THE USMAN REPORT (1923)

TRANSLATIONS OF REGIONAL SUBMISSIONS

*Edited by Dagmar Wujastyk
and Christèle Barols*

The Usman Report (1923)
Translations of Regional Submissions

SUPPLEMENTS TO EJIM
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EDITED BY

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and

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Introduction to The Usman Report (1923): Translations of Regional Submissions

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The historical record is dominated by the opinions and languages of those in power. For most of the modern period in India, the dominant voice is that of the colonial powers and the dominant language of the examined, extant historical record is English.¹ However, the remarkable *Report of the Committee on Indigenous Systems of Medicine, Madras* (1923), commissioned by the Madras Government in 1921, provided a unique opportunity of direct expression in their various original languages for more than one hundred of those practicing Ayurveda, Unani, and Siddha medicines in early twentieth-century India. It became known by the name of the committee's chairman Sir Muhammad Usman, KCSI (1884–1960) and hereafter will be referred to as the “Usman Report.” The Usman Report is the first major government report on indigenous medicine, and, significantly, it provided indigenous practitioners with an opportunity to put forward a strong case for more direct state encouragement and financial support.² Their testimonies came from all over India and were submitted in Sanskrit, Urdu, Tamil, Telugu, Malayalam, Kannada, and Oriya, providing a snapshot of the practices and socio-

¹ Historical studies that have considered the publications of indigenous medical practitioners in the early years of the twentieth century include Kandaswamy Pillai 1979, Panikkar 1992, Hausman 1996, Alter 2004, Sivaramakrishnan 2006, Berger 2013, and Mukharji 2016.

² That is, there were earlier government reports on medicinal drugs that were based on indigenous medical knowledge, but these did not describe the theories and principles of practice of the indigenous medicines.

political positionings significant for those practicing traditional medicines in India at the beginning of the twentieth century.

Here, we are pleased to be able to provide the first English translation of the vernacular testimonies of this important document. The complete original text of the Usman Report can be found on archive.org.³

The Usman Report is presented in two parts: Part One, “The Report with Appendices,” and Part Two, “Written and Oral Evidence.” In the first volume, the “Report” section summarises the committee’s conclusions and recommendations for education, registration, and supporting the local populations in accessing affordable and effective medical care. In the opinion of the authors, accessible and affordable health care for the majority of the population of the Madras Presidency could only be possible by incorporating state support for indigenous practitioners. This section is forty-five pages divided into three chapters, Chapter I: “Introductory,” Chapter II: “Medical Registration,” and Chapter III: “Medical Relief and Medical Education,” and organised in eighty numbered sections. It concludes with about five pages in which three members of the committee clarify where their own recommendations and conclusions might differ slightly from those of the main report in a series of “Special Reports.”

The appendices to volume 1 consists of a further 157 pages:

- Appendix I: “A Memorandum on the Science and the Art of Indian Medicine” by G. Srinivasa Murti (app. I: 1-96), “a book-length study of traditional Indian medicine.”⁴ This “Memorandum” was later translated into Marathi at the request of the principal of the Ayurvedic School in Poona (Hausman 1996: 220), demonstrating that the framing of the report and its recommendations had impact in other areas of India.
- Appendix II: “The Questionnaire” sent by the committee to various individuals and associations, both within and without the Presidency of Madras (app. II: 97-98). Only a part of the answers to this questionnaire were published in the second volume of the Usman Report (“Written and Oral Evidence,” 468 pages).
- Appendix III: “The List of Correspondents”. It shows the names of persons from whom written testimonies were received, organised by language: English, Tamil, Malayalam, Kanarese, Telugu, Oriya, Sanskrit, and Urdu (app. III: 98-101).
- Appendix IV: “The Constitution of Sub-Committees” according to language: Tamil, Telugu, Malayalam, Urdu, Sanskrit, Kanarese (i.e., Kannaḍa), Oriya, and English (app. IV: 101-102).

³ Both volumes can be found at <https://archive.org/details/UsmanReport>.

⁴ Wujastyk 2008: 50.

- Appendix V: “The List of Witnesses” who were examined orally (app. V: 102-103).
- Appendix VI: “The Programme of the Touring Sub-Committee” in Bengal, United Provinces, Delhi, Punjab, Ajmere-Merwara, Jaipur State, Bihar, Bombay, Hyderabad State, Mysore State, Cochin State, and Travancore State (app. VI: 103-106).
- Appendix VII: “The Statistics of certain existing institutions of Indian Medicine” (app. VII: 106-116).
- Appendix VIII: “Certain Schemes of Study of Indian Medicine” summarises the syllabus of sixteen authoritative teaching institutions of Ayurveda, Unani, or Siddha medicine from all over India: Madras, Jaipur, Bombay, Calcutta, Lahore, Haridwar, Mysore, Trivandrum, Kangri, and Delhi (app. VIII: 117-134). Most of these elements were collected by the touring sub-committee.
- Appendix IX: a valuable and extended “List of Indian Medical Works Extant (Both Printed and Manuscript)” (app. IX: 135-153).
- Appendix X: “G.O. No. 1351, P.H., dated 17th October 1921” (app. X: 153-157). This is a copy of the executive order establishing the committee, the particular individuals appointed, and terms upon which they may claim travel expenses.

The Usman Report was very much a part of the growing “domestic production” (*swadeshi*) and self-rule (*swaraj*) movements. Although colonial powers had long supported medical care and training based on a European model (Arnold 1993: 55-56), the majority of the population only had access to treatment administered by those trained in more traditional ways, in vernacular languages, outside of the colonial systems. Despite a lack of colonial support for indigenous practitioners, it is clear that traditional medical training continued to be provided in vernacular languages throughout the Indian subcontinent. Some princely states and local governments did provide financial support for indigenous medical practitioners and traditional medical training systems; these states included Hyderabad, Mysore, Baroda, Indore, Jaipur, Travancore, Cochin, Gondal, Rewa, and Gwalior (Wujastyk 2008:49).

There was growing popularity for the argument that Indian bodies should be self-reliant in order to throw off the yoke of colonialism. This argument, based on one of the fundamental principles of Indian classical medicine according to which environment, food, and customs are important criteria for diagnosis and remedy, is often invoked in the Usman Report. For example, A. Z. Muhammad Latifunddid Sahid, who administered both Unani and Siddha medicines, stated:

Patriotism and experience make me believe in the indigenous systems [...]. We cannot trust allopathic medicines on persons constitutionally unfitted to receive them. For the constitution, the climatic conditions, the habits, and food of the people of this country, the indigenous systems are best suited.⁵

Various anecdotal reports suggest that the general population of Madras was sceptical of the accessibility and efficacy of the new, European forms of medicine (Hausman 1996: 97 and Gayathry 2012: 169-170).

In the area of the Principality of Madras, attempts had been made by local Ayurvedic practitioners (*vaidya*) and educated Indians to bring up the standard of education for indigenous medical practitioners since at least 1902 with the founding of Arya Vaidya Sala at Kotakkal. There were other initiatives in other areas of the country like the Madrasa Tibbia that functioned under the Anjuman-e-Tibbia society in Delhi, which was established as a training institution for Unani medicine in the 1880s, but was significantly raised in influence in the early years of the twentieth century (Berger 2013: 62-66). Projit Mukharji documents early attempts at the organisation of Ayurvedic practitioners in Calcutta from 1871, but gaining more stability in the early twentieth century (Mukharji 2016: 40-44). On the national level, the All-Indian Ayurveda Mahasammelan (Congress) was organised in 1907 as a professional interest group for Ayurvedic *vaidyas*, lobbying for greater recognition and professionalisation of Ayurveda.

Within the large area of the Madras Presidency, educated and politically active Indians had been arguing in vernacular papers since at least 1914 that indigenous medicine was both cost-effective (most remedies were more affordable than those recommended by European-trained doctors) and, crucially, also most accessible to the majority of the Indian population (Hausman 1996: 120 fn. 77, 143, and 171). Meanwhile Gandhi was directly criticising European medicine as being a tool of colonial oppression. A Telugu translation of Gandhi's words appeared in the Telugu newspaper *Andhrapatrika* in May 1920:

The profession of medicine is one of the chief means used by the English to keep us as servants ... The hospitals are institutions helping on sin; they lead to men neglecting the rules of health and continuing to indulge in immoral life. The state of the European doctors is very unjust. In the name of the

⁵ Usman Report, vol. 2, "Oral Examination of Witnesses," p. 452. During the 1920s, although only alluded to once in the Usman Report, there was a parallel revival of Indian forms physical culture as a way to reinvigorate and strengthen Indian bodies and prepare them for self-rule (Alter 2000 and Singleton 2010).

protection of human bodies, they yearly kill some thousands of animals (Gandhi in Hausman 1996: 215).

The Congress Party began passing resolutions in support of government patronage of Ayurveda in 1920, and the commissioning of the Usman Report by the Madras Government in 1921 was part of the growing interest in reviving indigenous medicine as respectable and acknowledging the continual role it played in the healthcare of the majority of the Indian population.

From 1912-1917, the Government of the Corporation of Madras (responsible for the municipality with some autonomy from the Government of Madras Presidency) financially supported some Ayurvedic dispensaries within its area of jurisdiction. This expenditure was not made without complaints from the Presidency Government, who in government records denounces any sign of official support for “quack remedies,” deeming it below the dignity of a medical professional to even inspect such institutions (Gayathry 2012: 172-173). Beginning in 1914, A. S. Krishna Rao was pressing the Presidency Government to invest in investigating and funding improvement in indigenous medical provision as the only accessible healthcare available to the majority of the population. However, it is clear from records of discussions within the government that those with European biomedical qualifications considered any association with indigenous medical practitioners to be a tarnish on their reputation and the standards of medical care which they might provide. For example, in 1918, the Surgeon-General of Madras G.G. Gifford was recorded as arguing:

So long as a man belongs to a Profession, the Profession must be in a position to enforce certain definite rules of conduct.... Am I to be expected, by Law, to meet the absolutely uneducated and completely degenerated quacks of the bazaar who choose to call themselves Ayurvedic or Unani practitioners. Whatever law you pass you will not affect the conduct of a medical man, at any rate, a properly behaved decent medical man (Gifford in Hausman 1996: 266)

Eventually, with a sense that their arm was twisted by popular sentiment, in 1917 the Presidency Government agreed to fund an investigation into efficacy of indigenous drugs, questioning the existence of any indigenous medical tradition that could be considered a “system” worthy of investigation. Actually, this particular commission was only the latest in a series of colonial reports and investigations into “indigenous drugs” which sought to explore the possibilities of producing

cheap and effective medicines on Indian soil (e.g. Dey and Mair 1896 and see Berger 2013: 55-60).

Although the sponsors of this report hoped to further support indigenous medicine in the area, the immediate result appeared to be quite the opposite and more in line with the well-recorded prejudice of the members of the Madras Presidency trained in European medicine against any association with indigenous medicine, which was generally considered a form of unsystematic and archaic quackery. After several years of delay, a report on indigenous drugs authored by Dr. M. C. Koman on behalf of the Madras Presidency appeared in 1920.⁶ Koman appears to be a Western-trained physician with no background in Ayurveda. Although he undertook to read a few books of background material, including an English translation of *Suśrutasaṃhitā* and a Malayalam translation of the *Carakasamhitā*, the conclusion of Koman's report was that "there is very little if anything to be learnt from the methods of treatment followed by practitioners of the indigenous systems" (Gayathry 2012: 185-189).

Popular response to Koman's report was a sense of betrayal and outrage. The vernacular papers, often associated with social reform and *swadeshi* movements, were quick to criticise Koman's lack of understanding of indigenous methods of treatment. The Telugu-language *Andhra Patrika*, the Tamil-language *Swadesamitran* and *Vaidya Kalanidhi* as well as the Malayalam *Yogakshemam* all published criticisms of Koman's assessment of indigenous medicine (Hausman 1996: 188-190 and Gayathry 2012: 189-191). Meanwhile pointed and angry criticism against the Presidency Government's prejudice against indigenous medicine was published in English in *The Hindu*, thus likely to have been read by those in power.⁷ Two Madras-based professional organisations for Ayurvedic practitioners, the Dravidya Vaidya Mandal and Madras Ayurveda Sabha, undertook to study Koman's report in depth and produce a professional response (Dravidya Vaidya Mandal 1921).⁸ At a joint meeting held on 21 March 1921, the Dravidya Vaidya Mandal and Madras Ayurveda Sabha issued a joint statement affirming that Koman's report was so:

incorrect, incoherent, misguided and prejudiced that he has thoroughly proved himself to be unequal to the task he has undertaken of comprehending the

⁶ For a summary of Koman's report, see Hausman 1996: 172-179 and Gayathry 2012: 185-189.

⁷ A series of excerpts of this discussion in *The Hindu* is reproduced in Dravidya Vaidya Mandal 1921, app. III and IV, iv-viii.

⁸ The complaints and lobbying by the Dravidya Vaidya Mandal for a response to the Koman Report was initially funded by a group of Madras-based lawyers (Dravidya Vaidya Mandal 1921: iii).

indigenous systems of medicine, both in their theoretical and practical aspects, that therefore the said report is not worth the money spent on behalf of it, and finally that the Government have grievously erred in appointing one single man without any previous knowledge of indigenous systems of medicine for the task of investigation unassisted by any competent Vaidya or Hakim (Dravidya Vaidya Mandal 1921, app. II, i-ii).

It seems likely that the pressure these groups put on the Madras Government led to the resources being given to Muhammad Usman to conduct a more wide-ranging consultation on the practice of indigenous medicine. Although the original resolution to the Madras Presidency suggested the establishment of a committee to investigate and encourage indigenous medicine, it was passed upon the removal of the idea of 'encouragement' and that the committee entirely consist of non-officials. In the words of the Acting Secretary to the Government of Madras, F. J. Richards:

so far as I am aware, the advocates of the Ayurvedic and Unani systems have never yet stated their case in writing for scientific criticism, and the natural impression among scientific men is that the advocates to these systems know very little about them (Richards in Hausman 1996: 204).

Therefore, the Usman Committee was established in order to build-up an evidence base and provide an intelligent rebuke to the government's assumption that the European medical approach was the only scientific and efficacious system for promoting health.

In the summary of its more comprehensive consultation, the Usman Report did not mince words in voicing its concerns about what it saw as the European medical practitioner's wilful misunderstanding of indigenous methods of healthcare. The Usman Report was especially scathing at the tendency of European-trained doctors to attempt to exploit single ingredients for curative effect, without understanding the traditional systems and compounds in which particular plants might be used by a traditional medical practitioner:

[...] the use of remedies of the Indian systems by practitioners of Western medicine may really amount to, as we said before, unscientific and dangerous quackery; [...] it is necessary for the scientific and safe use of drugs and other remedial measures used by the practitioners of the Indian systems that the fundamental principles at least, such as the *tridoṣa* theory, the theory of *rasa-vīrya-vipāka-prabhāva*, and so on, on which the use of these drugs is based,

should be properly understood. We are therefore clearly of the opinion that to practice the art of medicine without a study of the science on which the art is based is undoubtedly quackery, whether it is undertaken by the followers of Indian or European medicine who would dabble in the use of therapeutical measures of the European and Indian medical art respectively without a knowledge of the science on which such use is based; quackery, whether practiced by the followers of the Indian or European system, is always undesirable, frequently dangerous, and sometimes even disastrous (Usman Report, vol. 1: 11-12).

This was a report with a clear agenda: to undertake an evidence-based survey of the principles of indigenous medicine by respected practitioners of those arts. The way the report was framed excluded equally as quacks much of village healing traditions as well as biomedical practitioners dabbling in indigenous herbal remedies.⁹

One of the recommendations of the report was that indigenous practitioners keep more systematic records of the efficacy of their treatments in curing specific complaints.¹⁰ The issue was to demonstrate the scientific value of Ayurveda, Unani, and Siddha medicine by providing evidence of its efficiency being at least equal to that of biomedicine, if not often superior. Anecdotal reports suggested that indigenous medical experts were also likely to be approached for ailments that were more chronic in nature. For example, Dr. Kaviraj Gananatha Sen claimed that

Western-trained medical men very often request the services of their Ayurvedic colleagues in chronic intractable cases, not only among their patients but also among their own family members. This is the everyday experience with me and several of my colleagues in Ayurvedic practice (Usman Report, vol. 1: 7).

The claim for the superiority of indigenous medicine is expressed in particular with regard to the range and variety of the medicinal substances used. For example, G. Srinivasa Murti in his “Memorandum on the Science and the Art of Indian Medicine,” notes that

⁹ This is a theme also discussed by Kavita Sivaramakrishnan in her study of indigenous medicine in colonial Punjab (2006: 234-235).

¹⁰ An issue that was a subject of criticism previously by the Madras Presidency Government (Gayathry 2012: 172-173).

there are hundreds of drugs, vegetable, animal, and mineral, used widely by Ayurvedic practitioners which their know-all Western-trained rivals have not even heard of yet. Some of these are: black and red sulphides of mercury (*kajjali*, *rasaparpaṭī*, *rasasindūra*, *makaradhvaja*, etc.), various forms of iron oxides (*lauhabhasma*) which, by the way, are far more assimilable and much less constipating than Western preparations of iron, tin oxides and chlorides (*vangabhasma*), zinc carbonates (*kharparabhasma*), *śilājatu*, a valuable bituminous drug highly effective in urinary diseases, etc. (Usman Report, vol. 1, app. I: 67).

More generally, there is the recurrent idea that indigenous systems address causes of disease while biomedicine treats (only) the symptoms of diseases.

In order to put indigenous medicine on an equal institutional footing with biomedicine, one of the major recommendations of the Usman Report was to create standard registration and training systems for indigenous practitioners to ensure that adequate standards were maintained to prevent quackery by those without proper grounding in the fundamental theories of the medical systems (Ayurveda, Unani, and Siddha). The need for some standardisation in registration was highlighted in the Usman Report by discrepancies in figures for medical practitioners in the census (self-reported) and by local authorities (who held their own standards). The Usman Report estimated that the Madras presidency held a population of about 42.3 million people which was provided for by around 4,000 European-trained medical professionals and no less than 21,000 (self-described) indigenous practitioners (vol. 1: 16). In order to promote the general health of the Indian population, the Usman Report concluded that there was an essential need for more state support and oversight of those medical practitioners, trained in indigenous methods, who were, in fact, administering the majority of medical treatment in the country.

The second volume of the Usman Report is entirely devoted to “Written and Oral Evidence.” In response to a questionnaire sent all over India, the committee received 183 written submissions. The majority of the written testimonies received were not submitted in English, but in Tamil: 76 written testimonies in Tamil, 49 in English, 24 in Malayalam, 11 in Sanskrit, 10 in Kanarese (i.e., Kannada), nine in Urdu, three in Telugu, and one in Oriya (Usman Report, vol. 1, app. III: 98-101). However, Part II only contains a selection of the written submissions that do not reflect this proportion in terms of vernacular languages. The majority of the published written evidence is in English, which was also the language of the formal summary of the committee and, of course, the Government of the Madras Presidency. In appendix II, the distribution in terms of languages

and medical systems described is as follows. “From Outside the Presidency of Madras” (Usman Report, vol. 2: 1-214) includes:

- Twenty-six testimonies in English, of which twenty-four relate to Ayurveda and two to Unani medicine;
- Five testimonies in Sanskrit which all concern Ayurveda;
- Five testimonies in Urdu, three of which relate to Ayurveda and two to Unani medicine.

Written submissions “From the Presidency of Madras” (Usman Report, vol. 2: 215-428) includes:

- Sixteen testimonies in English, seven of which relate to Ayurveda, six to Siddha medicine, two to Unani medicine, and one to “mantric” medicine specializing in snake bites;
- Five testimonies in Sanskrit which all concern Ayurveda;
- Ten testimonies in Tamil, nine of which relate to Siddha medicine and one to Ayurveda;
- One testimony in Telugu on Ayurveda;
- One testimony in Malayalam on Ayurveda;
- One testimony in Kannāḍa on Ayurveda;
- One testimony in Oriya on Ayurveda.

The Usman Report also gives a significant place to the testimonies of practitioners who were examined orally (Usman Report, vol. 2, “Oral Evidence”: 429-468). The oral examination of over forty indigenous medical practitioners was held from 25 to 30 September 1922 at the committee room of the Council Chamber, Fort St. George, in Madras. According to the recommendations that precede the “Questionnaire” (Usman Report vol.1, app II: 97-98), the witnesses for the oral examination were chosen amongst those who had sent written reports.¹¹ The committee organised over forty oral examinations, however the “Oral Evidence” includes less than forty transcriptions because some practitioners came in small groups of two to five people representing a single institution.

The “Questionnaire” addresses indigenous medical practices in their theoretical, practical, economic, and institutional aspects. While many of these questions betray leading assumptions and agendas of those commissioning the report, they are also very revealing of a genuine intellectual search for answers, both on the individual and collective level. The first two questions are particularly important and give rise to often very detailed answers. There is a very apparent comparison with European medicine implicit in the questions which included:

¹¹ Therefore, some individuals provided both written and oral submissions.

- 1) What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani or Siddha – that you propose to deal with?
- 2) (a) What are the theory, or theories, of causation of disease according to your system? Please favour the committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.
(b) What are the principles and methods of diagnosis and treatment followed in your system? Please favour the committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements with facts and figures wherever possible.
(...)
- 5) Do you agree with the view of the Calcutta University Commission that “There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”
If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?
(...)
- 9) What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the committee with your suggestions of revival.

The first question concerns the positioning of the practitioner among the different Indian medical systems: Ayurveda, Unani, and Siddha. The respondents usually had a definite, articulate, and evidence-based opinion on the definition, origin, and value of their respective systems. The second question often elicited extended discussion on theories of disease causation and extensive reflection on practices and the extent to which European and indigenous traditions may or may not be compatible or complementary. There was no simple or standard answer to these questions.

Many doctors showed a knowledge and awareness of multiple indigenous medical systems as well as most of the witnesses whose words are transcribed in the part “Oral Evidence.” Likewise, all the respondents affirmed that they did not use English medicine; this is unanimous, regardless of the indigenous system to

which the doctor primarily affiliated. Nevertheless, as both questions 2) and 5) show, they were subjected to the injunction to demonstrate the scientific character of Ayurveda, that is to say, to make it correspond to the same questions, definitions, methodology, and efficiency established by the Western scientific tradition. This is particularly evident in the recommendations that precede the Questionnaire:

As under the terms of their reference, the committee is required to subject the evidence gathered to scientific criticism, witnesses are requested to support their arguments [...] by proofs or testimony acceptable to modern science, such, for example, as the evidence of directly demonstrable or observable facts, or of facts indirectly inferable, by logical methods of the nature of induction and deduction, known to modern science, or by showing that a proposition has the hypothetical certainty of a coherent system of assumptions or the practical or pragmatic certainty of a hypothesis that works best. Witnesses are also requested to note that the authority of revelations or venerated texts or uncriticisable tradition, however high its evidential value may be in other matters, are not accepted by modern science as valid testimony unless it is also capable of being proved by one or other of the methods already indicated (Usman Report, vol. 1: 97).

Therefore, the practitioners often addressed European medicine (called “allopathy” by them) by trying to find equivalent concepts to germs, cells, and hormones in their own indigenous system. A primary challenge being addressed in this work seems to be the conceptual discord between germ-theories of disease and descriptions of imbalance as the framework for understanding illness. For example, M. R. Ry. Ayurveda Bhushana Pandit C.V. Subramania Sastri sought to give Western scientific equivalents to the three humours: *vāta* “is of the nature of nervous impulses,” *pitta* is the “oxidational process,” and *śleṣma* is the “lymph” (vol. 2: 227). The whole Usman Report is thus imbued with this compelled aspiration to comparativism.

Question nine introduces the idea that indigenous medical systems had come into disrepute and “decay.” Many of the responses confirm this notion, citing lack of government encouragement and especially funding as the main reason for it. Some of the Ayurvedic respondents suggested that a greater reliance on ancient texts and theory for the practice of medicine would allow it to be taken more seriously as a scientific endeavour. The ancient Ayurvedic treatises are thus widely quoted, the *Carakasamhitā*, the *Suśrutasamhitā*, and the *Aṣṭāṅgahṛdayasamhitā* in particular with regard to Ayurveda. A very elaborate syllabus is often

described, one that takes into account the progression by years and disciplines studied, reference works, and languages required. A major point in most responses is the language of learning: Sanskrit is necessary for Ayurveda, Tamil for Siddha medicine, and Urdu and Persian for Unani medicine. Knowledge of these languages usually appears as a prerequisite for learning the respective systems in the opinion of many of those submitting evidence.

An interesting and important contribution of the Usman Report is the placement of Siddha medicine on an equal footing with Ayurveda and Unani. In fact, this may be the first mention of Siddha as a specific form of indigenous medicine in a government report. The inclusion of Siddha had not been planned for in the framing of the commissioning of the report, which only mentions Ayurveda and Unani. However, popular opinion and the testimony of the witnesses required a reframing of the enquiry to include Siddha alongside Ayurveda and Unani (Usman Report, vol. 2: 153 and Hausman 1996: 206-207). A total of fifteen written submissions are from those who identify primarily as Siddha practitioners, including six (of sixteen) reports submitted in English and nine of ten contributions in Tamil (these submissions are translated into English in the present volume). In the first volume, the Usman Report specifically draws attention to the contributions of Narayanaswami Ayyar, “who has made a special study of chemistry as obtaining in the Siddha schools of medicine,” and Vaidya Bhupathi S. Krishna Rao, who gave a detailed oral testimony of Siddha medicine (Usman Report, vol. 1: 46). The “Memorandum on the Science and the Art of Indian Medicine,” which presents a short, book-length summary of traditional Indian medicine, devotes a few pages to the Siddha system, in its ninth chapter entitled “Additional Note on the [Tamil] Siddha System” (Usman Report, vol. 1, app. I: 82-87).¹²

The first question of the “Questionnaire,” which asks which “division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani or Siddha” the practitioner is working within, provides an unexpected opportunity for Siddha practitioners to define their system and to place Tamil Siddha medicine in relation to the other South Indian medicines, showing a specificity and enthusiasm for a Tamil claim to a particular medical tradition. The responding Siddha doctors used discursive strategies to place Siddha medicine at the same level as Ayurveda while retaining its uniqueness. Richard Weiss has analysed the Tamil sources’ response to this question, noting an ambiguity and overlap as to whether or not Siddha was a distinct system of medicine. Weiss concludes that “In calling their practices ‘*Tamil Ayurveda*’ or ‘*Tamil medicine*,’ they emphasised that they followed a medical tradition that drew upon Tamil texts rather than Sanskrit texts. Yet in calling their practices ‘*Tamil Ayurveda*’ they also assumed an overlap between

¹² There is also “An Additional Note on the Unani System” in app. I: 87-95.

the medical practices and theories continued in these Tamil texts and those of Sanskrit sources” (Weiss 2009: 86).

Indeed, the majority opinion in the Usman Report is that both the Siddha and the Ayurvedic systems have the same common foundations (Usman Report, vol. 1, app. I: 3 and 82). This was accepted by most Siddha practitioners, although they also emphasised the unique features of the Siddha tradition, particularly in regard to its reliance on the use of inorganic substances, i.e., salts, metals, and minerals, and also in regard to its use of distinct textual authorities such as the *Tirukkural* or the *Tirumantiram* of Tirumūlar.¹³ Neither the *Tirukkural* nor the *Tirumantiram* of Tirumūlar are exclusively medical texts: the *Tirukkural* (The Sacred Kural) is a “comprehensive manual of ethics, polity and love in 1330 distichs divided into 133 sections of 10 distichs each” and contains a section dedicated to medicine.¹⁴ The *Tirumantiram* (The Sacred Mantra) is “included in the 10th book of the Śaiva canon.” It is a mystico-religious work that combines yoga, medicine, alchemy, etc. in a poetic language. More generally, texts of the Siddha doctors are often enriched with poems, sometimes with esoteric or encrypted meanings (see Kędzia 2017 and Weiss 2009).

Richard Weiss contrasts this positioning in the Usman Report, which stresses commonalities and overlaps between Siddha medicine and Ayurveda, to the position of many Tamil medical practitioners in the early twenty-first century which draws more directly from a Tamil separatist narrative that gives Tamil medical traditions a distinct and separate origin to Ayurveda on the primordial continent of Lemuria (Weiss 2009: 87).

Only few of the respondents claimed superiority for the Tamil Siddha tradition. For example, Siddha practitioner M. R. Ry. Pandit Shanmuganandaswami asserted that

Tamil siddha medicine is superior to all other systems of medicine in the world. The reason for the superiority of Tamil medicine is that it has a gem (*maṇi*) and a medicine to promote longevity (*kaṛṇam*) that protects a person from greying hair (*narai*), wrinkles (*tirai*), old age (*mūppu*), and even from death (*cākkāṭu*). Other systems merely cure diseases and provide a good life based on soft (*tēva*), moderate (*maṇita*), and hard medicines (*acura*). One can learn this method only from yogis and not from other people. We also cure

¹³ The date of the *Tirumantiram* remains uncertain. Goodall notes that “The placing of Tirumūlar’s *Tirumantiram* between the fifth and the seventh century is widely accepted on the basis of scant evidence.” On the grounds of concepts with Sanskrit labels in the text, it would not be earlier than the eleventh-twelfth centuries (Goodall 2000: 213, fn. 27 and also see Scharfe 1999).

¹⁴ *Tirukkural* 941-950, “On medicine” see Zvelebil 1995: 669-671.

diseases using a gem (*maṇi*), mantras, and medicine as available, in the Tamil system of medicine (Usman Report, vol. 2: 340).

However, this sentiment seems to not have been shared by the others, who instead noted the incompatibility of European medicine for Indians.

It is somewhat surprising how little representation Unani receives in the Usman Report: two testimonies in English and two in Urdu from within the Madras Presidency, and a further two in English from outside the Presidency, with about ten *hakims* recorded as having given oral evidence. Volume 1, Appendix I, chapter 10 (pp. 87-96), “An Additional Note on the Unani System” provides a short summary of the history and principles of Unani. It is difficult to account for this lack of representation. Only few Unani testimonies seem to have been submitted to the committee. The report does not make clear whether the relative scarcity of testimonies for Unani reflected a proportional lack of existing Unani establishments and practitioners, or whether it was caused by the questionnaires not reaching Unani practitioners, or was due to Unani practitioners not taking the opportunity to respond.

The Usman Report does not fully capture the richness and diversity of remedies those seeking treatment for health in rural India might have encountered. However, there are some glimpses into this wider variety of medical treatment available. For example, there is a brief testimony from a masseuse and surgeon of boils who learned his skill from within the family (Usman Report, vol. 2: 466) as well as some mentions of astrology, mantra, and other forms of treatment (for astrology, see, for example, Usman Report, vol. 2: 251; for mantric practices, see vol. 2: 269).

The authors of the Usman Report argued that it was vital to harness the power of traditional medical practitioners to promote the general health of the Indian population, and a perceived need to establish and maintain institutions to teach and distribute indigenous medicine was central to the aims of the report. The framers of the enquiry hoped that by focusing on Ayurveda, Unani, and Siddha as more systematic and reputable systems of medicine, a more convincing argument for promoting and supporting indigenous traditions of medicine could be established.

That the indigenous traditions of India nevertheless continued to be held in disrepute by colonial bureaucratic and medical personnel throughout the colonial period was evidenced by the immediate reaction to the Usman Report as covered in *The Lancet* and the *British Medical Journal*, and repeated in the English-medium newspaper of Madras, *The Times of India*. The *British Medical Journal* asserted that:

The opinion is expressed in the report that no Western scientist should think of criticizing Ayurveda until he has learnt the Sanskrit language and studied the subject for some years under a competent Acharya. But the Western scientist has no need of any such prolonged and detailed study... In the last hundred years science has emerged from the metaphysical stage into the clear light of positive knowledge, and if the Madras Government has the interests of the Indian people genuinely at heart, it will expend its energies in planting modern science in the country, by the agency of scientists and teachers trained in Western methods, instead of endeavoring to stimulate the belated indigenous systems into renewed activity. (*BMJ* 1923: 477).

The Times of India opinion reasserted these British medical assessments of the Usman Report more directly as a failure: “One may as well try to put life in petrified bones of centuries, as to revivify these systems that are a mysterious compound of mantras and invocations, religion, metaphysics and speculative philosophy, with superstition and even prejudices superimposed upon all” (Choksy 1924).

Nevertheless, the Madras Presidency bowed to the force of public opinion, and the recommendations of the Usman Report to establish a government-sponsored training school were the first element of the recommendations to be accepted. After much debate, a government-funded School of Indian Medicine in Madras was formally sanctioned, with three sections in Ayurveda, Siddha, and Unani and a course extending over three years (Hausman 1996: 252).¹⁵ Two years later, facilities for both outpatients and inpatients were added and student intake was expanded to up to 120 to include training in both Indian and ‘Western’ systems of medicine:

The school is intended to provide such training to its alumni as will enable them to become competent practitioners of Indian systems of Medicine with a good working knowledge of the western system also. It is with this end in view that provision has been made in this School not only for the proper training of students in Ayurveda, Siddha and Unani but also for giving them courses of Instruction in such subjects like Modern Anatomy, Physiology and Surgery in all its branches including Midwifery and Ophthalmology. Provision has also been made as well for Herbarium, Museum Library etc. (Government Order No. 358, P.H. 2 March 1926, quoted in Kandaswamy Pillai 1979: 265)

¹⁵ Appendix VIII in volume 1 of the Usman Report lists the “Certain Schemes of Study of Indian Medicine” that were extant prior to this establishment (vol. 1, app. VIII: 117-134).

The first examiners were appointed in 1928. However, it was ten years after the Usman Report, in 1933, that there began to be established a register for qualified graduates of indigenous medicine (Hausmann 1996: 266-267).¹⁶ The vision and framework for establishing the systematic study of three Indian medicines, which was recommended in the Usman Report, remained the working framework for the study of Indian medicine in this institution until Congress took over administration of the Presidency in 1946, just prior to Indian Independence (Kandaswamy Pillai 1979: 564-567).

The medical anthropologist Charles Leslie concluded that “during the 1920s and 1930s [there was] trained a generation of practitioners who imagined a comprehensive national medical system that would be inspired by Ayurveda and that would assimilate cosmopolitan medicine to indigenous culture” (Leslie 1992: 179). In the years leading to independence, many nationalist leaders, both in and out of the Indian National Congress, continued to support various forms of *swadeshi* health promotion and healing. Mohandas Gandhi was better known for the championing of naturopathy as an accessible form of promoting health for rural populations (Alter 2000). Other nationalist figures, like Pandit Malaviya, founder of Banaras Hindu University, more directly supported a revival of Ayurveda and the healing potential of yoga practices (Newcombe 2017). The Usman Report was a key document in establishing such perception and in linking the provision of Indian healthcare for Indian bodies with the *swadeshi* and *swaraj* movements. It provides a remarkable opportunity for understanding regional similarities and variations in the understanding and practice of indigenous medicine in India’s late colonial period.

The very political framing of these debates continued throughout the twentieth century. The next major Indian government report, the Bhore Committee (1946), adopted a scathing attitude toward any scientific pretences of indigenous systems of medicine (see Wujastyk 2008: 11-20). Although after independence the Chopra Report (1948) again immediately tried to redress this accusation with more empirical data from contemporary practitioners, in many ways the frameworks of understanding and debate that continue to preoccupy supporters and critics of Ayurveda and other ingenious medicines today can be clearly seen as having been first articulated in the Usman Report. The richness of the Usman Report as a primary source to the diversity and shared preoccupations of front-line Indian medical professionals is only now beginning to be appreciated. Our translations of the vernacular submissions are an effort to expand the usefulness and accessibility of this extremely significant historical testimony.

¹⁶ The Madras Medical Registration Act of 1914 regulated those claiming to be qualified in the European medical profession.

Translation policies and remarks on the vernacular testimonies

The translations of the vernacular testimonies were commissioned by the Ayuryog project with the aim of highlighting the historical significance of the Usman Report and making it available to a wider audience.¹⁷ As noted above, one of the Usman Report's special features is its multilingualism: the testimonies it records were written in English, Sanskrit, Urdu, Tamil, Kannaḍa, Malayalam, Telugu, and Oriya, each using different scripts. Indeed, some of the testimonies use several languages and scripts. For example, the testimony by Hakim Syed Mustafa (vol. 2: 165-177), which is mainly written in Urdu, also contains Persian aphorisms, which the author left untranslated, as well as Arabic aphorisms, which he translated into Urdu. Several Dravidian-language testimonies on Ayurveda contain quotations from Sanskrit works, typically rendered into the main script of the testimony. Several testimonies also contain English vocabulary, sometimes long quotations, more often single terms. Here, some of the authors transliterated these words into the script they were using. In other cases, the authors used the Roman alphabet for English terms and quotations.

Sanskrit vocabulary (in Tamil script) also occurs in the Tamil testimonies where it is "tamilised," e.g. Sanskrit nouns are frequently transformed into Tamil verbs. This is probably in keeping with the older Tamil texts' usage of integrating Sanskrit terminology. One Sanskrit witness (in Devanāgarī script) also quotes from Tamil sources and uses Tamil script for this, visually marking the quotations as coming from a different tradition.

These different registers are conveyed in the English translations here in various ways. For example, Sabrina Datto, in her translation of Hakim Syed Mustafa's testimony, which contains several Persian and Arabic aphorisms as well as English loan words, has transliterated and italicised the English loan words. In the case of the Persian aphorisms, which were not translated by the author for his Urdu readership, she has given her own translation of the Persian, indicating this in the text by italicisation and including the Persian original in square brackets following the translation. In the case of the Arabic aphorisms, for which the author offered translations within the text, she has offered her English translation of the Urdu translation given by the author, again italicizing it to indicate it was originally written in a language other than Urdu, followed by the original Arabic in square brackets.

¹⁷ The full title of the research project is *Entangled Histories of Yoga, Ayurveda and Alchemy in South Asia*. The Ayuryog project was led by Dagmar Wujastyk at the University of Vienna and funded by the European Research Council under the Horizon 2020 programme (grant agreement no. 639363).

- (c) (1) செரிமாதை (அஜீரணம், குன்மம், அகிசாசம், கிராணி முதலிய இரப்பை கோவர்கள் (Diseases of the stomach),
 (2) மேகவாத குலை (Rheumatism)
 (3) இலிங்கபுண், பிரமேகம், மேகப்பூன், உருப்புக்களை அரிக்கும் புண், அரையாப்பு முதலியன (Syphilitic chancre),

میں نے اتنا پھر بھی دعوایا ہے کہ جہاں انگریزی ڈاکٹر تھرمامیٹر (thermometer) کے ذریعہ بعض نوبات مریض کو بخار سے پاک کر رہے دیکھ رہے ہیں وہاں ماہر دیسی طبیب با وجہ تعجب (temperature) نارمل (normal) سے کم پونہ کے بھی اس بات سے آگاہ ہو رہے ہیں۔ کہ مریض بخار ناک بخار میں مبتلا ہے *

श्लेहनकफस्य स्थानं शिरः । सुश्रुतेनोक्तम् । शिरस्स्थलेहतर्पणाधिकृतत्वादिन्द्रियाणामात्मवीर्य-
 णानुग्रहं करोति । श्लेहनकफमावे मस्तिष्कगतेन्द्रियकार्यं न भवति । पाश्चिमात्या अप्येवं वदन्ति—
 “ Its chief use is probably to afford mechanical protection to the nervous centres and to prevent the effects of concussions communicated from without.” Gray's Anatomy. श्लेषणकफस्य स्थानं

Examples of the integration of English terms and quotations in Roman script in Tamil, Urdu, and Sanskrit (Devanāgarī script) testimonies

अत्र गैर्वाण्या विद्यमानान् बहून् रसग्रन्थान् अपरांश्च आयुर्वेदग्रन्थान् स्वयमधीत्य तानेव
 द्वाविधा विवृण्वान् महामुनिरगस्त्य इति स्पष्टं समीहितमास्ते । “तेरेपर शेखरप्पा”
 (தேசையர் தேசசப்பா) इतिग्रन्थस्य मङ्गलपद्यस्यानन्तरं किमपिहितमिति अवलोक्यतां भवद्भिरिव—
 “ தமிழின்புத வசனம் பெறு தனுவந்தரிவடனல்
 இமிகும்பத முழுதுவகனி பெழுதும்படி. ஒருமே
 அமலன்பரை யருளுஞ்சுத சருளுக்குரு வானும்
 தமசை புறு தயவும்புரி தகவுங்கொளரிவனே.”
 इत्येतैः अपरैश्च हेतुभिर्वलवद्भिः अस्ति वक्तव्यं, नास्ति किमपि तन्वान्तरं नाम्ना “सिद्धवैद्यम्”
 इति । परं च केवलमिदं काल्पनिकं अव्यवहतपूर्वं च शब्दमात्रपरिवसायि नाम ।]

Tamil quotations in Sanskrit (Devanāgarī) text

For the Sanskrit portion, one of the translators (Vinoth M.) has opted to transliterate Sanskrit verses that were identifiably quotations from the Ayurvedic classical treatises, providing the translation beneath. In a very few cases, the translators were unable to provide translations of verses or prose given in another script and/or language within one text. In those cases, images of the untranslated text are given in lieu of a translation.

Arabic, Persian, and English within an Urdu testimony. The yellow box highlights an English word that has been transcribed into Urdu. The black box highlights a well-known Arabic phrase attributed to the Prophet Muhammad which reads, “Seek knowledge, even if it is in China.” The red box highlights a Persian aphorism, which comments on the knowledge project of aligning the categories of biomedicine with classical Avicennian medicine.¹⁸

The testimonies in the Usman Report concern specialist medical knowledge, and therefore, particularly in the answers to the questions about the theories of the medical system, our translators were confronted with many specialist technical terms, but also quite often with poetic or even encrypted language. The latter is especially true for the Tamil sources. Since the report was written in the early 1920s, some of the era’s assumptions about medicine are reflected in the vocabulary used, leading to a certain ambiguity with regard to the meaning of terms. In the English-language testimonies, we find reference to modern disease categories, such as typhoid, leprosy, and diabetes. However, equivalences in vernacular languages are seldom given (there is, for example, one instance of leprosy being equated with the Ayurvedic disease category of *kuṣṭha* on page 3). Nevertheless, we are aware that the indigenous practitioners may very well have had modern disease categories in mind even when using traditional vernacular vocabulary, something that is ubiquitous in modern discourses on Ayurveda, Unani, and Siddha.¹⁹ We have, however, typically opted to use more conservative translations for technical terms, such as “consumption” for *kṣayaroga*, or “respiratory disease” for *śvāsaroga*, etc. Similarly, the translation of technical terms used to describe the physical and mental processes involved in the causing of health and disease presents a set of difficulties, as their translation into a single term does not fully convey their meaning. For example, historical and philological studies on Indian medicine often use the term “humour” for the Sanskrit term *doṣa*, as there are strong parallels, if also significant differences, between the *doṣa* theory and the

¹⁸ We would like to thank Sabrina Datto, who highlighted the Persian, Arabic, and English sections and provided explanations of their content.

¹⁹ On the subject of equating old categories with modern biomedical terms, see Meulenbeld 2008.

Greek humoral system. Ayurvedic theory usually speaks of three *doṣas*, called *vāta* or *vāyu*; *pitta*; and *kapha* or *śleśman*. These are often translated with wind, bile (or choler), and phlegm, respectively, again in parallel with the terms used for similar entities in Greek medicine. This is the translation that we have applied throughout. However, it should be noted that, in the English part of the testimonies, several authors emphatically reject this usage, sometimes offering alternative translations or glosses, sometimes simply leaving the terms untranslated: There is no standard rendering of the terms.²⁰ The main translator of the Sanskrit portions of the Usman Report, Dr Trupti Patil-Bhole, who is a certified doctor of Ayurveda, concurs in rejecting the usage of “bile” for *pitta*, and “wind” for *vāta*, preferring to leave the terms untranslated, or translated as “fire element” and “air element”, respectively. For consistency, we have nevertheless applied the former translations throughout, keeping in mind that these are approximate renderings that do not fully represent the semantic field of the original terms.²¹ We have added a note to Dr Patil-Bhole’s translations, as her view represents a common perspective of current ayurvedic practice.

In the translations, technical terms for physiological or other principles that are specific to the indigenous medical traditions are rendered into English and followed by the vernacular term in round brackets. Square brackets indicate an explanatory addition by the translators or editors. All footnotes are also additions by the translators and editors.

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²⁰ For example, Hara Chandra Chakrawartha (UR, vol. 2: 20) translates *vāta*, *pitta*, and *kapha* as vital current, metabolic fluid, and lymph, respectively. Hariranjana Majumder (UR, vol.2: 56) uses the term humour, but glosses *vāta*, *pitta*, and *kapha* with wind, heat, and cold. See also the reference to the interpretations of C.V. Subramania Sastri mentioned above.

²¹ See Wujastyk 2002: xlii-xliii for a discussion on how these terms have historically been translated and how interpretations of them changed over time in different historical and political contexts. The explanations in the testimonies also give good introductions to the subtleties and complexities of these and other fundamental concepts.

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Kanarese/Kannada

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USMAN REPORT, VOL. 2, PP. 1-108

Testimonies from outside the Presidency of Madras written in English

This section of the report contains twenty-six reports from outside the Presidency of Madras, all written in English in the original and therefore not included here.

USMAN REPORT, VOL. 2, PP. 109-162

Testimonies from outside the Presidency of Madras
written in Sanskrit

JAIPUR-RAJPUTANA
Srijut Vaidyaratna Swami
Pandit Lakshmi Ramaswami Acharya

Translated from the Sanskrit by TRUPTI PATIL-BHOLE

I honour the proposal and intention of the assessment committee. I am very happy to see this committee appointed by the government. Previously many prominent Indian gentlemen requested the government officials to give support to the Indian system of medicine. However, at that time due to various reasons their request or prayers were ignored by the government officials. What else could be the reason for this other than the unfortunate state of the Ayurvedic system of medicine? However, I feel there is some hope now. From the appointment of this committee the misfortune of our medicinal system will vanish soon. Hence, I convey many thanks to the government officials for appointing this committee. At the same time, I consider it my duty to acknowledge all members of this committee who have invested their invaluable time and knowledge in this research work and have taken up this task. We also certainly hope that the committee would keep in mind that any assessment is only possible when the investigators are unbiased. Also, it is necessary that they are not prejudiced about any theory. The goal of those investigating should be to assess how much practicality [or truth] is in this system. It should be also thought over that this committee appointed by the government should keep the intention of rejuvenating Ayurveda and take decisions with a positive interpretation based on the tools and logic presented by experienced and learned Ayurvedic physicians and heads of institutes. Government officials also should kindly give stringent decisions on the assessment report to convert the outcomes of this report into implementation.

1) In my opinion, for realistic decisions about the Ayurvedic system of medicine, it would have been more appropriate if this committee had a learned Ayurvedic physician. I additionally hope that certainly some learned physicians will be appointed here. If at this moment they cannot include a member, they should do that

later at the time of testimonials and decision-making, by inviting acclaimed experienced Ayurvedic physicians who can from time to time elaborate on the subjects of Ayurveda and advocate for the Ayurveda system.

2) In ancient times, what was the status of Ayurveda? At a time when life was going on with the support of Ayurvedic treatment, there was no other way. Hence at that time, for the progress, enhancement, and utility [of Ayurveda] great deeds and correct support existed and huge efforts were taken. This itself is the reason for the attainment of great fame and the clear existence of this system.

3) The Ayurvedic system results from the experience of thousands of years of practice, work and inbuilt kindness towards society by the ancient sages that had great visionary powers and the great Ayurvedic physicians. The perfect status of medicines and combinations which are proved only after long-term study is also attributed to the reason that these medicines were famous after proving to be effective from ancient times in countless bodies, thus showing that they cure diseases. The ancient sages and Ayurvedic physicians were kind towards society and did not use the medicines and their combinations for their own profit, but owing to their charitable nature, they used them for the enlightenment of society.

4) Nonetheless, the established widely applicable principles also clearly prove that these principles have been established by careful, long-term practical use; and the principles, if applied as they are without any amendment in medical practice, show true results. This type of establishment of widely applicable principles cannot be the result of mediocre knowledge. The main theory from among the basic theories is that of the three humours (*tridoṣapaddhati*), which are considered to be the protective and destructive powers in the body. Actually, also according to our principles, there is a normal and abnormal state of the humours/fine body elements wind (*vāta*), bile (*pitta*), and phlegm (*kapha*).¹ Wind, bile, and phlegm are also of two types, if we assess them in both ways, grossly and finely.

Here, the fine body elements (*vāta*, *pitta*, *kapha*) are understood by their functions. The gross body elements, however, can be seen or understood as functioning in the body's channels (*srotasa*). Hence, in the healthy state or the diseased state, by the variation as normal or abnormal, the attribution of the body elements viz. wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*) is definite, by the means of

¹ Editor's note: We have standardized the translation of *vāta*, *pitta* and *kapha* and their correlates in the other vernaculars to "wind", "bile", and "phlegm" in this volume, but would like to note that this translator's preference was to leave the terms untranslated or to render *vāta* as "air element" and *pitta* as "fire element".

which the importance of Ayurveda and life is sustained. Hence, by the collection [or existence] of such deep and invincible theories, the Ayurveda system is unique and beneficial, as it is useful for the functioning of those having mediocre intellect as well as beneficial for the especially intellectual people for subtle knowledge and for providing correct guidance.

5) The three basic principles, i.e., causes, symptoms, and medicines, as outlined in Ayurveda, are the tools for obtaining knowledge of the synergistic and antagonistic properties of all existing materials. Synergism and antagonism cannot be understood without direct interpretation by the senses or by logical interpretation and rationality. Unless synergistic phenomena (*sāmānya*) and antagonistic phenomena (*viśeṣa*) occur in the external and internal causative factors of diseases, the increase or decrease of bodily entities cannot take place. Hence, for gaining knowledge of the nature of disease, at each moment the knowledge of synergism and the knowledge of antagonism are necessary for the avoidance of harmful substances. It is not just necessary for knowing the specific actions of medicines. On such subjects, the experiential statements of persons with special knowledge can be considered as standard. Because even modern science proves that comprehensive knowledge of all powers of drugs is possible only for the Almighty, not anybody else.

6) The Ayurveda system attained a very progressive form in the past, though the branch of general medicine (*kāyacikitsā*) received very meagre and inadequate assistance. Still, many classics were created at the same time, but over time there was a decline in other branches. In such a way, the branch of Ayurveda viz. general medicine contains an unlimited collection of treatment methods, treatment regimen [*cikitsā sūtra*], treatment types, tools, countless formulations, medicinal formulations, or drugs etc. Though there have been many obstacles and attacks, the above stated wealth [of knowledge] has been capable of making the Ayurvedic system firm.

7) Its present remaining parts are in a broken state. It is deteriorating day by day due to the lack of support and the lack of educational facilities. In this situation, due to the above-mentioned reasons, the true introduction of all Ayurvedic principles could not be for us. We cannot illuminate the true state of Ayurveda. However, though the situation is not very good, we can analyse the success achieved through the amazing results obtained by the basic principles of Ayurveda, and we can guess that if support and education were received, Ayurveda would gain its full capacity and would be useful for the betterment of the nation.

8) If the state of modern medicine fifty years ago and that of today is compared, it is clear that many Ayurvedic drugs have been included in it, and it is possible that many of Ayurveda's basic principles and processes will be acceptable to the modern medicinal system slowly and with gradual experience.

9) I am not introduced to modern science and the English language, and hence only have knowledge of Ayurveda. In accordance with my capacity and my status, I will try to answer the questions in Sanskrit.

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I have taken efforts in learning and teaching the Ayurvedic system, and I perform treatment according to Ayurveda's methods of diagnosis and treatment. Hence, I am willing to support its [Ayurveda's] own basic principles. For the ease of treatment, ancient scholars have divided this Ayurveda into eight parts: surgical treatment, treatment of organs above the neck, treatment of the full body by medicine, children's diseases, rejuvenation, aphrodisiac treatments, toxicology, and the treatment of afflictions caused by (malign) entities. Among these, surgical treatment (*śalyāpaharṭṛka*) is the one which describes treatment of diseases that can be treated by surgery or through instruments, like abscesses, abnormal position of a foetus where normal delivery is not possible, fistulas etc. Surgery above the shoulder (*śālākyaśāstra*) is the branch in which the treatment of diseases of organs above the neck – eyes, ears, nose, and head – has been explained by the means of eye drops, collyriums, nasal instillations of medicines, *tarpana* [a special treatment procedure for the eyes], etc.. General medicine (*kāyacikitsā*) is the branch in which the treatment of disorders which affect the whole body has been described, such as fevers, bleeding disorders, diarrhoeas, etc. Paediatrics (*kau-mārabhṛtya*) is the branch in which the treatment of diseases of babies, children, and adolescents have been described, who have growing bodies and hence undeveloped body tissues and less power due to young age. This branch includes knowledge of the characteristics of breast milk of the nursing women and treatments of disorders occurring due to improper breast milk. Rejuvenation (*rasāyana*) is the branch in which many processes are explained for the prevention of forthcoming age-related weaknesses and the processes which lead to increased vigour and body building. Aphrodisiac treatment (*vājīkaraṇa*) is the branch in

which the treatment of decreased semen or the seventh bodily tissue (*śukrakṣaya*) and abnormal semen (*śukra*) is given through nourishing medicines, pleasing medicines, and enlightenment. The knowledge of (malign) entities (*bhūtavidyā*) is the treatment of disorders of afflictions caused by malign entities through curative activities.

Amidst the other branches, which were unfortunately ignored, general medicine (*kāyacikitsā*) is the branch which is lived and practised by physicians. For this branch, too, though many other classical texts (*samhitā*) were available in the past, currently only the *Carakasamhitā* is available as an original classic. A few other compilation classics like the *Vāgbhaṭasamhitā* are also available. The available information from these classics in the form of basic principles regarding diseases, analysis of causes, diagnosis, examination, and treatment will be elaborated by me for the committee.

Question 2

- (a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stands the tests of modern scientific criticism.*
- (b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*
- (c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

To elaborate the theory of the origins of diseases, it is necessary to know about the diagnosis of diseases, and for understanding the diseased state it is necessary to elaborate on what is the normal state. According to the followers of all philosophies, all other entities opposite to the normal state are known as disease. When one intends to decide about the disease entity and causative entities, it is compulsory to decide what is normal. Hence, I shall first elaborate on normal health.

Health is something for which everyone, right from the poorest, puts in hard work. With good health, it is possible to perform all duties well, and in the absence of which even wealth cannot be enjoyed. Ayurveda has clearly stated what health

is exactly. Someone is healthy who has an equilibrium of body elements/humours (*doṣa*), an equilibrium of digestive fire, proper body tissues (*dhātu*) and proper excretory products and functions (*mala*), and who has a happy soul, happy organs, and a happy mind – such a one is a healthy person. The entities mentioned here, such as humours, body tissues, and waste products (*doṣa*, *dhātu*, *mala*), and digestive fire, will be further explained separately. The summary is that the state in which all bodily mechanisms and entities function properly and well, that natural body state is known as health. It means that the collaborative working of body entities naturally in a harmonious state has been conveyed by the word health (*svāsthya*).

It is necessary to know the causes of health to preserve them if they are present, and to achieve them if absent. Here, the causes have been elaborated in all their types, minute and minutest. This can be elaborated as follows: When there is a proper seasonal state in the cold season, the hot season, and the rainy season, the regimen suitable to that season and day should be followed in diet and life-style. All exaggerations and habits of the abnormal use of organs should be quit, the urges such as flatus, urine, and stool should not be forcefully created or ignored, and the ethical behaviours [as advocated by Ayurveda] should be followed. In short, the equilibrium and patient use of all substances, characteristics, and actions is undoubtedly the way to attain good health. Here, the word “substance” means all food substances as well as those necessary while bathing, the application of body scrub medicines, drugs for local application, substances for covering the bedding and clothes for wearing, and other equipment for these as well as time and place. The word “characteristics” indicates the sensations of sound, touch, appearance, taste, and smell, as well as all properties such as cold, hot, heavy, light, unctuous, dry, etc. along with their combinatorial effects and converted effects. The word “actions” (*karma*) means all bodily activities, like exercise, sex, sleep, sitting, etc. at the same time as the intellectual activities, like determination, perseverance, and speech-related actions, like singing, laughing, talking, etc.

In general, disease means absence of good health. This means that there is an abnormality in the natural phenomena or the natural phenomena of the body mechanisms, body entities, or normal functions in the body are disturbed. This is not different from disturbances in body tissues (*dhātu*).

The formation of disease can have two types of causes: external and internal. Of this, the internal causes are known by the term cause (*nidāna*). Though the causes can be of many types and made up of countless substances, properties, and actions, the ancient scholars have explained them to be of three types: abnormal use of senses (*asātmya indriyārtha samyoga*), improper decision making/errors of judgement (*prajñāparādha*), and effects of time (*pariṇāma*). Everything that is

elaborated and not elaborated comes under this. Out of these, the first type, unsuitable application of the senses (*asātmya indriyārtha saṁyoga*), means the use of the senses of hearing, touch, sight, taste, and smell in a way that is harmful for the body. It is said that without contact of physical causative factors to the body, there is no causation of diseases or of good health, and these come in contact with the body through the senses. The senses are five, and hence the contact of senses with other substances is also of five types. Here, even if the sense organ is one, there are many minute types [in its sensations], and hence its contact with different sites such as light or colours can be of many types. These are factors for beneficial or harmful action in body tissues, but as they are all eye-related, they are considered to be of one type. For the ease of succinct summarization and for advising, generally the uniting of sense organs with their respective senses is again of four types: scanty, excessive, abnormal, and normal, and of these, only the normal use of senses is the cause of good health. The other three causes are known as the improper use of senses. In this way, all abnormalities of touch, etc. are termed “abnormal use.” Also, bodily activities, intellectual activities, and speech-related activities in scanty, excessive, and abnormal manners create abnormalities in body tissues, and they are known as improper decision making (*prajñāparādha*). Similarly, time is also considered as the scanty, excessive, or abnormal natural atmosphere in the cold season, the hot season [summer], and rainy seasons. Even when there is a normal state of these seasons, if a person does not follow the regimen recommended then, the body tissues become abnormal and they become capable of producing disease, and this is known as the effect of time (*pariṇāma*). All causative factors are included, which are elaborated or not elaborated, known or unknown. These causes which are mentioned in the texts dedicated to diagnosis have been roughly explained here, and direction has been given for the minute details of related aspects.

After these body-related aspects, all external factors which can cause diseases have two types of phenomenon: some causes are related to the body, and they cause accumulation, excess formation, movement of a body entity to other sites, and getting lodged in an organ or tissue, and causing active painful disease by increase or decrease in body entities.

Some causes first create a painful body state and then cause the accumulation of body elements/humours (*doṣa*). These causes are respectively known as internal (*nija*) and accidental or external (*āgantuka*). They create internal and external types of diseases caused by themselves as well. However, though these two types exist for the origin and existence of diseases, after the disease is formed, there is usually equality of these two. This is because, if the body entities are not

abnormal, not many signs and symptoms can be formed due to external factors. The external causes are elaborated in short.

The internal causative factors are also of many types. The internal causes are seated in the form of body tissues (*dhātu*), body elements/humours (*doṣa*), excretory products (*mala*), etc. There are characteristics [or properties] associated with body tissues and six tastes in body tissues that possess characteristics like heavy, light, unctuous, dry, smooth, harsh, liquid, solid, etc. There are actions that originate in the body elements (*doṣa*) and body tissues (*dhātu*). All these substances, characteristics, and actions of the body get disturbed here and there by external causes, and they themselves become the causes of disease formation. It should be particularly understood here that in these internal causes, there is some cause, some target, some site [which is affected], and some pathway (*mārga*). Also, any cause will invariably affect the body elements (*doṣa*) only, nothing else. There are variations and countless possibilities of internal causes which are caused by external causes that affect some body parts, some sites, some body channels, sometimes [affecting] any two of these or three of these, leading to diseases of different shapes, different characteristics, and different actions, and leading to many symptoms.

The same can be explained in another way too, such as disease meaning the abnormality of body entities. This abnormality is present in the body entities, which can be by their increase, reduction, or opposite to this. For the knowledge of their proper characteristics, their functions should be known. After knowing these, it is possible for a wise person to know the technique of diagnosing any disease easily.

The body entities are body tissues like fluids (*rasa*), blood (*rakta*), flesh (*māmsa*), fats (*vasā*), bones (*asthi*), etc.; sub-tissues like veins, arteries, muscles, nerves, tendons, etc.; organs like lungs, heart, liver, spleen, intestine, kidney etc.; and excretory products like stool, urine, sweat etc., and body elements (*doṣa*). Their properties, the appearance of substances which develop them in each organ, their effects, their combinations, sites, etc., their normal functions for the good health of the body, their actions like life (*jīvana*), growth (*bṛmhana*), oleation (*snehana*), sustaining or holding (*dhāraṇa*), etc., as well as circulation of blood, carrying, pulsations, filling, letting out, digestion, separation etc., the sensations of sound, words, touch, looks, taste, smell, determination, perseverance, etc. and after that upward movement, downward movement, contraction, dilation, functions of opening and closure, etc., breathing in, breathing out, digestion, excretion of stool and urine after their proper separation, etc.: All these functions that go on continually are known as they are by nature, and known by experience.

The abnormality of these is of two brief types, though they themselves are of multiple types. This abnormality is either of “increase” or “decrease,” or it can be of three types, if we consider the opposites (*viparyāsa*). Increase (*vrddhi*) means increase by any means of each body entity by appearance, by unit, by system, by number, or in a qualitative way. The opposite to this is the decrease. Similarly, the increase takes place in particular actions. Hence, in this way the nourishing or promoting causative substances, when consumed, lead to an increase in the characteristics and functions of an organ, and the increase of similar other organs takes place, too.

The decrease or reduction in the organ or entity with opposite characteristics takes place due to consumption of catabolizing causative substances, and the same also happens in other similar organs. In such a way, the body entities themselves become the cause for the increase and decrease of each other [the reference for this is in *Carakasamhitā*, *Vimānasthāna*, chapter five]. It is clear that due to improper increase [or catabolism] of any body entity, entities with opposite natures to it undergo a decrease in characteristics and functions, leading to the hampering of proper bodily functioning. The abnormalities of such an organ, due to problems like slowness, loosening, and heaviness, leads to the hampering of its proper function. In such a way, due to an increase or decrease leading to the hampering of proper function, which is nothing but an abnormality of body elements, the previous is the internal cause of disease, and the same is known as disease, albeit in unexpressed form. The same leads to increase, disproportionate growth, and leaving its own site, thus getting lodged in a weak site, and the disease finally expressing itself by the phenomenon of disease formation (*samprāpti*) due to the interactions between abnormal body elements and organs or tissue.

Now it is essential not to forget the six stages including accumulation (*caya*). The unexpressed form of disease [in the form of interactions of abnormal body elements, i.e., *doṣa*, and organs or tissue], advances through six stages. It is not possible to oppose the disease unless proper knowledge [of these six] is obtained. They are as follows: The increase of body elements (*doṣa*) is accumulation (*caya*). It first occurs in the own place [site] of the body element. Part of the site is occupied by moving body elements, and the remaining part is occupied by non-moving body elements. As it is brought together, it is known as accumulation (*sañcaya*) [1]. When the whole organ or site is filled, the person experiences an aversion to entities with similar characteristics, and the stage is known as aggravation (*prakopa*) [2]. After this, the body element enters other organs or sites, and there a desire for opposite properties and aversion to similar properties are generated. As this involves displacement or movement, it is called expansion (*prasara*) [3]. When the increased body element defeats another body element at the place where

it has displaced it, it conquers the new site, and its own characteristics like dryness etc. are expressed. As it occupies the other site, it is known as lodging (*sthāna-samśraya*) [4]. Then, it causes further abnormality and expresses itself in a more aggressive manner, causing ill health and feelings of being unwell, and this is known as expression (*vyakti*) [5]. Later, the same disease undergoes many transformations and becomes chronic, and a group of diseases forms, and as it has different types, it is known as division (*bheda*) [6]. These six stages [of disease formation] have been clearly outlined by the sage Suśruta.

“Although there are also other reasons for disease formation, they are also included in the previous ones.”

There are also other reasons for disease formation. Diseases such as skin diseases, diabetes, haemorrhoids, body wasting, wind (*vāta*) disorders, gonorrhoea, etc., arise, and the cause of these is the parents having abnormal sperm or ovum (*bīja*). This means that due to the long-term existence of these diseases in the parents [either or both], there is an abnormality in their sperm or ovum (*bīja*), or part of it, leading to the formation of congenital diseases (*sahajaroga*).

Disease as cause of disease: Sometimes, a disease becomes the cause of other diseases, such as long-term fever or colitis, fistulas, or wounds leading to body wasting (*śoṣa*). Wasting (*śoṣa*) can be associated with *gaṇḍamālā* [a condition similar to thyroid enlargement]. Body wasting occurs due to its own causative factors and can further become the cause of a cough, or a cough can be the cause of body wasting. Many diseases which form due to their own causes also cause abnormality in body organs, which leads to the formation of new diseases in the affected organs. In a similar way, phenomena such as clusters of diseases (*ro-gasāṅkara*), complications (*upadrava*), or difficulties in treating diseases are created. Usually, when other diseases are formed later in an existing disease, this is known as a complication (*upadrava*). There, the own potential of the previously formed disease, and its effect of strongly encouraging the other cause, should both be considered as causative factors of the new disease.

It was previously stated that when the external causes get attached to the body, they become the causative factor in two ways. For example, a particular cause comes in contact with the body, and it leads to the stages of accumulation (*sañcaya*), aggravation (*prakopa*), etc. of the body element (*doṣa*), thus leading to the increase or decrease of bodily entities, causing pain, and hence the cause is known as internal (*nija*), and the disease formed by it is also internal.

Those causes which first lead to a painful state and later on result in stages like the accumulation of body elements (*doṣa*) are known as external or accidental

(*āgantu* or *āgantuka*) causes, and the diseases originating from them are known as external or accidental (*āgantu*) diseases. This also includes microorganisms. External diseases form in the body in two ways: by independent formation and by infection (*saṅkramaṇa*).

Injuries are caused independently by the impact of sticks or irons.

“Causes of accidental or external (*āgantu*) diseases are: by nails, teeth, falling, injuries, impact by evil (*abhiṣaṅga*), use of chanting, etc. for harmful effects (*abhicāra*), cutting, tying, piercing, covering, pushing, ropes, burns, weapons, lightening or instrument injuries (*aśani*), afflictions by malign entities, etc.”
[*Carakasamhitā Sūtrasthāna* 20]

Infection (*saṅkramaṇa*) means the spread of disease from an ill person to a healthy person, e.g. [contagious] skin disease. Its causes are as follows: coming into sexual contact with the ill person, touching their body, eating food with them from the same plate, breathing in the air exhaled by the ill person, eating the same food which has been partially eaten by the ill person, eating food on the ill person’s plate which has not been properly washed, sitting with the ill person on the same bed or seat, the use of the ill person’s bedding, the use of the ill person’s clothes which are stained by his excretory products like sweat, the use of instruments which they used, smelling the flowers or necklaces which the ill person has used, getting infected by microorganisms from the ill person’s body, etc. These are the causes of contagious diseases.

“Having sex [coitus], touching the body, exhalation, eating together, sharing bedding, sharing seats, sharing clothes, necklaces, or substances used for external application lead to skin disorders of various types (*kuṣṭha*), fever (*jvara*), wasting (*śoṣa*), or conjunctivitis (*netrābhiṣyanda*) and are contagious diseases, which spread through contact from one person to other.”

Attack of epidemics (*janopadodhvamsa*) [diseases which cause mass fatalities]: When at a certain time there is disease formation in a large number of people at a time, who have variable body constitutions, variable lifestyles, variability in body, systems, and strength, variable age, this is due to four causes: abnormality in air, water, place, and time [or season]. The causes of abnormal air are its being unnatural, too cold, too hot, too fast flowing, too stagnant, rough, causing stickiness [by humid nature], having foul odour [having potency to cause abnormality in the human body, poisonous], rotten odour [due to contamination of faecal matter], having abnormal humidity, having intolerable smoke or fumes, etc. In this case,

many types of abnormal minute particles or entities which have mixed with the air cause the abnormality, but air being the main source, and as it comes in contact with the body, it is considered that the air (*vāta*) causes abnormality.

Contaminated water includes the water having foul odour, abnormal colour, abnormal taste, is abnormal to touch, and where all aquatic animals have left. Here, also countless causative particles are consumed through water, so the main effective cause of disease is considered to be the use of contaminated water.

Abnormal place is elaborated as follows: Abnormal place or land means the original proper characteristics of the land have been changed and converted into abnormal colour, odour, taste, and touch, such as the formation of different colours, different smells, abnormal to touch, being too cold, hot, soft, or hard, being moist, and having mosquitoes, flies, mice or rats, and snakes. Furthermore, many types of land, such as those having excess grass or tendrils (*pratān*) or also abnormal, dry, and dead agricultural plants, etc., were regarded and mentioned in the texts as abnormal lands or places.

The next cause is time, or time-related changes in nature (*kāla*), which are natural. It causes variation in all entities, at all times, and in each moment, and it is the cause of growth and death of all plant and animal living beings, showing transformation at all times. This has been elaborated by sage Caraka in *Cara-kasamhitā Vimānasthāna* in the chapter The Causes of the Destruction of Peoples (*Janopadodhvaṃsa Vimāna*).

It is evident that variously shaped microorganisms are the causative factors of each disease, and hence these micro organisms are thought to be the causes. However, the origin and growth of these microorganisms are attributed to favourable conditions of air, water, land, and time, which lead to the origin and contagiousness of diseases, like some of the skin disorders. This is because the air and water [by means of nutrition] and land [by lifestyle or favourable atmosphere] become growth-promoting and nourishing for these microorganisms. Hence, favourable entities such as air or water are the main causes for it, and in the environment the causes are water, fire and air, while in the human body they are wind (*vāta*), bile (*pitta*), and phlegm (*kapha*) [the three body elements or *doṣa*]. This is because their favourable conditions in the environment and the body of animals and plants become causative factors for the origin and growth of [further] microorganisms or unfavourable conditions, and destructive environments also depend on the situation of wind, bile, and phlegm. This is by external causes.

Just as air, fire [or the sun], and water have importance, similarly the body has wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*). This is elaborated in *Cara-kasamhitā Cikitsāsthāna* in chapter 28.

(b)

DISEASE DIAGNOSIS

For the intention of gaining knowledge about diseases, physicians should rely intellectually on three methods: authoritative teachings (*upadeśa*), direct experience (*pratyakṣa*), and inference/interpretation (*anumāna*).

Authoritative teachings (*upadeśa*) refers to teachings received from teachers, hearing of systematic verses of Ayurveda about the causes, symptoms, and contemplation of these, and experiencing the examination of diseases by teachers, and it leads to knowledge of external and internal causes of diseases. The sights, sounds, touch, appearances, tastes, smells and other such aspects of diseases, the different types of pain, their sites, complications, the efforts for their opposition and their treatment are understood [from the master]. After such aspects have been taught by the teacher, the physicians should rely on direct experience (*pratyakṣa*) of signs and symptoms [by the sense organs] and by interpretation (*anumāna*). Using direct experience through the sense organs the physicians should examine sounds, touch, appearances, tastes, and smells of the ill person directly.

“The aspects to be understood by hearing are air (*vāta*), which expels blood and creates sounds while letting it out, etc.” [*Suśrutasamhitā Sūtrasthāna* 11].

The sounds of intestinal movements, sounds originating from the joints of bones, and the sounds of body organs as well as the speech of the ill person should be known by hearing. The variations in speech are also of two types, which can be assessed by hearing: Normal sounds are like that of a swan (*hamsa*), a crane bird (*kraunca*), a drum-like musical instrument (*duṇḍubhi*), a house sparrow (*kalavimka*), etc., and these exist without any abnormalities otherwise. However, speech which is unexpressed, similar to a boiling sound (*gadgada*), weak, or sad are not normal, and other unnatural sounds are also abnormal.

The examination should be done by inspection with the eyes [i.e., by looking] to assess stool, urine, phlegm (*kapha*), blood, semen, menstrual blood, oozing of wounds, vomitus, organs such as the eyes, the tongue, the skin, nails and body parts by seeing their colour, state, proportion or amount, shadow-related normal and abnormal states.

Various smells related to the body, the body organs, or the ill person should be assessed by smelling with the nose.

Palpation by hand is carried out for assessment of the arterial pulse, coldness, heat, smoothness, roughness, softness, hardness and such sensations as well as

cysts, swellings, body parts, and organs. This is the assessment by direct sense organs (*pratyakṣa pramāṇa*).

The following aspects of ill persons should be known by interpretation (*anumāna*). For instance, the digestive fire (*agni*) of a patient should be known from his capacity to digest food. Strength is known by the capacity to exercise. The state of the ears and hearing is assessed by his capacity or incapability to hear words. Normal or abnormal states of mind are interpreted from normal behaviour in the context of happy and sad events. Semen (*śukra*) [the seventh body tissue (*dhātu*)] is assessed from the cheerful nature of a person. Understanding of name, age, likings, tolerance, diseases from time, land, relief and symptoms, softness or fragility of intestines, hatred, desire, feelings of relief or trouble can be assessed by asking questions and by the interpretation of answers. For each disease, the prodromal symptoms are mentioned in the texts, and the abnormality in the body should be assessed by knowing these. The status of organic abnormality should be inferred from the complications from a disease. The incurability of a disease can be inferred from symptoms that predict death (*ariṣṭa*). Incurability here means an abnormality in organs that cannot be cured by any means, thus indicating signs of the end of life.

“A disease should be correctly diagnosed through teachings from experienced physicians, by direct examination, and by inference.” | 1 |

“A mindful person should always know the basic principle first and then proceed to action.” | 2 |

“One cannot treat diseases unless one enters the soul of the diseased person through a lamp in form of his knowledge and intellect.” | 3 |

EXAMINATION OF THE AFFECTED ENTITIES OF THE PATIENT FOR THE EXAMINATION OF DISEASES

According to the theory and principles of Ayurveda, for disease diagnosis and for deciding the line of treatment, assessment of the following should be done: affected body entities (*dūṣya*), land or site, time, digestive fire (*agni*), body constitution, mind power, tolerance or intolerance, and age, along with their minute details. Actions carried out by proper interpretation lead to immediate success.

Assessment of the affected body entities (*dūṣya*) is carried out as follows: *dūṣya* means the main internal cause of disease formation. Affected body entities are the internal causes of diseases which are affected by body elements (*doṣa*), such as in diabetes, fat, flesh, and fluids in the body are affected; in skin disorders,

skin, blood, flesh, and serum are affected; in haemorrhoids, skin, blood, flesh, and fat at anal sphincters are affected; in epilepsy and coma mind and the brain are affected; and so on. Diseases have been elaborated in the texts [in *Nidānasthana*], and those are formed by the increase or reduction or abnormality of body tissues, sub-tissues, excretory products, sites for getting lodged, pathways (*mārga*), etc. From the knowledge of the affected body entities, we can assess the curability or incurability of the disease. Among the affected body entities (*dūṣya*), some are similar to properties of wind (*vāta*), some to bile (*pitta*), and some to phlegm (*kapha*). When a body element comes in contact with an affected body entity (*dūṣya*) with similar characteristics, the body element gets strengthened and the disease becomes incurable. Hence, texts mention “not having affected body entities (*dūṣya*) of the same potential characteristics.” This makes it clear that for disease diagnosis, examination of affected body entities (*dūṣya*) is necessary.

LAND OR SITE (*DEŚA*)

This is stated to be of two types, [regional] land and the body of the ill person. Examination of land is necessary for diagnosis for the following reason: it is important to know in which land the patient was born, where he was brought up, where he got ill, which diet people from that land follow, which lifestyle, in which manner they behave, what kind of strength they have, what kind of will power, what kinds of problems, which common factors [e.g. for the origin of malaria, plague, cholera, etc.]. For example, in a land with old water and coldness in all weathers, the disease filariasis (*ślipada*) is common. What is beneficial and what is not can be assessed by knowing the land, and we can obtain details about the strength or weakness of body elements (*doṣa*), etc.

THE ILL PERSON (*ĀTURA*)

Since the body of the ill person is the site for performing treatment, it is also considered as a site (*deśa*). This site of treatment is important for assessing the lifespan of the person by knowing the signs of long life, etc.. and also it is necessary to cure the disease by knowing the amount of the involved body elements (*doṣa*). The knowledge of the proportion of body elements and the knowledge of lifespan can be assessed through the patient’s body constitution, abnormality, status of having well-nourished body tissues (*dhātu sāra*), physical build (*saṁhanana*), proportions, tolerance, will power, capacity of eating food, capacity of exercise, and age. Examination of body constitution (*prakṛti*) is performed as follows: the body constitution is of six types, related to birth (*jātiprasakta*), family

(*kulaprasakta*), place/site (*deśānupātinī*), time (*kālānupātinī*), age (*vayonupātinī*), and individual constitution (*pratyātmaniyata*). Out of this, the individual body constitution (*pratyātmaniyata*) is of seven types, as per bodily wind (*vāta*), etc. types. Psychological (*mānasa*) constitution, is of fifteen types, according to combinations of three types of mental power (*sattva*). To generate a specific type of body constitution (*prakṛti*) in a body, the basic constitution of sperm (*śukra*), procreational fluid (*ārtava*), constitution of time and uterus, diet, lifestyle, and body constitution of the mother as well as the constitution of the five basic entities (*pañcamahābhūta*) are considered. Body constitution is formed on the basis of these four special factors. Depending on which body element (*doṣa*) dominates these four special factors, the body of the foetus receives that body constitution (*prakṛti*). The body constitution can be phlegmatic (*kaphala*), bilious (*pittala*), dominated by wind (*vātala*), dominated by two humours/body elements (*dva-dva*), or with an equal distribution of the three body elements (*doṣa*), i.e., of seven types, depending on the aspects associated with the foetus. Due to this, from birth itself there is an association with body elements such as wind (*vāta*), and due to the same there is creation, growth, normal activities, and abnormalities. It is practically evident that in a person of the body constitution of wind (*vātaprakṛti*) who consumes substances with wind characteristics, the body element wind (*vāta*) immediately gets aggravated (*prakopa*), but the other body elements do not get as quickly aggravated as wind. The phenomenon is similar for the body element bile (*pitta*) of a person with a bilious body constitution (*pittaprakṛti*) and phlegm (*kapha*) of a person with a phlegmatic body constitution (*kaphaprakṛti*). A body element (*doṣa*) is aggravated by its own causes and hampers body strength, complexion, happiness, and lifespan, and creates pain for the body. There has to be some evident reason for this. If we search for reasons, we get wind (*vāta*), bile (*pitta*), and phlegm (*kapha*) as the reasons. This should be specifically inferred from *Carakasamhitā Vimānasthāna*. Of these, the analysis of aspects such as strength is also very useful for the determination of disease diagnosis. I shall not elaborate it here for the fear of extension. If anyone desires it, they should refer to my speech in the physicians' conference in Kolkata city from page 2 to page 52. If the examination of disease is proper, it helps in the examination of disease entities.

TREATMENT LINE

The actions carried out for the destruction of abnormalities in body tissues and for attaining equilibrium in body tissues is known as treatment. The authority says that “the processes which establish the equilibrium of body tissues is the treatment

of diseases, and it is the job of a physician.” The processes or actions elaborated for curing the disturbed body tissues are reduction of increased tissues, enhancement of those which are diminished, softening the ones which have become hard, hardening the soft ones, melting those which are stuck, and joining the loosened ones, stopping the flow, steaming the rigid, etc.

Processes for generating equilibrium of tissues: when body substances or characteristics diminish, nourishing substances of similar properties should be consumed. For their digestion, the digestive fire of the gastrointestinal tract and the digestive fires of tissues (*dhātvāgni*) should be stimulated. There are many types (of stimulation) according to needs, such as proper cleansing of body systems, following a good lifestyle with walking, running, swimming, regular consumption of rejuvenatory drugs, and quitting the causes of disease formation, etc.

When such activity is done, abnormality of tissues is cured on its own, also due to natural phenomena, by quitting the causative factors. The sage Caraka mentioned that

“By quitting abnormal causative factors and consumption of correct ones, there is no further abnormality and tissues become normal.” | 1 |

“Treatment should be performed so that there is no disturbance of tissues and for the equilibrium of tissues.” | 2 |

In this, proper arrangement [or application] of medicines, food, land or site, and time is done to complete the treatment. Not all of these, i.e., food, lifestyle, site, and time, are medicinal, however their importance in treatment or medication is proved in the case of treatment opposite to causes, opposite to disease, opposite to both, or effectively similar to both. All medicines necessarily should have opposing properties to causes or properties similar to causes but finally curative (*vi-paritārthakāri*). This knowledge is possible only when there is knowledge of the causes and symptoms of diseases and the similarity and dissimilarities among medicines. There are many causes, symptoms, and medicines together with their similarity and dissimilarities, and it is very difficult to know them all. Hence, one should try to gain an equilibrium of wind, bile and phlegm and knowledge about their balance or imbalance. If one gains knowledge of their balance or imbalance, the medicine delivered accordingly is almost always effective in curing the disease. Where there is an exception, a detailed study of causes, signs, symptoms, and medication should be performed. The word cause (*hetu*) means all external aspects, such as coldness and heat, and internal ones, such as body elements (*doṣa*), affected body entities (*dūṣya*), channels (*srotasa*), waste repositories (*āmāśaya*), and all abnormal organs and mechanisms. The destruction of disease

is always achieved by means of the destruction of causes. In the word “disease” (*vyādhī*), all stages of accumulation (*caya*), aggravation (*prakopa*), reduction (*praśama*), getting lodged (*sthānasamśraya*), and all active signs and symptoms of the formed disease together with their complications are included. Destruction of any of these is considered to work against the disease. Here as well, there is a possibility of partial or completely opposite states, and there may be proportional formulations (*tāratamyakalpanā*) and partial formulations (*aṁśāmśakalpanā*). Hence, countless medicines may be used in countless disease conditions, in various stages, and in a proper way, and they will cure the diseases. There is no scope of going wrong. Hence it is said that “One who knows about the combinations of flavours (*rasa*) and who knows about alterations (*vikalpa*) of body elements (*doṣa*), never goes wrong in knowing causes, symptoms, and the cure of diseases.” [Carakasamhitā Sūtrasthāna 26]

It is proven that the opposite characteristics of the cause, e.g., hot-potency medicine for cold causes and cold-potency medicine for hot-potency causes, and that for disease conditions like burning, cyst formation, and loose motions, therapeutic actions like dipping, softening and ceasing actions [respectively] are the cure. Similarly, the opposites to both of these should be understood. Diet also becomes a cause for the cure of disease when it is opposite to its causes, opposite to the disease, or both. Lifestyle becomes curative when it is opposite to the cause [e.g., walking by diabetic person], opposite to the disease, and opposite to both. The same is true for the land, since a land with a hot climate is curative for diseases caused by cold properties, while a land with a cold climate is curative for diseases caused by hot properties. The land can be opposite to the cause, the disease, or both, and hence knowledge about it can be useful in treatment, e.g., by having more air, water, land, or trees, etc. The same is true for time. The word opposite (*viparīta*) at this place should be considered as completely opposite, opposite in characteristics, or opposite in action.

The medicine may be of many types for different types of diseases, however, it can be classified into merely two types, i.e., anabolic (*santarpana*) and catabolic (*apatarpana*). It is not different from these two types. The diseases formed are also of two types: Diabetes, fever, skin disorders, improper digestive metabolism (*āmadeṣa*), obesity, heart diseases, etc. are formed due to excess consumption of heavy, sweet, or oily food, by excessive eating, not doing exercise and hence due to anabolism, or, in other words, an increase due to synergism. On the other hand, diseases like body wasting [*śoṣa*], cough, loss of strength and flesh, fever, constipation, or anuria happen due to not consuming nourishing food, or not having nourishing food available, due to chronicity of any illness, due to excessive cleansing treatment (*samśodhana*), causing catabolism, generally summarized as

catabolizing causes. Medicine, though of many types, is of two types: opposite in nature, i.e., catabolic medicine (*apatarpaṇa*) for anabolic diseases and anabolic medicine (*santarpaṇa*) for catabolic diseases. Moreover, the catabolic medicine (*apatarpaṇa*) can have many variations but is actually of two types: purifying (*śodhana*) and pacifying (*śamana*), according to the strength of the body elements (*doṣa*) [which have caused the disease]. Procedures carried out to remove excess body elements from the body are purifying (*śodhana*), where there is a great amount of the body element. The activity of getting rid of abnormality and destruction of disease from the roots is called pacifying (*śamana*), where the body elements are present in small amounts. Purifying means medically induced vomiting (*vamana*), medicinal laxation (*virecana*), enema (*niruha basti*), nasal instillation of certain medications (*śirovirecana*), bloodletting (*raktamokṣaṇa*), and it also includes medicinal smoke (*dhūma*), medicinal bolus in oral cavity (*kavala*), medicinal ophthalmic collyrium (*añjana*), eye drops (*aścyotana*) for physically getting rid of body elements (*doṣa*) from different organs, and it also includes the surgical removal processes of pus or altering an abnormal foetus position, through surgical procedures like cutting, breaking, scraping, piercing etc. Pacifying includes many actions, like supporting digestion (*pacana*), facilitation of digestive fire (*dīpana*), exercise (*vyāyāma*), fasting (*upavāsa*), staying or travelling in sunlight (*ātāpasevana*), staying or travelling in airy places (*mārutasevana*), etc. It also includes the application of anti-inflammatory liquids, loosening of swelling, application of medicinal pastes, as well as the consumption of smoke, nasal instillations, gargles, medicinal bolus treatment in oral diseases, medicinal collyrium for eyes (*añjana*), eye drops (*aścyotana*), local application of herbal pastes (*lepa*), baths, etc., and many variations.

Similarly, the anabolic medicines (*santarpaṇa*) include drugs of strengthening or nourishing medicines (*balyabṛmhaṇīya gaṇa*), like *aśvagandhā*, *śatavarī*, *balā*, *kṣīrakākolī*, etc. and food products like non-vegetarian soups, milk, etc. Pacifying treatment medicines (*bheṣaja*) include oil enemas (*anuvāsana basti*), baths, applications of oil on skin (*abhyāṅga*), nasal instillations, medicated gargles, medicated pastes for oral diseases (*kavala*), etc. There may be variations, but as these result in the nourishment of weak body organs, they lead to anabolism, and although it is anabolism, it comes under the pacifying treatment. For a healthy person, treatments like rejuvenation (*rasāyana*) and aphrodisiacs (*vājīkaraṇa*) are energizing, and hence they are strengthening (*bṛmhaṇa*). Though there are many variations, the medicines generally are of two broad types. A medicine with opposite nature or properties or action will have a more potent action if its site or land, the time, and the dose, etc. are also considered.

“When medication with opposite properties [to that of the cause of disease] is employed, considering land, time, and dose, the [curable] diseases are cured.”

| 1 |

It is fruitful to consider the stage [of the disease] when carrying out [therapeutic] actions. The knowledge of stages is obtained by listening to the system [through teachers], contemplation, worship of the teacher, regular study, and by repeatedly seeing the stages of various ill persons, which have been elaborated earlier.

In the Ayurveda system, three types of medicinal drugs are used: drugs of animal origin (*jāṅgama*), plant origin (*audbhida*), and earthen or inorganic (*pārthiva*). Those obtained from animals are *jāṅgama*. They are honey, milk, curd, ghee, bile, animal fat (*vasā*), marrow, blood, semen, bones, muscles, horns, nails, teeth, hoof, skin, excreta, urine, hair, skin hair, gall stones, etc.

The drugs which grow from earth are “sprouting” (*udbhija*), they are of three types: plants having fruits but no flowers, like *vata*, *udumbara* known as trees (*vanaspati*), plants having flowering and then fruiting, e.g., mango, known as flowering trees (*vānaspatya*); plants which die after the fruits are ready, e.g., wheat, known as annual plants (*oṣadhi*); and plants which need support for their creeping and growth, e.g., *śaṅkhapusṭī*. Roots, bark, inner stem, exudate, stem, juice, new tiny leaves, latex, fruits, flowers, oil, ash, alkali (*kṣāra*), essence (*satva*), thorns, shoots, thick modified roots, and aerial roots of these plants are used as medicinal agents.

Medicinal substances have natural taste, characteristics, potency, post-digestion effect, and specific actions. These are seated in the substance and create the equilibrium of tissues when used appropriately. Some substances are taste-dominant and they function by their taste. Some are potency-dominant. Some are dominant by means of their post-digestion effect. When two substances have the same taste, potency, and post-digestion effects but carry out different actions, this is attributed to the specific action (*prabhāva*) of the substance. This means the specific action of a substance which is evident by dominating over all the substances’ aspects, like taste, potency, and post-digestion effects. The substances of animal and plant origin have delicate parts and hence are perishable. Since these medicines underwent a reduction in potency and action due to the passage of time, the scholars of Ayurveda started using stable substances which do not undergo much change with time and have stability and great potency, such as metals, minerals (*upadhātu*), gems, secondary minerals (*uparasa*), and secondary gems (*uparatna*). These are known as earthen substances (*pārthiva dravya*), which have the capacity to function with their taste, potency, post-digestion effect, and specific activity.

These various medicinal substances, through their different formulation types, like pastes, decoctions, electuaries (*avaleha*), spirituous distillates (*āsava*), and liquors (*ariṣṭa*), powders, tablets, pills (*vartī*), caplets (*cakrikā*), etc., and by considering aspects like land or site, time, dose, and when administered according to the disturbance of body elements and tissues (*doṣa, dhātu*), path, place or site will certainly cure any disease. They will not create any abnormality.

There are many remedies which when used will immediately reduce the pain [of the illness] and are known as “so-called cures.” They actually never cure the disease, but they defeat the abnormality of the body element which is causative. Due to the destruction of the cause, the effective disease also appears to be defeated. As this remedy is unwanted [unnecessary], it immediately or later causes abnormality of systems or organs (*srotasa* or *āśaya*) and creates problems for the ill persons. Hence the ancient scholars do not recommend such treatment, and they advise pure treatment (*śuddha cikitsā*), for example: “The action or remedy which will reduce the illness but create other illnesses is not pure. The one which cures the disease and does not harm is pure. It is the opinion of scholars that the action which leads to inappropriate results immediately or later should not be performed.”

As per our science, the success or failure of treatment depends on the eligibility of the physician. If the physician has complete knowledge of the Ayurveda system, good interpretation skills, good memory, and quick action, his treatment will undoubtedly be fruitful.

The four pillars of treatment are the medicine, the physician, the ill person, and the nurse. Treatment which is based on these is considered complete, having the support of these four pillars. These aspects lead to great success in clinical practice. If any one of these is abnormal, the physician cannot accomplish treatment. In our medicinal system, the medicines are not destroyed after a short duration, and they do not create problems during their action and during their destruction – unlike modern medicines which have many toxins. Our medicines have proper taste and potency, are easily available in time, low in cost, and easy to prepare. That is the reason for the great action of authentic Ayurvedic medicine, which is comprised of many formulations, prepared correctly, used timely, and hence will not get outdated.

“The medicine with potency, which has been prepared nicely with medicinal juices, which has proper taste and smell, which is administered at a correct time, after the digestion of food, and with a focused mind becomes effective like nectar (*amṛta*).” *Aṣṭāṅgasāṅgraha Sūtrasthāna* 23

In the success of this Indian system there is an obvious intention too, in the sense that the medicines present in this land are suitable for persons born here. As the patient belongs here, he has always consumed substances belonging to this place, and hence the effect of medicines growing here is evidently positive on the body. In the Ayurveda system, for the cure of disease, suitability (*sātmya*) also has been considered as a special cause. Suitability (*sātmya*) means “being suitable” or “being used to.” It means that a substance is not harmful to the body through its nature or effect. There are many medicines for curing a disease. The medicine suitable to the patient has quick effects on his disease. This is logical. The particles of a substance will have effects only if the body responds to it in suitable or friendly way. Since the substance may also have curative properties, the specific good result is totally logical. This is also an intention behind the success of our system of medicine.

“The medicines naturally available at a land are beneficial for persons of that land, and also are the medicines from other lands with the same properties as the previous.” *Aṣṭāṅgasāṅgraha Sūtrasthāna* 23

Record keeping is necessary for having evidence of success. Unlike modern doctors, Ayurvedic physicians [Vaidya] do not have a tradition of keeping patients' records, consent forms, and registrations. Hence, any elaboration of the number of patients and other such aspects are very difficult for people like us. The government should create dispensaries and manufacturing units and hospitals for the Indian system of medicine and make arrangement for such types of aspects [record keeping, etc.], and then take a decision about its success.

(c)

Here it is my opinion that the Ayurveda system is especially fruitful in chronic diseases and in major diseases. I have treated many patients of wind (*vāta*) diseases, colitis (*grahāṇī*), cysts (*granthi vāta*), hyperacidity (*amlapitta*), gonorrhoea (*upadamśa*), etc. I have experienced many miracles of Ayurveda's medicines for the cure of these diseases. However, it is not possible to show the statistics due to the lack of any record keeping system. I am sending immediately the copies of certificates received from five to six patients who were not cured from other systems, had forsaken any hope of living, and then were cured by Ayurvedic treatment. These are from dignified persons with high status and names and fame like kings. When such types of persons are attracted towards any medicinal system, they have the knowledge about its certain fruitfulness from many other patients.

Thus, the committee should interpret how many patients must have been cured. The committee will analyse how many patients achieved good health.

Question 3

(a) *Are you connected directly with any institution providing medical relief or medical education on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

I am associated with two such institutions. I am the chief supervisor in the well-known clinic Dhanvantari Auśadhālaya. All patients who arrive in this clinic are treated according to the Ayurvedic system of medicine. Here in the government Sanskrit school, Ayurveda is taught up to the degree of physician of Ayurveda (*bhīṣagācārya*).

(b)

In the Dhanvantari clinic and medicine store, there is proper availability of treatment and medicines. However, the clinic is yet of general class. If somehow major financial funding becomes available and a large piece of land is made available, where we can have a well-equipped clinic and medicinal pharmacy as per the treatment system guidelines and as per the directions, then a college will be created together with a hospital, useful in all seasons, with a manufacturing facility of all types of medicine, well-equipped also as a hospital, and well-qualified, well-known physicians will be appointed, who have a record of success and knowledge of the system, medicine, and experience. Then a great deal of work can be carried out.

In the college, teaching is of best quality as per its potential, however, larger facilities are expected for gaining more expertise on the identification of raw medicines, diagnosis of patients, and surgery. If this is achieved, a different level of teaching and learning will become possible.

(c)

Our Ayurvedic system has eight branches. In the active institutes, only some of these branches are being taught and clinically practised. Hence, the availability of resources here cannot ever be considered adequate. To achieve adequacy, these are some proposals and solutions:

- 1) Some fully equipped medicine manufacturing pharmacies should be established in every region in India.
- 2) In these regions there should also be a well-equipped college.
- 3) The respective administrative physicians in these colleges must be well-qualified by knowledge, scientific views, and experience, etc.
- 4) Medicinal plant gardens for specific herbal medicinal plants should be created at places suitable for those plants.
- 5) Students selected should also have knowledge of other subjects which are necessary to learn Ayurveda in a detailed manner.
- 6) There should be such suitable arrangements in all regions as per the requirements there.
- 7) The funds required for this huge noble task should be under the authority of outstanding persons who wish for the improvement of the system and the country.
- 8) The false claim that only modern medicine is scientific should be abandoned. No single treatment system should be selected and pampered. Ayurvedic treatment which is very fruitful at low cost should also be considered and introduced [to everyone].

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

In the fourth recommendation of the assessment committee, the action plan for the Indian system of medical education is given, and I agree completely with it. I accept that it is essential for any proper education in Indian medicinal systems. I am not aware of the situation in Madras. Hence, I am unable to comment on how practical it would be to implement the proposed plan. If such equipment as per the proposal can be made available there, the plan can be implemented without great effort. If it is asked whether such a type of arrangement has already been applied at any other place, the answer is that in Indraprastha [in Delhi], as an initiative, all equipment is available in the college of Unani medicine. A similar project will be implemented in Rīṣikula in Haridvāra and Banaras Hindu University [in Varanasi]. Apart from these, I am not aware of any such facility. In my opinion such facilities are necessary. It is possible that there may be difficulties at some sites concerning such facilities. But despite the difficulties, if we do not begin the work it will never be accomplished. Difficulties are common everywhere in all tasks. If it is considered that such difficulties cannot be solved at all, in that situation the following actions should be performed:

(1)

In the regions where modern medical colleges are available, a department should be created where students willing to learn medicine (*vaidyak*) and those who have learned it can take admissions. Their job should be the same as students of allopathy, except for education. For teaching, arrangements should be made that two to three chief professors should be appointed who will explain the modern essentials in the Hindi language. Or else, which subjects should be taught should be under the discretion of the committee, where experts of ancient and modern systems will be available. I do not feel that there is much difficulty or expense in this scheme. This scheme is possible at low cost.

(2)

Alternatively, in the regions where colleges or universities are already there for education in the Indian systems, they should be funded for progress. There should be provision for students learning there to practice daily at local government hospitals.

(3)

The Ayurvedic system of medicine has been attacked by many and has broken down since a long time during its journey in time. Hence, there is a lack of experts who have knowledge of all its processes. Such skilled persons should be reached, financially rewarded, and they should facilitate the knowledge transfer to other physicians. Hence, the processes will be secured which may otherwise remain unknown to others after their masters have passed away. This would contribute to the loss of the Indian system of medicine. With all the above-mentioned three ways, or by any other means, the rise of the Indian systems of medicines should be planned.

Question 5

Do you agree with the view of the Calcutta University Commission that “There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

I agree with some parts, and I disagree with some aspects of Calcutta University Assessment Committee with due permission from them. I agree that some modern physicians are willing to build good collaborations with [our] system. It is favourable for the basic principles of Ayurveda and hence a sign of an auspicious future. It is undoubted that when the allopathic doctors benefit by Ayurvedic

concepts through Ayurvedic physicians, they will be favourable to Ayurvedic physicians (*vaidyas*). I disagree with the fact that “like the modern doctors, Ayurvedic doctors will also abandon many traditional processes.” There is no aspect in Ayurvedic texts which is worth deleting. Whatever is mentioned is completely certain and true. If proper assistance is given to enhance the Ayurvedic system in a complete manner, in the same way that it is given to the allopathic system, then the objections against our ancient Ayurvedic texts can be satisfactorily overruled.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, and also study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D. of our Universities).

(b) The preliminary qualification and periods of study for each of the standards proposed.

(c) The medium or media of instruction proposed.

Due to the differences in basic principles and medicines, it is not possible to equate the two systems [Ayurveda and allopathy]. To engage in collaboration between modern and ancient medicinal systems, I have accepted the action plans mentioned below, and they are useful for assisting the same.

- 1) Students of the Indian system of medicine may complete their education and then attain appropriate scholarships to study modern medicine.
- 2) Students of modern medicine may be facilitated to obtain knowledge of the basic principles of the Ayurvedic system (*vaidyaka siddhānta*) by some arrangements.
- 3) Legendary learned scholars who understand the core of the Ayurvedic system as well as modern medicine should translate the basic principles [or theories] of the texts of the Ayurvedic system into the Hindi language.

- 4) Modern physicians who have knowledge of the Ayurvedic system also should translate the basic principles of modern medicine into the Hindi language. I feel integration can be successful through this. In this way, the representatives of both systems can get to know each other, receive core knowledge from each other, and be in harmony.
- 5) I agree with the proposal of the assessment and discussion committee. The relation of Indian medicine, Western medicine, and current science is a must. However, the curriculum should be such that it rejuvenates ancient surgery and the branch which deals with diseases of the head and neck regions (*śālākya*), so that in the future progress can be seen.

In this regard, the essential aspects are how the education system should be and which exams should be conducted. Concerning this, my opinion is that initially the exam, syllabus, and textbooks mandated by “the regulations in All India Ayurveda Universities,” i.e., *nikhila bhāratavarṣīya āyurveda vidyāpīṭha niyamāvalī* are adequate – in trust that the committee will take up the hardship to look into these. There should be an arrangement of education and examinations at regional and experimental levels. Otherwise, such a committee should be formed having well-qualified and renowned scholars who would come together and discuss the syllabus and the curriculum. In the potential members of this committee, half of the members should be a part of an Ayurveda University and the syllabus as decided by them should be final.

The higher education of Ayurvedic subjects should be delivered in the Sanskrit language, and the new subjects should be taught in Hindi. In regions where Hindi may not be suitable, education should be in local languages.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b) *any changes in, or additions to, the existing legislation on medical registration.*

The names of Indian medicine practitioners must be registered in a register. The names of all Ayurvedic physicians (*vaidyas*) should be mentioned, those who received training from well-known colleges and passed any related examination as

well as those who are experts in this system by inheritance of Ayurvedic medicinal knowledge. For finalising registers of such experts, regional committees should be formed by eligible Ayurvedic physicians who can enlist both types of physicians as mentioned above and who can enter their names in the registers. The certificates given to all those registered should be recognized by government offices, as it is done also in the modern system. I am not aware of any [existing legislation of] registration, hence I will not write about it. For this regulation, learned physicians should be invited.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

It is the unanimous opinion of people of the present time that Western medicinal treatment is very expensive. By contrast, treatment by the Ayurvedic system of medicine requires lower expenditure. It is known that Western medicines are brought here through other countries. At the same time, the raw drugs are collected and exported from India to foreign countries, converted into medicine by means of many ways, and again imported here. Hence, obviously the Western medicines are expensive. Obtaining raw drugs from other countries and again exporting them together with such pharmaceutical companies and their many employees has become a medical business, and hence obviously it has become very expensive.

The Ayurvedic [Indian] medicines are free from this issue, since they are produced and used here. This is the reason why Ayurvedic drugs are less expensive than Western medicines. One can just check the yearly turnover documents of Ayurvedic and Western medicines as evidence here. I want to draw the attention of the committee towards an article entitled “Spread of Ayurveda in South India by Vaidyarāj Pandit D. Gopalacharlu” who lived in Madras. In the said article, on pages 16, 17, 18, 19, and 25, the expenses of Ayurvedic clinics and medicine dispensing units, the number of patients as well as and the expenses of modern hospitals and the number of patients there have been properly stated on the basis of state-wise annual data in that region.

Also the annual expense data of Dhanvantari Auśadhālaya are also clear. From this it is evident that the medicine distributed to patients is possible at such low cost. The committee should note that now the Ayurvedic system clinic has a facility of distribution of a few proven and commonly acclaimed medicines. In

this system, there are many such medicines which require not only hard work but also great cost. In this system, there are many such medicines prepared from gold or iron which, though expensive, can be produced in bulk amounts, and this can make them easily available and reasonable.

The minimum expense for Western medicine appears to be twice as high as the maximum expense of Ayurvedic medicine. The import of medicine from foreign countries, lack of drug manufacturing units, high cost, and the high-profile lifestyle of doctors are the reasons for these higher expenses. On the other hand, the availability of medicines nearby, maximum ease of preparation, minimal cost for raw drugs, and the tendency of physicians to spend a minimum on lifestyle are the reasons for the low cost of Ayurvedic treatment. This should be noted.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival.

There are many reasons for the fall of the Ayurveda system. In terms of thoughts the following aspects are possible:

- 1) Unstable situation in the nation, lack of government support, government officials being against Indian systems of medicine.
- 2) Destruction of many texts during foreign intrusions and war, lack of printing facilities.
- 3) Lack of educational institutes, unclear syllabus, lack of hands-on work along with theoretical education.
- 4) Aspects like an attitude of negligence of Ayurvedic physicians towards other systemic subjects, the nature of physicians to keep secrets and not revealing information to students, practising the system without proper education. Apart from this, other reasons are included here too.

It seems essential now to elaborate each of the four previously mentioned reasons. The first reason is the constantly changing situation in the country [India]. While contemplating this, a consideration of history is necessary. Although the history of this country is not accurately [completely] known, it is understood that after the Buddha's era, the governance became very unstable. The ruling powers were handed over quickly in small intervals from one caste to another. The political rules of many royal ascendants in Āndhra and Kīṇva etc. changed dramatically. Due to such a situation there was no peace. There was a huge disturbance in the

progress of art and skill in the nation. The degradation of Ayurveda started from the Buddha's era. Usually, the dissection of cadavers was considered sinful. With the dominance of the philosophy of non-violence, the treatment of bodily wounds was looked at with doubt. There was a great loss of the surgical branch. The instrumental treatment banned in this era never came into routine after that. Due to unstable governance, other branches of Ayurveda also were not encouraged. The lack of acceptance from the government led to a situation which continued afterwards. There was no improvement. The same situation prevailed until the Mughal governance, and during this there was even more damage to the system. In this era, there were more efforts for improving Unani treatment. Many libraries were destroyed, and along with other books, Ayurvedic texts also were destroyed. Near the end of the Mughal governance too, the situation of the nation was not proper.

Then the British rule began. In this rule, there was some restriction to the downfall of the Ayurvedic system. On the other hand, only few events occurred that were very favourable to Ayurveda and its physicians, who were reliant on the system for living. The main reasons are as follows:

1) Printing instruments were discovered in this time. The texts which had somehow survived became popular. If these had been destroyed, undoubtedly Ayurveda would be unfruitful and inadequate. But with their survival and spread [through printing], Ayurveda is glorified today.

2) In this time there was peace. Due to this peace, people turned towards education. Education, art, and skills progressed. Due to the spread of knowledge of Western literature there was a revolution in education. With milestones of research, the bright side was noticed by the intellect. Many intellectual people commenced efforts for the enhancement of our ancient system. Every person became active for improving their own state.

3) In this era, with great efforts of Western scholars, there was unimaginable scientific development. With this strength, treatment and instruments were easily and largely available. Various machines, anatomical drawings, various instruments, and equipment for drug manufacturing were easily available. By looking at this progress, physicians who were inactive for long also awakened. They also attempted to improve their state. Research commenced on many subjects which were extinct for a long time. With these reasons, the physicians of Ayurveda and the Indian system of medicine [Ayurveda] were greatly favoured. However, it is very unfortunate that even in this governance the Vaidya Vidya [Ayurveda] did not receive government support and acceptance. The British government's medical departments used large power for allopathic treatment, and the Western allopathic treatment received all official support. Hospitals were established in all the main cities, large amounts of funds were utilized for the growth of this [allopathy]

system, and medical colleges were established in many cities. The arrangement for the salaries of intellectuals who received the doctor's degree was made by the government department in a proper manner, thus many people were enthusiastically encouraged to get this education. In states over here too, hospitals were established following orders from the British government, and the government rules protected allopathic treatment. By many such efforts, the British government supported the allopathic system of treatment. At places, rude behaviour was exhibited towards persons who made a living through the Indian system of medicine. When the British government department was requested to support the Indian system, answers were given that indicated their reluctance towards our system.

With all these reasons there was a good promotion of modern medicine only, which created problems in the progress of Indian medicine. Though there were some benefits to the Indian system of medicine by the mentioned aspects, there was not much gain.

There has been a constant decline in our system in the past and the present, since the Buddha's era up to today, due to the unstable situation in the country, the lack of government support, and the dislike of Mughals and the present governments. If there were no such situations in the country and if we had government support, there would have been good progress of Ayurveda, which has strong and deep principles.

2) The other reason is that there was a destruction of texts of Ayurveda during foreign intrusions and wars, and there were no printing facilities. This caused great loss for the system. Many Muslim intruders burnt many Indian texts with cruelty, many stole books along with wealth, many texts were left to ashes, and many were taken to foreign nations. Some of the remaining texts were lost due to the lack of printing and publication facilities. The commentators of *Cara-kasamhitā* and *Suśrutasamhitā* have mentioned many names and given evidence of texts, but it is sad that there is no trace of these. If the ancient texts written on the eight branches of Ayurveda were present today, there would be no chance for any objections today on Ayurveda, or at least the system could be defended with the help of these texts. There had been many treatises on amazing subjects like surgery, diseases of the head and neck, full body medicine, children's diseases, rejuvenation, aphrodisiacs, etc. There are references to the existence of ten treatises, written only on general medicine (*kāyacikitsā*). These were *Agniveśasamhitā*, *Bhelasamhitā*, *Jatūkarnāsamhitā*, *Parāśarasamhitā*, *Kṣārapāṇisamhitā*, *Hārītasamhitā*, *Kharanādasamhitā*, *Viśvāmitrasamhitā*, *Agastyasamhitā*, and *Atrisamhitā*. Some people consider *Agniveśasamhitā* to be the *Cara-kasamhitā*, some consider them to be different. Whatever the truth may be, all

texts on general medicine (*kāyacikitsā*), apart from *Carakasamhitā*, went missing. It is possible that there may have been more texts. Similar to general medicine (*kāyacikitsā*), in other branches, like *Śālākyatantra* [diseases of the head and neck], there was also the creation of elaborate and clear texts like *Bhojatantra*, *Paṣkalatantra*, *Vaitaraṇatantra*, *Bhālukītantra*, *Gautamatantra*, *Videhatantra*, *Nimitantra*, *Kāmkāyanatantra*, *Śaunakatantra*, *Sātyakitantra*, *Gārgyatantra*, etc. However, with the effect of time, only their names presently remain. Had the foreign intruders not destroyed or taken away the books, or had there been a facility of printing, these great treatises would have been a great assistance to the progress of Ayurveda. This reason also caused much loss to Ayurveda.

3) The third reason was the lack of educational institutions, the uncertainty of syllabus, and the lack of practical training with theoretical training. Due to these reasons, the system suffered even more after the previous reason. In ancient times this facility was good. The students lived at the home of their teacher [guru]. They learnt the identification of medicinal plants etc., knowledge about diseases, dispensing medicines, and manufacturing complex medicines. There was a great number of students in many teachers' homes. There were facilities of best education at many places, where the students achieved complete education. Evidence of this is available at many places. In many chapters, there is the elaboration of questions by the students and answers by the teachers. In that era, the teacher's home was like a college, and there was the opportunity to attain a complete education. This system slowly became extinct, and teaching as well as learning processes attained a very low level. In the middle era, this situation started, and it is still going on today. Slowly, along with learning, the study of medicinal drug examination [testing], its appearance, and dispensing was also degraded.

Finally, only theoretical training remained and all practical training was lost. Thus, except the texts, all other aspects like testing of medicines etc. have become lax. There are many physicians today who do not know the medicines and are unable to manufacture good medicine. There was no rule for education, only the willingness was conclusive. Then, afterwards the study of different books was initiated. People slowly assumed learning of this subject with descriptions of Ayurvedic basic principles and treatment sequences. They began to believe that only learning practical departments or aspects was adequate. The first repercussion of this is that the Ayurvedic physicians do not know what is expected by "Ayurveda," leave alone how disease is formed and what are its causes. Some people only refer to *Nidāna prayoga khanda* and then treat patients. Due to this there is a scarcity of good Ayurvedic practitioners (*vaidya*). This has been going on for a long time, and this is the reason why objections are made towards

Ayurveda. There are thousands of Ayurvedic practitioners, but only a few, counted on the fingers of one hand, can defend Ayurveda. They are rarely found. Had there been a certain sequence of education in Ayurveda, had there been practical training too with theoretical training, Lord Ayurveda would not have suffered. We can analyse this.

4) Now the fourth reason remains. It is not less important than previous ones. When some good physicians in Ayurveda achieved great success, there was a trend to stay with them for learning and then copy their formulas and produce similar collections of medicines. After some time and through the collection of some formulae, these people who copied the formulae started their own clinical practice. The Ayurveda system has well-tested and invincible medicinal formulations, using which even a person with mediocre intelligence can perform successful treatment. Hence, seeing the success of some physicians, people started to believe that Ayurveda is only “based on formulas of medicines for each disease.” Gradually such people whose intention was to make money increased. Others also believed that complete knowledge of the system is unnecessary. These people became satisfied with formulas, and they abandoned knowledge of the basic principles of Ayurveda. For the last fifty years, there have been very few Ayurveda physicians who know the subject completely. There have been numerous physicians who just know the formulas and use them. Thus, when the treatment was based only on formulas, some physicians started to keep secrecy about the formulas and other aspects. I have even heard that a physician did not share his special formulas and miraculous processes with his son. By this aspect of secrecy, many processes of the collection of traditional medicine, application of oils, sudation, medicinal induction of vomiting, medicinal induction of laxation, etc. were lost. The persons who were experts in these processes and who knew the basics felt it was wrong to share the knowledge. The undesired effect of this was the loss of knowledge of the main processes, i.e., the application of oils, sudation, medication-induced vomiting, medication-induced laxation, medicated enema, medicated smoke inhalation, nasal instillation of medicine, enema using decoctions, which were the main aspects of Ayurvedic treatment. The same situation concerns the processes of medicine manufacturing. Looking at the entry of unauthorized people, learned people started to keep secrets about it. Many drug manufacturing processes ended with the lives of their masters. Due to the entry of unauthorized persons, the nature of keeping secrecy developed in good physicians too. This type of behaviour led to the end of many processes, numerous excellent processes, formulas to be used on specific conditions, many miraculous formulations, and *pañcakarma* treatments like oil application etc. Finally, many disturbances were

created in the task. Those who failed in other businesses considered medicine a business to earn a living. This business is nowadays ongoing in a major way. With wide availability of printing facilities, books are available at very low cost. Some books became available in local regional languages. Then, afterwards thousands of people who failed in other businesses entered this arena and worsened the situation of the already damaged Indian system of medicine. Due to these people many objections arise. With this fourth reason, not only was there a loss to Ayurveda but also there were blots on this pure system. Apart from these four, there are many small causes which assisted in the downfall of this treatment system. However, these were the main reasons. Due to them, today the Vaidyaka system [Ayurveda] is in a critical stage. This is the general directive. After solving the four problems, the solutions mentioned in the answer to the tenth question should be followed. This shall be the plan for the revival of the system.

The government can make efforts towards the progress of the Indian system of medicine. Though it seems difficult, the possible tasks are as follows, which I will elaborate in four parts:

- 1) The propagation of education.
- 2) The critical study and publication of ancient books.
- 3) The translation of specific texts related to Indian medicine [Ayurveda] into various languages, and additionally the translation of modern science into Hindi.
- 4) The establishment of pharmacies [Ayurvedic medicine manufacturing units]

1) Since education is essential, an Ayurvedic college should be established of the quality of a medical college. It should ideally have eight branches, where there is the facility of a complete education of the Indian medicinal system. It should have the establishments of a museum, a library, a pharmacy, a medicine shop, a hospital, a hostel, a medicinal plant garden, and allied necessary equipment, like the latest machines, instruments, pictures, etc. The syllabus of the said college should be according to the accepted protocol by the Ayurveda University. Otherwise, a committee of learned experts of both systems should be formed to finalize the syllabus. A minimum half of the members on this committee should be members of the All India Ayurveda University. Students should learn the identification of drugs, the diagnosis of disease, the manufacturing of medicine, the dispensing of medicine, as well as dissection, anatomy, and knowledge of the use of instruments. However, there should also be the opportunity for students to learn different subjects, since one person cannot specialize in all subjects. Such a college

should be established in each region, or the colleges may be established in large cities, with basic education facilities.

2) The government should appoint an expert committee with proper willingness and remunerations which should search for ancient unpublished texts from different regions in India. Those useful would be critically studied and printed.

3) Learned scholars of Ayurveda should translate texts into simple Hindi language. The basic principles are elaborated in verses in ancient Ayurvedic treatises, and they should be elaborated in detail as per the modern era. Also, new subjects should certainly be translated into the Sanskrit or Hindi language.

4) With the assistance of well-qualified physicians, the government should establish a huge pharmacy [drug manufacturing unit] with branches in all large cities of all regions. There should be two sections of the pharmacy, a raw material section and a finished medicines section. The raw material section should have the seasonal storage of good-quality natural medicinal herbal drugs, metals, sub-metals, toxic and sub-toxic herbs for distribution at proper rates. In the finished drug store, medicated ghee, medicated oils, pills, powders, electuaries, spirituous distillates and liquors, etc. formulations and medicinal ashes of metals etc. as well as mineral complex drugs should be available with good management. The process of medicine manufacturing, however, should be uniform in all pharmacies. For the same, a committee should be formed comprised of experienced Ayurveda physicians. They shall finalize the processes after contemplating the processes and will set a trend.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

(a)

The central government is completely capable of upgrading and assisting the Indian medicinal system of Ayurveda by the four means mentioned above. At the same time, the state governments too can implement one or all possible plans out of those mentioned above in their respective states for the upliftment of an effective system. The system should be supported just like allopathy. There should be an equality by powers conferred upon physicians by conferring rights to Ayurvedic physicians for issuing “medical certifications” and “death certifications.” The physicians of Ayurveda who make a living with a Vaidya degree should be promoted, and researchers should be assisted by salaries.

(b)

The corporations or municipality should establish charitable Ayurveda hospitals, and medicine dispensaries. Along with it, as per capacity, hospitals should also be created. Branches of these clinics must also be established in small cities to assist in the improvement of the system.

(c)

Universities should offer courses or teachings of Ayurveda as well as exams of Ayurveda courses through course two of the Ayurveda university, apart from also offering Sanskrit, philosophy, Vedanta, grammar, literature, and others.

(d)

Ayurvedic physicians should unite, be encouraged, and educate themselves through local bodies. They should search for texts and have them published and translated. Rather than keeping secrecy, they should write articles in newspapers etc., and by spreading knowledge of Ayurveda in the common public, they should confirm the identification of controversial drugs etc. and assist such tasks. The general public should accept the Indian medicines and encourage others by delivering lectures.

BOMBAY

Srijut Vaidya Panchanana Krishna Sastri Kavde

Translated from the Sanskrit by M. VINOTH

In the words of Vaidya Panchanana Krishna Sastri Kavde, president of The All-India Ayurveda Sammelan (1922) in Bombay, in response to questions put forth by the Madras Medical (Analytic) Commission:

Question 1

What is the division or divisions of the indigenous systems of medicine—Ayurveda, Unani or Siddha that you propose to deal with?

I will give the answers with reference only to Ayurveda.

Question 2

(a) What is the theory or theories of causation of disease according to your system? Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism?

(b) What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.

(a)

dhātusāmyakriyā caktā tantrasyāsyā prayojanam

Restoration and maintenance of the metabolic equilibrium is (said to be) the objective of Ayurveda.

*vikārō dhātuvaīṣamyam sāmyaṁ prakṛtirucyatē.
sukhasaṁjñakamārōgyam vikārō duḥkhamēva ca..*

Abnormality (disorder) is disequilibrium of the elements (*dhātu*) and their equilibrium is normalcy (health). Health is known as happiness while disorder is unhappiness.

taduḥkhasaṁyogāḥ vyādhayaḥ

Diseases are the ones which are connected with unhappiness (discomfort or suffering)

Thus the statements of Caraka and Suśruta defining (the state of) an unbalanced metabolism (*dhātuvaīṣamyam*) as disease and a well-balanced metabolism (*dhātusāmyam*) as health, according to Ayurveda, is clear. All wise people will concur with this definition. There won't be any chance for raising questions even among followers of the modern science in the statement, "The base of all diseases is the disequilibrium of the body". The perpetual co-inherence of the body, mind, and the soul is called a human being (*puruṣa*). There, the soul is immutable and free from pleasure and misery. Diseases are mentioned as of two types: innate and accidental. The basis of these diseases is also as of two types, body and mind. Thus, diseases are classified into four types as innate or accidental and related to body or related to mind. Moreover, they comprise seven types: formed innately, by womb, by pregnancy, by foetus, by soreness, by time, by effect and by nature. Thus disequilibrium (of the body) is the root of various types of disease. The same meaning is clarified in the sentence "*Doṣāḥ eva hi sarveṣāṁ rogāṇām ekakāraṇam*" meaning that disequilibrium is the only reason for all diseases. If it is asked how the disequilibrium is caused, then –

*kālārthakarmanām yogāḥ hīvamithyātīmātrakāḥ
samyagyogaśca vijñeyo rogārogyaikakāraṇam*

Too little, too much or the wrong combination of time, the senses and the functions is the reason for disease, and the right combination of these three factors is the reason for health.

The factors of disease and health are described clearly in this verse. By too little, too much, or the wrong combination of time, senses and functions, disproportion is formed in the body. It is not contrary to the scriptures to say that diseases are caused by this disproportion. The healthiness of the body will remain as long as the proportions of the components and limbs of the body remain in a state of equality. The disproportion of the components and limbs of the body caused by food (diet), behavioural regimen, etc. or by unwholesomeness of senses, transgressions caused by the mind, the changing of the seasons, and the accumulation, excess, diffusion, existence and association of the humours of the body, wind, fire and air (*vāta*, *pitta*, *kapha*) causes diseases. This is explained in detail by Āyurvedamārtāṇḍapaṇḍit Lakṣmīrāmasvāmi from pages 1 to 12. It should be referred to by wise ones according to the occasion. There is no scriptural contradiction or indetermination at all in this principle. The qualities, definitions, and function-based descriptions of the humours exists to a great extent in Ayurvedic texts. But substance-based descriptions of the humours are not found. So, this is perceived in a different manner by Western doctors, by whom humours are considered imaginary and are neither components of nor parts of the body. By this irregular perception, many misconceptions are explained. In fact, through discussion, it becomes clear that humours are components of the body. The answer to the question “In what meaning is the word “*doṣa*” (humour) used in Ayurvedic texts?” will be clearer when all the words that are used along with it (including the word “*doṣa*”) are explained. Humours are indicated in sentences such as “The body is nothing but a base of humours, bodily tissues and impurities” (*doṣadhātumalamūlaṃ hi śarīram*), “spleen and liver” (*yakṛtphlāṇau*) (*Suśruta*). Probably the same things are only being mentioned in combination. This combination of the word “*doṣa*” is manifested along with bodily tissues (*dhātu*) and impurities/waste products (*malam*) in the above sentences neither for the sake of calculation nor to explore special qualities and functions. All doctors should remember the attribution of composition or knowledge about humours (*doṣavijñāna*) read by the famous doctor and teacher of Maharashtra Medical Pāṭhaśāla (college), Narahari Shivram Mahadev Paranjape at Akolāvaidyasabhā (a medical conference at Akola, a city in Maharashtra). The principle of the humours which was explained by him briefly at the end and is to be discussed by everyone, is as follows: It is very clear that humours, bodily tissues and impurities/waste products are the components of the body. It is very well known that the body is a combination of five elements and a

combination of six flavours, accompanied by the senses and accompanied by vitality. The compiled, extended, depleted behaviours in that (body) are designated by the usages of the words *kāya*, *tanu* and *śarīra* (all three mean “body”). Thus, there is no hesitation in saying that the components, of humours, bodily tissues and impurities (*doṣa-dhātu-mala*), the controllers of the whole, compiled, extended and depleted behavioural body are also the combination of five elements, accompanied by senses and accompanied by vitality. Even then, their existence is deduced by inference only.

(b)

*ādau nidānavidhina vidadhyādroganiśrayam
tataḥ karma bhiṣak paścāt jñānapūrvam samācaret*

A physician should first diagnose the disease and then select the proper medicine. Thereafter, he should administer the therapy applying the knowledge of the science of medicine.

*rogaṃ nidānaprāgrūplakṣaṇopaśayāptibhiḥ
darśasparśanapraśnaiḥ parīkṣetātha roginam*

Disease should be examined by its cause and etiology (*nidāna*), prodromal symptoms and premonitory symptoms (*prāgrūpa*, *pūrvārūpa*), specific symptoms and clinical features (*lakṣaṇa*), diagnostic tests (*upaśaya*) and pathogenesis (*āpti*, *saṃprāpti*). Then, the patient (*rogin*) should be examined by means of inspection and observation (*darśana*), touching (*sparśana*) and asking (*praśna*).

In these verses, the way to diagnose disease and to give treatment for it are explained briefly. While diagnosing disease, five things should be consulted accurately: cause (*hetu*), premonitory symptoms (*prāgrūpa*), manifestation (*rūpa*), diagnostic texts (*upaśaya*), and pathogenesis (*saṃprāpti*). During inspection of the disease, one (the patient) should visit the physician’s home, to sit (in front of him), (then the physician) should look upon (the patient), should touch and should question (him). Some say that probably diseases should be known by these three (looking, touching, and questioning) skills. This is not fair. The skills to know diseases are of six types, by hearing sense, etc. (and the other four senses) and by questioning. Diseases that are to be diagnosed with the help of the organ of hearing will be fully treated later on, in the chapter on secretions from an ulcer

(*vraṇasrāva*). The wind (*vāyu*) makes the blood ebullient and forces it up with a distinctly audible sound, thus affecting the sense of hearing. The heat and coldness of the body, or the gloss, roughness, hardness, or softness of the skin of the affected part (as in fever or an oedematous swelling of the body), are perceptible by the sense of touch. Fullness of emaciation of the body (*cachexia*), state and indications of vitality, strength, and complexion, etc. are perceived by the sense of sight. Secretions or discharges (from the inflamed mucous membrane of the urethra) (*prameha*) etc., should be tested with the organ of taste. The characteristic smell emitted by an ulcer in its critical stage (*ariṣṭa*) should be determined with the help of the organ of smell. While such facts as to the time or season (of the first appearance) of the disease, the caste that the patient belongs to, and things or measures that tend to bring about a manifest amelioration of the disease or prove comfortable to the patient (*sātmyam*) as well as the cause of the disease, the aggravation of pain, the strength of the patient, and his state of digestion and appetite, the emission of stool, urine and flatus or their stoppage, and the maturity of the disease in regard to time, should be specifically ascertained by directly interrogating the patient (on those subjects). The above-referenced five organs of sense — like the three fundamental vital humours — help us to make the correct diagnosis of a disease, yet the objects locally perceived by these senses should not be left out of account in ascertaining a disease's specific nature. (*Suśruta.Sū.10.5*)

The object of Ayurveda is nothing but balancing the metabolism. Therefore, it is very important for the doctor to know the growth or decay of the elements in the patient's body. After we know, the developed ones should be decreased and the weakened ones should be increased. These two only, named “nourishing” (*saṃtarpaṇa*) and “depleting” (*apatarpaṇa*) and also familiarly termed “*bṛṃhāṇa*” and “*laṅghana*”, are described as treating principles in Ayurveda. Again, “depleting” (*laṅghana*) is differentiated into cleansing (*śodhana*) and appeasing (*śamana*). Lubrication (*sneha*), sudation (*sveda*), emesis (*vamana*), purgation (*virecana*), purgation of head (*śiroreka*), enema (*basti*) and bloodletting (*asraviśrutī*) are applied in purification procedures (*śodhana*). Digestion (*pācana*), stimulating digestive metabolism (*dīpana*), fasting (*kṣut*), withstanding thirst (*tr̥ṣṇā*), physical activity (*vyāyāma*), exposure to sunlight (*ātapa*) and exposure to breeze (*māruta*) are applied in appeasing treatment (*śamana*). The practices and procedures of the drugs used in treatments are impressively explained along with the description of the context of taste (*rasa*), property (*guṇa*), potency (*vīrya*), post-digestive taste (*vipāka*) and effect (*prabhāva*, also referred as *rasapañcaka* in Ayurvedic pharmacology) from pages 24 to 34, by Pandit Lakṣmīrāmasvāmi. This has to be referred to by physicians. The important things that have to be done

by physicians who desire a revered reputation in their field are clearly explained in the following verse:

*dūṣyaṃ deśaṃ kālamanalṃ prakṛtiṃ vayah
satvaṃ sātmyaṃ tathā''hāramavasthāśca prthagvidhāḥ
sūkṣmasūkṣmāḥ samīkṣyaiṣāṃ doṣauśadhanirūpaṇe
yo vartate cikitsāyāṃ na sa skhalati jātucit*

The physician should minutely examine and determine the bodily tissues (*dhātu*) and waste products (*mala*) involved in a disease (*dūṣya*), the area of the body wherein disease is manifested/the living place of the patient (*deśa*), the strength of the patient (*bala*), the season as well as how old the disease is and the age of the person (*kāla*), the digestive power of the patient (*anala*), the constitution of the body (*prakṛti*), the age of the patient and the disease (*vayas*), the mind and tolerance capacity of the patient (*satva*), the food and activities to which the patient is accustomed (*sātmya*), eating habits (*āhāra*) and the stages of disease (*avasthā*).

The physician should watch for the above factors to decide and, even then, only the physician should decide on the aggravated humour and its appropriate treatment. Such a doctor will never commit mistakes in treatment.)

The meaning of these two verses is explained very close to the heart by Pandit Lakṣmirāmasvāmi from pages 35 to 56. This should be referred to by Western doctors who haven't sensed the aroma of Ayurveda. I am ready to prove the result of Ayurvedic treatment by giving references from the Ayurvedic pharmacies of the sacred city as well as from other Ayurvedic pharmacies.

(c)

It is not necessary to explain Ayurvedic treatment in detail, as it is accepted world-wide as giving good results, especially with diseases like Irritable Bowel Syndrome (*saṃgrahaṇī*), phthisis (*kṣaya*), diarrhea (*atīsāra*), etc. I feel very happy to state that two patients, who had reached the incurable stage of phthisis, were cured by Ayurvedic treatment. Their names and addresses will be announced at the right time.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.]

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

I have been allied directly with national Ayurvedic pharmacies, hospitals and colleges.

(b)

Existing Ayurvedic colleges, pharmacies and hospitals are:

1. Imperfect from the viewpoint of providing good health.

2. Also imperfect from the viewpoint of teaching Ayurveda.

Spreading of the work became very difficult due to the absence of (the necessary) drugs. It is mandatory that each Jilla should have a college (Ayurvedic college) as well as that each Taluka should have a pharmacy. This has to be executed at the proper time and should be associated with various facilities like herbal gardens, medical libraries, laboratories, pharmacies, general libraries, etc.

(c)

The practice of the knowledge (of Ayurveda) becomes more difficult because of the absence of institutes like these. So, I would first remove the obstacles that exist. There is no doubt about the method of teaching that is easy and in practice at present in Ayurvedic colleges. But an Ayurvedic teacher's home is the best place for reading Ayurveda where you can find college, hospital, pharmacy, etc., all at once. Keeping this in mind, I will explain that, without any doubt, it is the right place to gain Ayurvedic knowledge for the students for whom it might be

difficult but quite enough. Even being in a difficult state at present, the reputation of Ayurveda flourishes as a result of treatment for which the only important source is the old Ayurvedic teaching method. The present teaching method, consisting of special features, may be either easy (organic) or intellectual in regard to gaining Ayurvedic knowledge. But only the teacher's house can give a complete knowledge of Ayurveda. I could not say that there will be a lack of traditional teaching method (gaining knowledge from a teacher's house) for the students who are gaining teaching (education) by (the means of) their intellect.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires:

- (1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*
- (3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

Following the sublime object of the nation's medical teaching method, instructed suggestions were accepted for suitable teaching knowledge. Gradually, it will become like this.

Now, the decision will be taken only in the meeting regarding the following points: sublime object, actions that need to be done at present and the remedies to be added (in the future).

Question 5

Do you agree with the view of the Calcutta University Commission that “There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfillment of such an ideal?

My opinion is different from the opinion of the commission formed by the University of Calcutta.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry and biology, and also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, master’s and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

Subjects like physics, chemistry, biology — and with modern medical methods, subjects like post-mortem, zoology, surgery, etc. — should be added to the Ayurvedic teaching method. There won’t be any loss. But insisting that knowledge of

these subjects be required is not sensible. As per the instructions of the committee, more exams and degrees are to be added in pedagogy according to the teaching course of the Ayurvedic college. ... The learning period should be between three and six years. The language of the teaching should be the regional language as derived from Gīrvāṇi (Sanskrit).

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a)** *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b)** *any changes in or additions to the existing legislation on medical registration.*

Medical registration regulations, like those presently established by Western doctors, are needed for Ayurveda. Moreover, it is very important that the committee gathers good doctors together in one place. The members of the committee of doctors, specifically those of appropriate ability, should be the members of this committee (commission).

Question 8

What is your opinion regarding the comparative cost of treatment according to allopathic and indigenous systems? Please give reasons for your opinion.

In comparing the methods of the doctors of Western countries with the expenses of the pharmacies and hospitals currently operating, it has been observed that in a national pharmacy, the expense is between 4 pies and 9 pies for a patient. However, the expense of the Western treatment is between 8 pies and 3 annas 2 pies. I say this with confidence about the pharmacies operated by the township municipalities.

Question 9

What, in your opinion, are the causes of the decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

How did the decline happen for Ayurveda and what are the remedies to be applied to improve this? No discussion of this matter is needed. This has already been dealt with by the former members of the committee.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by:

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

If the great kings and emperors of India had taken action to cultivate Ayurveda, then there should be:

- A. Ayurvedic doctors would be members of the government administration.
- B. There would be a pharmacy for each village according to the national medical system to protect the lives of people.
- C. There would be freedom for the municipality district boards to spend money as they like for Ayurvedic colleges and pharmacies.
- D. There would be compiled Ayurvedic medicine in Ayurvedic hospitals, pharmacies, colleges, herbal gardens, laboratories and facilities like chemical laboratories and libraries, etc. would also be created.

Obstacles caused by the regulations of the Western medical registration would have been overcome.

The obstacles that arise in collecting regional details and details of related matters created by the Government would be gotten rid of.

Unpublished and unfamiliar Ayurvedic texts would be edited (rectifying the errors) and published.

Reports on sickness given by doctors would be accepted in government offices.

Lessons on Ayurveda would be added in successive learning textbooks.

Efforts would be taken to avoid bad practices in government-approved institutions and offices caused by the partiality between learned Ayurvedic doctors and those schooled in Western medical treatises.

In the opinion of everyone, like experts in Western treatises, (Ayurvedic) doctors would be part of the recruitment process in municipal institutions.

Universities would also accept Ayurvedic studies and would award those students who have written exams with degrees.

(The universities) would help either by offering to publish and edit unfamiliar Ayurvedic texts or by any other inducement.

Whatever is possible for the persons and institutions who wish for the growth of Ayurveda would be accomplished.

I know that the answers to the questions are given in brief. The second among the questions is subject to dispute. It would be useful to give the interpretation and explanation for this as an individual essay. However, the speech that was given seven years ago by the member of the Calcutta Commission looks as though it were written for the second question of the Madras Medical Analytic Commission. That is why it is mentioned by me. Without knowing whether the five elements explained in Ayurvedic texts and other principles explained in texts — like Logic (*nyāya*), Exegesis of the Veda (*mīmāṃsā*), etc. were accepted or not, as well as the means of knowledge, perception (*pratyakṣa*), inference (*anumāna*), etc., stated for discussion — explaining this (speech) is useless. The standards of the scriptural authorities (*āgamapramāṇa*) should be accepted for proving the disorder of the three humours (*tridoṣa*) of the body. Otherwise, no one will be able to explain that their substantiation will not occur. It is however explained by us that excepting the standards of the scriptural authorities in favour of other means of knowledge, their substantiation will occur. The drug description methods of Ayurveda: taste (*rasa*), potency (*vīrya*), post-digestive taste (*vipāka*), effect (*prabhāva*), etc. are also not acceptable to those learned in Western medical treatises. However, this is accepted as useful from the point of view of the wholesome and unwholesome, and in the experience of (both) doctors and people. According to ancient scriptures, there is a substance named chebulic myrobalan (*harītakī*). It has an astringent quality. But it is well known to everyone, experientially, that the chebulic myrobalan purges. In this context, which has to be accepted, (is this) chemistry or the Ayurvedic experience? According to chemistry, the categorization of cowry, oyster shell, conch, pearl and ash is made (with)in one group. But the usages of each drug are subtly explained in Ayurvedic texts. Likewise, there are many types of controversy. The investigation of right and wrong and the exposition of these (judgments) are not possible in a short time. Two hospitals were

run by the doctors of the township without receiving a salary, at a time when the town was affected by phlegmatic fever. Those two hospitals have become very trustworthy and beloved Ayurvedic hospitals that encouraged people to approach for treatment and to avoid the Western hospitals, even though these were nearby.

COCHIN

M. R. Ry. Vasudeva Nambeesan Avargal

Translated from the Sanskrit by TRUPTI PATIL-BHOLE

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I shall elaborate according to the branches of Ayurveda.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stands the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a) (b)

In this system, the entities mentioned as humours (*doṣa*) [wind, bile, and phlegm: *vāta*, *pitta*, *kapha*],¹ the entities mentioned as body tissues (*dhātu*), i.e., fluids,

¹ Editor's note: We have standardized the translation of *vāta*, *pitta* and *kapha* and their correlates in the other vernaculars to "wind", "bile", and "phlegm" in this volume, but would

blood, flesh, fat, marrow, bones, and semen, and the waste products (*mala*), like stool, urine, and sweat, together with the disturbance of these lead to the formation of diseases. This is our grand theory.

The humours, body tissues, and waste products do not have an independent capability to create a disease, however the second body tissue (*dhātu*), i.e., blood, has a capacity to independently cause a disease. This is known by experience regarding bleeding disorders, intoxication (*mada*), “wind-blood” disease (*vāta rakta* = gout), and eye diseases. Wherever it is mentioned that the rest of the body tissues (*dhātu*) or waste products (*mala*) create certain diseases, it is summarized that there the humours (*doṣa*) get lodged in the body tissues and waste products, create their abnormality, and give rise to disease.

The word “imbalance” has been used commonly for increase and decrease, but for the creation of many strange diseases, increase is the main causative factor. It is divided as follows: 1) accumulation (*sañcaya*), 2) aggravation (*prakopa*), 3) spreading (*prasāra*), 4) accumulation in a location/organ (*sthānasamśraya*), 5) expression of the disease, 6) by having long-term association. These stages are increasingly painful. By ignoring the prior causes, in the fourth stage of intended action (*kriyā kāla*) the symptoms of the diseases appear, which give us knowledge about the disease, and then the disease forms fully, which is known as the expression type (*vyakti bheda*). In this way, while elaborating the imbalance of humours and various causes, I shall broadly explain matters to prevent excessive lengthiness, which might have been unavoidable.

Scantiness, excessiveness, and abnormality of time [or season], reason, and actions as well as excess use of tastes like bitter etc. and substances which have similar characters are responsible for the increase of the humour wind (*vāta doṣa*). Whatever diseases form there, the appearance of characteristics of the properties of the humour wind, like dryness, and signs of increase and decrease, i.e., thinning, laziness, etc. and signs like falling from its place will appear according to the stage (of the disease).

As it is proven that by the consumption of medicine, food, and lifestyle opposite to these properties [similar to the causative factor], the cure is evident which proves that humours (*doṣa*) are the cause of all diseases.

The *naiyāyika* theory that destruction of cause leads to destruction of effect becomes regular, by the unanimous opinion of all authors of texts. Due to the reduction of humours (*doṣa*), the particular signs of reduction are developed, and if treatment is not done, other problems arise, and after that the increased entities or diseases like fever do not occur. In general, if the movement of fluid etc. in

like to note that this translator's preference was to leave the terms untranslated or to render *vāta* as “air element” and *pitta* as “fire element”.

tissues is obstructed due to some obstacle in their routes, many ailments develop at that particular organ [where the obstruction is present].

Even if the followers of modern scientific systems consider their knowledge superior, there is no harm to our well-described basic theories. They are still well respected. Even then, the modern people have accepted the means of direct interpretation only. Our ancient authors have accepted the means of knowledge like interpretation (*anumāna*, *pramāṇa*), etc. As the way of interpretation is very important, it has been accepted in Ayurveda. Accordingly, the unseen entity air/wind (*vāta*) is interpreted by its characteristics as dry or speedy, and under its control all the moving processes in the body take place. The movement of all body entities from one place to another occurs due to it, and without its assistance all entities will be immovable and cease at a place.

This unseen wind (*vāta*) is somewhat like nerves (*snāyu*), which are directly perceptible according to modern people. The power of nerve force (*snāyu*) has been described by modern science. This is wind/air (*vāyu*) [the *vāta* element]. This is the cause behind the origin, the status and the destruction of the whole world. The entities described by our system are worth contemplating by the new systems. The origin of this universe which has animate and inanimate things has been shaped by the basic five great entities (*pañcamahābhūta*), as per the theory of all. As a part of this, air (*vāyu*), fire (*agni*), and water (*jala*) have been described here as wind (*vāta*), bile (*pitta*), and phlegm (*kapha*). The remaining “space” (*ākāśa*) is considered as a part of wind (*vāta*) itself. The normal or abnormal states of parts of air (*vāyu amśa*) lead to normal or abnormal states of the human body. The origin and destruction of results depends on the destruction of causes. Due to variations in causes, the results are also innumerable. Hence, the number of diseases, their appearance, and causes, if elaborated, cannot be finalized. If one intends to do that, the system will never attain completeness. Hence, in our system only certain diseases like fever have been elaborated in term of details, such as causes, etc.. A path has been shown to examine all diseases, by a detailed elaboration of symptoms of causative humours (*doṣa*) in normal, increased, and diminished amounts, moving upwards and in various stages.

Modern doctors diagnose diseases as they occur from time to time, and this is the reason for the incomplete state of the modern system. Until the time they have such a system, they will be incomplete as a science. Moreover, according to modern science, all diseases occur because of strange phenomena and some occur because of microbes. Our system has a cause analysis. In natural substances which have excessive moisture (*klinna*), or stickiness, decay, and rotting, there is naturally the formation of various worms or microorganisms (*kṛmī*). Similarly, once abnormality occurs in body elements (*doṣa*), i.e., wind, bile, and phlegm (*vāta*,

pitta, kapha), and blood, different microorganisms form there. Unless there is an abnormality in the body, there cannot be disease. Hence, it is certain that there is the occurrence of microorganisms (*kṛmī*) at the time of the disease origin.

Due to their belief in direct perception only, due to the lack of knowledge about humours etc., and by non-acceptance of other means of knowledge than the method of direct interpretation, the modern people have accepted only the microorganisms as the causative factor for diseases, not the disturbed body elements (*doṣa*). Hence, the two systems have a practical difference.

The word cause (*nidāna*), indicative of knowing about the disease, indicates the five entities: causes (*nidāna*), prodromal symptoms (*prāgrūpa a*), symptoms (*rūpa a*), relieving factors (*upāśaya*), scope (*vyāptī*). The term cause (*nidāna*) among these is indicative only of the causes of the disease. In this way, the term cause (*nidāna*) has been used in both a general and a specific manner. This cluster of five causes (*nidānapañcaka*) answers the previous queries and decides about the specificity of disease. For the examination of different diseases too, each of these are useful, just like a single cause [*hetu*, synonymous with *nidāna*] is seen to give rise to many diseases. Hence, for the specific determination, the prodromal symptoms are useful. In the prodromal symptoms of some diseases, the treatments for upcoming diseases were recommended in the texts, such as “in prodromal symptoms of fever (*jvara*), clarified butter should be consumed.”

Thus, in such cases it is very much necessary to know the prodromal symptoms. Knowing these details of a disease is useful for treatment. Unless we know the appearance and symptoms (*rūpa a*), it is impossible to name the disease. Thus, even after knowing the causes and symptoms of disease, if the specificity of the disease is still not understood, then the relieving factors (*upāśaya*) are helpful in knowing the disease.

Thus, in a disease examined by all four means, knowing the fractions of related humours (*doṣa*), independence or dependence, strength, time, etc., the specific aspects should be known, and without this the employment of medicines and their arrangement is impossible. For this reason, the map of disease formation is necessary (*samprāpti*).

In the general section of causes (*nidāna*), I will briefly explain the parts which are causes (*nidāna* [*hetu*]) etc., and their characteristics in the following.

1. CAUSES (*NIDĀNA*)

In this section, the causes which lead to the disturbance of the humours (*doṣa*) are elaborated, namely the three phenomena of inadequate, abnormal, and excess occurrence of time [seasons], excess consumption of bitter etc. tastes, which

increase some humours, excess actions like exercise, or consuming mixed food when there is aggravation of all three humours.

Improperly digested food (*āma*) is the main problem in diseases such as *alasaka* or *visucikā* [*~ gastroenteritis*], and their cause is excess eating and the consumption of dirty food. The cause of “royal fever” (*rājayakṣmā* ~ tuberculosis) is performing exaggerated brave acts. The cause of intoxication (*madātyaya*) is excess intake of alcohol. The causes of diabetes are foods which increase urine, fat, the humour phlegm (*kapha*), and sedentary work. The external causes of fevers etc. are impacts etc. and the cause of bleeding disorder (*raktapitta*) is diseases such as fever etc. Apart from this, all causes similar to these are included in the terminology of cause (*nidāna*).

By so many causes, in the normal human body, the humours become harmful for good health, since they become abnormal, vitiated, imbalanced, and accumulated (*sañcaya*). If they are not treated then and there, they enter the second stage of aggravation (*prakopa*), and then travel to sites of other humours, get diverted (*āvṛtta*) in their pathways, and lead to painful problems. Such humours, through the fluid system of the body (*rasavaha srotasa*), arrive at certain sites and create various diseases, which are known as the combination of various pains.

2. PRODROMAL SYMPTOMS (*PRĀGRŪPA*)

These are the indicative signs of getting a disease like fever. They are of two types: general and specific. The general signs arise before a disease like fever, and wind (*vāta*) disorders are the general prodromal symptoms. They originate in the fourth treatment stage (*kriyākāla*). Hence, it is clear that all the treatment regimens recommended in prodromal symptoms are useful in the fourth stage of treatment (*caturtha kriyākāla*).

It is mentioned that the evidence of prodromal symptoms is not seen in diseases like *alasaka* and *visucikā* (~ gastroenteritis) as well as in cases where the origin of disease takes place first and the disturbance of humours later, i.e., in accidental diseases (*āgantuja*). Should the prodromal symptoms of all diseases be explained, excessive elaboration is unavoidable. Hence, by the explanation of only one and since there is no special intention, I shall only state a verse to give knowledge about the prodromal symptoms: “The aggravated humours get lodged at a site, and they give rise to the symptoms of future disease, which are known as prodromal symptoms. In other words, the symptoms of diseases which are not yet existent are known as prodromal symptoms, because everywhere the signs seen before the creation of a particular disease are prodromal symptoms (*pūrvārūpa*).”

3. SYMPTOMS (*RŪPA*)

Symptoms are the signs which give knowledge about diseases like fever (*jvara*). When the cause of specific diseases like fever is described, these will be elaborated. Hence, I will not unnecessarily describe it here. Like the prodromal symptoms, these too are divided into two types: general and specific. Their result is also same.

Due to the strange movement of abnormal humours and the increase or decrease of humours, various symptoms of fever, etc. present. All these should be understood by examination of signs and actions of the aggravation, increase, or decrease of particular humour.

4. RELIEVING FACTORS (*UPAŚAYA*)

This is the cause of the generation of happiness through the use of medicine, food, and lifestyle. These are divided into six types in the case of food etc., each 1) opposite to the cause, 2) opposite to the disease, 3) opposite to both, 4) similar to the cause, 5) similar to the disease, 6) similar to both.

Here by the term cause (*hetu*), the separate entities like the humours and blood, the further causative factors like body tissues and excretory products, the specific substances which are causes for the increase, decrease, and aggravation of the humours, abnormal seasons, and other causes similar to these should be understood.

Here, “opposite to cause” means that when substances with cold or heavy etc. properties lead to *alasaka* etc. disease when used, there is treatment by drugs like dried ginger (*śuṇṭhī*), which possess hot or light properties, [or treatment] by fasting etc.. In wind (*vāta*) disorders, [treatment can be undertaken with foods with] tastes like salty or drugs which are heavy etc.. And similarly bitter etc. tastes [can be used in treatments for] diseases due to bile (*pitta*), and specifically dry etc. drugs and similar drugs and actions like exercise etc. in diabetes. All these are opposite to causes.

By rule, in some diseases like fevers, improperly digested food (*āma*) leads to diseases, it is the main cause. Hence, for these fasting, promoting digestion and stimulating metabolism (*pacana*, *dīpana*), and medications are used that are opposite to the causes.

Improperly digested food (*āma*) is caused by the low strength of bile (*pitta*) or the heat in the body, leading to the formation of abnormal first tissue, i.e., nutritive juice, or food that has undergone the first stage of digestion (*rasa dhātu*). This is improperly digested food (*āma*). Some people regard it as a substance

formed from the admixture of aggravated humours. Although there are controversies about the formation of improperly digested food (*āma*), since there is obstruction of systems (*śrotorodha*), it is clear that some substance is formed. The humours and the affected entities (*dūṣya*) combined with improperly digested food (*āma*) as well as the diseases originated from these are known as “with *āma*” (*sāma*).

The substances opposite to the properties of the causes are not capable of curing disease, they do not hold an independent power, but by the detection of causes they can in that way possess the power to destroy the disease.

Now we shall regard the aspect of “opposite to disease.” *Mustā prapaṭak* for fever (*jvara*), *pāthā* in diarrhoea (*atisāra*), *śirīṣa* for *viṣa*, *khadira* for skin disease (*kuṣṭha*), *haridrā* in diabetes (*meḥa*) – these [herbs] and such are the types of treatment opposite to the disease. When these [herbs] are used, the disease is defeated. Since there is no destruction of the effect without that of the cause, at times one can infer the destruction of the cause through special effects.

While elaborating “opposite to both,” some important examples are the use of the “ten roots” (*daśamūla*) in wind (*vāta*)-dominant swelling (*vātaja śvayathu*). The ten roots reduce both the wind and the swelling. There are many other such examples.

Though without opposing properties, the entities included in “similar to cause and disease” cause opposing functions. In this, we first elaborate the aspect of “similar to causes but resulting in opposite action,” such as the application of hot poultices in bile- (*pitta*) dominant intermediate stage swelling (*pacyamāna śvayathu*). Similarly, spicy, sour food may be given to a patient of wind- (*vāta*) dominant psychosis (*vāta unmāda*).

Now the elaboration of the aspect “similar to diseases but with action opposite to the disease.” In obstructed vomiting even after it was induced with medicine, *madanphala* is administered, which itself causes emesis. In the treatment of diarrhoea, *haritakī* is administered, which itself is a laxative.

Now the entity “similar to cause and diseases but functionally opposite to both” will be explained. Application of a paste of *agaru* [a hot potency drug] is applied over burns caused by fire. In toxicity, some other toxin is used. An example of food is that in alcoholism induced by excess consumption of alcohol, alcohol is again administered. An example of lifestyle is that in the stiffness (*mūḍhavāta*) induced by excess exercise, swimming is recommended. These should be administered with care.

5. MAP OF DISEASE FORMATION (*SAMPRĀPTI*)

This map of disease formation (*samprāpti*) describes which humour (*doṣa*) – either one, two, or all three – and the causes by which it is disturbed, enters the systems of the sites of disease and spreads there to get lodged at the site and cause disease. There are seven types. This state of the humours has fourteen types. With the addition of blood, and only by blood, i.e., a fifteenth type.

This map of disease formation (*samprāpti*) has categories such as number (*saṅkhyā*), permutation (*vikalpa*), independent (*prādhānya*), dependent (*aprādhānya*), strength (*bala*), weakness (*abala*), factors of time (*kāla viśeṣa*). Number (*saṅkhyā*) enumerates the types, for instance in the case of fever (*jvara*), eight types are evident, i.e., fever caused by each separate humour (*doṣa*), each two humours, all three humours, and three external impacts. Permutation (*vikalpa*) elaborates the different proportional permutations and combinations of the three humours. Diseases with clear symptoms, own causes, and own relieving factors are mainly known as independent (*svatantra*, *pradhāna*). Diseases without their own aspects are dependent and secondary (*paratantra*, *apradhāna*). The dependent diseases are mostly cured by treatment of the independent. It should be understood that diseases are also of two types: having too many causes and having less causes, which make us understand strength (*bala*) and weakness (*abala*). The factors like night, day, fed state, etc. make us understand the specificity of time. In this way, the map of disease formation (*samprāpti*) was briefly elaborated.

Known by 1) knowing white, red, circular, large, etc. by inspection with the eyes, 2) understanding hard, soft, hot, cold, etc. by touch, 3) understanding the difference in pains and other signs perceived by the patient by questioning him, and 4) by interpreting through one's own intellect brings us the full knowledge of disease. In this, the prime attributes like pulse, urine, stool, tongue, sound, touch, sight, appearance, colour, etc. are the main aspects of disease, which are understood by looking (*darśana*), touching (*sparsana*), and questions (*praśnana*). By following proper procedure, diseases are understood.

The answer to the question “What is the treatment regimen according to Ayurvedic principles?” has been given previously, and I request the same to be accepted.

The cure (*śamana*) of diseases arising due to cold causes is by use of its opposite hot properties. The humours are returned to their own sites by purifying (*saṁśodhana*) or pacifying (*saṁśamana*) types of treatments depending on the stage and severity of the disease in order to cure the disease [which arose due to the humours]. It must be kept in mind that in diseases of pure wind (*vāta*) or wind and bile (*vāta-pitta*), pacification (*śamana*) is achieved in the form of nourishing

medicines (*brmhana*) and not in form of fasting [*lañghana* or very light food]. When diseases have formed from undigested fluid (*āma*), this undigested fluid is destroyed by fasting. Formed by the abnormality of flesh, such diseases as piles, tumours, cysts, etc. should be cured by getting rid of the flesh by procedures using instruments [surgery], alkaline drugs (*kṣāra*), treatment by fire etc., through piercing, cutting, downward pulling, digestion (*pācana*), etc., and by normalizing the humours. Diseases of phlegm (*kapha*) should be cured by the destruction of the excess phlegm by scraping off through instruments. Diseases occurring due to increase or reduction in the humours are treated by the application of opposite or similar medicines in order to establish an equilibrium. Diseases occurring due to foreign body impaction are cured by the extraction of the foreign body by proper processes, followed by wound treatment. Fractures are treated by reduction and immobility through tying (*bandha*). Diseases formed by overlapping humours (*āvrta doṣa*) are treated by recommended treatment of obstructing (*āvaraṇa*) and by cleansing the channels in the body (*śrotasa*) by purification (*śodhana*), and by balancing the causative humours. Treatment of mental disorders like psychosis and epilepsy should be by relieved through counselling, reassurance, cheering up, and inducing the quality of goodness and purity (*satva guṇa*). The diseases occurring due to blood are treated by purification of blood by medicines, bloodletting, stopping, nourishing, etc., as well as by the proper treatment of allied humours. So many treatment regimens exist in our system in general. By all these processes, if the patient is curable, the diseases get cured – this is the experience.

(c)

Yes. For instance, for treating wind (*vāta*) disorders, application of medicated oil, etc. (*sneha*), sudation (*svedana*), and enema (*basti*) are very useful, giving instant and unique relief. Some special treatment sequences are unique, such as decoction of emblic myrobalan (*āmalakī*), therapeutic showering of sour buttermilk and oil [mixed together] on the head (*śira pariṣeka*), *śirobasti*, i.e., placing medicated oils etc. over the head in a special manner, placing an oil-soaked cotton or bandage on the head (*śiropicū*), etc. Some processes unique to our system and unknown in other systems or protocols are available, for instance, colitis caused due to lowering of digestive fire (*agni māndya*) and indigestion are treated by drugs with pungent and bitter tastes and through actions, i.e., the digestion of undigested sticky substances (*āmapācana*), encouraging the digestive fire (*agni dīpana*) and stabilization (*sthīrīkaraṇa*). The consumption of ghee, medicated enema, medicated laxation, etc. are themselves unique. The treatment regimen of toxicity also depicts the progress of our system. The treatment of diabetes, which is curable by

fasting, and other such treatments are also unique. There are many such examples. I have given an overview here, and I shall not elaborate more for fear of being too verbose.

Question 3

(a) *Are you connected directly with any institution providing medical relief or medical education on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

Yes.

(b)

Not satisfactory at all.

(1) For the fulfilment of the requirements given in this section, having inadequate money is the obstructing reason.

For tackling this problem, funding is required from the government to provide medicines to the poor and ill patients without any fees or cost for them.

(2) In this matter, for the fulfilment of the requirements excellence needs to be achieved, but the willing persons for learning are very limited. In general, nowadays ineligible people tend to learn Ayurveda. To overcome this shortcoming, the remunerations of professors may be made available from the government.

(c)

Not expected.

The solutions for getting rid of these shortcomings are as follows: There should be the establishment of well-equipped clinics in various regions. In order for physicians to attain mastery in their work, well-equipped colleges should be affiliated with hospitals by outstanding government persons. Moreover, some of the dedicated students should be rewarded each year.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

a

The activities suggested in part (1), (2), and (3) of this section are necessary in my opinion. I am not aware of any institute, existing or upcoming, in this regard.

b

1. In the previous section (a), all actions leading to the ideal should be desired.

2. It is ideal to establish colleges, like medical colleges, and their curriculum.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

I agree with the same. I hope that physicians of both the systems, Ayurvedic and allopathic, should be properly inducted to the causes, sequence, diagnosis, and treatment principles of diseases according to the system.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, and also study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D. of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I agree.

The index for study for the first academic year is as follows:

- 1) The treatise *Aṣṭāṅgahr̥daya* is to be considered as the main textbook.
- 2) During the study of drugs, instrument types, and use, the latest knowledge should be taught from the allopathic system.
- 3) As a secondary text, *Aṣṭāṅgasāṅgraha* should be accepted.
- 4) The proven formulas [decoctions etc.] used by renowned physicians should be learned.
- 5) The most appropriate process of medicated emesis (*vamana*), medicine-induced laxation (*virecana*), decoction enema (*niruha*), oil enema (*anuvāsana*), and nasal instillations of medicine (*nasya*) should be finalized for wide use.
- 6) As an additional text, any text of pharmacology (*dravyaguṇa*) should be selected.

The second academic year:

- 1) *Aṣṭāṅgasāṅgraha* should be the primary among textbooks.
- 2) *Carakasamhitā* and *Suśrutasamhitā* should be after this.
- 3) Deeper knowledge of body systems and surgical instruments.

Third academic year:

- 1) *Carakasamhitā* and *Suśrutasamhitā* should be the primary texts.
- 2) The texts known as *Vṛndamādhava*, i.e., *Siddhayoga*, *Bhaiṣajyaratnāvalī*, and *Śārṅgdharaśamhitā* should be considered as secondary textbooks.
- 3) All basic principles and theories of all medical systems should be taught.

(a)

I hope that the education would be of three levels: In the first level, those passing the level should be certified as “*Ayurveda vaidya*.” Then those who qualify the second and third stages should be awarded certificates as “*Ayurveda viśārada*” and “*Āyurvedācārya*” sequentially.

(b)

Students who have learned *Tarkaśāstra* up to *Muktāvalī* and who are trained in Sanskrit should be eligible for admission to the first year of education in my opinion. Those who pass this year and the certificate would be eligible for the next years. The first year would be of three calendar years, the second year of two years, and the third year of one year.

(c)

In my opinion, teaching should be in Sanskrit.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

By authorized way, i.e., through government personnel, the registration of Ayurvedic physicians is truly essential. However, there should not be injustice to renowned physicians of this time. Why? If they are examined, they will not be able to successfully answer, since this process is new to them. Hence, they should seek eligibility from old physicians, and government personnel can then register their names. An association should be formed for the registration of Ayurvedic physicians, and the members of the same should also be Ayurvedic physicians.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

The expenses of treatment by the Ayurvedic system are very inexpensive. The medicines used here are produced and processed in the same country, so they are much cheaper than allopathic medicine. This is the main objective. Moreover, substances used for the treatment according to the allopathic system are also foreign, and they cost more. This is also a reason.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival.

In my opinion, the main reason is the long-time disrespect by kings, government officials, and other influential persons. The prime cause for this disrespect seems to be time. In these transformed times, all aspects of people underwent strange pitfalls. Just like the moon, the Ayurvedic system also had similar changes [of rises and falls]. In my opinion, the degradation was due to the disrespect only. Now, by witnessing these efforts, the Ayurvedic system will again attain a very good status. For the upgrading, undertaking actions that would generate respect should be done in my opinion.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a)** *the State,*
- (b)** *the local boards,*
- (c)** *the Universities,*
- (d)** *private agencies (individuals or associations).*

The aspects covered in (a), (b), (c), and (d) should be followed. Those who are willing to learn by using their own expenses without expecting any scholarship should be admitted to colleges. Hospitals or clinics where medicines would be dispensed to patients free of charge should be established. These are the ways for the rejuvenation of education related to the Indian Ayurvedic system.

UNITED PROVINCES
Pandit Shivaram Pande, Allahabad

Translated from the Sanskrit by VINOTH M.

In the words of Pandit Shivaram Pande, with salutations to Lord Ganesha, in an interview with Madras Medical Analytical Committee:

Question 1

What is the division or divisions of the indigenous systems of medicine — Ayurveda, Unani or Siddha — that you propose to deal with?

Ayurveda, Unani and Siddha — among these three Indian systems of medicine, all three are accepted by us. However, we shall discuss matters here with special emphasis on Ayurveda.

Question 2

(a) *What is the theory or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism?*

(b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

According to the principles of our system of medicine, diseases occur due to the following: Vitiation (to impair or weaken the effectiveness) of the three bodily humours (*doṣa*) viz., wind, bile and phlegm (*vāta*, *pitta*, *kapha*) faults in the use of food, drinks, clothes, etc., with respect to the bodily humours; abnormal change in the condition of water, wind, etc.; social factors and other innumerable causes. The proper inference of the reason or reasons of the diseases [should be arrived at] by the method shown by preceptors like Caraka and by practitioners. Our principles must be examined according to the concepts of modern science. The root cause of all disease is physical and mental weakness. Ten patients affected with classical diseases, such as fever caused by vitiation of all three humours, irritable bowel syndrome, and epidemics, or new fatal diseases such as plague must be sent to a skilled Ayurvedic practitioner for treatment. Similarly, ten patients must be sent to a physician belonging to other (Western) branches of science (those who do not accept our theories). The one who makes the patient healthy in a shorter duration must be considered to be the one that has passed the examination.

(b)

As per our concepts, the same principles of diagnosis and treatment are followed that were accepted by our preceptors such as Caraka, who consider the *Vedas* to be the sole source, and that were documented by them in their own compendia (*saṁhitā*). Only those concepts of harmless treatment are accepted to be authentic and have been passed on directly from the words of the preceptors. According to the treatment accepted by our texts, usually all diseases are treated.

(c)

We consider that treatment performed in accordance with the principles of our country tend to be more fruitful in all circumstances. While comparing the treatment methods of Ayurveda and other sciences, we can immediately understand the expertise in Ayurveda by noticing that nowhere other than in our treatment modalities and the *Vedas* and *Upanishads*, is there such an elaborate explanation of the meat and urine (not just in terms of urine examination) of uncountable animals and birds such as the cow, buffalo, horse, goat and even human beings. To substantiate this statement, we need evidence through patients who are treated (by Ayurveda) and experience.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of:*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

(a)

We do not have a direct relationship with any hospital or medical college that is established in accordance with traditional practices.

(b)

Due to lack of knowledge in this area, we are not eligible to conclude anything in this context.

(c)

We do not know if there has been an establishment of any instrumental facilities anywhere in the traditional treatment practice. Therefore, before gaining knowledge on that subject, we cannot determine anything in regard to this issue.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(1)

We accept all criteria mentioned for the appropriate education of our traditional systems of medicine. However, we are not aware of the model institution in Madras or other districts. We cannot determine if any institute will attain the same soon.

(2)

In regard to this, we do not know anything.

Question 5

Do you agree with the view of the Calcutta University Commission that:

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

The two methods contradict each other – thus the theory formulated by Kolkata University is not accepted by us. We understand that the subjects of epistemology, alchemy, life science, anatomy, physiology, pathology, microbiology, surgery etc., must be in the order of medical study. But can these concepts be easily read

and understood? For students who would be taking pains to study traditional medicine, the following syllabus must be included in that syllabus, in our view:

- I. the “Small Three” (*laghutrayī*) texts
- II. the “Great Three” (*brhatrayī*) texts
- A. Examination system and provision of equipment must be designed as appropriate.
- B. Eligibility criteria – Proper study of Sanskrit grammar and literature for the students of the “Small Three”, passing of the exam on the “Small Three” for the student of the “Great Three”. Duration of the course – 5 years for proper understanding and gaining practice.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I do not oppose this opinion since ‘Knowledge of a thing is better than ignorance of it’. The medium of instruction for the syllabus mentioned by us is Sanskrit only. Prescribed texts must be studied in Sanskrit language with Sanskrit commentaries only, and not with the help of local translations alone.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a) the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b) any changes in, or additions to, the existing legislation on medical registration.*

Students of Ayurveda and other systems of traditional medicine should be given the title of Dr. (Vaidya) for the benefit of the patients. Due to the large number of patients in our country, the number of physicians as per the government norms are few in number. We opine that the method formed through a long lineage of heritage only is beneficial for the nation.

It would not be an exaggeration to say that Ayurvedic physicians treat 100 times more patients than the total number of patients treated by all practitioners of foreign medicine put together.

Doctors are certified both by the patients as well as their preceptors (*āpta*). Patients of modern doctors also die, just as it is said, "The doctoriness of a doctor lies in understanding the disease and controlling the pain; the doctor is not the lord of life." If it is not necessary to bind traditional physicians with the title of Vaidya or Dr., these rules need not be changed.

In the activities of the minister who has lost his relations and the physician who has received a case of vitiation of all three humours (sannipāta), the intellect is disturbed. Under normal conditions, who is not a scholar?

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Treatment performed according to the Western science is possible only after great efforts and does not benefit the poor, because the costs of importing these medicines are high and they are attained with great difficulty. However, medicine based on traditional systems is easy to be achieved in our view.

We can very easily procure what is needed such as *punarnava*, *apāmārga*, *eraṇḍa*, *śaṅkhaṣpī*, *mucukunda*, *guḍūcī*, *nimba* with all its parts, plants like *brāhmi*, different types of water, fire, soil, fruits, leeches, buttermilk, etc. These can be especially useful in the treatment of serious disease.

Other than this, fasting, nutritive therapy, exclusion of extinct materials and other highly useful solutions for treatment are known, and the following lines are seen in the scriptures:

The food is the potency for the Rudras who are in uncountable thousands on Earth.

As it is consumed by living beings or since it is consumed by living beings, it is called food. – Manusmṛti

Death wishes to kill the twice-born due to lack of practice of the Vedas, dereliction of practice, laziness, or faulty food.

The substitution of healthy food in the place of something that is harmful to the individual constitution is possible, either easily or without too much difficulty. For instance, we can use foods like barley in the place of wheat, and so on, as well as well-cooked, easily digestible foods in the place of food like chickpeas (that may increase pain) and by which, freedom from disease can be easily attained. It is also said in the classical medical books that purgation is the treatment for all disease and is a source of nourishing the body, as it is said –

Clarity of the mind, strength of the sense organs, stability of the tissues, keenness of digestive power and slow ageing occur from purification therapies, (when) properly undertaken.

Knowledge, penance, fire, food, earth, mind, sprinkling with water, wind, duties, sunlight and (the) passage of time are the means of purification of men.

This is Vāgbhaṭa's statement of proof – There is no pain without indigestion. All diseases occur due to accumulated wastes, and thus, purification must be done.

Purgation has clearly been used to direct unwanted material away from the body, but not to banish the well-known disease of the abdomen called “*jullāva*” –

The usage of curd, milk, buttermilk, etc., as food alone can resolve many diseases at the root.

Likewise, it is the theory of our scriptures that just the introduction of curd or buttermilk as foodstuffs in treatment of Irritable Bowel Syndrome (IBS) or the use of milk for treating fever can be beneficial. There is no argument that such treatments are not available in Western medicine.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

The decline of the traditional systems of medicine is because Indians have become highly indulged in the study of Western sciences. Because of that, there is a looseness [of understanding] in our Sanskrit studies and our own pathways.

They have become detached from their own duties and are not interested in practicing the traditional system of medicine. Nowadays, studying the Sanskrit sciences is not so wealth-fetching, while money and fame are achieved through Western science. Until this situation resolves, the pain of our [collective] negligence of Ayurveda and our own traditions will remain difficult to defeat; this will remain for a long time and can be overcome only by great efforts. Thus, [serious] attention must be given by everyone in this endeavour.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by:

- (a) the State,
- (b) the local boards,
- (c) the Universities,
- (d) private agencies (individuals or associations).

(a)

The ancient medical texts must be read by people residing in government bodies as well; the solutions given in these texts must be overseen with great care. By practicing them [diligently], regard towards Ayurveda will [gradually] increase.

(b)

Local boards must provide support in the activities of the government and they should, [in and of] themselves, promote traditional medicine as much as possible.

(c)

Ayurveda must be included in the courses of study at universities and efforts must be invested in the study and promotion of the same.

We have presented the replies received from this interview to the best of our efforts. Our last and important request is that we would like to act independently in our activities of study and treatment using traditional medicine, without the hand [i.e., interference] of any authorities. With this, we would like to conclude.

BOMBAY

The Ahmedabad Vaidya Sabha, through
Vaidya Narayan Shanker Devshanker and Others

Translated from the Sanskrit by TRUPTI PATIL-BHOLE

I offer prayers to Lord Dhanvantarī.

Some measures must quickly be taken for the uplift of Indian medicine, and with this resolution, a decision was made in Madrāsa Nirmāṇa Sabhā [conference] on 21 February 1921. With the same intention, according to the government order number “1351 P. A. Press,” on 17 October 1921 the officials created a committee for the acceptance of branches of Ayurveda and for establishing the evidence for its importance. After reading the questions received from the committee, I am courteously presenting answers before it.

Members of this committee should be experts of Ayurveda. Why? It is said that members of the government committee should be experts in ethics (*dharmaśāstra*), belong to families with great lineage, be truthful, and have the same justice for enemies and friends. In other references it is mentioned that “it is said that the members of the government committee [or King’s committee] should be learned, ethical, truthful, and hold the same views [or justice] for enemies and friends.” The Indian medical system will truly benefit only when there are such members, otherwise even in dreams we can not expect any progress or benefit. If there are Ayurvedic experts, they can all the more so tackle an assessment [if required]. However, without knowledge of the references of our [Ayurveda] system of Indian medicine, its knowledge cannot be understood by scholars of Western medicine; even in their dreams. Hence your thoughts are like flowers rising in the sky. We can deduce the committee’s knowledge about the Indian system of medicine by looking at their questions. The classical authors have explained three ways of obtaining knowledge (*pramāṇa*), but now the way of learning from ethical masters is side-lined and only two ways are accepted. This is not logical. Is it? Sage Caraka elaborated in the fifth chapter of *Vimānasthāna* that “disease is properly understood through the teachings of ethical masters, through direct sense

perception, and by logical interpretation.” How can the system of knowledge taught by the ancient system be useless? Even the *Bhagavadgītā* mentions that “those who overrule the processes mentioned in the *śāstra* [the great ethical classics] do not achieve any success, happiness, and noble path during or after this life. And hence for your act of performing or not performing any deeds, the *śāstra* is the main guideline. All deeds should be done according to the *śāstra* [ethical behaviours according to ancient wisdom].” Without having knowledge of Ayurveda, how is the rendering, elaboration, and planning regarding this system possible? Hence, I feel that you are attempting a difficult job.

Question 1

What is the division or divisions of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

Answer to question one

On the basis of the Ayurvedic system, [the knowledge of plants, mineral drug substances, and mineral medicines], I am obliged to further elaborate.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism.

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

Answer to question two (a)

THE FIVE BASIC GREAT ELEMENTS (*PAÑCAMAHĀBHŪTA*)

The universe was created from Om, (the primordial sound) and the supreme Self within. From the soul, space originated. From space, air originated. From air, fire originated. From fire, water originated. From water, the earth originated. From the earth, plants originated. From plants, food originated. From the food, semen or sperms originated. From these sperms, humans were formed. This has been the generation process.

In this world, seven entities are present; they are: substance, its properties, actions, synergism, antagonism, collaboration, absence. From the seven substances, there is origin and end. In all these, the five basic great elements (*pañcamahābhūta*) are the direct causative factors (*samavāyikāraṇa*). Sage Caraka said in chapter 25: “All substances basically derive from the five basic great elements (*pañcamahābhūta*) and in turn they are sentient and insentient, or having sensations or not.”

The summary of this essay leads to the living human being who is the main recipient of treatment (*puruṣa*). A living person is the union of twenty-four entities and the bodily soul (*jīvātmā*). The three properties of nature (*prakṛti*) are nobleness (*satva*), movement/pace (*rajas*), and inertia (*tamas*). The functions of these three are explained as follows: “The organs originated from the principles of movement and nobleness [*rajas* and *sattva*]. These organs are the ears, eyes, tongue, nose, mouth, hands, legs, sexual organs, and anus. And the eleventh is the mind. The first five are the sense organs, since they are related with the intellect or knowledge. The latter are functional organs, since they are related to deeds. Because it originated from nobleness and individualism, and because it is noble and enlightened, the learned people regarded the mind as the organ of the intellect as well as its function. Whichever organs are aroused are based in the mind itself.”

The senses of the sense organs have been elaborated as “Hearing, touch, sight, taste, smell are respectively the sensations of the organs of intellect.” This has been elaborated by the great sages. Talking, consuming, walking, pleasure, and excretion are the functions of functional organs. Analysis is the function of the mind. The heart is considered to be the seat of the mind. From the subtle component of movement (*rajas*) and subtle component of inertia (*tamas*), and principle of individualism (*ahankāra*), five types of particles are formed (*tanmātrā*). These five types of particles, soul, and mind cumulatively form the organs. The particles specific to sound, touch, looks, taste, and smell are parts of the specific organ. These are concerned with desires. Sensations of these organs are of an amazing

kind that are comprehensible by external organs. The organs are formed by the particles of entities [*tanmātrā*], namely sound, smell, and this phenomenon is understood by yogis who have control over their mind. Persons having this quality are few. "From these particles, i.e., *tanmātrā*, the five great entities of space, air, fire, water, and earth have been formed respectively." This means that by ascending manner, space etc. are created. For instance, from the particles (*tanmātrā*) of sound, space forms with sound as its main property. From the particles of touch along with those of sound, air gets formed, which has touch as its main property or characteristic. From the particles of sight along with those of sound and touch, fire forms with the characteristics of sound, touch, and sight. From the particles of taste along with those of sound, touch, and sight, water forms, which contains sound, touch, sight [visible characters], and taste. From the particles of smell along with those of sound, touch, sight, and taste, the earth is formed, which contains sound, touch, sight, taste, and smell. Now the characteristics of the five grand entities are elaborated. Experts have elaborated the properties of characteristics of grand entities (*mahābhūta*).

"The characteristics of space are sound, organ of hearing, perforations, discreteness (*viviktatā*), as stated by experts." Discreteness means the variations between body parts, such as veins, tendons, bones, muscles, etc. The characteristics of air are explained to be touch, the organ of touch, i.e., the skin, lightness, pulsation of body, and bodily movements. The characteristics of fire are external appearance, organ of sight, i.e., the eyes, digestion, temperature, sharpness, complexion or colour, radiance, intolerance or strong emotion, and valour. External appearance means beauty. Digestion means that of food by the fire (*agni*) present in the abdomen. Temperature means heat. Sharpness means causing very fast action. Complexion means fairness, etc. Radiance means brightness. Intolerance means anger. The characteristics of water are taste, organ of taste, i.e., the tongue, coldness, oiliness, heaviness, collection of liquids, and semen (*śukra dhātu*). The characteristics of the earth as elaborated by experts are smell, organ of smelling, i.e., the nose, hardness, and heaviness.

There are eight natural states (*prakṛti*). Due to the non-occurrence of causes of *prakṛti*, it is *prakṛti*. There are seven deviations (*vikṛti*), namely supreme intelligence (*mahattattva*), and so on. The interpretation is as follows: *Prakṛti* is the cause; and it is not an effect of anything. The actions are performed by the organs (*indriyā*). The causes are the five great elements (*mahābhūta*). Then, seven great elements are formed, which are individuation (*ahankāra*) and the five particles (*tanmātrā*). Actions are the deviations (*vikṛti*) from the natural state (*prakṛti*). It has been explained that the causative factors for the great elements and the organs are the seven *prakṛti* [*mahattattva*, etc.], the ten organs, the mind (*citta*), the five

great elements (*mahābhūta*). These entities result in the sixteen deviations (*vikāra*) in nature.

There are seven natural states (*prakṛti*). Also the sense organs, the functional organs, the great basic elements (*mahābhūta*), *viśaya*, *antaḥkaraṇa* – these twenty-four entities form the establishment in form of the human body.

The nature is comprised of the five great elements (*mahābhūta*). How? The five great elements reside in the mother's ovum, the father's sperm, in the tiny body formed after conception, also in food substances and their tastes; and hence the human body is known as a body that is made up of the five great elements (*bhūta śarīra*). Since space is omnipresent, it is not counted separately. In this human body comprising the sixteen elements, unless there is an entry of diseases like fever, the person is healthy. Natural maladies that occur, like hunger and thirst, actually stabilise or support the body. Diseases create hindrances or obstacles in body and mind. When diseases originate at the elemental (*mahābhūta*) level of the father's sperm and mother's ovum, they are formed in the foetus, such as skin diseases, fistula, or diabetes. As a rule, the effect resembles the cause. The effect is intimately connected to (*samavāyi*) cause. When disturbance arises in the mother's fluid [*rasa*] or one's own fluid, then diseases like abdominal pain (*ānāha*) or pain [for the baby] etc. arise.

How is this disturbance formed in the body comprised of the five great elements (*mahābhūta*)? There are many causes, such as time, season, etc. For instance, when a somewhat normal situation is evident, with minimal variations in the normally expected atmosphere, in autumn (*śarada*), in summer (*grīṣma*), or during the rainy season (*varṣā*), these are normal (*hitayoga*, i.e., beneficial). Actions such as carrying out a cold regimen when a hot regimen is needed, and vice versa, are the causes of abnormalities and known as improper actions (*mithyāyoga*). In this way, due to various activities of the sensory organs, there are disturbances in the five elements (*mahābhūta*) of sperm and ovum which are recognized as disease. When due to the proper functioning of time, intellect, organs, and their sensations, the body functions normally, then this condition is called health or the not-diseased state. In the first chapter of the *Sūtrasthāna*, Sage Caraka said that the causes of diseases are 1) improper use, 2) scanty or no use, and 3) excessive use [of senses]. The body and mind are considered the seats of disease. These are the same for happiness too, and having equilibrium is the cause of happiness. Bhāvamīśra also elaborated that "a person is considered to be healthy if his body elements/humours (*doṣa*), digestive fire, body tissues (*dhātu*), and excretory functions are normal or in equilibrium, and there is a happy state of the soul, organs, and the mind." The body is in a state of health until diseases enter into the body formed of the five great elements (*mahābhūta*). When changes in

properties and functions occur in this constitution of the five great elements (*mahābhūta*), various diseases arise. In *Sūtrasthāna* [chapter 25], Sage Caraka said that the wealth of these entities create a person, and their deprivation causes many diseases. For example, even a strong house made up of regular and irregular wood pieces may collapse due to the attack of wormwoods, due to fire, or due to storm. When such a house collapses, it is generally said that the house collapsed. This example should be understood. The five elements were formed as stated above. By the combination of these five great elements (*mahābhūta*) in varying proportions, all substances in this universe are formed. While the human body is earthly, this does not mean that other entities do not have their part in it. Other entities are also present. The body is endowed with earth's fractions, i.e., water, fire, and air, and the equilibrium or abnormal situation of water, fire, and air lead to health or disease. For instance, as long as water elements, fire elements and air elements are well-organised, the person is said to be healthy. When mismanagement takes place in these entities, diseases arise. The reference is that as long as there is an equilibrium of the three elements, they are known as the three body elements/humours (*dhātu*), and the body is in a good condition. On the other hand, when these three elements are imbalanced or problematic, then, in terms of the body, these three elements are referred to as *doṣa* ["fault"]. Hence, they are generally termed *doṣa*. The characteristics of the normal and abnormal state should be properly studied and regulations pronounced by the ancient sages for the protection of health and the cure of diseases must be properly abided by. The humour phlegm (*kapha*) is [mainly formed by] the water element, the humour bile (*pitta*) is mainly formed by the fire element, and the humour wind (*vāta*) is mainly formed by the air element.¹ In such a manner, wind, bile, and phlegm (*vāta*, *pitta*, *kapha*) exist in the body as the humoral elements (*doṣa dhātu*). Sage Vāgbhaṭa has elaborated that "wind, bile, and phlegm collectively are the three humours (*doṣa*). They cause phenomena such as destruction and development of the body, when in an abnormal and normal state respectively."

¹ Editor's note: We have standardized the translation of *vāta*, *pitta* and *kapha* and their correlates in the other vernaculars to wind, bile, and phlegm in this volume, but would like to note that this translator's preference was to leave the terms untranslated or to render *vāta* as "air element" and *pitta* as "fire element".

*DOṢA (VĀTA, PITTA, KAPHA)*ELABORATION OF BODILY HUMOURS (*DOṢA*)

Since bodily tissues and excretory products are also affected by them, wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*) are regarded as “faults” (*doṣa*). The etymology of *doṣa* is “*duṣ vaikṛtyai*,” from the verbal root “*duṣ*,” meaning “to spoil.” This is explained by the verse “*akartari ca kārake ca samjñāyām*,” where *ghaṇ* is the *pratyaya* (suffix). Those which spoil (*doṣa*) have been termed “*dhātu*” by some. In the Western system of medicine, the nervous system, the vascular system, and the lymphatic system are in the form of *dhātu*. Wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*) carry out the sustaining (*dhāraṇa*) of the body, just as the water (*soma*), the sun (*sūrya*), and the air (*vāyu*) hold this world through the cold season (*soma*), the hot season (*sūrya*), and distributing and wind-like activities (*vāyu*). They support or hold (*dhāraṇa*), hence they are *dhātu*. Here, integration should be understood in numerous ways. It is similar in the case of cold and hot climates where there is a distribution of cold and hot etc. (*vikṣepa*), by different ways. Since they (*doṣa*) contaminate the chyle (*rasa*) etc., they are known as impurities (*mala*). This is what Sage Śārṅgadharma has said. wind, bile, and phlegm are faults (*doṣa*) since they disturb the body, they are elements (*dhātu*) since they support the body, and they are waste products (*mala*) since they contaminate the body. In *Sūtrasthāna* [chapter 21], Sage Suśruta also mentioned wind, bile, and phlegm as the causes of the creation of the body. They are in order [i.e., normal], seated in the lower, middle and upper parts of the body, and support it just as three pillars support a house. Hence some people call them the three pillars (*tristhūṇa*). When they are in disorder (*vyāpanna*), they become the cause of destruction. Hence, along with the fourth entity, blood (*rakta*), these constantly cause the origin, maintenance, and destruction of the body. The body cannot exist without the humour phlegm (*kapha*), it cannot exist without the humour bile (*pitta*), and it cannot exist without the humour wind (*vāta*) or blood (*rakta*). They regularly support the body.

ETYMOLOGY (*ŚABDĀRTHA*)

Etymology: The letter *vā* in “*vāyu*” signifies speed. Heat (*tapas*) indicates temperature or anger, and clinging (*śliṣā*) [in *śleṣma/kapha*] indicates embrace. By joining a suffix (*pratyaya*) to these through *kṛdanta vidhī*, the terms wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*) are derived.

SITES OF THE DOŚAS

Now I will elaborate upon the sites [i.e., seats] of the humours (*doṣa*). The whole of wind (*vāta*) is located in the region of the pelvis and the anus. It resides below the umbilicus, above the pelvis and anus, and in the [large] intestine (*pakvāśaya*). The seat of bile (*pitta*) is in the middle of the intestines (*pakvāśaya*). The seat of phlegm (*kapha*) is the stomach (*amāśaya*).

Further, wind (*vāyu*) is divided into five types: “upper forward” (*prāna*), “upper” (*udāna*), “middle” (*samāna*), “down and outwards” (*apāna*), and “diffused” (*vyāna*). These five types of wind, when at their own sites, support life (*yāpana*) in the body. The seats of *vāyu* are at the throat, the heart, at the lower side, near the seat of digestive fire, in the excretory part [i.e., the rectum], and in a functional way, *vāyu* is present in the whole body. The characteristics of wind (*vāyu*) have been elaborated by Caraka. These are as follows. wind maintains the functioning of the instrument called the human body. It is of five types, namely “upper forward” (*prāna*), “upper” (*udāna*), “middle” (*samāna*), “down and outwards” (*apāna*), and “diffused” (*vyāna*). It is the generator of large and small movements and it is what controls and inspires the mind. It makes all organs function; it guides them towards their sensations; it creates the array (*vyūha*) of all bodily tissues (*dhātu*); it unites the body; it generates speech; it is the cause of touch and sound; it is the basis of ears and touch; it is the originator of happiness and energy/enthusiasm; it flares up the digestive fire; it absorbs the *doṣas*; it throws out excretory products; it separates the large and subtle bodily channels from each other; it creates the foetal structure; it is the cause of the maintenance of life. Such functional wind (*vāta*) is the wind in its natural state. The *Caraka-saṃhitā* mentions that it has the characteristics of dry, cold, light, fine, speedy, clear, rough, and it is reduced by the opposite characteristics. If it is aggravated in different ways, it causes problems in the body, becoming the cause of the destruction of strength, colour, happiness, and life. It disturbs the mind, destroys all organs, kills the foetus, and causes abnormalities. It holds the excretory products for longer times, creates negative feelings of fear, sadness, hypnosis, weakness of mind, etc., and it obstructs life. If we study wind according to *Caraka*, we understand that what Western physicians know as “nerve force” is known as wind (*vāyu*) by the masters of Ayurveda. The ancient sages have elaborated this entity as *ṣaṭcakra* [“six wheels”] or *nāḍī maṇḍala* [“circle of tubes”], and the same entity is known in the allopathic textbooks as “nervous system.” The example of similarity – unless the lightning or electric bulb is actually seen, it cannot be even imagined. Known from this and the elaboration of wind (*vāta*) by the ancient sages, it is not something imaginary, and, knowing this, also the eyes consider it

to be true by direct interpretation. The power with which the activities of life continue, that power is known to Westerners as the nerve force. When we study this from beginning to end, we come to know that what the ancient sages have explained by the term *vāta* is correct as it is.

THE CHARACTERISTICS OF BILE (*PITTA*)

The humour bile (*pitta*) is hot, liquid, blue, yellow, endowed with good properties (*sattva guṇa*), flowing, pungent, light, oily, sharp, and acidic. When it is not mixed with undigested fluid, it is of yellow colour. When it is mixed with undigested fluid, it is of blue colour. The one entity of bile is of five types, just like wind (*vāta*), according to names, sites, and functions.

THE NAMES OF BILE (*PITTA*)

According to their different sites of existence, the names of bile are “the one that cooks/ripens” (*pācaka*), “the one that colours” (*rañjaka*), “the one that effects” (*sādhaka*), “the cause of sight” (*ālocaka*), and “the brightener” (*bhrājaka*).

THE SITES OF BILE (*PITTA*)

bile (*pitta*) resides sequentially at the pancreas (*agnyāśaya*), excretions, the spleen, the heart, both eyes, and the whole of the skin. The curiosity here is whether fire is different from bile, or bile is the same as fire. I state here that in the body there is no other availability of fire than that from bile. Due to the fire element in bile, the processes of burning and digestion are carried out just like a fire, like an inner fire. If the properties of fire are increased by the consumption of similar substances, then we can also see that the consumption of cold reduces it, hence there is no different fire than bile. We also come to know that fire is no different from bile by direct sensation. That bile has similar properties as fire also indicates that fire is not different from bile. When bile is reduced, medicines with similar characters like fire, i.e., hot and pungent, are used. If bile is increased, cold treatment is performed. We also understand by wisdom that there is no different digestive fire (*agni*) than bile. Nowhere in Ayurveda it is said that fire is different from bile. Hence, the bile which is in the form of fire has five types according to its sites, and these are “the one that cooks/ripens” (*pācaka*), “the one that colours” (*rañjaka*), “the one that effects” (*sādhaka*), “the cause of sight” (*ālocaka*), and “the brightener” (*bhrājaka*).

The process of digestion takes place by means of the fire element [i.e., through *bile*]. If *bile* is aggravated, there is high temperature and dysfunction. Natural heat is generated during the functions of the body, which is the effect of fire element. Western authors have termed this power an unknown energy which generates heat (heat producing mechanism, metabolic function).

The element bile (*pitta dhātu*) has been described by the great sages as endowed with oiliness/moisture, hot, sharp, liquid, acidic, pungent. *Pitta* with these qualities is suppressed by drugs with opposite properties. The five types of *bile* have also been well-described by the Ayurvedic system. However, due to fear of excessive writing I shall not mention it here. What in the Ayurvedic system authors call “*pācakāgni*” is termed bile by Western scholars.

The bile assists in emulsifying the fats of the food and thus rendering them capable of passing into lacteals for absorption. – Kirk’s Physiology

Vāgbhaṭa stated that due to the “bile that ripens” (*pācaka pitta*), others become capable of performing their functions. The function of *pācaka pitta* is being there and benefiting the other types of *bile* by strengthening them. The “bile that colours” (*rañjaka pitta*) is an appropriate label. With *rañjaka pitta*, blood is coloured red. Regarding this, the theory of Western experts is as follows:

The colouring matter of the bile is derived from, and is closely related to, that of blood, since the qualities of the bile pigment secreted are markedly by the injection of substance into the veins which are capable of setting free haemoglobin. – Kirk’s Physiology

The seat of the “bile that effects” (*sādhaka pitta*) is the heart. This bile facilitates the contractions and dilatation of the heart’s spaces. Due to regularity of this, function of intellect is assisted. Vāgbhaṭa elaborated that the bile in the heart responsible for intellect, wisdom, and self-respect is *sādhaka pitta* [i.e., what makes something possible]. Regarding the contractions of heart, the thoughts of Western experts are as follows:

The contraction (of the heart) cannot be long maintained without supply of blood or similar nutritive fluid. The view that is at present taken of the action of the heart is that in heart muscles as in protoplasm generally the metabolic process are those of anabolism or building up which takes place during diastole of the heart and the catabolism or discharge which is manifested in the contraction of the heart. – Kirks’s Physiology

The seat of “bile that causes sight” (*ālocaka pitta*) is the circle of the organ of sight (*dr̥ṣṭīmaṇḍala*). The *dr̥ṣṭīmaṇḍala* includes the process by which there is the capacity of seeing; it is not possible to see without it. Hence, the great sages have given it an appropriate label. The Westerners state that

It is supposed that the change effected by the light which falls upon the retina is in fact a chemical alteration in the protoplasm and that it stimulates the optic nerve endings.

The seat of “bile that brightens” (*bhrājaka pitta*) is the skin. Processes such as sweating take place due to this.

THE CHARACTERISTICS OF THE HUMOUR PHLEGM (*KAPHA*)

The humour phlegm (*kapha*) possesses the qualities heavy, white, oily, sticky, cool, endowed with inertia (*tamas*), sweetness, and salty when it is affected. phlegm is of five types according to differences in site, titles, and functions.

THE NAMES OF PHLEGM (*KAPHA*)

According to its sites, the names of phlegm (*kapha*) are “moistening” (*kledana*), “clinging” (*avalambana*), “tasting” (*rasana*), and “fatty” (*snehana*).

THE SITES OF PHLEGM (*KAPHA*)

In a person, phlegm (*kapha*) sequentially resides at the stomach, the heart, the throat, the head, and the joints. The sites of the humours (*doṣa*), which are actually residing all over the body, have already been explained.

The opinion of Vāgbhaṭa and Caraka is as follows: These are the general sites of normal humours, which are omnipresent in body. Here different functions can be understood. Although it is omnipresent, it [*kapha*] is located in the heart as well as above and below at the umbilicus. Similar to the humour wind (*vāta*), which is an extraordinary entity (*atindriya*), bile is also an extraordinary entity, due to its minuteness, and so is phlegm. Sage Suśruta has described phlegm as follows: phlegm (*kapha*) in its five types benefits the body through its functions such as fluids, i.e., the lubrication (*śleṣaṇa*) of joints, bringing oiliness, healing, filling, strengthening, and providing stability. The site of “moistening phlegm” (*kledaka kapha*) is the stomach (*amāśaya*). The site of “moistening phlegm” (*kledaka kapha*) has been explained by Western experts by use of the term “saliva.”

The physical use of saliva consists of moistening membranes of the mouth, assisting the solution of the soluble substance in the food, and in virtue of its mucin, lubricating the bolus of food to facilitate swallowing. – Halliburton’s Physiology

If we assume phlegm to be the water element, in fact there is salivation in the mouth. In the Indian medicinal system (*ārya vaidyaka*), the functions of “moistening phlegm” (*kledaka kapha*) have been elaborated in the *Aṣṭāṅgasaṅgraha*. It is explained in *Carakasamhitā* that by liquidity it disintegrates and attains softness by moisture. Hence, there is a similarity between the functions of “moistening phlegm” (*kledaka kapha*) and saliva. The site of “clinging phlegm” (*avalambaka kapha*) is the chest. Through its own potential, at its own site it assists by absorbing the leftover moisture. Hence it is termed “clinging phlegm” (*avalambaka*).

This is known as saliva (*rasa*) by the Western experts. The main seat of phlegm (*kapha*) is the root of the tongue, as explained in the *Suśrutasamhitā*. The root of the tongue is situated near the throat. Due to the dominance of the water element in the tongue organ, there is saliva (*rasa*). When phlegm (*kapha*) at the tongue, i.e., saliva, is not produced, then the tongue cannot perceive taste. Western experts also consider this phlegm (*kapha*) at the tongue, which is clear from following statements:

Serous glands occur only at the back of the tongue in the neighbourhood of the taste-buds. The secretions of these serous glands is of a watery nature and probably assists in the distribution of the substance to be tasted over the taste area. – Gray’s Anatomy

The site of “fatty phlegm” (*snehana kapha*) is the head, as explained by Sage Suśruta. Since it gives oiliness and nourishment to the head, it nourishes the organs through the essence of food. Without “fatty phlegm” in the head, the organs in the head cannot function. The Western experts also say the same:

Its chief use is probably to afford mechanical protection to the nervous centres and to prevent the effect of concussions communicated from without. – Gray’s Anatomy

The site of “fatty phlegm” (*śleṣaka kapha*) are the joints, as stated by Sage Suśruta. The phlegm (*kapha*) in the joints lubricates all joints and benefits them. Western experts elaborate by the word “synovia.”

Synovia lubricates the surface of the joints and so ensures an easy movement
– Hallinburg's Physiology.

Why are the four great entities named wind (*vāta*), bile (*pitta*), and phlegm (*kapha*)? Sage Caraka has explained this in the first chapter of the *Nidānasthana*. Hence, three types of diseases arise, related to fire, related to water, and related to air. This is also further explained: The diseases are of two types, i.e., internal and accidental, and of three types, i.e., through the three humours (*doṣa*). This is mentioned by Sage Suśruta in the *Sūtrasthāna*, in the chapter "Differentiation of savours" (*Rasavijñāna*), verse 42. The sweet, sour, and salty tastes reduce wind (*vāta*); sweet, bitter, and astringent tastes reduce bile (*pitta*); and pungent, bitter, and astringent tastes reduce phlegm (*kapha*). The relation of the humours wind, bile, and phlegm to the great elements (*mahābhūta*) is given in order to clear away doubts as follows: wind (*vāyu*) contains many entities, bile (*pitta*) is fire-dominant, and phlegm (*kapha*) is water-dominant.

For the same reason, Suśruta has explained that there is no greater method of treatment than that pertaining to the great elements (*mahābhūta*). This is self-explanatory. Apart from the five elements, there is no other entity worthy of consideration. If we systematically consider Ayurveda's three-humour (*tridoṣa*) theory, then we come to understand that the *tridoṣa* theory, i.e., the theory of three basic bodily elements, is worthy of praise. If your Western medical science cannot be praised in a similar way, then what can be said about it?

EXAMINATION OF DISEASES

Initially, for the examination of diseases, knowledge of the true situation is obtained by the means of close reasoning [*samavāyikāraṇa*] and assisting reasoning [*sahakārikāraṇa*].

For example, in order to investigate the character of some unknown child, four persons authorised by the king (i.e., officials) are sent to find his parents' place and to determine their character. The company he keeps is investigated, and efforts are made to investigate this character. Later, efforts are taken to find out about his lineage (*kula*). From this an understanding arises. If he is ineligible, we should attempt to generate eligibility or goodness. In this way, diseases should be examined first by general observation and then by special observation. By coming close to the patient through touch, the functions of the heart, the pulse, the lungs, etc. should be understood to ascertain whether the disease is natural or unnatural. Examination by touching is performed for the sake of knowledge about coldness, heat, etc. and for knowing the roughness of the skin. If the patient cannot speak, the examination is carried out following the *ramalaśāstra* [a branch of Indian

ancient astrology based on questions], examination of sounds, and astrology. In this way, the examination should be carried out by touch, inspection, and questioning. Hence, Sage Vāgbhata said in the first chapter that the patient is examined by inspection, touch, and questions. This is done in the same way as stated in the previous example in which the king's authorized personnel investigated the child's character independently. Similarly, Ayurvedic physicians undertake four examinations for knowing the disease: 1) by inspection, 2) by touching, 3) by questions, 4) by experience. In the inspection, other ways are also included. "Looking" (*darśana*) makes use of the root "dṛṣ" ("to see") of the Sanskrit language. Through this, the tongue, the pulse, faecal matter, the urine, the looks, etc. are considered. For the same, examination by eight methods is indicated: the pulse, urine, faecal matter, the tongue, the speech/sound, touch, the eyesight, and appearance. In the three types of examination [inspection, etc.], other methods are also included. The next point for discussion is the site of disease, i.e., which is the most important cause of disease [*samavāyi*], i.e., the patient's body. What should be studied here? The site of disease.

Disease means pain. It is of two types. According to the region, diseases such as haemorrhoids and fistulas are localised at specific sites of the body. The examination of blood and such tissues is considered, as it is present in the whole body. One should understand aspects such as reduction, etc. in the four entities, such as blood, etc.

DIAGNOSIS (*NIDĀNA*)

a) Answers based on points raised in question two:

The diagnosis can be made from knowing the causes (*nidāna*), the prodromal symptoms (*pūrvārūpa*), the symptoms (*rūpa*), the relieving factors (*upāśaya*), and the map of the formation of disease (*samprāpti*). Sage Mādhava mentioned in the *Mādhavanidāna* that the causes, the prodromal symptoms, the symptoms, the relieving factors, and the map of the formation of disease are ways to arrive at specific knowledge of the disease. In these, the causes are the similar or opposite causative factors, and they are explained by synonyms such as *nimitta*, *hetu*, *āyatana*, *pratyaya*, *utthāna*, and *kāraṇa*. All these are synonyms of "cause." Then the prodromal symptoms are explained. By means of the humoral specificity, with the help of knowledge of prodromal symptoms, disease which is developing can be predicted. These are the symptoms of disease in brief. For diagnosis, the prodromal symptoms have been explained first, before the disease formation process becomes clear through the formation of the disease (*samprāpti*). If the prodromal symptoms express themselves, they are referred to as symptoms. Its synonyms are

samsthāna, *vyāñjana*, *liṅga*, *lakṣaṇa*, *cinha*, and *ākṛti*. Then the relieving factors are explained. The relieving use of medicines, food, and a lifestyle opposite to the causes and the diseases and opposite in action to the cause and the disease are the “relieving factors,” (*upaśaya*). This is also known as favourable factors. Opposite to these are the non-relieving factors or non-favourable aspects. Then the map of disease formation (*samprāpti*) is explained – the manner in which humours get aggravated and the way they spread and result in disease is the map (*samprāpti*), also called *jāti* or *agati*. Its conditional (*aupādhika*) types have been categorized as number (*saṅkhyā*), permutation (*vikalpa*), independent (*prādhānya*), dependent (*aprādhānya*), strength (*bala*), weakness (*abala*), [affected by] factors of time (*kāla*). For instance, fevers are of eight types. The quantitative permutations and combinations of the involved humours (*doṣa*) are “permutations” (*vikalpa*). The importance of disease should be decided from dependence and independence. The fullness or partiality of these causal factors determines the strength or weakness of the disease. The time of disease should be understood by the variations of night, day, season, fed state, etc. In this manner, the diagnosis has been explained in short.

Now I will explain it in detail. Causes of disease are of two types, distant and close. Regarding this, the distant ones are improper food combinations, etc. and the close ones are such as wind (*vāta*), etc. The invariable causation of wind (*vāta*), etc. in all diseases has already been mentioned. The cause of all diseases is disturbance in waste products (*mala*), and the cause of their aggravation are various types of consumption of improper entities.

In summary, as stated in *Caraka Śārīrasthāna* [chapter 6], the principle is that wherever there is mismanagement, lack, or excess in the body that is comprised of four entities, equilibrium should be established. Hence, rather than by other bodily tissues (*dhātu*), the nourishment of flesh is preferable by flesh, just like that of blood by blood, fat by fat, fat in muscles by fat in muscles (*vasā*), bone by young bones, marrow by marrow, semen by semen, and foetus by eggs [i.e., all in the form of external nutritional entities]. Similarly, at appropriate times the increase and decrease of bodily tissues should be carried out by synergism and antagonism. At the same time, according to Suśruta, the reduced one should be increased, the increased ones should be reduced, and those in equilibrium should be maintained. Caraka explained in the *Sūtrasthāna* [chapter 1] that in all entities, similarity is always responsible for increase, while dissimilarity is the cause of decrease. The generation of both is important. Here, substance, properties, and functions should be considered equally. How? The mismanagement created in the properties and functions in the own states of the five great elements is known as disease.

PROPERTIES OF THE HUMOURS (*DOṢA*)

There are two types of the five great elements: inner properties and outer properties.

The properties of wind (*vāta*) are 1) dry, 2) cold, 3) light, 4) fine, 5) moving, 6) clean, and 7) rough.

The properties of bile (*pitta*) are 1) moist, 2) cool, 3) sharp, 4) liquid, 5) sour, 6) flowing, and 7) pungent.

The properties of phlegm (*kapha*) are 1) heavy, 2) cool, 3) soft, 4) moist/oily, 5) sweet, 6) stable, and 7) sticky.

There are twenty general properties: 1) heavy, 2) light, 3) slow, 4) sharp, 5) cold, 6) hot, 7) oily/moist, 8) dry, 9) smooth, 10) rough, 11) thick, 12) liquid, 13) soft, 14) hard, 15) stable, 16) moving, 17) fine, 18) thick, 19) clear, and 20) sticky.

There are also similar and opposing properties. For instance, where there is an excess of cold, heat should be applied, and where there is excess heat, cold should be applied. Sage Caraka explained in the *Vimānasthāna* [3.255] that physicians make diseases caused by heat decline through cold properties, and that they treat diseases generated by cold through hot properties. In a similar way, also other diseases should be treated by medicine that opposes their cause. There is no medication other than anabolism for diseases caused by catabolism, and there is no treatment other than catabolism for diseases caused by anabolism. The catabolism is of three types: fasting (*lañghana*), fasting together with digestive drugs (*lañghana, pacana*), and physical evacuation of humours (*doṣāvasecana*). In fever this is recommended according to its specific stages: in the initial stage of fever, fasting should be carried out, in the middle stage of fever, digestion should be carried out, and in the final stage, medicine-induced laxation (*virecana*) should be carried out. This cures all fevers.

TREATMENT OF DISEASES

The *Amarakoṣa* states that treatment (*cikitsā*) means combating the disease. This is meant by the root “*kiti*” in the word “*cikitsā*.” The word “*cikitsā*” is derived by attachment of *san* to the root “*kiti*.” The body composed of five great elements (*mahābhūta*) is the site of treatment. It can be healthy or diseased. When wind, bile, and phlegm perform their own functions in the body within their limits, it is healthy. Healthy are those who have an equilibrium of body elements (*doṣa*), bodily tissues (*dhātu*), excretory products (*mala*), and digestive fire (*agni*), and also have a happy soul, organs, and mind. Hence *Suśrutasamhitā*, *Uttaratantra*, chapter 65 considers healthy that person who has proper functions of the humours

(*doṣa*), bodily tissues (*dhātu*), waste products (*mala*), and digestive fire (*agni*) and has a happy soul, organs, and mind. For the preservation of health, the rules of the medicinal system regarding the regimens of day, night, season, etc. should be abided by. This elaboration concerns the treatment of a normal person. When the rules are not abided by, there is ill health or sickness. When there is an imbalance in the quantities and the properties and functions of the five great elements (*mahābhūta*), there is a diseased state. This is what is treated. It is of three types: causes, symptoms, and medicine. The system with appropriate cures is the Ayurveda system. The term “treatment” (*cikitsā*) grants knowledge of causes, symptoms, and medicine. The combination of the earthly body, made of five elements, and the soul is known as “*puruṣa*,” i.e., the person. The union of the person with pain is disease. These diseases are of four types: accidental/external, bodily, mental, and natural. All can be of three types: “relating to the self” (*ādhyātmika*), “supernatural” (*ādhidaivika*), and “relating to the elements” (*ādhibhautika*). Sage Suśruta explained in *Sūtrasthāna*, chapter 24, that there are seven types including “possessed by a primal power” (*ādibalapravṛta*) etc., and three types of the “supernatural”. The roots of all diseases are wind, bile, and phlegm. This is because such signs are evident and such experience is present. Just as the way the universe exists is nothing else than the three primary qualities of goodness (*sattva*), “activity” (*rajas*), and “inertia” (*taṃas*), diseases all over are not without wind, bile, and phlegm. It is understood that this great sorrow of the soul [i.e., illnesses] is expressed through the body and the mind. It is of two types: of the body and of the mind. Due to minute variations, diseases are of four types: accidental /external, internal, mental, and natural. These factors cause the disturbance of three humours (*doṣa*). Cause means origin (*hetu*). While experts of Nyāya philosophy accepted three causes – close reason (*samavāyikāraṇa*), unnatural reason (*asamavāyikāraṇa*), and being caused by previous deeds (*nimittakāraṇa*) – the system of Ayurveda accepts only two reasons, close reasons (*samavāyikāraṇa* [*upādāna*]) and assisting reasons (*sahakārikāraṇa*). Hence, there are no different causes other than these. Therefore, the three types are: 1) “application of something that is inappropriate to the senses” (*asātmyendriyasamyoga*), 2) “errors of judgment” (*prajñāparādha*), and 3) “effects of time” (*pariṇāma*). These three include different combinations of time, intellect, and sense organs, as demonstrated above. All substances are derived of the five great elements in the sense that they are living and non-living. In *Caraka Sūtrasthāna*, chapter 26, the different general properties of the three humours (*doṣa*) are specifically mentioned.

Earthy (*pārthiva*) substances are characterized as 1) heavy, 2) rough, 3) hard, 4) mild/slow, 5) stable, 6) clear, 7) thick, and 8) smelly.

Watery (*āpya*) substances are characterized as 1) liquid, 2) oily, 3) cold, 4) mild/slow, 5) soft, 6) sticky, 7) flowy, and 8) taste. They generate 1) liquidity (*utkleda*), 2) moisture /oiliness (*sneha*), 3) binding (*bandha*), 4) fluidity (*viṣyanda*), 5) softness (*mārdava*), and 6) soothing / cooling (*prahlāda*).

Fire-dominant substances are characterized as 1) hot (*uṣṇa*), 2) pungent / sharp (*tikṣṇa*), 3) fine (*sūkṣma*), 4) light (*laghu*), 5) dry (*rukṣa*), 6) clear (*viśada*), and 7) appearance (*rupa*). These generate 1) a burning sensation (*dāha*), 2) digestion/gangrene (*pāka*), 3) brightness (*prabhā*), 4) prayer (*prikāśa*), and 5) colour (*varṇa*).

Air-dominant substances are characterized as 1) light (*laghu*), 2) cold (*śīta*), 3) dry (*rukṣa*), 4) rough (*khara*), 5) clear (*viśada*), 6) fine (*sūkṣma*), and 7) touch (*sparśa*). They generate 1) dryness (*rauṁṣya*), 2) sleepiness (*glānī*), 3) thoughts (*vicāra*), 4) clarity (*vaiśadya*), and 5) lightness (*lāghava*).

Space-dominant substances possess properties such as 1) soft/ mild (*mṛdu*), 2) light (*laghu*), 3) fine (*sūkṣma*), 4) smooth (*ślakṣṇa*), and 5) sound (*śabda*). They generate 1) porosity (*sausīrya*) and 2) lightness (*lāghava*).

According to this narration, all available substances in this world are medicinal. As said before, the body that is comprised of five grand elements is related to wind, bile, and phlegm. Due to variations in function, there are different nomenclatures. One kind of bile [*devadatta*], which carries out functions such as digestion, has different names [according to its different functions], such as ripener (*pācaka*), one that colours (*rañjaka*), one that places (*dāpaka*), agent (*kāraka*), bringer (*hāraka*), etc. The same is also true for the three humours. Hence, Sage Caraka stated in *Sūtrasthāna*, chapter 6, that one entity receives various technical terms because it carries out various functions. When a person is capable of carrying out many functions, then performs one function and attains a particular name according to it, the same is the case for medicinal substances. Many effects are evident in the elements of earth, water, fire, wind, and space (*prthvī*, *āpa*, *teja*, *vāyu*, *ākāśa*) and their properties. There are two types of effects: beneficial and harmful. For this purpose, it is necessary to have knowledge of signs (*liṅga*).

Please refer to this in *Carakasamhitā*, chapter 18 – in this soulful living body, wind, bile, and phlegm are certain. Experts should understand whether they are abnormal or normal. It is generally stated that a state of balance is normal and a state of imbalance is abnormal. Equilibrium is when no harm is created for the body. There is no other form of tolerance, and it is the mark of the characteristics and functions of wind, bile, and phlegm. Sage Caraka mentioned in *Sūtrasthāna*, chapter 20, that among the diseases of wind, bile, and phlegm, there are 80 diseases of wind: 1) splitting of nails, 2) cracked heels, 3) foot pain, 4) numbness of the feet, etc. While the diseases of wind are numerous, the most important ones

have been mentioned. In all the stated and unstated diseases of *vāta*, the experts call them wind disorders by knowing the specific characteristics and effects of wind and by knowing their subdivisions. For instance, the specific characteristics of air (*vāyu*) are that it is 1) dry, 2) light, 3) clear, 4) cold, 5) movement, and 6) shapeless. Functions similar to the following are reflected as signs when it enters the related organs: 1) falling down from its place, 2) displacement, 3) dilatation, 4) breaking, 5) clumsiness, 6) goosebumps, 7) thirst / desire (*tarṣa*), 8) covering, 9) twisting pain, 10) tremors, 11) shaking, 12) pricking pain, 13) piercing pain, 14) coating, 15) breaking/fracture, 16) hoarseness, 17) clarity, 18) porosity, 19) redness, 20) astringence, 21) inability to understand taste (*virasatā*), 22) wasting, 23) pain, 24) numbness, 25) contraction, and 26) consolidation. These are the functions [or signs] of wind. Diseases comprising these must be considered wind disorders.” They should be treated with sweet, sour, salty, oily, hot. The wind-reducing treatments are: 1) sudation, 2) local application and consumption of medicated oil/ghee, etc., 3) non-oily (*asthāpanā*) enema, 4) oily (*anuvāsana*) enema, 5) nasal application of medicines, 6) eating food, 7) application of oils on skin, 8) rest (*sādana*), and 9) showering of hot decoctions (*pariṣeka*). By employing these and determining their dose and time, the prime physicians have considered non-oily and oily enemas the best wind treatment. Enemas enter the large intestine and destroy the root of disturbed wind. Wind disorders all over the body are cured by conquering wind at this site, just like, for instance, the stem, branches, fruits, and leaves of a tree will certainly perish when its root is cut.

Henceforth I shall elaborate the forty bile (*pitta*) diseases, such as 1) heating (*oṣa*), 2) scorching (*proṣa*), 3) burning sensation (*dāha*), 4) inflammation/boils (*davathu*), 5) hot flushes (*dhūmaka*), 6) burning sensation in the shoulders (*aṃsaka*) etc. From among the numerous bile disorders, I have mentioned the most important ones. In all stated and unstated bile disorders, the experts call them bile disorders by knowing the signs of functions as an effect of their own characters and by undoubtedly knowing these fractions. For example, the individual signs of *bile* are 1) heat, 2) pungency/sharpness, 3) lightness, 4) not too moist, 5) whitish red colour, 6) strong filthy smell, and 7) pungent and sour taste. These express when it enters particular organs: 1) burning sensation, 2) heat, 3) digestion/alteration, 4) sweat, 5) wetness (*kleda*), 6) putrefaction / gangrene (*kotha*), 7) oozing and secretion, and 8) redness. The functions of bile can be assessed through its smell, colour, taste, etc., and these confirm it. Treatment should be sweet, astringent, cold, etc., applied by 1) consumption of fats [ghee, etc.], 2) medicinal laxation (*vireka*), 3) application of medicinal paste of cooling drugs, 4) showering with Ayurvedic medicinal liquids, 5) application of oils on the skin, and 6) tub bath in medicinal liquids. The time and dose of such treatments should

be decided, and according to the physicians of Ayurveda medicinal laxation or purgation (*virecana*) is the prime of all other therapies for bile. It [*virecaka* medicine] enters the stomach (*amāśaya*) first and scrapes off only the abnormal *bile*. By conquering bile at this site, all bile in the body is controlled, just like the whole kitchen becomes cold when the wood fire is turned off.

Further, twenty diseases of phlegm (*kapha*) will be explained. Conditions such as 1) satiety /fullness, 2) sleepiness (*tandrā*), 3) excessive sleep, 4) a mesmerized state (*staimitya*), etc. complete the number twenty. From among the numerous disorders of phlegm, the most important ones have been mentioned. In all these stated and unstated phlegm disorders, the experts undoubtedly know them as phlegm disorders after knowing the effect of the own qualities of phlegm, its signs, and its fractions. The own characters of phlegm are: 1) white /colourless, 2) cold, 3) heavy, 4) sweet, and 5) soft and muddy-like consistency. When such enter into particular organs, the individual signs arise, namely 1) white, 2) cold, 3) itchy, 4) stable or non-movable, 5) heavy, 6) oily or fatty, 7) stiff, 8) numb/hidden (*supti*), 9) wetness (*kleda*), 10) covered feel (*upadeha*), 11) tying, and 12) long standing sweetness. These are the results of phlegm, and diseases endowed with these are phlegm disorders. They should be treated by 1) pungent, 2) bitter, 3) astringent, 4) pungent or hot, and 5) dry (substances). By deciding the dose and time, 1) sudation, 2) medicinal vomiting (*vamana*), and 3) application of strong nasal medicines (*śirovirecana*), etc. should be performed. The best treatment for phlegm is medicinally induced vomiting (*vamana*). It enters the stomach and removes abnormal phlegm. When phlegm at this site is conquered, all phlegm disorders in the body are cured, just like plants such as rice or barley, which are nourished by water, become dehydrated when the water supply discontinues. The description of health, causes, symptoms, and medicines [three factors] were mentioned by Sage Caraka in *Sūtrasthāna*, chapter 20. First, the disease should be examined, then medicines should be considered, and then action should be studiously initiated by the Ayurvedic physician. The physicians who initiate treatment without knowing the disease, despite their knowledge of medicines may get only uncertain results. For one who knows about the specificity of disease, all medicines, region, and time, success is undoubtedly certain. Here, in the knowledge of diseases (*roga vijñāna*), sixty-three types of diseases such as fever (*jvara*) etc and wind, bile, and phlegm, etc. types are expected. By the term “differentiation of drugs” (*auśadhavijñāna*) sweet, sour, salty, bitter, etc. qualities of the medicines are referred to. It has further been explained that whoever knows the permutation and combinations of tastes as well as the humours never gets confused while assessing the causes, signs, and relieving factors of diseases. Furthermore, a physician is someone who is capable of knowing about the problems caused by tastes,

drugs, humours, and activity and wisely knows the region, the time, and the body. Knowledge of causes, knowledge of symptoms, knowledge of medicines, and the origin of living beings were explained. Which are its assisting reasons? Which are the types? The elaboration of healthy and unhealthy, etc. is presented by Sage Caraka in chapter 1 of *Sūtrasthāna*. This discipline of Ayurveda is intended for all persons, the healthy and the ill. Ayurveda has explanations of causes, symptoms, and medicines [three main aspects]. This systematic and complete knowledge of Ayurveda was known to the ancient sages. Especially in *Suśruta Sūtrasthāna*, the algebra of treatment (*cikitsā bīja*) has been well-explained.

CIKITSĀ BĪJA

In this system, a person is said to be a combination of the five great elements and the soul. Treatment is carried out on it, i.e., the person, thus it is the main site. Why? Because the kingdom [of living beings] is twofold: the plant and the animal kingdom. There are fire-dominant and water-dominant entities, due to their respective dominating characteristics. Here, animals are of four types: originating from sweat, originating from eggs, emerging from the soil, and originating from the placenta. A person [i.e., a human being] is the main entity, and other aspects are the means or materials for him. Hence, the person is the main entity [on whom treatment is carried out]. The entities which cause him pain are called diseases. They are fourfold: accidental /external, internal, mental, and natural. The accidental diseases arise due to external impacts. The internal diseases arise due to faulty food and habits, and due to the coming together at once or the disturbance of wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*). The mental diseases are lust, anger, grief, fear, happiness, depression, envy, short temper/aggression, pitiful conditions, stinginess, greed, delusion, desire, etc., and they give rise to longing or hatred. The natural disorders are hunger, thirst, old age, death, sleep, etc. All these arise due to the location of either mind or body. The prevention for these is performed through physically removing (*saṁśodhana*) the humour (*doṣa*) or calming the humour [*saṁśamana*], both by means of Ayurvedic medicines, as well as through proper food and proper behaviour. Food is the main responsible factor for strength, complexion, vigour, and vitality (*ojas*) of persons, and it is at the influence of six tastes. These tastes reside in the substances. Substances are medicinal and of two types, namely with plant-based and with animal-based origins. There are four types of plants: *vanaspati*, *vṛkṣa*, *vīrudha*, and *oṣadhi*. *Vanaspati* are the ones without flowers and with direct fruiting. *Vṛkṣa* are those that have flowers and then fruits. *Vīrudha* are those without hard stems and with branches [i.e., creepers]. *Oṣadhi* are those that terminate after fruiting. The animal

sources are also of four types: born from a womb (*jarāyujā*), born from eggs (*aṇḍajā*), born from sweat (*svedajā*), and born from soil (*udbhijā*). Of these, wild animals, men, and elephants are born from the womb. Birds (*haga*), snakes, reptiles (*sarīsrpa*), etc. come from eggs [i.e., they lay eggs for reproduction]. Worms, insects, ants, etc. originate from sweat. Rain bugs (*indragopa*), frogs, etc. develop from the soil (*udbhijā*). From plant-based drugs, the bark, flowers, leaves, fruits, roots, modified roots/stems, exudate, juice, etc. are medicinally applicable. From animals, the skin, nails, hair, blood, etc. are usable. From [inanimate] substances obtained from the earth, gold, silver, gems, pearls, realgar, zinc ore (*kharpara*), etc. are usable. Time creates a year comprising windy days (*pravāta*), days without wind (*nivāta*), sunny days, shady days, light days, dark days, cold days, hot days, rainy days, daytime, nighttime, the duration of fifteen days, one month, the seasons, *āyana* etc. These are the natural causes for the rise, aggravation, reduction, and defence of the humours, and hence they should be known. There are four types, which are the causes of rise, aggravation, and reduction, as explained by physicians. The accidental diseases are of two types: residing either in the mind or in the body. Treatment is of two types: those in the body are cured by treating the body, and those affecting the mind by regimens such as counselling. In this way, the person, disease, medicine, and the time of treatment were explained. By the term “person,” its origin along with the responsible entities for its origin, like the great elements, have been explained. Then its body parts were explained, such as skin, flesh, veins, tendons, etc. By the term “disease,” all diseases through the abnormality of wind, bile, and phlegm (*vāta*, *pitta*, *kapha*), blood, the combination of all three disturbed humours (*sannipāta*), etc., were elaborated. By medicines, the details of drugs, their characters, tastes, potencies (*vīrya*), post-digestion effects (*vipāka*), and specific actions (*prabhāva*), etc. were reported. The procedures such as piercing, etc. and the application and consumption of oil and fatty substances were explained. In regard to time, the timing of interventions was mentioned. Hence, the algebra of treatment (*cikitsā bīja*) [from the *Suśrutasamhitā*] was succinctly explained. Actually, it can only be defined in detail in one hundred twenty chapters. [In the classics] there are five sections to these one hundred twenty chapters. They are divided by meaning in sections such as *sūtra*, *nidāna*, *śārīra*, *cikitsā*, *kalpa*, and the remaining part in a section called *uttaratantra*. This has been explained in such a way by the *Suśrutasamhitā*.

THE EIGHT BRANCHES OF AYURVEDA

The Lord created Ayurveda as a subsection of the Atharvaveda, in the form of one thousand Sanskrit verses. Then, considering the short life span and inferior intellect of people, he divided Ayurveda again into eight branches, namely surgery (*śalya*), the treatment of disorders above the neck region (*śālākya*), full-body medicine (*kāyacikitsā*), the treatment of afflictions caused by spirits, etc (*bhūtavidyā*), children's diseases (*kaumārabhr̥tya*), toxicology (*agadatantra*), rejuvenation (*rasāyanatantra*), and the aphrodisiac branch (*vājīkaraṇatantra*).

A BRIEF DESCRIPTION OF ITS BRANCHES

In surgery (*śalya*), foreign bodies are different types of grass, wood, stone, ash, iron, iron rust (*loṣṭha*), bones, hair, nails, pus discharge, and delivery of stuck foetus. Various equipment, instruments, alkalis (*kṣāra*), fire, etc. are utilized for their extraction, and the wound is treated.

Śālākya is the treatment of diseases of organs above the neck [located at the ears, eyes, mouth, nose, etc.].

Kāyacikitsā [full body medicine] is the treatment of diseases involving the whole body, such as fever, diarrhoea, bleeding, wasting, psychosis, epilepsy, skin diseases, and diabetes.

Bhūtavidyā is the treatment of afflictions caused by gods, demons, heavenly beings (*gandharva*), nature spirits (*yakṣa*), evil spirits (*rakṣa*), ancestors (*pitṛ*), flesh-eating demons (*piśāca*), spirits that have mingled superhuman and serpent qualities (*nāga*), planets, etc. through their satisfaction by various processes.

Kaumārabhr̥tya is the treatment of children's diseases, the treatment of breast-feeding mothers for purification of her breast milk, and the treatment of afflictions caused by spirits, etc. resulting in disorders.

Agadatantra is treatment of the toxicity of bites of snakes, insects, spiders, scorpions, mice, etc., and various other toxins, combination of toxins, and the treatment of patients affected by these.

Rasāyanatantra is the branch of rendering longevity, life enhancement, intellectual enhancement, and the treatment of diseases.

Vājīkaraṇatantra is the branch for those who have little semen, infected semen, or dried semen, with treatments to rejuvenate, nourish, build, and for enjoyment.

THE GREATNESS OF AYURVEDIC TREATMENT

If treatment is carried out according to the principles of Ayurveda, disease such as wasting, colitis, skin disorders, rheumatism, gonorrhoea, fever, and wind disorders are quickly cured. Indian physicians properly treat diseases ignored by Western doctors.

1) In the disease of body wasting (*rājayakṣmā*), medicines like *vasanta-kusumākararasa*, *suvarṇavasantamālatīrasa*, *sahasrapuṭi abhrakabhasma*, *pravālapañcāmṛtarasa*, *jayamaṅgalarasa*, *kṣayāmṛtarasa*, *lokanātharasa*, *vāsā-valeha*, *cyavanaprāśa avaleha*, *drākṣāriṣṭa*, *lakṣādi taila*, etc. show fast action. Ninety-five out of one hundred patients are cured.

2) In colitis (*saṁgrahaṇī*), medicines consumed as per the rules of the system, such as *pañcāmṛtaparpaṭīrasa*, *svarṇaparpaṭīrasa*, *rasaparpaṭīrasa*, *dugdhavaṭī*, *takravaṭī*, *grahaṇīkapāṭarasa*, *kanakasundararasa*, etc. cure the disease.

3) In conditions similar to rheumatic arthritis (*āmavāta*), medications like *vātārigugulu*, *eraṇḍa* oil, *rāśnādi* decoction, *āmavātāri rasa*, etc. have been mentioned in the Ayurvedic classics thousands of years ago.

4) Even modern doctors say that the Ayurvedic system of medicine is worthy of praise. For this purpose, we hereby mention the certificates by Western scholars.

Your statements in the second question are boastful. Regarding those questions with conceited sentences, like “according to your system, on which one or more principles is your treatment based on?” etc. It can be interpreted that these are boastful questions indicating a system similar to Ayurveda (*pratīrupa*) were composed by the interviewers. According to the great poet Śrī Kālidāsa, one should never be boastful:

Who received excess happiness? Or who received only sorrow?
 Their status is always changing up and down with time.
 On the one side, the moon sets as the master of medicines,
 and on the other side, the sun rises with red coloured brightness.
 With the simultaneous rise and fall of these two bright entities,
 the world is regulated. [Śrī Kālidāsa]

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

Answer to question three

(a) I am not directly related.

(b) The following are answers to the third question. There are many Ayurvedic schools and colleges in the cities of Jaipur, Vaṭapattanagara, Mumbai, Varanasi, Prayāganagar, etc. Teaching and learning activities are running nicely there, and there are many students. Those students who have passed examinations are conferred degrees such as *bhiṣagvara*, *rasavaidya*, *prañācārya*, *ācārya*, *śāstrī*, etc. How can there be progress for the Ayurveda system, unless there is government support? Hence, constant efforts should be made for the encouragement of our own people and for the progress of Ayurveda. When I look at your questions, I cannot see anything other than an absolutely targeted bias. In your system, each year the basic principles are shuffled. This is not the case in our system. There are many clinics (*vaidyaka śālā*) that follow the Indian system. Still, there cannot be much progress without government support. Whenever there were life threatening diseases in the country, like influenza, the plague, etc., the patients benefited from Ayurvedic clinics to the highest degree. This is known to all.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries and museums;*
- (3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

Answer to question four

To contemplate whether something belongs to them or others is a thought process of those with restricted thinking. For broad-minded persons, the whole universe is like a family. The classical statement is that whatever is the essence, it should be worshipped. So considering the same with a focus on Ayurveda, we should constantly strive for upgrading it, there should be no bias against this system, and if we do that, the aspects mentioned in question number four will certainly take place. In some regions there are Ayurvedic clinics, colleges, research laboratories, libraries, but without government support they cannot run smoothly. Hence, I previously said that the president in this committee should be an Ayurvedic expert. Then there will certainly be a thought process about these questions.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

Answer to question five

I am in opposition to the opinion published by the regular commission of Calcutta University. How? Without taking into consideration the principles of Ayurveda, whatever is articulated there, except about the point of government assistance, seems incorrect. Unless there are colleges according to the Ayurvedic system, what can happen?

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

Answer to question six

The eight branches of Ayurveda were previously explained. It includes branches such as surgery. Whenever you have limited knowledge about it, expert Ayurvedic physicians should be invited, and certainly it should be thought about.

Regarding the subjects of question six [a), b), c)], the opinion of many professors should be considered, the syllabus and curriculum should be decided upon,

and a sequence of pharmacy work, etc. for the passed students should be decided upon.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

Answer to question seven

Places such as Jaipur, Mumbai, Kashi, Vaṭapattana, and Prayāga have many clinics. In these places, with recommendation from the government, teaching, learning, and knowledge of medicines, research, chemistry, science of knowledge of organs, knowledge of obstetrics, mineral medicine treatments can be learnt completely, except for surgery. The names of those who have passed the exams there should be recorded in a physicians' register by the rule. For the same, an association of physicians should be established.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Answer to question eight

The Ayurvedic system of treatment is worth praising for its low expenses.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

Answer to question nine

With what is shown in the second question, it is clear that government assistance [acceptance and support] is expected for the uplift of Ayurveda. Due to being busy, I have hastily composed answers to your questions. Since ‘aggression (*pramāda*) is part of human nature’ and therefore there has been any aggression in the writing, please forgive me.

Without delay, I have sent you the answers to your questions. Please accept them. What more should be said to those who do not have deep understanding or those who have a self-serving bias (*abhijñā*)? This much explanation is adequate.

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Testimonies from outside the Presidency of Madras
written in Urdu

MADRAS

Hakim Muhammad Ghaus

Translated from the Urdu by ARIAN HOPF

Question 1

What is the division or divisions of the indigenous systems of medicine—Ayurveda, Unani or Siddha that you propose to deal with?

I am a supporter of the Unani type of medicine wherein I have personal experience. I am not acquainted with the Ayurvedic form.

Question 2

(a) *What is the theory or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism?

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

The inferring methods to determine the reasons of a disease according to Unani medicine are based on pulse (*nabẓ*), urine (*qārūrah*) and the examination of the patient. After examining these things, the Unani physician comes to his conclusion regarding the disease.

(a)

I am not acquainted with the opinion in modern medicine [literally: modern knowledge, *jadīd ‘ilm*]. Thus, I cannot comment on this.

(b)

There are different kinds of pace in pulse, and every kind indicates a particular condition of the temperament (*mizāj*). Thus, by examining the pulse and simultaneously checking the colour, the consistency and the sediment of urine, the temperamental inclination becomes obvious: which humour is dominating in the temperament and which organ is injured. These things can be specified immediately. After these specifications, the treatment is begun. The principle of treatment is to, first of all, stop the disturbance of the humours. The (change of) diet and medication is applied and for medication, first, uncompounded medicines (*mufradāt*) are used. If this does not show an effect, then compounded medicines (*murakkabāt*) are given. To prescribe continence in diet simultaneously to medication is an obligation in Unani medicine. The patient is requested to abstain from such aliments (food, nourishment) which bear the danger of increasing the patient's symptoms.

(c)

The general efficacy of Unani medicine is obvious to everyone, as this method has been practiced (for many) years in India. Millions of patients have been cured by this treatment from the most severe illnesses. Since my childhood/youth (*kam-‘umarī*) I am [in the study of] this science with my elders and since I am mature, I am practicing the Unani treatment myself up to this day. I was the personal physician of her highness Nawab Khair an-Nisa Begum Sahiba, who was the last princess of Karnatak and Arcot. Currently, I am the personal physician of the Prince of Arcot. During this period, I could cure – by the grace of God – hundreds of patients, suffering from different diseases.

I am certainly of the opinion that the Unani method of treatment is more effective than other methods. For, even though the medicines of Unani do not show an effect quickly, their effect on the organs is long-lasting and under no circumstances do Unani medicines (cause) any harm. In contrast to Egyptian and English medicines, which quickly either benefit or do harm. In the second case, they weaken the organs seriously, as the medicine is prepared of the spirit of true alcohol or [*jūhaz(?)*]. Unani medicine is free of these defects.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

The status of medical practices in Madras is that an Unani physician operates his practice in his own home. In these practices, the full treatment cannot be provided. For the physicians (can) issue only prescriptions, while any kind of furniture for the patient cannot be provided there.

Unani physicians are entirely unacquainted with the science of surgery. Thus, my personal view is that surgery should be included as a branch in the education of physicians.

I do not know about the arrangements that have been made for the treatment and the instruction of Unani according to the national methods.

Those people who are teachers in medical schools will provide (at the same time, concurrently) the services of a physician. Since patients used to come to the medical practices, thus students should be present there as well so that they can practice the examination in front of their teachers, which will afford them great gains in their personal experience. Under these circumstances, the students benefit from the guidance of skilled physicians.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires:

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

I agree with the opinion that teachers should be given the opportunity to conduct medical scrutiny by themselves (independently). But there are some difficulties in achieving this aim in the near future. Where there have been studies conducted on the method(s) of medicine, this succeeded only after a great lapse of time, the investment of a (large, extensive) amount (of funding) and personal efforts. Furthermore, our physicians often also have to carry the burden of traveling during their scrutiny. It will also be necessary to provide utensils for the examination. For those reasons, I think that the achievement of this aim is afar.

Question 5

Do you agree with the view of the Calcutta University Commission that:

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of western medicine the traditional knowledge which is of real value and will reject, as western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

I cannot confirm to the opinion of the Calcutta University Commission since there is a mutual contradiction of the Eastern and Western methods of medicine. In the same way that Western people take our inferring method of determining reasons of a disease as insufficient regarding its justification, we can critique [literally: stop] several of their principles in the same way. In my opinion, a combination of

both these contradicting methods is impossible. Yet, some sciences, for example surgery, can be integrated into the syllabus, as I mentioned above.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to:

- (a)** *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*
- (b)** *The preliminary qualification and periods of study for each of the standards proposed.*
- (c)** *The medium or media of instruction proposed.*

Whoever wants to study Unani medicine must inevitably be proficient in Persian, as most of the (medical) literature is written in Arabic or Persian. Thus, a student first of all has to increase his proficiency of Persian to such a level that he may (adequately) comprehend the medical literature.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a)** *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b)** *any changes in, or additions to, the existing legislation on medical registration.*

In comparison to Western medicine, our national method is doubtless cheap (inexpensive), because Western medicines are expensive, as they have to be ordered from distant countries. Furthermore, the provision of utensils for examination also implies great expense. In Unani medicine, the examination can be easily conducted merely on the basis of (examination of) the pulse and urine.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

The decrease of the national methods of medicine is to a great extent related to the opening of hospitals (*šifā-hāne*) by the government wherein patients receive medicine free of charge and where they are furthermore provided food and other arrangements for their ease (and comfort). Besides that, the success of surgery made the patients inclined toward the governmental hospitals. As a result, the medical practices [of Unani physicians] were ignored in competition to these hospitals. What else can be recommended than to revive those practices? In the city of Madras and its neighbouring districts, several Unani practices should be opened with the support of the government.

The government will have to take responsibility for half the expenditures for the re-establishment and support of those Unani practices. The other half should be covered by governmental resources in the city of Madras and by the local Board in the districts.

MYSORE

Janab Hakim Syed Mustafa Sahib Bahadur

Translated from the Urdu by SABRINA DATOO¹

Bismillah

(Testimony number) (2) In the words of Janab Hakeem Syed Mustafa Sahib Bahadur – Mysore

Question 1

What is the division or divisions of the indigenous systems of medicine—Ayurveda, Unani or Siddha that you propose to deal with?

I am specifically a follower and supporter of the yūnānī (Yunani) medical art.² However, I am also an active proponent of both of the indigenous treatments (*desi 'ilājōñ*), Yunani and Ayurveda (*vaidik*), within the country (*mulk*), because the country needs both of these. The country and its people have been familiar with the above-mentioned treatments for centuries and they continue to benefit from them. Moreover, people's natural constitutions (*tabī'ateñ*) have become so habituated to them that other methods of treatment (*tariqa-e 'ilāj*) offer them no relief.

It is my contention that whatever methods of treatment are prevalent in the world today, Yunani alone is a particular method of treatment from which there is no likelihood of harm (*ẓarar*). The medicines (*dawā'en*), apart from being

¹ I would like to acknowledge the colleagues with whom I discussed this translation project. I would like to thank Faezeh Mirshahi for her willingness to discuss all things Persian, and Hasan Siddiqui for his thoughts on the Mughal Persian citation in Bihari Lal's testimony. I would also like to thank Jennifer Dubrow, Karim Javan, Shefali Jha, and Aysha Munira for helping me discern the words obscured by a few challenging typographical errors.

² While *yūnānī* is an adjective meaning 'Greek' or 'from Greece', the usage here refers to the Avicennian medical tradition as practiced in India.

attractive, are also delicious. Even if the sick person is given a medication that that doesn't suit them, there is no damage of any real concern.

Question 2

(a) *What is the theory or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism?

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

The human body is filled with four humours (*akhlāt*). Illness (*bīmārī*) is the name given to the condition in which a deficiency arises in the action of the organs (*af'āl al-a 'zā*) due to the occurrence of a fluctuation or disarrangement in (one, or more than one of) the humours. The cause of these changes in the humours (that is the cause of the disease (*marẓ*)), and the resulting deficiency in the action of the organs (one, or more than one of) is called illness (*bīmārī*).

(b)

Pulse recognition (*nabẓ shenāsī*) is the name given to recognizing the strength of the heart (*dil*) or its lack of strength, and other diseases of the heart (*amrāẓ qal-bīya*), by placing three fingers on both wrists to discern the expansion and contraction of the heart from the beating of the blood vessels (*shiryānoñ*). The pulse can be observed by placing the hands on the blood-vessels of any part of the human body. However, the wrists have been selected for pulse analysis since unnecessarily placing one's hands on other parts of the (patient's) body, especially if the sick person is a woman, is unseemly. To this extent, the principles of *dāktarī*

and Yunani are united.³ However, the Yunani practitioners conducted more research, and after experimenting on hundreds of sick people, appointed a unique pulse pattern for each disease. For example, they took a group of sick people with the same condition and began to examine them. And upon careful examination, they found that all the sick people had identical pulse patterns in all circumstances (it is possible that, in rare cases, there was some difference here and there). For example, they examined many sufferers of pleurisy (*zāt al-janb*) and found their pulse patterns to be of the same state (*kaiḥḥiyat*). Then, they appointed a name appropriate for the condition. For example, if the hand is placed on the pulse of somebody who has pleurisy, then it will seem as though the hand is running over the teeth of a saw. So, in accordance with that, the name (*minshārī*) that was given to this pulse pattern, which means, “like the teeth of a saw.”

Therefore, in this way, each disease was experimented upon and the names of the pulse patterns were appointed. In this manner, the pulse patterns of diseases such as consumption (*diqq sill*), epilepsy (*ṣarʿ*), etc. were established and their specific signs (*ʿalāmāt*) were appointed, an understanding of which depends upon regular practice. Several days of practice and experience reveal everything. Consider how doctors popularized the stethoscope (an instrument for examining the chest), even though to make use of it or to understand the condition of the organs of the chest depends upon a great deal of work and continual practice. In the same way, recognizing diseases through pulse patterns depends upon experience and practice. Authoritative manuals on this science (*ʿilm*) exist, in which its principles are explained in great detail. Upon reading them, it becomes apparent that this is a truly useful art ordered according to principles.

I would like to submit just this much more: This science is very closely connected to practice. A person’s knowledge will grow according to the amount of experience he gathers. For example, there is no use in memorizing the categories of pulse patterns, all of their rules and regulations, until this knowledge has been strengthened by practice. That is, until one’s information and beliefs haven’t been strengthened by keeping the finer points in mind while aligning them with the pulse patterns of sick people.

³ There are several names used in Urdu for biomedicine in this period, including *angrezi tibb* and allopathy. This text also uses the term *ḍāḳṭarī*, as both an adjective, meaning ‘having to do with doctors’ and a noun, meaning ‘the medical system of doctors’. Since this word is used frequently, I will not continue to use diacritics in its transcription. For an extensive discussion of the empirical ambiguities entailed in who might be considered a ‘daktar’, see Mukharji, Projit. *Nationalizing the Body: The Medical Market, Print and Daktari Medicine*. London: Anthem Press, 2011.

Pulse specialists and physicians who could read the pulse were in abundance when Yunani medicine was alive and developing under kings in past times. Now, because of the low demand and the lack of support from current rulers, just as other sciences and arts have disappeared, so too has this necessary and beneficial thing.

Connected with healing (*mō 'ālaja*), I also mentioned above that illness is the name given to a defect or fluctuation in the activities of (one or more than one of) the organs. And treatment (*'ilāj*) is what we call the removal of the cause of the damage to the activities of the organs. The Yunani method is called treatment by opposition (*'ilāj bā'l-ẓid*). That is, the treatment of coldness is by heat, and dryness by moisture. For example, if someone's sleep is disturbed by a great deal of restlessness or an excess of contemplation, and despite trying, he can't sleep, then the Yunani physician (*ṭabīb*) will determine that this is an excess of dryness (*yubūsat-e dimāg*) in the head and treat him with ingredients that increase moisture and humidity (*ruṭūbat-o-ṭarāwat afzā azjā*). For example, he will arrange for the application of oils of poppy, violet and almond and the feeding of moist porridges and foods that increase moisture, which will relieve the dryness in the brain and enable [him to] sleep.

To take another example, if someone begins to have headaches and they explain that the cause of this is that they performed hard labour in the hot sun, then we will develop a regimen to remove this temporary heat (*'ārẓī ḥarārat*) (the collection of blood in the brain). That is, we would recommend a draught of the blue lotus flower (*sharbat-e nīlūfar*) or of sandalwood (*sharbat-e ṣandal*) be taken internally, and the application of cold ointments on the head, which would remove the existing difficulty.

In sum, the Yunani method of treatment is founded on absolutely natural principles. Yunani medicines are delicious and tasty and they are never the cause of any harm. These attributes are not available in other methods.

(c)

Without a doubt, our opinion is, and it is correct and based on grounded realities, that the country's own method of treatment, compared to other treatments, is quick to take effect. Also, our method of treatment is successful in most diseases. For example: in all of the diseases of blood and black bile (doctors deny the existence of the black humour (*khilt-e saudā*)); all hot diseases (*amrāz-e hārah*); the treatment of intractable and incurable diseases such as leprosy, syphilis, and leucis is the specialty of indigenous medical systems (*desī ṭibbōn ka khāsa*); malignant diseases (*amrāz-e khabāyis*); we also do amazing work in treating hemorrhoids

(*bawāsīr*) and diabetes (*ẓiyābītis*). Modern medicine (*ṭibb-e jadīd*) also has no treatment for cancer, epilepsy, venereal disease, consumption, etc. On the contrary, whoever has taken daktari treatment for these diseases has found their condition worse than before. We are ready to give evidence at any time. The most compelling evidence of all is experiment (*tajriba*) and observation (*mushāhada*).⁴ If the Committee agrees to it, then take sufferers of one of the above-mentioned diseases and divide them into groups of twenty-five each and see what the result is (of treating them with different methods).

Now, we have to understand the reason why daktari medicines are not useful in these diseases. Daktari medicines are hot and dry. They have been prepared according to the airs and waters of Europe. The social conditions, food and drink, and the very way of being of those for whom they were created, are different from our own. So then, how could such medicines be useful for the people of India (*ahl-e hind*)? India (*hindūstān*) is generally hot, and the greater part of it is hot and dry. The temperament (*mizāj*), habits, et cetera of the people of India are different from those of the people of Europe. Apart from this, daktari medicines – the essence, tincture, strong spirits, and acidic salt – because the greater part of them is a poison, are deadly for some of the delicate and hot temperaments of the people of India.

Day by day, the energies of the people of India are being plundered through the use of daktari medicines. Their families are becoming weak, indeed are being destroyed. With the blessing of these medicines, consumption (*sill-o-diqq*) is now in abundance. Conditions such as gonorrhea (*jarayān*), premature ejaculation (*sur'at*), nocturnal emission (*ēhtēlām*), diabetes, cancer, et cetera have increased. Gonorrhoea, premature ejaculation, et cetera, from compound medicines containing steel, and an increase in diabetes, cancer, et cetera, from an excess of arsenic, while the use of aconite root (*ba'chnāg*) and vomit nut (*kuchla*) kept generating dryness. We will briefly mention a few matters in support of our claims which, if kept in mind, would allow perceptive men to concur in support of our explanation. Quinine is first amongst the class of medicines used in abundance by daktari. Every doctor uses it in excess. Indeed, beyond doctors, the public is familiar with its name and use it as they wish.

Doctors normally use it for fevers. Its temperament is hot and dry. In ancient Greece, whenever a criminal had to be killed and made to suffer, he would continuously be made to drink a decoction of the ground bark of cinchona (from

⁴ On the dual signification of the word *tajriba* as both experience and experiment see Liebeskind, Claudia. "Arguing Science: Unani tibb, hakims and biomedicine in India, 1900-50" in W. Ernst (Ed) *Plural Medicine, Tradition and Modernity, 1800-2000*. London: Routledge, 2002.

which quinine is obtained). Within a few days, this criminal would die, having been afflicted by all manner of difficulties due to the abundance of dryness. In the same way, even today, doctors use it in obesity (unnatural fatness) (*samn mu-frihan*). If someone has a potbelly, then the doctor, without thinking twice, induces him to take it. In sum, they prescribe it to people for most diseases without hesitation. Accordingly, the government, having listened to the advice of doctors, has even established a system for selling it at post offices. In every lane and village, people are buying it and taking it. Because its temperament is hot and dry, it is deadly for Hindustanis.

Doctors make patients take six to twenty grains per month for malaria and other fevers. The author of these words has seen such patients whose faces were yellow and emaciated, who were afflicted with dry nostrils, extreme thirst, sleeplessness and premature ejaculation. Their ears could not hear a thing, and moreover, the sounds of buzzing in the ears had stopped the ability to speak. Their appetite was completely gone, and there was severe constipation, too. Some had diarrhea because of inflammation in the intestines. Some, because of a problem with the liver, could not urinate and only produced a small quantity of red urine. Some would vomit because of inflammation in the stomach. Even in this condition, the doctor would keep offering the same advice: You pay no mind to these things and just keep taking quinine. Yet all of these difficulties are signs of cinchonism (*konānīzam*).

Actually, this medicine has had a terrible effect in Hindustan. It severely affects faculties of seeing, hearing, et cetera. Because of it, the greater part of Hindustan is being ruined. Given that the use of daktari medicines is worsening health, instead of improving it and strengthening the principle organs, what will be the state of the children of these chronically ill, weak and infirm people? Possibly, they too will be born weak, thin, hateful and defective. In this way, it is as though day by day, Hindustani faculties (*quwā*) are becoming weak and their future generations are being ruined. However, it is regrettable that we are learning absolutely nothing from these sad incidents. The blind imitation of Europe, the apparent attractiveness of English medicines, and the clean appearance of doctors have distracted us.

In connection with this, I want to submit one more issue. That is, to explain why in some diseases, daktari medicines are of no use, and how the country's (indigenous) methods of treatment continue to prove successful.

Daktari medicines do not take account of temperaments and the four qualities (*kaiḥfiyāt-e arba 'a*), that is, considering these things is not understood to be necessary for their use. For example, if someone is afflicted by a burning fever, the doctor will keep giving him quinine, even though it will cause him great harm. If

a person is suffering from a weak liver, then he will be given compound medicines including steel, despite (the fact) that his temperament is completely hot and that he will never be able to endure this hot and dry thing. Instead of benefiting from it, he will be besieged with extreme difficulties. Among Yunani practitioners, these matters are taken into special account. Whatever kind of damage may be found in any organ or its use, it will be removed by paying attention to the above-mentioned considerations. Since this manner of healing is completely consistent with nature (*manshā'-e fītrat*) and according with the essence of the creation of the human body, it is a method that offers quick relief without harm. There does not exist in the world an easier, superior or more certain method of healing than that of treatment by opposition.

Other matters connected to this discussion will be explained under question number five.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

(a)

I am the senior hakim of the Government Yunani Dispensary (Princely State of Mysore) where sick people are treated according to the Yunani method.

(b)

It should not be understood that I am taking sides in whatever I will submit below. There is certainly truth in what I will explain. If anyone has a doubt, he can easily be persuaded.

(1) Given the need for institutions of indigenous systems (*tabābat khāne*), we are lucky to have the ones we do. And their existence is extremely necessary for the country. Yes, they are in need of quite a bit of reform, given the progress in changing times. Their medical treatment is also very simple. However, they are only in need of money, with which anything is possible.

If today, as an experiment, the High Government closed the indigenous institutions (*desī shifākhānoḥ*) (for only 6 months), then the extent of the relief they provided to people would be seen. So too would the sacrifices they make as they take responsibility for the lives of God's creatures.

If, during the time of influenza, the indigenous physicians (*desī tabībs*) had not lent a hand to the High Government, then one-fourth of the population of Hindustan today would have died. But on the contrary, in this great battleground, during a time seized by death, the advantage remained in the hands of the indigenous physicians. This can be verified from every part of Hindustan. The doctor's storehouse of medicines was empty. And, due to the Great War, the dispatch of medicines from Europe had stopped. If the indigenous physicians had not gathered their courage and set to work when needed – at a time when doctors, with their enlightened dispositions, were unable to offer any treatment – then the consequences would have been sorrowful indeed.

If the government closes these indigenous institutions, then the number of dispensaries will have to be increased six-fold, and the attendant necessities will have to be increased accordingly. Even then, there will be a shortfall. In sum, given the great need, the indigenous institutions are demonstrating satisfactory results. For this reason, it depends upon the favour of the High Government to make them flourish and to offer patronage in all matters. Genuinely successful treatment will be possible when the provisions of medicines are plentiful, when there is no shortage of instruments and supplies for preparing medicines, and when other necessary items are provided as needed.

It is clear to you that the obtainment of these things is not feasible without money. Unlike doctors, the indigenous physician lives a life in which he has to trust in God. He serves the sick by putting faith in the mercy of God. If a sick person returns to health and wants to give him something, then he must patiently accept it with gratitude. By contrast, doctors receive reliable government salaries, the government gifts them provisions for medicines, and all necessities and instruments are readily at their disposal. Is it a surprise doctors have such high self-regard?

There cannot be any relationship between indigenous pharmacies (*desī dawākhānoḥ*) and government dispensaries. An indigenous pharmacy is an exemplar of individual courage, and a state dispensary proof of the government's liberal

generosity. The point is, even in this impoverished state, the indigenous physician (*desī hakīm*) who is serving the community and country is often far better than the state dispensaries, and he has no equal, not in Hindustan nor in any region or country of the world.

(2) In connection with centres for indigenous medical education, I would like to restate what I said above about indigenous medical institutions. If the government would arrange for new schools and would itself take on responsibility for their expenses, then their condition can be improved today.

However, many centres of medical education there are, they have all, each and every one of them, been established by individual members of the community and country. The government has no part in this. Well-wishers of the community are doing whatever they can. In my opinion, we are hundreds of miles away from our desired goal. We have to establish a new order and organize our educational institutions anew. For this, money is needed.

(c)

The government has not taken part in any of this. Until now, it has paid no attention to problems concerning the survival of Yunani and Ayurveda. It has not made any efforts towards their progress. Whatever has been done and is being done is due to individual efforts. If one were to keep this situation in mind, then one might think that the existing arrangement is good enough – if you can't have the full flower, a petal will do. However, considering the greatness of this art, one is compelled to express with disappointment that nothing is being done, and its condition today is shameful.

Reparation would be possible if the government would first establish the same rights for indigenous physicians and medical systems that are afforded to modern science. And if it were to confer on them the same favour, in theory and practice, that is conferred upon allopathy, then the damage could easily be fixed. In this circumstance, it would be the government's duty to offer every kind of financial assistance, and moreover to establish and patronize indigenous medical clinics in numbers akin to dispensaries, granting indigenous physicians (the opportunity and credentials) to work alongside doctors. In this way, through competition, one group will naturally want to outdo the other, and each person will improve his individual talents. In my opinion, the results of this competition would be very valuable and more profitable to the public than the situation we have today.

The lack of competence is due to the lack of investment. This work can only proceed in two ways - either through the liberality of the public or the aid and

generosity of the government. The public doesn't have the resolve to arrange for such hospitals by itself and then maintain them at a high standard for a long period of time. As for the government, it is not concerned about these matters.

It is only because of the inherent curative power of these indigenous systems that they continue to exist, despite indifference and disarray, and continue to prove their necessity to mankind. In spite of this state of deprivation, they offer valuable aid to all people.

In contrast to them, daktari survives only because of the assistance of the government. If anyone doubts this, then consider what would happen if its government assistance were stopped for just six months. Let's see if it would exhibit the same pomp and authority then.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires:

- (1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries and museums;*
- (3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(4a)

I was delighted upon seeing this question. Indeed, it gave me hope that Yunani medicine's star has yet to reach its highest point, because the committee members and the government is attending to the needs of indigenous medical systems. Before long, our hopes and aims will see the light of day.

- (i) Without a doubt, it is extremely necessary. Indeed, without it, the education will be incomplete.
- (ii) I also like this opinion. Actually, it is also necessary.

(iii) I also agree with this proposal.

As far as I know, Yunani schools (that are worth mentioning and worthy of attention) exist in the locations mentioned below.

Delhi – Ayurvedic and Yunani Tibbi College – Its patron is Hakim Janab Ajmal Khan Sahib (Masih al-Mulk). The state of education here is excellent and its management is orderly. It is as good as any government college.

Lucknow – Takmil al-Tibb – Its manager is Hakim Janab Abdul Majeed Sahib, the son of the late Janab Hakim Abdul Aziz Sahib, who was the best among the hakims of India (*hind*), not only Lucknow, and who was deeply respected and valued by the Maharaja of Baroda.

At this school, the practical training is excellent, and the students are educated in Yunani medicine alone. Apart from this, surgery is also being taught as part of the practical training.

Apart from these, there is the Madrasa Tibbiya Asfiya in Bhopal. There are also schools in Hyderabad, Deccan, of whose state of education this writer is unaware.

In my opinion, the centres in Delhi and Lucknow are completely appropriate for this work. And these people are working with great effort. They are very aware of all of their needs. They are thinking about all matters that demand attention. They are constantly considering what needs to be done: which areas of knowledge have shortcomings, what these are, and how they should be remedied. These people (sooner or later) will arrive at the desired goals in a manner consistent with modern science. They will make their own tradition of medicine so proficient that no critic will be able to raise an objection to it.

(b)

In my opinion, there is nothing in the world that cannot be obtained through effort. If we gather our resolve today, then in the near future, the results will be clear. The concern is one of money. If we lack anything, it is money. The knowledge exists, the practices exist, there is an abundance of knowledgeable people, and there are people who are ready to do the work. But the sad fact is that there is nobody to (financially) support this work. There is no benefactor to offer the money, which is at the heart of every scientific discovery. I will discuss this in greater detail under question number nine.

Question 5

Do you agree with the view of the Calcutta University Commission that:

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of western medicine the traditional knowledge which is of real value and will reject, as western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

This opinion of the Calcutta University is based on fundamental ignorance and in our estimation, cannot be trusted or accepted. Hybrid medicine (*ganga-jamni*) from which they expect much, will, on the contrary, put human health in jeopardy. We cannot mutilate our ancient art in order to fulfill this wish of the Calcutta University. It is apparent from the proposals they are putting forth that they are also no friend of allopathy. If this proposal is acted upon, then it will not only be Yunani medicine that is ruined, but allopathy too will diminish, and the consequences will be very dangerous.

It is apparent that Calcutta University is completely unacquainted with the principles of Yunani medicine. The principles of each medical system differ, their method of treatment differs, and between these two medical systems, there is the distance of the two horizons, of east and west.

In order to improve an art, it is not necessary for its principles to be destroyed, and for its true form to be ruined and then absorbed by some opposing medical art. Until allopathy accepts temperaments and the four humours, it can never be associated with us.

No science or art can progress unless it remains within the ambit of its own principles. Without doing so, no art in the world, no language and no scientific discovery could endure.

Considering these differences, how can one expect that the combination of Yunani and daktari will produce a beneficial method of treatment and will be beneficial for us? First settle the fundamental differences and then consider the proposal about unity. Otherwise, this is an idea that is absurd and madness (این خیال (ست و محال ست و جنون). There remains the fact that Western medicine changes its medical explanations and its trade craft every year, which is proof of its immaturity

and incompleteness. This demonstrates that Western medicine's pretensions are founded only on a trade in words (*zabānī jam' kharé*). Its immaturity is evident from the fact that every year, it has to refute the product of its efforts from the previous year. It has to continually admit that whatever was being done until now was nonsense, and that it no longer has confidence in the prescriptions it was using to treat people. Let them keep this way of doing things! God spare us from this calamity, and grace our theory and practice with permanence.

Thousands of 'patent' Yunani medicines exist in pharmacopeia (*qarābā-dīn*), and from their creation until the present day, no need for a change to them has been felt. Doctor Beecham's pills for constipation have become renowned throughout the world, but they are actually taken from a common Yunani prescription.

Apart from this, *anūshdāru*, *itrī-fal zamānī*, *ḥabb ayāraj*, *javārish shahryārān*, *safūf ṭabāshīr*, *la'ūq sipistān*, and hundreds of other compound medicines exist whose properties and effects are the same today as they were when first written down.⁵ There has been absolutely no change to them. So, what is the need for us to keep changing them with every passing year?

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

⁵ To explain: *anūshdāru* seems to be used to stop diarrhea. See Husain, Ahmed & Burhanuddin, Muhammad. *Unani Pharmacopeia In English*. The Madras Provincial Indian Medical Practitioners Co-operative Pharmacy and Stores. Madras, nd. pp 3 – 5. *itrī-fal* is made of three fruits and used for diseases of the eyes, ears and brain. See: The Board of the Yunani and Ayurvedic Systems of Medicine. *Tibbi Farmakopiya*. Matba' Nisaar Art Press. Lahore, 1972. p. 397. *ḥabb ayāraj* is a laxative pill. *Unani Pharmacopeia in English*. p.29 *Javārish shahryārān* strengthens digestion. *Tibbi Farmakopiya* p.419. *Safūf ṭabāshīr* is a powder made of the matter in the spiny bamboo. See Chopra, RN et al. *Chopra's Indigenous Drugs of India*. U N Dhur and Sons Private, Ltd: Calcutta, 1958. pp288,665. *La'ūq sipistān*, is an electuary made of the Sebesten plum, see *Unani Pharmacopeia* p.110 and *Tibbi Farmakopiya* p.514.

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I do not oppose this opinion since ‘Knowledge of a thing is better than ignorance of it’ (علم شئی به از جهل شئی) is a well-known saying, and it is after all the tradition of Islam to ‘Seek knowledge even if in China’ (اطلبو العلم ولو كان بالصین). Below, I discuss those topics which we expect will be useful.

(1) Anatomy – This is a necessary and useful thing. Education in it is necessary. Moreover, without it, no doctor or hakim will be complete. But, keeping this in mind, it is not necessary for us to use the tome that the doctor teaches from. Because as soon as students set foot outside of the college walls, they don’t even remember one letter of it. What is obtained from this unnecessarily prolonged training? Rather, the students ought to be taught an abridgement, that is, a selection of what is necessary to know, that which is truly useful and worth remembering.

(2) Physiology – It is a necessary thing. However, the observation made in connection with anatomy should also be kept in mind. ‘Whatever you learn, learn it in brief.’ (بر چه گیرید مختصر گیرید). But it should (also) be put into practice.

(3) Pathology – We have to read the science of diseases (‘ilm al-amrāz) within daktari. It can only be profitable, however, when we put it to practical use. Otherwise, there is no benefit in simply reading. For example, if someone has read about the science of surgery, but knows nothing about its practice, then what use is his reading?

Yes, in the interest of broadening learning, one can acquaint students with whatever differences exist between Yunani and daktari, and inform them of one’s opinion on which party is correct.

(4) Bacteriology – Doctors have become obsessed with this science. This science is truly not worthy of being given the attention, time, and money which are being expended on it.

(5) Surgery – From among all of the subjects within daktari, I prefer this one. Indigenous physicians (ṭabībūn) are in severe need of this science. Moreover, in my opinion, no indigenous physician’s education and training should neglect it. Although, this art too is our invention. Even today, Arabic books about this art exist, such as that of Zaharawi, in which twelve-hundred

surgical instruments are explained, with pictures. This book exists in the library of the late Khan Bahadur Janab Khuda Baksh in Bankipur (Patna), where anyone can see it.

A practical proficiency in surgery should be cultivated in every student. There is nothing to be gained from simply repeating lessons like a parrot, which is only a waste of time. In my opinion, not enough emphasis can be placed on this branch of knowledge.

I want to see that blessed day with my own eyes in which the *ṭabīb*, like the doctor, cultivates expertise in surgery and works with him, shoulder to shoulder, to serve and benefit mankind.

My opinion in relation to progressive standards (*progresīw asṭāndarz*) is that specific subjects of daktari which will be useful for us should be taught alongside a pure Yunani education. And the course should be complete according to the needs of the time. The subjects below should definitely be included in the course.

- (1) Kulliyāt – The principles and rules of Yunani medicine. At the same time, where these principles differ from those of daktari, it should be pointed out. The existence of the difference should be made clear, as well as the reason or misunderstanding from which it arose, as well as which of the two methods is the more sound.
- (2) Treatments of Yunani medicine (*mō‘ālajāt-e ṭibb-e yūnānī*) – They ought to be written according to modern principles. And it ought to be pointed out where it differs with modern medicine (*ṭibb-e jadīd*).
- (3) The science of preventive medicine (*‘ilm-e ḥifẓ-e ṣeḥat*) – Whatever books have been written on this subject up to the present day, there isn’t any one among them which can be put to use. If anyone disputes my statement, then that gentleman can try to put these books to use and show us how it is done. Whether they are books of daktari or Yunani, this defect exists in them all. The principles of preventive medicine should be such that anyone, whether rich or poor, young or old, can act upon them. What benefit will be obtained from simply writing them in books? In my opinion, there is need for significant improvement in this science.
- (4) The science of poisons (*‘ilm al-samūm*) – This field possesses a great breadth and extent of knowledge within it. There are three types of poison: botanical – for example, vomit nut (*kuchla*) and the root of aconite (*baḥhnāg*); mineral – for example, arsenic (*saṅkhiyā*) and the red sulphuret of mercury (*shangarf*); and those from animals – for example (bites or stings with venom) from snakes and scorpions. A comprehensive book should be prepared connected

with this science, which contains the new information of both of the medical systems' (recommended treatments).

Those things which nullify the effects of poisons are called antidotes (*tiriyāq*). Such antidotes are in abundance amongst the practitioners of Yunani medicine. Although much of this knowledge has been lost, there remain today hundreds of people who are knowledgeable about it. Even some beggars in the bazaars are able to live on it with their performances: a person eats *sers* of arsenic and nothing happens to him.⁶ How is this possible? He has the antidote with him. He takes that antidote first and then after that, he can eat *man* of arsenic and no harm will come to him. The same trick is possible with opium, *ganja* and *bhang*.⁷ The antidotes for all intoxicants and poisons exist. This disordered and scattered body knowledge should be gathered and written in a book so that rules of practice are available for the preservation of lives.

- (5) The science of medicines (*'ilm al-ādwiya*) – A new book is needed for this as well. It might include exacting descriptions of three- to four-hundred useful medicines without any exaggeration of their effects.
 - (a) The goal, concerning students' abilities, is that they should understand these books easily. Their proficiency in Persian should be quite good, and they should also be familiar with Arabic to the extent that it is possible, since understanding Urdu requires knowledge of both of these languages. They should be familiar with the English language to some degree so that the technical terms of the English sciences can be understood.
 - (b) At least four years, and six years for higher education, should be allocated. Education in surgery, et cetera will also be accounted for in this time. And all of the necessities will also be included in this. Topics in the modern sciences will also be covered in this time.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

⁶ A *ser* is a unit of measure equal to about two pounds. A *man*, see below, is a weight of approximately 40 *ser*, or about 80 pounds.

⁷ *Ganja* and *bhang* are different forms of cannabis.

(b) *any changes in, or additions to, the existing legislation on medical registration.*

If the purpose of this register is to exclude hakims without certificates or incompetent *ṭabīb*s (even if they have experience in treatment) from the profession, then the first step should be to create an adequate number of educated *ṭabīb*s to take their place. This would prevent the difficulty people might experience from the suspension of those practitioners.

Although one accepts that the work of ignorant people is never well-executed, and they are often unable to work according to principles, nonetheless, these people are working miracles among the poor, who are otherwise forgotten. They attend to these people in places where neither your certified hakim nor the well-salaried government doctor will ever go – where there is some township of four houses, some village settled with just a few souls. God alone is concerned with their existence. That these wretched beings exist at all is more than enough for the world. If these people didn't exist, the world's great works wouldn't stop. Nobody has valued their health, nor have any measures of preventative medicine been made available to them. And those people, who by their own initiative are taking responsibility for the health of these neglected and dispossessed beings, are going to be stopped by your registration act. Isn't this oppression? Wouldn't this be called a day of darkness?

In my opinion, if you train an abundance of worthy *ṭabīb*s and capable hakims, and they spread out to the four corners of the Earth, when this educated class creates a stir with its achievements and proves to the world with its theory and practice that it is offering the best service, then there won't be a single person who will go to ignorant hakims for treatment. When these people see that they can't compete with bright minds, that there isn't anyone interested in their treatment, then they will leave this profession of their own accord and find other work. When something can be accomplished without trouble, of its own accord, then why would anyone endure the difficulties and unpalatable attention of this class?

If you assert that the aim of the act is not to obstruct the work of self-taught people, but only to include the names of capable *ṭabīb*s in the register, then what is the use of it? It is much better simply not to undertake this pointless activity.

Refrain from these plans. Your first duty should be to prepare a large group of capable *ṭabīb*s and allow them to work throughout the country. It won't be long before you easily achieve your goal. And without any pressure, the unqualified people will gradually leave the profession of their own accord, and this educated class will spread over every part of the country. In this manner, you can be successful in your plan.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Our indigenous treatment is easily available and provided everywhere. The indigenous hakim is not confined to any area. He can treat people in towns and villages with the same arrangements as in cities.

Our treatment is comparatively inexpensive. Medicines are prepared cheaply. The reason for this is that we prepare medicines from what grows in this country. Essences and tonics are made from the flowers and seeds of the forests. In short, we are not compelled to order anything from outside the country. Hakims and apothecaries (*attār*) also prepare the medicines themselves.

In contrast to this, all of daktari's medicines come from Europe or America. Those people know that doctors are compelled to buy their medicines. They also know that doctors need them because they cannot make a single thing themselves. They cannot prepare any tonic, any essence or any compound medicine; indeed, they have absolutely no role in the science of making medicines (*fārmesī*). If the importation of medicines made in Europe and America ends or if they voluntarily, or in the form of a boycott, stop sending their merchandise to the Indian market for as little as six months or one year, then who knows what plight the doctors here will be in and how they will treat anyone? Dust will settle in the hospital wards and the doctors will be compelled to close them down and retire to their homes.

The people of Europe are very astute. Can these weaknesses be concealed from them? They observed, 'Doctors caught up in blind imitation of us, have ruined themselves. We can take advantage of them by any means and do what we want with them.' And so, they sell their common medicines for ten or even twenty times their price and our doctors are compelled to buy them despite this high cost. Upon seeing this state of things, the Maharaja of Gwalior made a smart remark concerning doctors in a public meeting. He said, 'A doctor is like a Bridgeload gun – if its cartridge doesn't come from England, then the gun is completely useless! So, treat the sick with indigenous plants and herbs that grow wild and which are incomparable in their effects for treating diseases.'

These precious words from His Highness the Maharaja of Gwalior are similar to the command of Hippocrates:

Cure every disease with the products (plants and herbs) of its land.

عالجوا كل مرض بعقاقير ارضها

In my opinion, nobody can refute this.

Hemorrhoids cure – There is a medicine for asthma which comes from America in tin boxes (of about three ounces) and is prepared in the form of a powder. It sells for a price of three and a half rupees. If you have it prepared yourself, then it can be made for eight annas.

Similarly, Beecham Saheb's pills to stop constipation are one-and-a quarter rupees for a box of thirty. But if you wanted to make them yourself, then with this amount, you could make three-hundred pills or more.

Let me give you one more proof of the cheap cost of desi [indigenous] medicines. If someone with an illness – a cold, a cough, a fever, bad digestion, or colic, any illness – goes to a doctor, the doctor will give him a prescription and tell him to go to such and such pharmacy to have it filled. There, he will be charged at least six annas for one day's worth of medicine (three or four doses). For complicated and more serious illnesses, the cost could reach up to one or two [?] a day, if not more than this.

By contrast, if these diseases were treated according to the indigenous methods, then the cost wouldn't be more than two or three paisas. If anyone doubts this, then they can examine the matter themselves until they are satisfied. Quinine sulfate costs three-and-a half rupees per ounce. If one were to use the same sum of money to have an indigenous medicine for fever prepared, then one would get more than ten times that weight. And if one ounce of quinine suffices for fifty sick people, then two hundred people can be cured with this indigenous medicine.

It cannot be denied that there are also some expensive medicines among us and that they continue to be regularly used. For example *mufarreḥ-e a'zam*, *yāqutī*, *jawāḥar mohra*, et cetera. Such medicines are not used as a matter of course, but on very specific occasions.⁸ Such costly medicines exist in daktari medicine as well.

There are also some sicknesses which incur great expense, such as consumption. If these diseases were to be treated by daktari then the cost would be in the thousands, but the results would be negligible. The illness stays the same or even progresses.

⁸ An all purpose tonic with 34 ingredients. See Ahmed Husain & Muhammad Burhanuddin, *Unani Pharmacopeia In English*. The Madras Provincial Indian Medical Practitioners Co-operative Pharmacy and Stores. Madras, nd. p.134 A snuff box of precious stones. See Platts p.795 It 'gives strength to the principle parts of the body' (my translation) See Manzur Shudda, Tibbi Farmakopiya. Bord af Yunani and ayurvedic system af medesin. matbu'a nisaar art press. Lahore, 1972. p.422.

First, the loss of gold, then the loss of life.

(یکے بربادی، زرد دیگر ہلاکت جان)

The doctor advises such ill people to go to a sanatorium (pleasant places where arrangements have been specially made for such ill people). For a sick person with a companion, and one or two attendants, the costs of the journey, never mind the trouble in coming and going, surpass five-hundred rupees. And if he stays there at least six months, with the cost at two-hundred a month, then he loses nearly two-thousand rupees. This doesn't include the cost of medicines.

If such an ill person were to be treated with the Yunani method, then the cost would never be more than a few hundred. And the result would also be comparatively more salubrious. In sum, the indigenous treatment is beneficial, it is inexpensive, and it absolutely agrees with the delicate temperaments of the people of India.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

There are hundreds of reasons for the decline of indigenous medical systems. Putting aside most of them, I will examine only one here, the truth of which cannot be denied.

There was no rival to indigenous medical systems other than daktari. The government offered it unparalleled investment: It outfitted it with thousands of instruments and supplies; it established hospitals with an expenditure of millions of rupees and lavishly furnished them with all the necessary equipment; it filled warehouses with hundreds of thousands of rupees worth of medicines; it legislated for the rights of doctors, thereby protecting them; it increased their self-confidence by giving them high salaries.

For whatever reason, God knows, they completely ignored other medical systems. Due to this inattention and lack of aid, even the longstanding reputations of (indigenous) medical systems were diminished. This is because people only see the obvious, what is apparent on the surface. Everybody's attention was drawn to these new magic houses (hospitals). However, despite this drop in demand and the lack of patronage from the current rulers, indigenous medical systems have continued to exist. This is the sign of their integrity. Had daktari been subject to this, it would have long (ago) disappeared. Today it has arrived at a great height,

but should the government withdraw its patronage for a year or even as little as six months, then it would not remain in existence anywhere. It lives on nothing more than the exclusive liberality and support of the government.

In summation, the unacceptable events which should never have happened, have already taken place. Rather than crying over them, it is better to make plans to create a new order, and to consider proposals to return them (indigenous medical systems) to their former position.

In my opinion, the committee has a hope of successfully meeting its goal, if it can execute the proposals below.

- 1) The rights of hakims and vaidu should be protected and they should be given the same rights and the favored position that doctors have obtained.
- 2) Capable people should extract the rules and regulations of medical knowledge from our encyclopedic books. In doing so, attention must be paid to the needs of the time. New critical and well-researched books should be written on the principles of medicine (*kulliyāt*), pharmacy (*‘ilm al-ādwīya*), and treatment (*mō‘ālajāt*), in which there is absolutely no room for exaggeration or willful misrepresentation. Principles of preventative medicine should be generated which enable anybody to act upon them. This work cannot be done by a single person; rather, it would require a committee of capable individuals to see it through to completion.
- 3) At least three colleges ought to be opened in each presidency where, according to a new arrangement, Yunani medicine is taught alongside the necessary subjects of the modern sciences. This would include practical training in surgery and the essentials of the science of poisons, and a familiarity with all necessary subjects. Graduates of these institutions would work side by side with the certificate holders from English colleges. Capable people who are well acquainted with both Yunani medicine and the modern sciences would be appointed professors at these colleges, on good reliable salaries.
- 4) The graduates of these colleges will be employed at treatment centres (*shifākhānā*) built by the government, at its expense. And it will build the confidence of these men by giving them salaries that are worthy of their status. With these plans, Yunani medicine will obtain a level of development that has long been desired, within a few years.
- 5) The first duty of the committee should be to gather the scattered gems and thread them together into a lovely string which will speak to the beauty of ancient medicine. What I mean by this is tested and verified treatments. Somebody has an unparalleled treatment for hemorrhoids and will not tell anyone, and somebody else is aware of a treatment for diabetes but keeps it close to the chest. That is, somebody will have one tried and tested remedy, and

somebody else will have something else. The committee should write to the hakims of every city and district and ask them if anyone in their environs is famous for a particular treatment, and if so, to send their name and the treatment for which they are known to the committee.

The committee should then enter this information in a register and then through correspondence with these men, they should obtain these prescriptions in return for compensation, and prepare a pharmacopoeia which would be extremely beneficial and will also save these little traces of Yunani medicine from ruin. We do not know how many tested remedies have been lost (already), the men who knew them having already been buried.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by:

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

If the voluntary associations or individuals within the community had the wherewithal to do this, then what would be the need for complaint? I expect this is useless, and it would be better to do nothing. That is because the needs have grown to such an extent that no single source of money would be adequate to meet them. In my opinion, we should be given aid from the government, the local boards, universities, or whatever other source is possible. Otherwise it will not be enough to do the work and all of these proposals will remain fixed on paper. This work will be as stable and as enduring as the size of the investment made in it. It should be kept in mind that all of this work is starting anew, from the ground up. If the government is unable to act according to our proposed scheme, then it should at least establish one hospital in each of the big cities, with its own expenditure, in which everything needed to work in accordance with Yunani principles is provided. It would also bear the cost burden for the salaries of hakims and other employees, for the medicines, and for the rent of buildings. Give these people a chance to work for a year or two and then examine the results of these hospitals and develop them. We want to see a state of affairs in which we are given the opportunity to do our work.

Oh Lord, my wish is so pleasant/ So, please make it happen.

(یا رب این آرزوئے من چه خوش ست/ تو بدین آرزو مرا برسان)

LAHORE
Janab Pandit Vaid
Thakur Datt Sharma Saheb Bahadur

Translated from the Urdu by SABRINA DATOO¹

It has been a year since 21 February 1921, when the Madras Legislative Council passed a resolution intending that the government must quickly make some arrangement for the encouragement of indigenous medical systems. Implementing this resolution, the Government formed a committee that includes doctors, *tabībs*, and *vaid*s, tasked with investigating and reporting on whether, accepting the benefits of indigenous medical systems, it is necessary to improve them or not. The secretary of this committee is Doctor Srinivas Murti, who has toured India for the purpose of this investigation and now has come to attend this conference for the same reason.

I have read the questions he would like to ask. I will try to reply succinctly. First of all, I would like to make one thing clear. Whatever the Government of India or the local governments do to advance indigenous medical systems, the council members should keep up their efforts. Our conference kept making petitions from the beginning, however nothing has happened yet. The Punjab Government, while taking donations from the public for the spread of medicine, declared it would support indigenous medical systems as well. However, it then did nothing. The UP Government made the same statement when it was building the Lucknow Medical College, but then did not fulfil its promise. When Lala Sabkheer [*sic*] Singh tried to encourage the government to establish a college for Desi

¹ I would like to acknowledge the colleagues with whom I discussed this translation project. I would like to thank Faezeh Mirshahi for her willingness to discuss all things Persian, and Hasan Siddiqui for his thoughts on the Mughal Persian citation in Bihari Lal's testimony. I would also like to thank Jennifer Dubrow, Karim Javan, Shefali Jha, and Aysha Munira for helping me discern the words obscured by a few challenging typographical errors.

medicine, he was brought down.² What has the Madras Council itself done? Our elder, Pandit D. Gopal Charlu [*sic*], was running an Ayurvedic school of high standard, and the government did not give him a cent. It was the Madras Medical Council itself that removed Krishan Swami Ayer from the register because he was helping with the arrangements of a Vaidik [= Ayurvedic] dispensary. The Bombay Medical Council, on behalf of the Puna Municipal Committee, tried to close a functioning Ayurvedic hospital. The point is they are [actively] opposing indigenous medical systems to this day. They have never admitted the value and the benefits of indigenous medical systems. If they ever did anything, it was to appoint doctors to go and discover indigenous medicines. In this very way, the Bombay Government assuaged the naïve councillors. They could not understand that this is not the development of indigenous medical traditions, but is a direct advancement for *dāktarī* [i.e., Western medicine] if they take our best medicines and include them in their system while we applaud. Researching medicines and including them within *dāktarī* does not advance our indigenous traditions but harms them. If this occasion is just more of the same – and does not centre on advancing the indigenous medical systems of Ayurveda and Yunani, by supporting the formation of a college, etc. – then the government should not bother. Indigenous medical systems do not need that kind of encouragement; we will keep on going as we have been. Petitions have gotten us nowhere; if God wills it, we will move forward. There are preparations to open schools and colleges of indigenous medicine all over the country. One day, these medical traditions will leave behind this current state of neglect and be admired again.

However, if the government of Madras is genuinely repentant about this past and actually wants to fulfil the wishes of the public, from which it receives so much income, then my goodness! It will be as though [those] who have been forgotten all day will return home at night, and not be forgotten. If only Pandit D. Gopal Charlu were here to see with his own eyes and hear with his own ears how his efforts are bearing fruit.

The committee, in the introduction to the published copy of questions I have been given, writes that in support of the arguments given in reply, evidence should be provided that is acceptable to modern science. It should also be kept in mind that whatever references given to books, no matter how sacred, cannot be admissible unless they can be proved by the scientific method.

² The reference here is likely to Lala Sukhbir Singh associated with the Rishkul Ayurvedic College in Haridwar. For more on the institution and its political context, see Rachel Berger. *Ayurveda Made Modern: Political Histories of Indigenous Medicine in North India, 1900 – 1955*. Palgrave Macmillan, 2013, pp. 147-48.

This matter is of some difficulty to me. We know there are theories or rather truths that cannot be demonstrated through the discourse of scientific argument, but which can be proved by being put to the test of experiment (*āzmā'ish*). The science of today, which is so proud, still cannot understand such matters, although they were written down by our ancestors. Leks Mular³ [*sic*] has written somewhere that where our science ends, that is where the science of the Hindus begins. Whatever research investigators do, they are surprised to find that the results they arrive at, after much experimentation, are already written in the books of the Hindus.

Doctor Paul Brokohan [*sic*] has written somewhere that “I read such cerebral matters in these books of a kind that are simply not seen anywhere else. After working through them, I remain extremely surprised.”

I have been exceedingly struck with the profound meaning of many passages which indeed go beyond anything that I have met before in medical literature.

Doctor Myukas⁴ [*sic*] himself has said that now doctors have much to learn from India.

The Commissioner of Bhagalpur division Mr Skrāiyān [?] said once:

It is wonderful to note the comparatively advanced views held by the sages of your country and how completely they had anticipated discoveries which we moderns flatter ourselves are due to the enlightenment of this age.

That is, it is surprising how the sages had relatively elevated thoughts, and that they completely understood those things which our existing scientists claim, with pride, to have discovered themselves. There are many matters which on which science can say nothing, and even more which are clarified by the abilities of our *r̥sis*, with their sagacious recognition of enigmas.

Your current science cannot prove at this time how mercury (*pārah*; *sic*) cures syphilis.⁵ However, doctors accept that it does cure it, because they have the experience doing so. Our *r̥sis* were very knowledgeable about this. They say that all the diseases in the world can be cured by this mercury. Boil mercury and sulphur and make a collyrium (*kajlī*, i.e., a medicated eyewash) out of it; whatever medication of whichever disease you mix it with, it will cure that disease. The medicine

³ This is likely one of the many typographical errors the text is littered with. The reference is probably to the Indologist Max Müller.

⁴ I believe this is another typographical error. This is likely a reference to Sir Pardy Lukis, Director-General of the Indian Medical Service. See David Arnold. *Science, Technology and Medicine in Colonial India*. CUP, 2000, pp. 144-145.

⁵ The text reads *pārah*, however this would be nonsensical in this context. The word is more likely *pārā*, the Hindi word for mercury.

(*makard hoj*), used by Sir Pawdy Myukas [*sic*] and other honourable post-holding doctors, is a mixture of mercury, sulphur, and gold. If gold were not included in it, and current science asked us what is the benefit of its inclusion, we would say that the benefit would not be apparent from some experiment of your science. Use it and see what happens. If you apply a coating of grit (*bālū ret kī pān*) to a very fine-pointed piece of iron, then it becomes capable of cutting glass, and if you give it a coating of oil (*tel kī pān*), it will be capable of cutting iron. You tell me how you can prove this by scientific experimentation. Doctors say that mercury damages sexual vigour. We say that there is nothing as invigorating as it. The issue is this: There are eighteen flaws (*doṣa*) in it, one of which causes impotence, and [if] it is not eliminated, that is why there is damage. In *ḍāktarī materia medica*, tin and sterling are described as “impurities” within mercury, which come from the outside. How would they know that the sages (*ṛṣi*) had discovered other impurities, which modern science has been unable to discern? They used to purify even pure gold and silver by sprinkling them with oil. If you put mercury in a lump of salt, bury it in the ground for a month, and put a stopper of salt on top, you can remove the flaw (*doṣa*) that causes impotence, and it will become a remedy to strengthen sexual vigour. In your books, “aconite” (*bachnāg*) is considered a heart suppressant, which weakens the heart, but if you soak it in urine (*mūtar*) for three days, it becomes pure and heart-strengthening.

Wherever you want proof for these things, we can present a living example or a demonstration. Whether it is compatible with your science or not is not our responsibility.

In school, we learned that in sunlight, trees expel oxygen (*āksījan*) from inside of them and absorb carbonic acid gas. However, in darkness, they expel carbonic acid gas. We have asked several scientists why birds [which are] living according to nature, that have never been sick, make their nests in trees and remain healthy? None of them offered a satisfying answer.

There is a wildflower which has already been shown once at a medical exhibition. If any person or animal has worms anywhere, they need only tie this plant around the neck and they fall off. We will make them fall off to show you how it is done. It is up to you to argue with science. If you have an intermittent fever (*tia*, *y'anī bārī kā bukhār*), then take five or seven red chilis, cut them, tie them to the middle finger, and soak it in water for an hour before the fever. The first episode of fever, or if not that, then the second one, will not appear. Other things are added to this, too, but whomever wants to see its effect, even by itself, can test it without delay. In the same way, in malarial fever, if you tie pieces of the pith of *Caesalpinia bonducella* (*magz-e karanjua*) to the finger and put it in water, it stings and the fever disappears. If it is not malarial fever, then nothing is felt in the finger.

A fever can be reduced by tying the root of *sahdewī* [?] to the head.⁶ The science that experiments on dogs, cats, rabbits, and frogs makes errors itself. How can we demonstrate what we are saying with that kind of science? We say that in a new fever, especially when combined with bowel problems (*jab ām joṛ ho*), one should fast. This science also says that “feeding” should not be stopped because this leads to weakness. Eventually in Germany, one D-A system appeared, that is, “diet absolutism.” These people made patients with fevers fast for the first six days and had excellent results. Strangely, this science states that eating should begin with milk products, which is extremely harmful in new fevers. It is not science that said so, but our sages [who] have forbidden this. In a new fever, feeding should begin by boiling water down until a quarter or a sixth remains, then administering this only, when cool. A chronic fever will be diminished by half. There are many types of fever that we make chronic by employing the wrong treatment. Consider this amazing idea: it has been written about this water that it should not be cooled by waving a fan or other means, but rather that it should be left alone to cool by itself. Scientific experiments cannot demonstrate such subtle matters, only experimenting on sick people can.

Furthermore, honey and water are said to be poisonous if given in equal parts. You can, of course, make an experiment of this, however perhaps it cannot be proved poisonous by any principle of science (*sā'ens ke kissi uṣūl se*). Take a man and give him two *tolas* of ghee and two *tolas* of honey mixed together, every day. Take another man and give him three *tolas* of ghee and two *tolas* of honey, that is, unequal parts. You will be convinced on your own of the great intelligence of our sages. The man who eats equal portions of ghee and honey, his appetite will lessen, and he will become sicker day by day. The other man will feel himself strengthening, because both of these things are like ambrosia.

Both ghee and bananas are heavy. But if you cook bananas in ghee, then they become light. How is it that this is unknown?

It is very difficult to test each matter with science. If there is a lake full of leeches and you press your thumb in your fist and drag it through the water, the leeches will not stick to it. If a black bee is flying and a few men link hands and stand in a line holding their fists tight, the black bee will come and fall between them. These sorts of things are better proved by practical experience (*'amlī tajrboñ se*) rather than by scientific experiments (*sā'ens ke tajriboñ se*). There is no doubt that, as sciences advances, the recorded truths of the *ṛsis* will continue to become clear.

⁶ This might be a reference to: *sahadeva*, i.e., “snake mallow.” See Dominik Wujastyk. *The Roots of Ayurveda*. Penguin, 2001, p.142.

Our people used to put copper around the neck of a child. In Germany, there was once an outbreak of cholera. The workers in a copper mine did not get cholera. With experiments, it was discovered that in the time of cholera, most men remained safe from infection if copper was stuck to their bodies. It is written in the authoritative scriptures (*śāstra*) that water should be left in a copper dish, now science is saying that copper consumes germs and keeps water pure.

The authoritative scriptures say: “Do not sleep with your head to the north.” Now the science of electricity (*bijlī ki sālens*) is proving this.

That which you call modern science (*ilm*) is sometimes little more than a compilation of arguments (*dalīlōn ka majmū'a*). What cannot be proved with this modern science? On the basis of this modern science, well-known doctors are proving that natural treatment alone is best, and that using drugs is a grave sin (*gunāh*). Somebody proves one method, somebody else [proves] another.

Doctor Loheken [?] has used science to prove that the use of drugs makes illness worse. All diseases can be cured with just four types of baths. With modern science alone, Doctor Hanīmen has proved that all of the world's treatments are wrong, and [that] only treatment by similitude is a true method of treatment.⁷

A short while ago, I read the famous Doctor Raḍak's [?; *sic*] book “Vitality,” which proves through the scientific method that bathing is very harmful to health. He mentions a patient who had been sick for a long time and whose whole body was covered in filth. One doctor washed it all off in just one day, and [the patient] died that very day.

It is not at all my intention to say that science is a bad thing. The whole world should acknowledge the favour that these great men are doing by discovering new scientific matters. Through science, they have invented several excellent things for healers, as well. The stethoscope was common before, but the thermometer, the sphygmomanometer, the microscope, and several other instruments are proving to be very useful. Indigenous medical practitioners have no objection to using them. The meaning of what I have said is certainly not that science should solve every matter that has been written about in our authoritative scriptures (*śāstra*); it is certainly this, that not one amongst those matters is in contradiction to modern science. They will always be proved through tests of knowledge (*ilmi kasauṭī par*). It is for this reason that, until now, the three humours (*tridoṣa*), that is, the humoral theory (*akhlāt kī thiorī*), is still not accepted by doctors. However, it is the absolute truth and, eventually, scientists will be convinced of it.

⁷ This is likely a reference to Samuel Hahnemann (1755-1833), the founder of homeopathy. See Roy Porter. *The Greatest Benefit to Mankind: A Medical History of Humanity*. WW Norton, 1997, p. 390-91

I have one more thing to state in these prefatory remarks before I come to the questions.

Why do we say that we should improve the indigenous medical systems so that patients will be more comfortable? If that is what is intended, why not treat everyone with *ḍāḡṡarī*?

The first response is that, if the limiting condition is the comfort of the patients, then experience can tell us that indigenous medicines cure more patients. So why do we not put an end to *ḍāḡṡarī*, which is foreign for us, and just treat everyone with indigenous medical systems? The facts that science has discovered are a kind of knowledge (*voh 'ilmī hain*) and nobody has a monopoly over knowledge. They can all be absorbed into Yunani and Vaidik [Ayurveda]. In this way, the government's medical expenses will be halved, and the benefit will be even more than this. Yet we know the government will not agree to this. We feel that indigenous medical systems are more suited to the natural dispositions of Indians. For our people, medicines grown in this country are more efficacious. We know that with indigenous medical systems, there is little expense and much benefit (*upkār*). We know that the method of treatment in indigenous medicines is very simple and has been tested through experience. *Ḍāḡṡarī*, even after much scientific progress, has little to add when it comes to eradicating the pain of the sick. No doubt, surgery is very impressive. But that is the sort of thing that anyone can learn and do, whether *vaid*, *ṡabīb*, or doctor. If the government makes such arrangements for indigenous medical systems, they will work within that arrangement, just as all manner of operations were performed in the past.

A patient who is dying of pneumonia will not be comforted by somebody who sits at his bedside and starts spewing science: "There is an inflammation in such-and-such sacs (*parde*); the sacs work like this; this is the effect it has on the lungs; it needs medication." Experience tells us that, up to this day, nowhere can medicines be found that are as quick-acting as the ones indigenous practitioners have. Up until the present, ninety percent of people benefit from indigenous medicines. And regular people are inclined toward indigenous medicine. Accordingly, it is the government's essential (*'ain*) duty to make arrangements for the medical treatment of its subjects according to their wishes. Some clerks are required to take English treatment. It is such a pity. They are compelled to buy their medication, and then they do not use it. They go for their real treatment to an indigenous medical practitioner. Indigenous medical systems actually are beneficial, they are suitable to most Indians, they are appropriate for the conditions of poor Indians, and it is for this reason that we desire their improvement.

Most of the things we need for indigenous medicine are easily available within our country and even laymen are familiar with them. We do not need to make arrangements for steamships in order to treat what ails our bodies.

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I do not think there is any fundamental difference between these three. Siddha falls within the remit of Vaidik (Ayurveda). It simply means to use the very special, high-quality prescriptions which wise men (*sādhū*) and ascetics (*sanyāsīs*) discovered after years of experience. Anyone can use them. As far as Yunani and Vaidik go, there is little difference except that *vaid*s use mercury (*ras*) and calcinations (*kushtajāt*) more, and they use other medicines more. People that read Yunani books in Persian and Arabic become Yunani physicians. Those that read in Hindi or Sanskrit become *vaid*s. As far as medicines go, many *hakims* now have begun to use Vaidik [ones]. Still, since I myself am a *vaid*, I will discuss Vaidik matters more.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

We do not have theory, we have truth, which I explain below. We believe in three types of disease. External/accidental (*agnatik*), that is recent (*hādiṣī*). This is ones in which there is not necessarily any prior cause and which happens due to some event, for example a wound (*zakḥm*), an injury (*choṭ*), having heat stroke (*lū la-gna*), getting a sprain (*moch ānā*), being bitten by an animal, etc. A sudden attack

from some type of germ (*jarmz*) would also be external. Mental (*mansik*) [is that type] which pertains to the mind, which today's science refers to as hysteria, etc., and which is generated by grief, anger, etc. The third kind is originating in the humours (*doṣajay*). Its true reason is the derangement, the lessening, or the increase in the humours (*doṣa*). However, this consequence (*sidhānth*) is explained in this manner. The body is a collection of humours (*doṣa*), bodily tissues (*dhatu*), and impurities (*mal*).⁸ Apart from this, there is nothing else in the body. There are three humours: wind (*vāt*), bile (*pitt*), and phlegm (*kaf*). There are seven bodily tissues: chyle (*rasa*), blood (*khūn*), flesh (*gosht*), fat (*charbī*), bone (*haḍī*), marrow (*majā*), and semen (*vīraj*). There is an impurity for every bodily tissue, for example excrement (*pākhāna*), urine (*peshāb*), perspiration (*pasīna*), menstrual blood (*haiṛ*), phlegm (*balgam*) from the nose, the discharge (*gaḍ*) of the eyes, etc. Illness arises from the lessening, the increase, or the derangement (*fasād*) of these three things. Bringing them within the appropriate boundaries is correct treatment. A difference in the activity of the organs leads to a difference in these three.

Upon seeing a prisoner with hands covered with blisters, someone says he used a grinding-stone, somebody else says he stole, and that is why he had to use a grinding stone. Ayurvedic medicine goes further than this and says that because of a difference in the activities of the organs, due to errors in taking food (*āhār wa hār meṇ galtiyān*), there is a spoilage (*bigār*) in the humours, bodily tissues, and impurities. It is the spoilage of the humours in particular that is present with every disease. These foundational principles create a straight path for treatment. It is written that:

The best *vaid* is the one who understands: the accumulation of the humours; their presentation; the beginning of their spreading in the body; their collection in a particular place, and the increased difficulty of that organ; after seeing that disquietude hasten, how to make the signs clear; and after that understanding their types.

The commentary for this is quite long and I cannot elaborate on it in this short period of time. If you want to understand the issue in greater detail, I will give you a copy of *Dosh vighyan* or '*Ilm al-akhlāt*', in which I have explained (*viyākhiyā*) the three humours very well.

⁸ These definitions of Sanskrit medical terms are from the index of Dominik Wujastyk. *The Roots of Ayurveda*. Penguin, 2001, p. 345-89.

I would certainly say there are no words for this in modern science (*jadīd 'ilm*). Nowhere do they offer a clear commentary. But the principles of contemporary science also cannot prove it wrong. Whatever they have not discovered cannot be wrong. The experience of every *ṭabīb* makes its truth evident. We examine each patient, will tell you which humour has accumulated inside of him, and will give you a medicine in opposition to it. The patient will begin to find relief. We can demonstrate which effects a medicine has by administering it and creating the same symptoms (*lakṣan* [?]). That is, giving an excess of phlegmy things will increase phlegm, prescribing warm things will increase warmth, and windy things will increase windiness. If we understand the humours well, and begin treatment accordingly, then no matter where the illness has struck, it will be eased. These are matters of everyday experience which can be tested at any time.

Now, we tell you that all three, wind, bile, and phlegm, reside in the body and are the powers (*shaktiyān*) support it. One cannot get by without accepting them. Doctors accept them in a different form, however they are slowly beginning to accept them.⁹

Doctor M. Kendrik had written in the *Encyclopedia Britannica* that somebody will have to name the power that enables the “nerve” (*‘aṣab*) to work. It ought to be named wind (*vāt*) or some similar name.

Doctors believe that the all of the body’s movements and actions occur through muscles (*‘aḏlāt*), which are not much more powerful than *a’ṣāb* (“nerves”). Vaidik goes beyond this and states that those nerves (*narwaz*) obtain power from wind (*vāt*). This is seen throughout the body in different forms. It affects each and every hair, from where they become less or more, or bad or non-existent. However, many nervous (*narwas*) diseases are in *ḍāḳṭarī*, all of those are considered diseases of wind in Vaidik. This matter will stand up to any scientific test.

The second humour is bile. Even doctors accept that “combustion” takes place within the body at every moment. That is, fire burns and heat spreads throughout the body. The body’s corrupt matters (*fāsid māde*) keep burning. New ones are made. The Vaidik word body (*sharīr*) makes this meaning clear, because शरीर शरीरः That which is dying at every moment, that is what is called the body (*sharīr*).

Bile (*pit*) is the name of this phantom (*ṭaif*) power, from which bodily tissue is continually made and which keeps the inside of the body at 98.5 degrees at all times. The action that the English call “metabolic function” or “heat producing mechanism,” that is bile. To keep this bile within limits within the body, so that

⁹ Odd locution: *dāḳṭar abhī is ko aur ṭarīqe se is ko mante haiñ, magar āhista āhista mante jā rahe haiñ.*

the body does not burn from this heat, God created phlegm, which can burn, in the same way that moon exists facing the sun. It is present throughout the body. It works like oil in all of the joints and distributes coldness within the body.

After reading this short explanation, who could say that this conclusion (*sidhānt*) would not stand up to a scientific test? These powers remain in the body, even when they are in an impure form. In the scriptures (*śāstra*) it is written, *attā atnā* [?]. Every humour in the body is natural (*qudratī*), any more or less is harmful. They protect the body. It is called fault (*doṣa*) because its increase, decrease, or derangement produces illnesses. The scriptures discuss their signs in detail; there is no time to include them here. There is certainly this much – that the ancient sages always kept writing aphoristic guidelines (*sūtra*). They took great pleasure in making themselves understood in very few words. That is why you will not find commentary in our books, only principles, which are true.

It is written in *Suśruta*:

The disease can be understood through questions and the five senses.¹⁰ The five senses or organs of senses (*giyān andriyān*) are: ear, nose, eye, tongue, and skin.

Listening to noises with the ear, for example [with] the *nari jantar*, which today is called a stethoscope. Using this, or simply placing the ear on the lungs or heart to listen to their noises. Listening to the sound of faeces or urine, or the sound of blood, or the sound of breathing, or recognizing the sound of a cough while coughing. *Suśruta* includes a discussion of how to listen to sounds with the *nari jantar*.

With the nose, one can smell the fragrances and malodours of the human body – impure urine, infected wounds, boils.

Diagnosis is established by seeing with the eyes, for example by looking at the colour of the body, eyes, [or] tongue, or the state of its body – fat, thin, swollen, [or] shrunk. There must be a *jantar* for the eyes, like the microscope, which would explain the mention of invisible actions (?; *karmṇ*).

Diagnosis can certainly be made by tasting with the tongue as well. Sometimes the patient is asked how their mouth feels, [or] what is the taste of the

¹⁰ Sharma is using an odd locution for five senses – *pānch hawās khamṣa*. It is odd because the phrase *hawās khamṣa* is an Arabic phrase used in Persian and Urdu and can be translated literally as “five senses.” The use of the Urdu/Hindi word “*pānch*” as though it were a qualifying adjective suggests Sharma thinks *hawās khamṣa* means simply “senses.”

phlegm that comes out, [or] whether ants stick to the urine or not [presumably an indication of sweetness?].

Skin, that is to diagnose with the power of touch (*lams*). By touching the body one can discern heat, coldness, greasiness, dryness, perspiration, or hardness, examining the pulse and its motion, understanding the hardness or softness of the liver and spleen using the hands. Questioning also aids in diagnosis because the patient states all of these problems in their true form: when the illness began, how it began, how it progressed, when it flares up, when it remits, etc.

These are the five methods. The doctors developed the thermometer because they didn't make adequate use of the power of touch. Not having understood how to examine urine with the eye, they have produced new means of testing it, which indigenous practitioners are able to use. To examine the pulse they developed an instrument, the sphygmomanometer. I will say this much, that truly understanding the pulse and the examination of urine only comes after a great deal of experience. Few *vaid*s understand both of these very well. However, the ones that do are successful in diagnosing all diseases through both or just one of these. There is no need to explain the scientific principles. A bit of sharp thinking reveals that the pulse changes in every disease, and these changes are memorized. This is not deception, but true science (*sachā 'ilm*). On some occasions it can predict death as much as a whole year in advance. Aside from this, our ancestors have written several signs of disease. After understanding all of these matters, a true diagnosis of disease is made. A doctor uses soda (*soḍā*) to examine sees a stone in the bladder. We can explain everything after having seen the signs. The signs have been recorded with great clarity. In Yunani medicine, they have been described in such detail that anybody who knows them, who studies them well, can never make an error in diagnosis.

To this day there are people who write a prescription after having simply put their hand on the pulse. These matters are unknown to contemporary science, and that is why they call it a deception. But if anyone wanted to, he could have this tested, even at this time.

Now for the method of treatment. For this, do not even bother asking. Despite science's thousands of advances, to this day it has not been able to compete with Vaidik. The important thing that the present science has done is that – having extracted the essences from things – it has reduced dosages quite a bit. Things have become more convenient. However, this does not help much in eradicating the underlying disease.

When a translation of Caraka reached the famous Doctor George Clark, M. A. D. in Philadelphia, he wrote:

As I go over each fascicules I arrive at only one conclusion and that is this —

If the physicians of the present day would drop from the pharmacopeia all the modern drugs and treat their patients according to the methods of Charaka there would be less work for the undertakers and fewer chronic invalids in the world."

[Urdu translation of above]

It ought to be remembered that it was not as though the *vaid*s of ancient times did not know chemistry. They made new kinds of calcinations, they prepared mixed remedies such as the calomel (*ras*) and sulfide (*sandhūr*) of mercury and *chandr adwe*, etc. They extracted the essence of minerals. They prepared medicines in different forms – ghee, oils, *ashwārāshaṭ*, distillations, and draughts. These are all matters of physics and chemistry.

In his book on chemistry, Doctor Rai writes that in *Suśruta* one finds instructions for the preparation of caustic alkali (*kāṣṭik alkālī*) and the advice that it should be stored in an iron vessel. Having read this, who would not appreciate that ancient men also understood chemistry very well?

Mister Lafnaṣṭan [*sic*] writes the following about *vaid*s:

They know how to prepare sulphuric acid, the oxide of copper, iron, lead (of which they had both the red oxide and litharge) tin and zinc; the sulphate of iron, copper, mercury, antimony, and arsenic; the sulphate of copper, zinc and iron, and carbonate of lead and iron.

Their methods of preparing these substances were sometimes peculiar.

Their use of these medicines seems to have been very bold. They were the first nations who employed minerals, internally and that not only gave mercury in that manner but arsenic and arsenious acid which were remedies in intermittents.

They have long used cinnabar for fumigation by which they provided a speedy and safe salvation. They have long practised inoculation.

[Urdu translation of the above]

Their acquaintance with medicines seems to have been very extensive, we are not surprised at their knowledge of simples, in which they gave early lessons to Europe. More recently they taught us the benefit of smoking *Dhatura* in asthma and the use of cowitch against worms.

[Urdu translation of the above]

Mister Enī Besant [*sic*]¹¹ said the following in a lecture given in Calcutta in 1906:

¹¹ This might be Ms Annie Besant (1847-1933), the English theosophist based in Madras. See Metcalf and Metcalf. *A Concise History of Modern India*. 2nd ed. CUP, 2006, p. 164.

[Urdu translation of the above]

One could give many more testimonies like the ones above. But what are testimonies when what is said here can be put to the test at any time?

Plague, influenza, cholera, etc – many more sufferers of these conditions are helped by indigenous medical systems than by *ḍāḳṭarī*. We also have excellent medicines for the treatment of difficult conditions like syphilis, gonorrhoea, haemorrhoids, impotence, bladder stone. This could be demonstrated if a committee were to appoint one doctor and one indigenous practitioner to the same place for year, and send each of them an equal number of patients of each condition and keep a tally of the results. It would be seen that with little expense, more patients are returned to health through indigenous medicine, and more quickly.

And these medicines are not mere conjecture, they are founded on high principles and truths. Doctor Chand has begun writing for some years that in *shoth rog*, that is, in the disease of swelling, salt is prohibited. Thousands of years earlier, Caraka gave the same advice, and to this day indigenous physicians prohibit salt, and sometimes even water, in this condition. That is because salt absorbs water and the swelling keeps increasing. What amazing points one can find about treatment. Having described the medicines for fever (*bukhār*) and diarrhoea (*atīsār*), a disease called fever-diarrhoea (*jwar atīsār*) has been noted. It has been written that the medicines for fever and diarrhoea cannot be given mixed together. The medicine for loose bowels (*ishāl*) will increase the fever, and the medicine for fever will increase the diarrhoea. That is why they write special medications. Talc (?; *abrak*), mercury, etc. are adjuvant (*yog wāhi*) medicines. That is, whatever medicine you mix them with, they will greatly increase its attributes. Some medicines have to be purified before use, others can be used as they are. Aspaghol, etc. should not be ground, etc. These are very unusual and subtle points that doctors do not know. Do not even ask about *path*, [dietary restrictions (*parhez*)]. Doctors here offer advice based on what they have overheard of our conversations, such as do not eat aubergine, whether or not to eat ghee, which fruit to eat, etc. Actually, one cannot find dietary restrictions discussed to the extent of detail that they are discussed in our books. In our tradition, it is written that aside from medicine, the appropriate dietary restrictions alone can cure disease. However, someone who does not take dietary restrictions cannot be cured by medicine alone. When patients go to newly educated doctors, they beg them for dietary

restrictions. All they have written is to advise easy to digest, strengthening food for everything, and the same kind of advice when they give medicine. During a fever, they keep prescribing milk and meat broth to increase strength, and in so doing they increase the duration of the fever. The principles of treatment amongst us are straightforward and easy, so that everyone can remember them.

There are two major pillars of treatment: purification (*sanshodhan*) and pacification (*sanshoman*)

Purification (*sanshodhan*) is the cleansing of the body through the removal of matter or humours that have accumulated in it. Pacification (*sanshoman*) is the calming of the humours without removing them, and ceasing their effect. All treatments the world over fall under these two. *Vaids* understand the practice of purification in a way that doctors cannot even dream of yet. No doubt, they remove residues through vomiting (*qai*), purgatives (*julāb*), and enemas (*anīmīā*) to remove residues, but they do not know if vomit or purging only empties matter accumulated in the stomach. All they know about *huqna* or *wasti karm*, which they call enema, is that you insert soapy water or castor oil into the intestines (*antarīṇ*) through the anus (*maq'ad*), and the matter accumulated there comes out. In Vaidik, five large types, or rather eighteen types of enema (*wastī*) have been written about. Through enema alone, one can reduce obesity, one can fatten the body, one can strengthen the body, one can eradicate impotence. Recently, I have read only one advertisement of a person in England who has begun administering strengthening medicines through the anus.

In the scriptures (*śāstra*), five practices (*pañj karam pāñch 'amal*) have been discussed. Employing these practices resolves longstanding chronic diseases and “great diseases” (*mahāviyādhyān*). They are: to oleate the body (*sīna karam*); to cause perspiration (*suīd karam*); induced emesis (*waman karam*); purgation (*warichan karam*); and enema (*wasti karam*). If emesis (*waman*) is done after the oleation (*sīna karam*) and sweating therapy (*suīd karam*), then chronic asthma (*dama*), severe fever, severe diseases of the wind, etc., which are understood to be incurable, will also be resolved. In ordinary diseases, this sequence is not completed, instead whichever one seems necessary is performed. Even then, attention is given to ensure that the medicine prescribed to induce diarrhoea or vomiting should remove a particular type of matter from a particular place. That is, it is kept in mind that if the matter is not ripe, then before giving a purgative, it is made to be digested (*munzij karāyā jātā hai*). These are things that *dāktarī* is now learning from indigenous medical systems.

The knowledge about pacifying (*sanshoman*) medicines amongst *vaids* is also amazing. Concerning the effect (*aśar*) of the medicine in *dāktarī*, all that is written is that this is the effect on such-and-such organ. However, indigenous medical

systems also tell you what it will effectuate (*us kī tāsīr kyā hai*). Is it hot or cold, phlegmy or windy, dry or moist? Imagine a man has a swelling in his liver. The doctor will give him medicines that have an effect on the swelling of the liver. An indigenous practitioner, however, will also discern is the swelling cold or hot. If it is hot, then he will give a cold medicine, and if it is cold, he will give a warm one. If there is a particular medicine that is very beneficial for swollen livers, then he will prescribe it with a vehicle (*anūpān*), so that it has the appropriate effect. It has not yet become popular to use a vehicle in *dāktarī*. They do not use anything other than milk and water. It is the power (*parbhāu*) of the vehicle that protects the patient from heat and dryness when an indigenous practitioner administers even quinine with a draught. Whereas when doctors try to cure a fever, patients complain of parching with heat and cold. With every medicine, our things are described: taste (*ras*), properties (*gun*), potency (*vīrīya*), post-digestive effect (*vipāk*), specific action (*parbhāu*). First of all, the taste is described, which offers much guidance. For example, it is written that bitter medicines cure fevers, which include *charāīta*, *shātara*, quinine, neem, etc.

There are six kinds of taste (*ras*). In combination they make sixty-four. Ordinarily, sweet and sour (*mīthā tursh*) calm alkaline (*khārā*) matters, sweet and bitter resolve astringent bile [*kasīlā pīt*], and sharply bitter resolve astringent phlegm [*kasīlā balgham*]. There is other similar guidance.

After this is the explanation of qualities (*gun*). There are many kinds of qualities (*guna*). For example, being heavy, being light, etc. Their separate actions have also been recorded. Then there is the description of potency (*vīrīya*), which they also call effects (*tāsīr*), that is, what is its effect after having reached the stomach. After that, post-digestive effect (*vipāk*) is explained, that is, when a medicine is digested, what are its tastes (*ras*) and its effects. These are the kind of subtle matters that have not been discussed anywhere in any medical tradition in the world, except in Vaidik. After all this, there is one more thing which they call specific effect (*parbhāu*). *Parbhāu* are the effects that no worldly science can prove. To cure some disease is the *parbhāu* of some medicines. This effect is particularly inside of them. Nobody can explain how it happened. It is only the yogis which hold divine vision (*diviya drshṭī*) who have explained this, and thanks to whom the rest are left with their heads bowed in shame. Your science could not tell us, but we know to use mercury in all diseases. You say that cinnabar (*shangarf*) weakens the sex drive, we can make it strengthen it. That is the one who is called a *siddh yog*. You would never know how the medicines included in *siddh* prescriptions have their effect. There is even a calcination of copper in *joṛādī abrak*, but it cures even hot fevers quickly. There are very unique powers in plants, whoever knows them will always be successful.

One can see how straightforward the path to treatment is by understanding these five things. Whatever the illness, whichever humours gave rise to it, we give the medicines that will cure it, and if the specific action is known, then the ones that will work specifically for it, and the patient will be cured. Also, that which they call treatment by similitude, that, too, is often due to the specific action, and there are hundreds of examples of this in Vaidik.

I explained methods of treatment and diagnosis very briefly. To describe them in detail is not possible without books of hundreds of pages. Whoever examines them without the blindfold of prejudice will be pleased. He will join Dr. Clark in telling people to leave chemicals aside and begin treatment with indigenous medicines.

Now what remains is the last part of this question, which is to know what are our thoughts on the common effects of the treatment. Indigenous medicine does not employ any method of statistical analysis (*a'dād-o-shumār*). However, whenever they are compared, indigenous medical treatment has been more successful and less expensive. This is clear from the statistics in those Municipal Committees where indigenous physicians are appointed with doctors. We have an example from the Municipal Committee of Puna. Everybody knows that during the influenza epidemic that indigenous physicians were more successful wherever the illness spread because of the *tridoṣa* theory (*thūūrī*). And if so desired, one need not trust anyone's judgement, but rather can conduct an experiment by a committee which would distribute patients into two equal groups, one treated by *dākṭarī* and the other by indigenous systems. If my claim is true that more patients are helped with less expense, then a college of indigenous medicines should be opened to encourage these practitioners, who can benefit the country even more. Otherwise, the choice is always in the hand of the ruler.

In my opinion, the indigenous medical systems are more efficacious in those diseases known as *mahārog*, and Vaidik is particularly efficacious because it includes rejuvenation therapy (*rasā'īn*) and virility therapy (*vājī karan tantra*). A detailed discussion of these is not anywhere in *dākṭarī*.

Ayurvedic has eight parts which have been described by *ṛṣis*: surgery (*shaliya*); surgery above the neck (*shālādkiya*); general medicine (*kāye chikitsa*); science of malign forces (*bhūt vidiyā*); paediatrics (*koṭār bharat*); toxicology (*agadtantra*); rejuvenation therapy (*rasā'īn tantar*); virility therapy (*wājī karan tantar*).

Shaliya means surgery. It is unorganized at this time and that is why *vaid*s have left it aside. However, this knowledge is available in complete form in *Suśruta*. Even after much progress, there is not a single surgical instrument

amongst doctors that has not been mentioned in *Suśruta*. In *Darjanon rāoun* [?; A round dozen?], one opinion from Mister Weber will be enough:

In surgery, too, the Hindus seem to have attained a special proficiency and in this department, European Surgeons might, perhaps, even at the present day still learn something from them; as indeed they have already borrowed from them the operations of Rhinoplasty.

[Urdu translation of the above]

If the government supported the medical systems of this country, then they would certainly advance in surgery as well.

The second branch is *shālākiya*. It refers to special treatments for diseases above the neck. This includes a discussion of diseases of the eyes, nose, ear and mouth. *Dāktarī* also now has separate branches for each of these kinds of diseases, and doctors are doing great work. However, experience tells us that they are behind in medications for these conditions. It has been seen several times that where cocaine (?; *kokīn*) is of no use, a decoction of *lodha*, etc. does the job.¹² Doctors may explain deafness with anatomical pictures, however no doctor can get rid of it. Some *vaid*s still use the old method to remove cataracts. There was a *vaid* from Kathiawar at an exhibition in Bombay who removed cataracts using the method in *Suśruta*. He claims that this method proves to be better than the existing one used by *dāktarī*.

Everyday treatment is called general medicine (*kāye chikitsa*). It has been mentioned already with respect to the discussion of the superiority of drugs in Ayurveda compared to *dāktarī*. Even if you do not think that it is better, it is still not worse.

The science of malign forces (*bhūt vidya*), or the cure of mental illness, includes germ theory (*jarmz theūrī*) as well. That is why hypnotism and mesmerism seem like yoga. If somebody knows the science of yoga (*yog vidya*) then he would find greater success than any of these. Germ theory is included in the science of malign forces (*bhut vidya*) because in old books, '(invisible) being' (*bhut*) is the name given to germs that cannot be seen. Somewhere in *Suśruta* it is written that a steam application of the gum resin of *Amyris agallochum* (*gūgal*) should be applied to a wound to protect it from the effect of the *bhut rakhshas*¹³. If these *bhūt rakhshas* are not germs, what are they? This branch of knowledge has also been forgotten. Although within *dāktarī* germ theory has been made visible, nonetheless, the treatment of mental diseases is still better performed by *vaid*s.

¹² The bark of the tree *Symplocos racemose* (<http://dsalsrv02.uchicago.edu/cgi-bin/philologic/getobject.pl?c.7:1:3547.platts>, accessed 28 June 2018).

¹³ These are traditionally understood as demonic spirits.

Paediatrics (*koṭār bharat*) is the branch that deals with pregnancy and the diseases of newborn children. Indigenous practitioners are rarely given the opportunity to test this. However, whatever has been written is nothing short of miraculous. Take an instance in which the preservation of a pregnancy is mentioned. There is only one type of treatment for miscarriage in *dāktarī*. But here, we have different medications for each month of pregnancy. If a miscarriage begins in some month, then give this medicine, if in some other, then give that one. It is such a subtle point. It is the distinction of *Koṭār bharat* that even after conception a remedy is written for producing a male child. Ninety percent are correct. Then, the treatments written for problematic deliveries leave even the trained specialists in 'midwifery' very surprised.

Kaviraj Avesh Chandar in the preface to *Shahad Sandhu* [?] writes about *morth garbha* and *rashmari*, which mean a difficult birth ('*asr liwilādat*) and to remove a stone (*phatrī ko nikālnā*) and which are described with such sophisticated methods that Dr. Charles, who was the principal of Calcutta Medical College at that time, expressed an interest in seeing what had been written. According to his wish, Dr. Durga Das Gupta and myself translated the work into English and sent it to him for his examination. Dr. Charles praised the methods for dealing with delivery in difficult cases and accepted this with an open-heartedness, despite the fact that he is quite experienced in the field of midwifery and surgery. Moreover, he said to this day he had not seen such excellent methods anywhere in any other medical books that he had read. In sum, although this branch of knowledge is not put into practice, if the occasion would arise, it would be no less than what *dāktarī* offers.

The sixth branch is toxicology (*agad tantra*), which records the remedies for poisons. No doubt, indigenous practitioners are more successful in this. There are two types of poison: immobile (*sathādar*) and mobile (*jangam*). Immobile means poisons from roots, such as arsenic (*sankhiya*), vomit nut (*kachla*), opium, etc. Currently, doctors pump the stomach to remove these poisons, but this becomes a problem if the poison has travelled beyond the stomach. In Vaidik, a separate medicine is given for each poison. For example, if opium is eaten then, taking *nāri sāk* turns everything inside to ashes.

[For] the poison of living, moving things (*jangam*), there are many excellent medicines that have been written for the stings from snakes, scorpions, etc. *Suśruta* mentions that a *vaid* that knew poisons well was always appointed to the army. Treatments are also described that explain how to cure poisonings which have been caused by an enemy spreading poison in the air or water.

No other science has explained snakes and their poisons as well as the research available in *Suśruta*. The famous historian Irene [?; Aryan?] writes that

when Alexander attacked India, the healers with his army could not cure the men with snakebites, and those men were cured by *vaid*s. The virtue of this part is understood from reading *Suśruta*.

Whatever new matters doctors have discovered regarding “toxicology” should be adopted by indigenous practitioners. For example, just because there is no book on medical jurisprudence, that does not mean that this branch of knowledge did not exist, since there are plenty of examples of it. The *Kautilya koiḍal artha śāstra* [the Arthaśāstra by Kauṭilya] is an old example, made by the sage Chānak Rishi. In it there is mention of understanding symptoms (*lakṣhaṇa*) by ripping open the corpse, that is, doing a *post mārṭim*, upon death by poison, or snake bite, etc. Many symptoms are written which are reasonable. It is unfortunate that the treasure stores of our old books cannot be found anywhere.

The seventh and eight parts of Ayurveda are rejuvenation therapy (*rasā'īn*) and virility therapy (*wājī karan tantar*). It can be claimed that from among these, doctors have begun to understand something of virility treatment, that is, diseases specific to men, whereas it used to be the case that even after passing the assistant surgeon's exam they were still clueless. The medicines for these conditions can be counted on one hand. However, this has been explained so completely within Vaidik and Yunani that doctors are stunned when they hear and study it. This is not to mention rejuvenation therapy, which eradicates conditions like old age, diseases which cannot be cured by medicine, and even premature death. There is no doubt that *vaid*s are no longer using this. However, that is because there is no formal arrangement for offering this kind of education. These kinds of medications must be administered with great caution. They remake the whole body; a new body is created and the old one left behind. An old man becomes young again. This is not a deception. If Vaidik were to reach the heights it had obtained in the past, then these matters would be seen through clear experiments. Doctors should not think that the knowledge they have not understood is erroneous. Our sages (*ṛṣi*) have discovered truths, and those truths are enduring.

The real questions related to the system of medicine are the first two [i.e., questions 1 and 2 of the questionnaire], the rest are commonplace. I am replying to all of them in a few words below.

[See one paragraph statement after statement of questions 3 – 10]

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

- (1)** *adequacy of medical relief provided; and*
- (2)** *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1)** *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2)** *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries and museums;*
- (3)** *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a)** *the State,*
- (b)** *the local boards,*
- (c)** *the Universities,*
- (d)** *private agencies (individuals or associations).*

Until there are excellent Vaidik and Yunani colleges in which anatomy, surgery, and the eight parts of Ayurveda are taught, then the true state of these medical systems will not be manifest. There is no benefit to these medical systems in any other kind of help, including creating chairs for them in medical colleges. The course of study can be created by a committee of *vaid*s and *tabīb*s. In addition to this, wherever there are free government hospitals, Vaidik and Yunani hospitals should also be established. We do not need a medical registration act. Doctors themselves complain about it. So what is the need for us to beat ourselves with it. There has been no benefit whatsoever of any of the medical registration acts that have been passed. It is better to keep our distance.

LAHORE

From Pandit Vaid Bihari Lal Jhingan Sahib Bahadur

Translated from the Urdu by SABRINA DATOO¹

To the Secretary of the Committee on Indigenous Systems of Medicine, Post Box 262, Madras.

Greetings Dear Sir,

At the meeting of the managing committee of the Society of Physicians, Lahore (*Anjuman-e aṭibba-e lāhor*), held on the 17th of September 1922, a resolution was passed to the effect that several reputable physicians (*ṭabīb*) would consider the questions of your committee and answer them to the extent possible. Therefore, acting upon the instruction, some answers have been submitted.

Question 1

What is the division or divisions of the indigenous systems of medicine—Ayurveda, Unani or Siddha that you propose to deal with?

I don't consider Ayurveda and Yunani to be separate medical systems. Both are based on the principles of the natural unity of the humours (*qudrati waḥadāniyat-e akhlāt*). It is necessary to promote both of these indigenous (*mulkī*) medical systems throughout India.

¹ I would like to acknowledge the colleagues with whom I discussed this translation project. I would like to thank Faezeh Mirshahi for her willingness to discuss all things Persian, and Hasan Siddiqui for his thoughts on the Mughal Persian citation in Bihari Lal's testimony. I would also like to thank Jennifer Dubrow, Karim Javan, Shefali Jha, and Aysha Munira for helping me discern the words obscured by a few challenging typographical errors.

Question 2

(a) *What is the theory or theories of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism?

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

My system of medicine is a unified science of treatment (*waḥadāniyat-e 'ilm-e 'ilāḡ*). I consider the theoretical explanations (*qiyāsi taujīh*) for the causes of illness to be only the ones given below. That is because it is only in these two indigenous systems of medicine, Ayurveda and Yunani, that keeping these causes of disease at the centre of attention is necessary. Moreover, throughout the world, it is these causes of disease that are necessary to consider first in the diagnosis of all diseases in all types of medical treatments. It is my opinion that there is no differentiation or dispute related to the causes of diseases between indigenous medical systems and the modern developed allopathic treatment. We have no objection to the investigation of causes of diseases by means of bacteria (*bakṭariyā*) that modern science (*jadīd 'ilm*) considers its stamp of modernity. This is a welcome and necessary achievement in developed countries. However, our claim is that those *bakṭariyā*, or germs (*jarmz*), that are not found in a healthy body, appear in a condition of disease, even though the sick person cannot (yet) feel that disease state. But this early condition is like the seed that, before sprouting, lies hidden under the Earth.

In the same way, this is a verified truth that the germs of an illness appear later, while the spoilage (*kharābi*) of humours in the body begins first. Unfortunately, the modern science of daktari has chosen to neglect these humours. Otherwise, certainly they too would be convinced of the truth mentioned above.

At this point, I also want to emphasize that proving that the cause of each disease is a different type of germ, through investigating bacteria, will also prove to be a difficult matter. Contrary to this, it has been confirmed and verified for hundreds of thousands of years that in a healthy body humours are in

equilibrium (*ē'tidāl*), and illness is the name for a poor equilibrium of humours (*khilṭon ki bad ē'tidālī*). This poor equilibrium happens [on] a small scale, in a [similar] manner to what happens with our possessions (*sāz-o-sāmān*) over time. We depend on our possessions to be cleaned daily. If we don't keep cleaning our things inside and out, then over time, they become dusty, discoloured, misshapen, useless, rusty, etc. – as though this condition was the manifestation of illness in these things. However, this doesn't happen in a day. Rather, for some time (and) in the early stages, the things seem clean. It is as though for some time, the dusty condition is so slight that one doesn't even suspect spoilage or illness. However, wise men throughout the world have declared the necessity of everyday cleanliness precisely to avoid illness. As with possessions, so with the human body. Its daily washing and cleaning is necessary to remain clean from external dirtiness. Keeping the body free from internal impurities also keeps the internal state of the body well.

This is the very goal of the science of treatment. It is to allow every person to keep their health strong and sound by natural methods, and to stay clean and pure through daily internal and external cleaning. It is the role of the physician to keep guiding both rich and poor on how to preserve their everyday health and strength. To bring the derangement (*bigār*) of humours back into equilibrium before the onset of diseases, in order to keep proving the reason for their guidance. By being attentive in this way, the health and well-being of the country can be established and preserved, and people can be spared from being afflicted with fateful diseases.

If the government and the government's modern, developed physicians ("doctors") genuinely want to spread our indigenous systems, then I would say that they ought not to persist in their ways. If, in their eyes, humours are nothing, and they want to, at present, remain aloof from the science of humours, then they ought to have mercy on the people of India and stop being an obstacle to their natural causes and means of health (*tandurustī*). Rather, it would be appropriate and their duty to provide the equipment necessary to further the spread of the indigenous systems, according to the will of their practitioners, so that indigenous practitioners can show the government, the government's doctors, and the subjects the miracle of the effects of their treatment in the full light of day. Should we hope that our ambitious doctors will also give these old medical systems the opportunity to rise [anew]? If human compassion and fellow-feeling is indeed intended, then that is exactly what will happen.

A few principles, before understanding the causes of diseases.

1. Nobody can deny that constituents of the four elements – air, fire, water, earth – are included in the creation of all existing things (*kā'ināṭ*) in this ether (*akāsh*). It is the balance (*mauzuniyat*) and equilibrium of these very constituents that is the basis of human health. There is no cause of disease that gives rise to sickness without also being the reason for disequilibrium in the mixture of airiness, fieriness, wateriness, and earthiness in the body.
2. These constituents of the four elements are so fine that they cannot be perceived with the five external senses. Moreover, the sensations we may have of these four elements through the five internal senses is far duller than the actual subtle (*latīf*) condition.
3. It is a virtue of Indian medical systems that they judge (*jaj*) the effect of everything that enters the body from the outside according to the 'four elements'. And whatever changes these things cause in the body, [indigenous systems] correct for them by adjusting food and drink. And so the beginning stage (*sṭej*) of treatment for diseases that arise from errors in eating and drinking is to correct eating and drinking and thereby return [patients] to health.
4. A person's work is most often the reason for his illnesses. For example, a clerk at an electricity [power?] factory (*bijli ke kārkhana ka ek bābu*) was in the habit of rushing off to work as soon as he had finished eating. He always was bothered by an upset stomach. He tried different treatments but the condition didn't go away. He came under my care and I understood that the real cause of his illness was this running around right after eating. I advised him that after eating, he should rest and then take his time going to work. With this small change, he began to return to health. This proves that the effects of our daily work are also good or bad for our bodies or, put it this way, on our elemental constituents (*anāṣirī ajzā*).
5. There are also causes of disease that are unforeseeable events and accidents. They affect the spirit (*rūḥānī ṭāqaton*) first and then also reach the bodily four elements.

In brief, it can be said that the experts of the indigenous medical systems have divided causes of disease into two types – controllable (*ikhtiyārī*) and uncontrollable (*ghayr ikhtiyārī*). The first type, controllable, includes eating, drinking, and activities which one can control. The second type, uncontrollable, includes accidents, etc. The effects of all these types of causes of disease in the body generate changes in the bodily elements. The name given to understanding these changes is the foundation of diagnosis (*tashkhiṣ*). No doctor can say that some other prior cause can prove the existence of disease before the above-mentioned causes of diseases. That is because in every

case, no effect can occur prior to the effect of the four elements (*arba' 'anāṣir*).

6. And now pulse recognition and other similar means of diagnosis. I have no hesitation in accepting that common people hold the misunderstanding that 'Merely putting the hand on the pulse reveals all the details of the disease.' In this period, pulse recognition has been made even more difficult, [mostly] because our indigenous systems of medicine do not have any arrangements for in-patients. Otherwise, one could present evidence of the varying degrees of a single illness by taking the pulses of admitted patients at different times and in different conditions.

However, it can also be said that sometimes the English doctor will declare a patient free of fever using a thermometer (*tharmāmeṭar*), while a master of indigenous medicine would be alerted that the patient is afflicted by a dangerous fever, even when the temperature (*ṭamprechar*) is less than normal (*nārmal*).

These days in India, the reason patients with consumption (*tap-e diq*) neglect treatment at the beginning stage (*sṭej*) of the condition is that according to the thermometer, the fever is proved non-existent. In educated circles, neither has pulse analysis remained popular, nor do these people trust it.

However, I will say this much: that in every circumstance, the pulse will reveal the humours and the mixed elements (*'anāṣir tarkībī*) in the patient and these are the matters that truly guide diagnosis, and this is seen in urine (*qārūrah*) as well. That is, whatever is done to arrive at a diagnosis, it is done for the guidance and confirmation of the humours. I won't say more about the effects and powers of the four elements here. I will only say this much more: voice; motion and rest; warmth and the heat of passion; coldness and the tranquility (*taskīn*) of the heart; forbearance and endurance, etc. – all of these are the miracles of the four elements. The four elements of our bodies continually meet with the four elements outside our bodies and are the reason for health and disease. The more a healer understands these natural enigmas (*qudrati ramz*), and the more he understands the effects of these natural observations, the better is his command over the science of treatment.

I think that the indigenous methods of treatment, Ayurveda and Yunani, are more beneficial than all other similar treatments, not only in some cases but always, in each situation. Since those other treatments do not take into account the humours or the effects of the four elements in the diagnosis or the effects of treatment.

Question 3

(a) *Are you connected directly with any institution providing medical relief or medical education on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

Concerning medical institutions, I am content to narrate two instances from my personal experience below. I do this because these instances concern in-patients which are more important than “out-door patients” for this scientific investigation.

The first: In 1918, there was a serious epidemic of influenza (*aṇflūā'īnza'*) in Lahore. The Arya Samaj gave me the responsibility of making daily visits to the homes of about one hundred of the poorest patients and treating them. I diagnosed them according to the indigenous, that is humoral, method and treated them accordingly with food provided by the Arya Samaj and with the principal (*bālā nashīn*) inexpensive indigenous medicines. I also arranged to have pleasant-smelling things burned in their homes to purify the air. It is necessary to state here that in each of these homes, almost all of the inhabitants were sick, and most of them did not even have a single person in the house to give them water to drink. Even in such conditions, out of nearly one hundred patients, only three died, and the rest were saved. My report (*rapūrī*) concerning influenza (*aṇflūā'īnza*) is available at the office of the Lahore Municipality (*Miyūnespālī*).

Second: In the year 1921, extremely sick orphans in famine-stricken areas of the Central Provinces were saved from death by the Arya Samaj Pat (?) Loan Fund. More than a hundred were placed in orphanages where they were treated and cared for. They were all under my care. I also considered them in-patients and was very successful in treating them very inexpensively with the principal indigenous medicines. Apart from one or two orphans who died in transit or within a few days of arriving in Lahore, by the grace of God, all of the remaining were spared from the epidemic diseases of famine. Those who saw the state

of the skeletal children leaving famine-stricken areas with their own eyes or at least saw the photographs and pictures, would well understand that these children didn't have the energy to get back on their feet for several weeks. Aside from this, whatever scraps (*rad*) they managed to eat during the days of the famine made them horribly sick. They required treatment long after their strength had returned. Almost all of them kept falling prey to cholera (*haiṣah*), pneumonia (*namūnīah*), etc. They were besieged by fevers, coughs, and skin diseases as well. But, thank God, now they are in a better state than ordinary children. And all of this treatment was based on nothing more than recognizing humours and the effective changes in the four elements. I will list the diseases below and their signs in brief to illustrate what I mean:

A patient with smallpox (*chechak*); 2) bloody vomit and diarrhea; 3) bad fever (*kharāb bukhār*); 4) cholera; 5) pneumonia; 6) *kirim shakm* [?] – expulsion of vomit and feces in foot-long trails; 7) *kirim* [?] *dimāgh* – tiny worms that leave the head through the nose; 8) an infected wound that doctors treat by cutting off the leg; 9) diseases inside the throat; 10) *kalṭiyan* and *hajīren* outside the throat; 11) episodes of fainting and *mazgi* [?]; 12) a woman who was in a dangerous state of unconsciousness for five hours and was saved from death; 13) rectal prolapse (*kānch nikalnā*); 14) bodily itch (*khārish*); and other skin diseases.

In sum, a variety of conditions were alleviated merely by diagnosis based on humours and simple treatments.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries and museums;*
- (3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

From the perspective of arranging for satisfactory healers and the appropriateness of training at medical centers, the existing state of indigenous medical institutions (*tabābat khāne*) is not what one would wish for.

There should be at least one indigenous medical institution in each district, Ayurvedic or Yunani, established and funded by the government. It should definitely house in-patients. After obtaining reports of success, the number of indigenous institutions should be increased. Medical education connected with these indigenous institutions should be organized according to the wishes of capable healers.

All of the topics here have been addressed in brief above.

Question 5

Do you agree with the view of the Calcutta University Commission that:

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of western medicine the traditional knowledge which is of real value and will reject, as western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

I do not agree with this idea from the Calcutta University (*yūniwarsaṭī*) Commission (*kamishan*) that the speculative reasoning (*qiyāsī taujīhāt*) of the indigenous medical systems (which in fact is not merely speculative but based on truths of theory and practice) ought to be rejected. As long as the followers of Western medicine do not study the Indian systems of healing closely and do not try to understand them, this accusation of theirs is unwarranted. The truth of this is well perceived by those doctors who have carefully examined and practiced Ayurveda or Yunani alongside *daktari*. Such doctors are convinced of the speculative reasoning of the indigenous systems of medicine.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, and also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to:

- (a)** *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*
- (b)** *The preliminary qualification and periods of study for each of the standards proposed.*
- (c)** *The medium or media of instruction proposed.*

I agree with this, that the curriculum of the indigenous medical systems should include education of the modern scientific methods. However, this should not have the effect that the spread of outside medicines has (previously) had on indigenous medicines, leaving them to be ignored. That is, the English form of education should not eliminate the extremely necessary older educational methods, which are necessary for India. That is why I emphasize that it is more necessary to develop medical education with the guidance of well-established, capable and experienced indigenous physicians. Indeed, it is the duty of indigenous physicians to use the research of these new methods to their benefit.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding:

- (a)** *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b)** *any changes in or additions to the existing legislation on medical registration.*

If the intention of the registry law regarding indigenous systems of medicine is to ensure their spread and preservation, then I am in support of it. Otherwise, there is some concern of being obstructed by this registry law.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Regarding the expenses of the Western and indigenous medical systems, in my opinion, the indigenous systems, Ayurveda and Yunani, are far less expensive and a cut above (*bālā nashīn*). What could be better proof of their affordability than [the fact] that our indigenous medical treatments begin with using the everyday food and drink in our homes? Merely using water, cold or warm, at the very beginning of treatment, resolves innumerable sicknesses. After this, the country's medicinal roots and plants and trees cure innumerable illnesses. In villages, poor people obtain such treatments without any cost. Moving ahead, the animals raised in homes also have innumerable benefits for treatment. For example, the stomach problems of the children in the orphanages were cured with cow's urine (*go mūtr*), which doesn't cost a cent. And other examples along these lines.

However, one ought not to think that there are no costly prescriptions used in indigenous medical systems. On the contrary, the most expensive medicines are available for the delicate dispositions of the wealthy. And this is one of the good things about indigenous medical systems: The effect of each medicine is defined according to the four elements. And these elemental constituents (*'anāṣirī ajzā'*) can be obtained from inexpensive things as well as from the most valuable.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

In my opinion the most important reason for the decline of indigenous medical systems is that the dignified high government and the government's powerful doctors have understood indigenous medical systems to be ignorant and absurd.

Instead of raising them up, they have defamed them with respect to both theory and practice.

Before the English rule, in the time of the Muslim kings, it is seen that the rulers of the time and the medical tradition and physicians they brought with them had no dispute with local Indian traditions. On the contrary, in those days, keeping in mind the health and convenience of Indians, the aim was adopted to spread the truth of Indian traditions without any partiality and without any religious or intellectual prejudice. And its truth was accepted openly in the royal court. Given this, consider the citation below, which has been copied from the prefatory remarks of the book *Sikandar Shah's Mine of Healing*²:

بحسب تجارب معلوم شده که حکمت یونان مناسب و ملایم امزجئی مردم دیار بند نمی آید و موافق آب و هوای این بلاد نمی گراید و چون اسامی ادویه بزبان فارسی و یونان مسطور است حقیقت آن درین ولایت معلوم نمی گردد و اکثر آن یافته هم نمی شود پس ضرورت گشت تتبع کتب حکماء که چون مقناطیس است برآین اقسام ابنیه و فساد امزجہ را

It has been discovered by experience that the medicine of Greece does not suit the delicate temperaments of the people of the Indian region. It is not in keeping with the airs and waters of this land. And since the names of the medicines have been written in the Persian and Greek languages, their meaning cannot be understood in this territory. Also, most of them were not obtainable here. And so it became necessary to investigate the books of the physicians of India, to draw out the varieties of physical types and the possible derangements of temperaments, in the way a magnet acts upon iron.³

It is worth reflecting on the matter that during the rule of Muslim kings, when the advancement of Yunani medicine and the progress of its court physicians would be expected, it was considered a sin to undercut local Indian medical traditions. On the contrary, the ruling court and the royal physicians thought it their duty to spread the theory and practice of Indian medicine, keeping in mind its validity and the comfort of the people.

² This text is likely the 16th century book by one Bhuvah Khan ibn Khavass Khan: *Ma'din Al-shifā'-i Sikandarshāhī*; For more about this Persian text see: Speziale, Fabrizio. "The Relation between Galenic Medicine and Sufism in India during the Delhi and Deccan Sultanates" East and West. Vol.53 no1/4 (December 2003). p154.

³ The translation of this Persian passage is my own, as are the translations of other Persian aphorisms within these Urdu testimonies, and I am responsible for any errors in them. However, I would like to thank my colleague Hasan Siddiqui for discussing this passage with me. I would also like to thank my colleague Faezeh Mirshahi for our on-going and wide-ranging discussions of Persian translation.

During the time of those kings, it was considered a virtue that Yunani and Hindi physicians could learn from one another's medical traditions. Consider the goodwill that prevailed at that time: The royal court and the royal physicians were not simply concerned with their personal profit or trade but rather they demonstrated respect for both the spiritual sciences, that is the study of religion, and the bodily sciences, that is medical treatment, of India's residents. However under English rule, unfortunately both types of knowledge – Indians' sciences of the body and of the spirit, their natural health and the yearnings of faith – have taken a hit because of the destruction of their natural sciences. And up to the present, there remains the anxiety that these Indian sciences of the body and sciences of the spirit will be annihilated under the pretense of improving them.

Cannot the government, as it does with English doctors and missionaries and keeping in mind the human rights (*insānī haqūq*) of Indian healers and Indian religious missionaries, openly support and uphold their dignity?

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

If the government wants to atone for the devastation of the indigenous medical systems, Yunani and Ayurveda, then it should establish at least one medical institution each of Ayurvedic and Yunani medicine in every district. These institutions would house in-patients as well as offer medical education to students. They would also study and act upon English research on medical treatment and medical improvements.

In addition, students in schools everywhere – primary, middle, and entrance (?; *yanṭrans*) – would be taught the big issues in subjects of diagnosis and treatment according to their abilities. So that using this knowledge will become common in every home within a few years.

In my opinion, it is necessary to employ the services of an indigenous medical practitioner in each and every school. When this teaching becomes an accepted part of the course, then the teachers themselves will become familiar with it of their own accord. So that even without the indigenous physicians, they will

enrich their classes with the knowledge of the humours and the humoral effects of indigenous medicines.

Before closing my testimony, I want to emphasize that the basis (*kasauṭī*) of our humours has been taken from the four elements. This basis can be equally effective in all methods of treatment throughout the world, as long as the science of humours is very well understood.

HYDERABAD DECCAN

Janab Hakim Hari Govind Sahib Bahadur Vaid

Translated from the Urdu by SABRINA DATOO¹

The committee organized in Madras for the investigation of indigenous medical systems, their principles and methods, and information on their compatibility with science.

In connection with this, an introductory memorandum to medical questions on *vaid*s and *aṭibbā*.²

I have a few thoughts to submit before I answer the questions of the Madras committee to investigate the foundational methods of the indigenous medical systems in order to obtain information on their being scientific.

In our “All India”, a wide variety of medical traditions are currently practised. Of all of them, three are accepted as being scientific and excellent. First Ayurvedic, second Yunani, and third allopathic, which is also called daktari medicine (*dāktarī tibb*).

It ought to be known that in 1910, a high-level, all-India committee of doctors was organized in Bombay in which there were no *vaid*s or *aṭibbā*. It was large assembly of only doctors, in which a resolution was passed that “Ayurveda and Yunani systems are both harmful and unscientific, and it would not be an exaggeration to call them little more than a collection of speculative deceptions (*khayālī dhakoslon*)”. It was proposed that it would be desirable to professionalize both of these systems. As a result, a law was passed called the Medical Reg-

¹ I would like to acknowledge the colleagues with whom I discussed this translation project. I would like to thank Faezeh Mirshahi for her willingness to discuss all things Persian, and Hasan Siddiqui for his thoughts on the Mughal Persian citation in Bihari Lal’s testimony. I would also like to thank Jennifer Dubrow, Karim Javan, Shefali Jha, and Aysha Munira for helping me discern the words obscured by a few challenging typographical errors.

² *Aṭibbā* is the plural of *ṭabīb*, a noun meaning ‘medical practitioner’. In India, in this period, it can be used, as in this sentence, to indicate a practitioner of Yunani medicine. ‘*Vaid*’ refers to practitioners of Ayurveda.

istration Act. When the Act began to come into force, *vaid*s and *aṭibba* initially misunderstood it, and then having understood it, became anxious.

Alarm bells rang out from the four corners of India. The experts of the traditions woke up. A lot of noise was made. The problem concerning the preservation of traditional medicine was presented in government. The implementation of the act was stopped. But it appears that the embers kept burning and on the 21st of January in 1921, they flared up in the legislative council. A proposal was approved on the basis of which the government recommended that the indigenous medical systems should be organized along modern lines. According to Government Order PH Press, dated 17th October 1921, the government appointed a committee with the intent to “accept the validity of indigenous medical systems and present a report on the problem of how to improve them”. It is on the basis of this order that the committee desires to become familiar with the thoughts of all *vaid*s and *aṭibba*, so that there is greater ease in legal proceedings. The desire is good; the proposal is excellent; the thoughts are correct. However, our fear is also appropriate. Consider the meeting in Bombay in which there was no participation of any *vaid*s or *aṭibba*, and doctors amongst themselves expelled the two indigenous systems, that is Ayurvedic and Yunani. In ignorance, they accused these two systems of being unscientific, the fight over which continues to this day. We wouldn’t want the same thing to happen this time – that they come to an agreement among themselves and the experts of the indigenous medical systems are left staring blankly. If there is dread and fear, then it is of this. Otherwise, we wouldn’t retreat by even a hair’s breadth from implementing the committee’s command. Having debated each and every subject and created a correspondence, we will demonstrate that within our Ayurvedic system, there are many branches of knowledge that are compatible with modern science (*jadīd ‘ulūm*). This will be clearly proved to whomever pays close attention to the matter and examines it justly. And the good will be sorted from the bad.

In the introduction to the questions, the astonishing demand was thrown down that whatever answers are given, “they ought to be worthy of acceptance from the view of modern science, and the proof of those matters which are logical in modern science, from which a particular type of result is obtained, on account of being conceivable, will be considered worthy of acceptance”. Apart from this, revelations, sacred signs, the authority of traditions not subject to criticism, (and) whatever elevated arguments are made related to their value and contents, as legitimate testimony, they are not worthy of acceptance from the perspective of modern science. The intention of this sentence does not seem to only apply to indigenous medical systems; rather the reasoning of this objection

can be applied to modern research as well. However, what need do we have for someone who makes such an allegation? At this time, our job is to answer the committee's questions and in so doing, to demonstrate the compatibility with science to the extent that it is possible and to prove our indigenous medical systems are scientific in comparison to modern research. The historical references in support of the antiquity of our medicine, mentions of the inventors of indigenous medicine to show its benefits, the condition of the intelligentsia ('ulamā) that are aligning it with science, etc., will all take months to work through. Therefore, they have been ignored for the time being.

I cannot stop myself from making a supplication, with all modesty, in the venerable service of the honourable members of the committee. Is it possible that the medical system that has enjoyed the generosity of government patronage is scientific? Can a medical system whose professors admit its incompleteness and whose research has no confirmation, be called professional or be understood as such? Can a medical system that in times past was the translation of another medical tradition, be said to be superior in comparison with the original medical system?

If it doesn't offend anybody, then we are ready to prove with our old books that modern medicine is a translation. We can fulfil the committee's wish while making it correspond with traditional medicine (*qadīm ṭibb*). The result of this might be that traditional scientific medicine and modern scientific medicine will combine to create a new syllabus in sympathy with and to meet the needs of their fellow beings. That would be enough for us. However, for this to happen, each one of the partisans of each medical system would have to remove prejudice from his heart and not allow any selfishness or ambition to come nearby.

It is not a hidden matter that The Omnipotent has, with its perfect power, created useful plants and roots in this country according to every attribute of the country – according to its airs and waters, its temperament and powers. To eradicate the diseases that happen there, nature has filled the roots and plants with the effects to counter and repel those diseases. The subject of this introduction is very broad, which is clear to members of the committee. Therefore, putting it aside, we are ready to answer the questions. It is requested that close attention is paid so that something can be achieved from this.

Question 1

What is the division or divisions of the indigenous systems of medicine—Ayurveda, Unani or Siddha—that you propose to deal with?

Because I know the traditional Ayurvedic system and want it to endure, I am its assistant and supporter. I know Yunani medicine as well and so am (also) a supporter of it. Daktari has some points that are worth admitting. On the basis of this, I am interested in daktari as well. This is the truth, if anyone accepts it, then very well; if not, I have no complaint. If the Ayurvedic, Yunani and daktari systems, are observed closely, one finds superficial (*farū'āti*) differences, however no difference whatsoever appears in the fundamental methods (*uṣūlī tarīqon meñ*). In our opinion, there is correspondence on most issues which we will present to the honourable members of the committee.

Question 2

(a) *What is the theory or theories of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism?

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

Answer to Question 2

It is accepted that the Earth is a world of causes. In this world of causes, there are millions of types of things that are visible. They are considered a cause or a collection of causes. Because the Earth is a changing thing, at every moment, there are alterations that keep appearing within it. Whatever is changing is just begun. For the changeable things of the world, alterations are extremely necessary. That is because effects without cause, and a cause without a cause, cannot come into existence. In addition to this, there is no kind of disease or diseases that happen without causes. Concerning this, the ancient professors have declared that even a cause cannot be without a cause.

The conclusion of this statement is that whatever thing of the Earth, whether it is observed (*mar'īy*) or unobserved (*ghair mar'īy*), cannot be created without

causes. This is a reference to causes in general about which a great debate can be had.

Now, from this point, we intend to discuss the causes of diseases. We would like to make the honourable members of the committee bestow their sophisticated thoughts on this matter so that they can make the correct legal proceedings.

It should be known that concerning the causes of diseases, the findings of the sages of the Ayurvedic system, the information of the professors of daktari, and likewise the thoughts of the hakims of Yunani are all a bit different.

Significant differences have occurred amongst the sages of the Ayurvedic system too. Some were satisfied with four causes, others relied on three. Some closed the matter at only two causes. We will discuss this ahead. It seems appropriate to mention all of the causes, paying close attention to how research on the causes of diseases has been done in our Ayurvedic system, and whether, through debate, it can be found compatible with modern research or not. For example: *par adhānik hetu*; *vapar krasht hetu*; *sanī krasht hetu*; *vebhi chāri hetu*; *asātme andrī ārth sanyog hetu*; *par ganiyā aprādah hetu*; *brī nām hetu*; *atpādik hetu*; *vanchik hetu*; *bhasiya hetu*; *abhnetr hetu*; *dosh hetu*; *vabādhi hetu*; *adihiye hetu*; *samwāi hetu*; *asamwāi hetu*; *agnatik hetu*. These are the 17 causes, that is, causes that are the invention of the founders of the Ayurvedic system and which are from research and experiment as has been explained. A serious scientific (*sā'intīfik*) debate can be had on the causes that have been mentioned from numbers five to seven. If we mention *asātme andrī ārth sanyog*, then we would have to include a detailed discussion of the five external senses and the five internal senses. That is a lengthy task. The very particular pleasure of listening to a discussion of this subject is impossible to describe. We have left it aside in keeping with the subjects determined after discussion within the committee. The discussion of the soul of sensual pleasures (*naḥs-e ammāra*) is also a deep subject. We have ignored it as well. Discussions of *par ganiyā aprādah hetu*, etc. and their benefits and the easy flare-ups (?; *sahal angāriyān*) that, in diagnosing, disease, are understood to be the highest concerns of medicine. To mention them is against the rules of the committee. So we have left that aside as well. A discussion will be had on this issue on the appropriate time.

The sages of the Ayurvedic system have divided the manner of practice for this issue into seven parts, entered below: *namat*; *hetu*; *āyatan*; *prate*; *authān*; *kāran*; and *nidān*. Its *viyākhyān*, that is, its detailed explanation, is very lengthy and so has been set aside. However, it seems appropriate to offer a brief mention of the meaning of the names. *Namat* is that which is found alongside the disease. *Hetu* is that which advances the condition (*rog*). *Āyatan* is that in which the disease stays protected. *Prate* is that which makes the disease apparent. *Autqān*

[sic] is that which gives the disease *ashta'ālik*. *Kāran* is that which creates the occurrence and beginning of the disease. *Nidān* is that which brings the disease to its full manifestation.

It is also the corroborating opinion of some hakims that until celestial causes and terrestrial causes and shared causes are combined, and until they reach the peak of their collective state of derangement and take on a transgressive state, until that time, from among the six seasons, no one season is spoiled.³ As long as the season is not spoiled, the air is not spoiled, and as long as the air is not spoiled, the food is not spoiled, and the humours are not spoiled. As long as the humours are not spoiled, no type of disease or diseases appears. Here, too, it seems unnecessary to offer a detailed explanation of the problem of celestial causes and terrestrial causes, which is a complicated problem, as is its connection with the effects of the country. They are found to be like a limiting cause (*hetu inḡibāt*) on the terrestrial particles, which spoil the terrestrial particles. That is, a wide variety of poisons, according to the season, create a unique type of change in the terrestrial particles, which is understood to be the reason for disease. This is a very delicate and scientific subject. Its explanation is too lengthy for a short period of time. There is a fear that the distinguished members of the committee will not attend sufficiently to it because of this length, and that would be a waste of work and miss the actual intention.

In keeping with the express wish of the distinguished members of the committee, we want to discuss causes numbers one through four: *par adhānik hetu*; *vapar krasht hetu*; *sanī krasht hetu*; and *vebhi chāri hetu*. These are the four causes about which Professors Hari Chandar and Hari Chandar Bhattachari have clearly stated in their book *Ap kalpanī adhā* that these four causes are understood to create the incidence and cause the beginning of disease. Through their individual nature, effects, powers, and ingenuity, having spread their poisonous effect through part of or the entire body, they create a variety of diseases and conditions.

Professors of modern research have admitted this and accepted it wholeheartedly. We think it appropriate to discuss it here. *Prādhānik hetu* can be called the first cause. It is the cause that is also called the natural temperament (*mizāj fītrī*); it is the third temperament that is created or the type of temperament that is established at the time of union between a man and a woman, that is during sex from the temperament of each of them, whatever it may be and after the mixture of both of their temperaments. It is called that because this temperament has entered the nature (*fītrat*). It has been found to be stable. And, in it,

³ In this sentence, and below, "transgressive" is my translation of *muta'ddī* (معتدى) which I believe is the word intended by the text, where معتدیه and معتدیه have been typed.

whatever types of causes that will be entered in it or will be found to be combined, they will exist according to their true action, that is, their natural action (*fītrī fe'l*). There will be no opposition to this. However, yes, it is another matter altogether if it is not understood by the professor of some system or if it is evaded for whatever reason. We feel compelled to explain this in detail because this is a complex issue and requires discussion. And so we are only satisfied with this.

We are calling *prādhānik hetu* a natural cause. This cause creates disease with the help of seasons (*ritu*), that is the six seasons and through the four pillars (*arkān*) or five, and the four elements or five, when it enters the body in a refined form and deranges the indivisible particles of the elements (*ẓarāt lāyatajzīā 'anāšir*). It creates a type of change which we name the distant cause of the disease (*sabab ba'īdah marẓ*). This is what has been given the name remote cause (*rīmoṭ kāz*) in modern research, that is (among) daktari. Although the meaning of remote cause is behind (*pīche*) or distant (*ba'īd*), nonetheless, the subtlety found in a close examination of the discussion of *prādhānik hetu* will not be found in remote cause (*rīmoṭ kāz*). In our opinion, if, instead of remote cause, the name “prime cause” (*prem kāz*) had been given, that would have been better. Well, what of it? If this error were removed from daktari and the Ayurvedic system and the allopathic system were understood as separate due to a difference in language, it is of no consequence. However, with respect to the subject matter, it is worthy of being understood as one. From the perspective of age, it can be understood as the translation of Ayurvedic [knowledge].

This important problem has not been explained with any commentary by modern researchers. The reason this problem has been ignored, without a detailed explanation, is not known. Very quickly, it was divided into two types – one predisposing cause (*prīdispozīng kāz*), which means prior cause (*sabab se ba'īdah*), and another, exciting cause (*akseṭīng kāz*), which is called a near cause (*sabab qarība*). It seems that “predisposing cause” is a translation of *prakraśṭ hetu* which, due to lack of observance of the rules of preventative medicine, makes the effects of the airs and waters of the six seasons enter the body. And having created a condition of accumulation in the body and having reached a transgressive state, it creates disease. The ancient sages (*pūrvaj rishīn*) of the Ayurvedic system gave this cause the name *vapar krasṭ hetu*. In daktari, it has been translated as “predisposing cause” which the ancient physicians (*hukmāy-e māsalaf*) have divided into six parts: *prabhāu*; *subhāu*; *prakritī*; *desh*; *kāl*; *ve*. And there is a type of particularity (*ek qism kī khuṣūṣīyat*) placed in the occurrences of diseases, due to the difference between woman and man and also with respect to family, mores, and occupation. This is because from the earliest days

of childhood to the last days of old age, the condition of a person does not remain the same. The disposition (*kaifīyat*) that is present in childhood is not found in adolescence and that which is found in adolescence does not remain in old age. That is, from the perspective of these differences in state, the causes of diseases are also different. At every moment, nature (*fīṭrat*) keeps changing, and the second temperament (*mizāj sānī*) is also changed.

Vapar krasht̤ hetu, which has been translated by daktari as “predisposing cause”, which means: poisonous substances that come from afar. Whether they be from celestial effects (*falkī tāṣīrāt*), that is the effect of the planets (*siyārgān*) or familial effects or the poisonous effects of an unsuitable season. And which enter the body and, having found cultivation and produced a transgressive form, leave in place the cause of the occurrences of diseases. And at the slightest provocation, it can become the reason for creating a disease or diseases, in the manner of a pretence for oppression. There are many parallels of this type that are related to *vapar krasht̤ hetu*, but we have left them aside because they are too lengthy.

Sanī krasht̤ hetu. This has been translated in daktari as an “exciting cause”, meaning that which creates disease through a recent absence of precautions. For example, the predisposing cause created, within the body, the transgressive matter of the poisonous effects. However, whether it will burst out in the form of a disease depends on a very little thing; the *sanī krasht̤ hetu* completes this. Take the example of not observing the rule of the six necessities in the medicine of the canon. That is, the actions that occur contrary to the rules of “hygiene” such as eating at the wrong time, sleeping at the wrong time, wearing inappropriate clothes, filth in the house or in its vicinity, or other actions that are against the natural disposition (*ṭabīʿat*) or against habit, which are called the proximate causes. Their exertion activates the transgressive matter and makes it ready to create illness.

Vebhi chāri hetu – which, in daktari, has the understood meaning of special cause. It combines the two causes mentioned above and because of matter (*māddah*), becomes the reason for the creation of disease. Harish Chandar Bhattachari’s idea is that as long as the four causes do not create spoilage each according to its own stages and do not participate in and aid one another up until that time, no disease can occur. This is a reference to those indivisible particles, which are called electrons (*alkaṭron*) and to those which some ancient sages called *anu* and *pramānu*, which are called atom (*eṭam*).

There is another way to understand the meaning of the causes and the method of treatment in the Ayurvedic system of the ancient sages. Whether they are indivisible particles or electrons, or atoms, or *anu* or *pramānu*, when they incor-

porate a poisonous effect inside them and it deranges their true state (*haqīqat*) from its foundation (*aṣṭīyat*), then its first effect acts on the *sanpūran dosh*, that is the four humours. The four humours also become deranged and adopt the same form as the invisible (*ghair mar'īy*) matter mentioned above. Because the invisible matter is a very fine matter, human eyes are not capable of seeing it. Whatever research is done on it is understood to be merely conjectural and speculative (*qiyāsī aur khayālī*). The great sages have named it the five subtle elements (*panch tan mātra*), which has been translated in daktari as five elements (*fif almentis*).

The five great elements (*panch mahābūt*), which are called the five elements (*'anāṣir khamṣa*), have been accepted as the cause of the creation of all things on Earth. Furthermore, it is understood to be the reason for each and every organ in the human body. So, what we call *dosh*, are the four humours (*akhlāt arb'a*). When the first poisonous effect by whatever means reaches those humours, the humours pull back from their true state (*haqīqat*) and their fluctuation and their derangement becomes the reason for disease. That is why the ancient sages have praised the humours with much fanfare. They have explained that it is the humours alone that are the reason for the occurrence of disease. When we think through our experience and treat and pay attention to their fluctuation, when they come into balance through treatment, then the disease is eliminated and total health is obtained. It would not be inappropriate to comment on this in brief. Some say that the humours cannot be a cause, rather that they are worthy of being accepted as a caused thing (*musabbab*). That is because they themselves have changed from their balanced condition due to some [other] cause. In a disease, the humoral signs that appear, are not humoral signs; rather they are signs of that cause (*vapar krasht hetu*) which has infected the humours. So the conditions and difficulties are the actions of that poisonous cause.

Some say that the cause by which the humours altered and the changed humours themselves, meet and become the cause of creating disease. Others accept that the cause which creates a change in the elemental particles (*ẓarāt 'unṣarī*) and inserts its poisonous effect into the mixed particles of the human body, creates disease. About some causes, they believe that they turn the primary and secondary elements of the human body (*panch tan mātrā and panch mahābūt*) away from their true state (*aṣṭī ḥālat*) and create havoc in their form and action.

The extensive discussion of causes from the point of view of the Ayurvedic system, that is the reason for the naming of each term and its occasions and context of use to describe those examples, was a necessary matter. However, it will become lengthy, so it has been put aside. Now the idea is to describe here

what the professors, scholars (*achārī*), and hakims of each of the three systems have said about the causes. We think it seems appropriate to explain this here.

Prādhānik hetu, which is translated as prime cause and which in daktari has been turned into remote cause and in Yunani medicine is understood as the first cause.

Vapar krasht hetu – included in it (are): *aupādik hetu*, *asātmay-e andrī*, *ārth sanyog hetu*, *abhnatīr hetu*, *dosh hetu*, *asmūāir hetu*. Doctors call this predisposing cause and intrinsic cause (*andrīnzik kāz*). Yunani hakims have named them past interior causes (*asbāb sābiqah dākhilī*), remote causes (*asbāb ba'īdah*), and material causes (*asbāb mādī*).

Sanī krasht hetu – *pragīna aprād hetu* – *wanchik (?) hetu* – *bā'ih (?) hetu* – *viyādhī hetu* – which doctors call exciting cause and intrinsic cause and the Yunani hakims call external causes (*asbāb khārijī*) and proximate causes (*asbāb qarbiā*). *Wehī chārī hetu*, *brī nām hetu*, *namat hetu*, *agnatik hetu*, *yog prayog (?) hetu*. Doctors have named this special cause and the Yunani physicians have described it as causes connected to the body (*asbāb wāṣila badnī*). At first glance, the above-mentioned causes which have been described, having been aligned with the three systems, seem to differ. This is the fault of the style of expression (*ajmālī bayān; sic*). If one were to consider a detailed explanation, then, God willing, it would be clarified.

In modern research, Professor Orange [?], in his work *Bacteriology*, that is, the science of bacteria (*'ilm al-jarāshīm*), which is called *jantūsh shāstra*, has ascribed the cause of all diseases to bacteria. He has proved with arguments and demonstrated that without bacteria, no disease can be created. However this matter is “under discussion”. The ancient sages of the Ayurvedic system have stated that before the occurrence of disease, through a cause or several causes, there is the entry and creation of poison, several types of which are described. The disease is born from this putrid matter. Of all of the causes mentioned above, only four are considered as given precedence. These four causes are *prādhānik*, *vapar krasht*, *sanī krasht* and *vebhi chārī*. The debate has been conducted with these four causes, and this debate is reasonable. If one examines the three systems closely, then one will find correspondence between them. Therefore, those causes, for which many names have been given before, are being put aside. Only these four causes will be discussed, and it seems better to demonstrate their compatibility with one another. This is because the causes described by the professors of each system are understood to be synonymous with words of the other systems. This division between three systems is correct from the point of view of their grouping. Only the difference of language is apparent.

However, from the perspective of meaning, aims and usage, they are worthy of being understood as synonymous.

To some extent, the alignment of the research of the *jantū shāstra* of the ancient sages and the *Bacteriology* of Professor Orange is understood to be unnecessary here. It seems enough to say that bacteria are created from matter, or matter is created from bacteria. It has often been proved by experience that first matter, of whatever type, does not putrefy as long as there are no bacteria, of any type, born in it. Just as, first, because of matter, somebody is afflicted with “typhoid fever”. Bacteria do not appear at all for seven days, nor is the disease clearly understood by the healer. He treats only by the visible signs. When the treatment is not successful, then a “*blāḍ akzāmineshan*” that is an investigation of blood is done. At that point, bacteria are seen and the name typhoid fever is given.

On these occasions, in the Ayurvedic system, the thing that gives rise to the disease is called matter (*mādda*). The names used are: *marṣ māddī*, *marṣ māddī murakkaba*, *marṣ māddī hazmana*, and *marṣ māddī wabā'iyā*. They think that as long as matter does not come into a cumulative transgressive state and does not become putrid, then bacteria are not born in it. So from this statement, it is proved that bacteria are the cause of certain causes (*kisi sabab ke sabab*) and the effect of some causes (*kisi 'illat ke ma'lūl*). Here we can say that disease is the aggregate of several causes and the poisonous matters of bacteria lead to difficulties. So that which has been said, that disease occurs from bacteria, is without argument. If we accept that bacteria as matter, then the theory (*thīorī*) of each of the three systems becomes one. If not, what is there to say?

SECTION 2

Now we are going to discuss what the benefit of pulse recognition is in the diagnosis of disease. Before discussing the benefits of pulse analysis and the results of its activity, we will discuss how to correctly diagnose disease with it. First, it seems appropriate to discuss what it is that we call *nabṣ* and what is named by *nabṣa*. We call pulse (*nabṣ*) whatever place the hakim covers with the fingertips of his hand – the index, middle and small finger – and feels motion, such as in the joint of the thumb – the artery (*shiryān*) situated there is called pulse. The motion of its contraction and expansion is named *nabṣa*. Since pulse is a type of matter (*ek qism kā jism*), because there are three divisions (*aqtār śalāṣa*) established in it, these very three divisions multiply with one another and are equal to “9”. And each division is [further] (sub)divided into three degrees. These three divided sections when multiplied by “9” are equal to twenty-seven. The teachers

of old have given a separate name to each of these twenty-seven patterns of motion (*harkat*). The honourable members of the committee are probably well acquainted with them. After that, the practice of pulse analysis begins. Decisions are made from which a particular type of result is obtained, which helps the tabib in the more correct diagnosis of the disease. That is if disease has occurred, then due to which causes? If it becomes manifest, then through the signs of which humours? Did the disease occur due to simple humours or mixed? Knowing this makes the course of treatment easier for the healer, and the patient becomes well (more) quickly.

According to the indigenous systems of medicine, the foundational rule of treatment is to first eliminate the causes so that the difficulties and infirmities of the disease disappear. Because, when the cause is eliminated, the effect also disappears along with it. At that time, the general effect of medicines on the vital organs takes place with a kind of consistency so that whatever lingering matter remains from the poisonous effect completely leaves the body.

The therapy of the Ayurvedic system is a scientific therapy (*sā'īnīfik mō'ālaja*). It has been established by the power of the East (*ishrāqi quwwat se*) with respect to the type of country and in accordance with its climes and the temperament and natural disposition of its inhabitants. That is why it has made the 33 core subjects of our generous and justice-loving government its admirers and adherents. Although the government system, that is the "allopathic system", does help the subjects in their time of illness, nonetheless, the kind of inclination the subjects have toward their own country's system is not like that towards any other system. Anyone who looks at the matter carefully and with an appreciation for justice, will find that the demand for indigenous medicine has increased. Whichever systems' demand is greater, that is the system that is understood as more successful.

The indigenous system offers patients an easy path. The non-indigenous system does not allow one to support its treatment. The drugs of the indigenous system are prepared by hand by its practitioners and the profit from them remains here. The practitioners of the non-indigenous system must know how to make medicine but we have never seen any one of them make even the smallest of preparations. Therefore, the medicine of daktari, which costs little, in coming to our country and enduring innumerable kinds of expenses, becomes a medicine that is very expensive.

This burden is borne by the patient. Moreover, it has been seen in some instances that a medicine has been demanded from abroad and before it has even arrived, the patient died.

SECTION 3

Keeping in view the aspects above, the methods of indigenous therapies are relatively more effective than others because of a few reasons. Often the medicine for the disease is prepared by our own hands and we know its chemical compound and we remember it. When we want to make use of plants, we use the ones that are appropriate to the natural dispositions of the country. Nature has created the medicinal plants to eradicate all illnesses right here in our environs, and they are compatible with the natural disposition of the people (who) live here and their temperament and diseases. If we can't recognize them, it is because of a shortcoming in our own minds. However, whenever the healers of our country are well acquainted with the effects of those homegrown flowers and have command of their effects and are masters of their actions, then there is a great benefit. For example, when quinine isn't available to treat malaria, grinding black pepper in the juice of tulsi leaves and making pills using them also works. Similarly, boil the inside of the bark of neem in water and drink one ounce of this drink three times daily and this will resolve the swelling of the spleen and the ruination of the liver that happens in malaria. We can offer many arguments such as this to support our position.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

Answer to Question 3

I am also among those who give a bad name where there are few of good repute. That is I am a family-taught hakim in the tradition of the Ayurvedic system of

my ancestors. I have been practising in Hyderabad Farkhunda Bunyad for forty-eight years. I have a fantastic clinic. In the manner of government pharmacies (*sarkārī dawā khānōn*), a register has been placed in the pharmacy. Formal certificates are issued. Different kinds of people are drawn here from places far and wide for different kinds of diseases. And by the grace of God, they find healing.

There is also a school (*madrasa*) for the Ayurvedic system connected to my clinic. It also offers education in Yunani tibb. Where it is felt necessary, some topics of daktari medicine are also taught to our students, having made them correspond with our medical system. The curriculum has been established along the old lines. At present, we have been content with “The Small Three” (*Lag-hotare*) and “The Great Three” (*Vrdhṛe*). That is, *Shārangdhar* or *Dhondaan*, *Bhāo prakāsh*, *Charaka*, *Sushruta*, *Vāg bhaṭ*, and *Purohit nighaṇṭ ratnākar*.⁴ Similarly, in Yunani medicine, *Mizān al-tibb*, *Tibb-e akbar*, *Mufarraḥ al-qulūb*, *Khazāyīn al-mulūk* are taught.⁵ The method of teaching is that after giving a lecture on the lesson, the article that has been read is explained. The art of making medicine is taught separately. Its students, after having been successful and found capable of practising, have established their clinics in a variety of places and are treating people. Their chemical formulation has been established according to the old way. For four years, there has also been a tibbi conference established in Hyderabad. It has been named Hyderabad Nizam Ayurvedic and Yunani Tibbi Conference.

In this time, the goals of the conference that have been successful are a gift from God. What medicinal and chemical plants have been acquired by the conference, in the provinces of Hyderabad, growing in the high government’s wilderness! The members of the conference having experimented on them and debating their actions and properties, have included them in their writing and they are worthy of praise. Hyderabad’s forest is not some ordinary forest. Rather, it would not be an exaggeration for the produce of the roots and flowers to be considered equal to those of the Himalaya Mountains. The flowers that grow and flourish in the mountains of Hyderabad and its surrounding area, and in other forests, these kinds are found with difficulty in the Himalayas or rather there would be no trouble in thinking they are not found there at all. And that is the state of plants. If we turn to consider minerals, then there are very many of them. It will be enough to say that. On this basis, our conference was successful

⁴ The named works are classic works of Ayurveda, composed in Sanskrit.

⁵ The first three of these three texts are modern compositions and were written by a single 18th century hakim, Muhammad Akbar Arzani (d.1722). These texts are described in Tazimuddin Siddiqi, “Hakim Muhammad Akbar Arzani”, *Studies in History of Medicine*, September 1981, pp 167 – 214.

in obtaining very high-quality plants. There is hope of even greater progress in testing and learning about their activities and properties, God willing. Those plants of excellent quality that we have tested or that we are going to test will be presented in service of the generous members of the committee.

From the point of view below, the indigenous pharmacies (*dawākhāna*) are found to be good. This is because most healers treat after having obtained some theoretical (*naẓarī*) and practical (*'amlī*) education. Some are healers after having gained experience in their ancestral practice. The only difference is that no schools, colleges or universities have been opened for them by the government, nor is their education formalized. They work only on the basis of their experience and are successful. This kind of healer diagnoses disease in his own way using the signs of the disease. And he treats very complex diseases with his patent medicines.

Section 1

Since there is no adequate arrangement on behalf of the government for their education, whatever they are doing should be understood as sufficient and satisfactory.

Section 2

There is no Ayurvedic system treatment anywhere on behalf of the government. If it can be found anywhere, then it lacks sophistication. Wherever medical education has been established through the interest of atibba themselves, it is much better and their curriculum of studies seems reasonable too.

In my opinion, to find fault in the existing arrangement would be uncivil. That is because the manner of practice of Western medical education is different from that of the Eastern one. Western medicine wants to dim Eastern medicine by giving it a glimpse of its foreignness and wants to leave it in the dark. While Eastern medicine, with its old, hidden gems, wants to enrich its fellow beings with the wealth of health. And it gifts its priceless gems to the government, saying, "If accepted, well done!"

Section 3

Whatever arrangements have been made at present for treatment and education in indigenous systems of medicine, without any outside help, are understood to be adequate and satisfactory. That is because when we examine this matter

closely, an abundance of people are under the treatment of the Ayurvedic system. This proves that even in this degraded state, without sophistication, they use its treatment and are successful. This proves that there is something excellent present in Eastern treatment that our minds have failed to understand.

Concerning treatment with indigenous systems of medicine, in my opinion there is never any proof of dissatisfaction. If there is inadequacy in any subject, then it is *shel tantra shārīr*, that is, surgery.

A human being needs surgery only once or twice in their life, whereas they need medicine (*medīsan*) every day. There are many reasons why the practice of surgery in the Ayurvedic system has become dim and rusty. I will present them in answer to one of the upcoming questions. And so I cannot ever confess to any dissatisfaction at the methods of the indigenous medical systems when all of the subjects of the Ayurvedic system are in perfect condition.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries and museums;*
- (3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

Answer to Question 4

Whichever type of medicine is currently practised today in our Hindustan, whether it be Western or Eastern, all of them can be understood as speculative (*khayālī*) and conjectural (*qiyāsī*) – this is not limited to indigenous systems. If the government has been sincere in its attention to the training of the indigenous medical systems – that the systems should endure, that their old reputation

should be restored throughout the world, that their priceless gems should be used for the welfare of the government's dear subjects – then is it a wonder that the treasure (trove) of sciences related to it should be retrieved or that taking consideration of airs and waters, of the type of country, and temperament and powers should be proved useful, or that it would demonstrate its abilities and progress very quickly?

1)

Every science (*'ilm*) is divided into two parts – theoretical (*nazarī*) and practical. It is extremely necessary to employ both of these in order to make the science of medicine successful. In order for this to happen, we need the kind of teacher under whose personal guidance students ought to be placed or you might say under which they ought to live, when such a one is highly capable of rendering this service. I have already submitted that the Ayurvedic system can never be separate. The teacher of the Ayurvedic system, with his excellent abilities, will teach voids allopathy through the *āyūr* [Ayurveda?]. And so, like it or not, it will be necessary to come to terms with those topics.

2)

After the completion of theoretical training, practical training begins, which perfects knowledge. At that time, the student, with his teacher or on his own, is required to obtain practical training by visiting dispensaries “*rasāin khānon*”, that is chemists or libraries or manufacturing sites. There is nothing new in this method. It is a very old method that the Ayurvedic system's ancient sages established in their own time. So then, if we come to our own path, then we can very quickly correct our old method and can demonstrate it in comparison with new science.

This matter is granted that as long as teachers do not receive adequate time for education related to their own subject in an independent manner, how can anyone conduct research? The new form of our traditional education is unique, due to which we cannot justly refute each others' practical methods. If we are determined to be obstinate, then then any kind of criticism is possible. When we carefully consider the necessities of medical training, then we see two subjects in which there is great difference. The first is science (*sā'ins*), which is called “*padārth wigniyān shāstra*” and the second is chemistry (*kameṣṭrī*), which is called “*rasā'in shāstra*”. Their practical methods are in a strange state. In this domain, which is under the control of the government, may it forever reign, one

will find that those (who) know the two shastras and can implement their practical methods of making medicine are limited to a few individuals. This should not lead one to think that the method of the Ayurvedic system is harmful. No, no. Its method is appropriate to it and even useful. Wherever some provision has been made for medical training, if people were to work with unity, obtain a little bit of governmental aid and show some compassion for humanity, then there is a strong expectation of reaching our goal very soon.

b)

It will not take much time to arrive at the aims stated above. We are ready to quickly demonstrate the good results of these goals, with the resolve of our longstanding experience, given the assent of the government and the grace of God.

“In closing” certainly the good results of the goals will be obtained.

There is no need to think about or delay this. Action should be taken immediately.

Question 5

Do you agree with the view of the Calcutta University Commission that

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of western medicine the traditional knowledge which is of real value and will reject, as western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

Answers to question 5

When we have the idea to sustain Eastern, that is indigenous, systems of medicine, and to become the defenders of what remains of them and to present to the members of the committee its excellent gems, having made them correspond with the Western medical system, then how can we follow other ideas? In our

Hyderabad, there is an abundance of people who know professionalized Eastern medicine. For them, a branch of education in the two sciences should be opened at universities and colleges.

If that is done, then these people will very quickly become professional (*bāzābīta*) practitioners (*ṭabīb*). They can obtain an education and the style of giving an education. They can put into practice the work of hypothetical explanation (*qiyāsī taujihāt*) with sophistication and excellence. In such a circumstance, the government's sincere intention of improving indigenous medicine would be realized. The kind of results that can be created by tying together the fortunes of the two systems, that is East and West, for their survival, their stability, and their existence will be proved to the members of the committee upon a little of their close attention. And in a very (short) time, the old treasure trove will be ours again.

Just as agreement is a great blessing, it is a clear light upon each person. When we, Western and Eastern medicine's highest degree of experts, will sit together with unity at a public meeting or in a voluntary association with our goals, which the government has accepted, it would be pleasant to see agreement emerge at that time as a matter of course. When obtaining the goal will begin with unity, then there will be no need to ask more about it. It is our opinion that this goal will be obtained very soon.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

Answers to question 6

Inserting the modern curriculum into the old curriculum of indigenous medical systems seems like an idea anyone would favour; however, there is the fear that this would wipe out the old medical traditions in a few days. At first glance, such a plan would ruin the current efforts of our supporters of traditional medicine, who are working to preserve it, who only want to be looked upon with a little bit of generosity by the government, and who are showing the signs of success in a very short time. So who amongst the supporters of indigenous medical systems would accept this idea? Consider that indigenous medical systems have the knowledge of natural dispositions, which is called *padārth vigniyān shāstra* and in this branch of knowledge, its founders have examined every challenging problem with great subtlety. In the science of *kīmīyā* or *rasāin shāstra*, which has been named chemistry, and similarly in astronomy, a high degree of innovations have been made and are very successful in practice. It is a lengthy task to list the names of the inventors of the mentioned sciences and describe their circumstances, so this has been omitted. Also, it is the directive of the committee that members “will not accept anything other than looking into methods of practice”.

Now, for the other sciences (*‘ulūm*) that have a deep connection to the science of medicine that is *shārīr shāstra*, which is called “anatomy” in daktari, and called the science of dissecting the human body (*‘ilm-e tashrīḥ-e jism insānī*) in Yunani. *Shārīr shāstra* has been divided into two types. One type is “*shārīr adviyāt pati shāstra*”, which is called the anatomy of the development of the human body (*tashrīḥ takawūn jism insānī*). The second is “*shārīr adiv karm shāstra*”, which might be called the action of the organs and which doctors have given the name “physiology”. There is also: “*rog nidān shāstra*”, which is called “pathology” or the knowledge of diseases; “*jantū shāstra*”, which currently is called bacteriology, which we can also call *‘ilm-e jarāśīm*; and “*shaliya tantra shāstra*”, which is called surgery or *jarāḥī*. This is divided into several branches: “*ārog vidaniyān shāstra*”, anatomy in health, which is called “descriptive human anatomy” in daktari; and “*rog vidaniyān shārūr*” which is called “anatomy in disease” or morbid human anatomy; “*prānt vidaniyān shārūr*”, anatomy of parts of the body, regional anatomy; “*shaliya tantra shārūr*”, the anatomy of surgery, surgical anatomy. Instruction in all of the (above-)mentioned subjects is offered at length in the books of the old indigenous medical traditions, and the old style of education has also been explained. We intend to present to the committee members the formal organization of this instruction, having made it correspond with modern Western medicine and having appropri-

ated without delay those unique issues found within modern Western medicine in order to benefit the highest concerns of our medical tradition.

Concerning the standards of our ordinary medical traditions, whether they correspond with the LMP, graduate, master's of the medical schools and doctorate qualifications of our universities (LMS; MA; MS; MD). It is not clear, however, what kind of correspondence is intended. Whether this is an interest in creating correspondence with the Ayurvedic system or it is to boast about the greatness of daktari, and in so doing belittle indigenous medical systems. We cannot accept this sort of idea, when all of the subjects of science related to medical knowledge are present in our system as needed. We want to present them, in a short period of time, after having worked on them. In this situation, who would destroy his own ancient sciences and ruin longstanding useful research? Whether because of something somebody said or just accepting whatever came to mind. However, we actually like our old system. If one pays close attention, one can see it is very useful. We cannot speak to the correct system for other countries. We submit the state of things in our Hyderabad where the census counted one crore and thirty-three lakhs. From these people, three parts of the subjects are adherents and admirers of the indigenous medical systems and are inclined to use them in their illnesses, undergo their treatments and benefit from them. From this, it is proved that in our ancient medicine, there is no kind of harm. So on to the neglect by the government: first, why hasn't a school or college been opened for the professional education of traditional medicine? Second, why haven't experts of traditional medicine been given advice on becoming professional? Notwithstanding the fact that they are already professional in their own way. For the uneducated to ask questions according to their ideas and to present both systems after having made them correspond, this is something that becomes contrary to the will of the committee members, and this matter is not advisable.

2)

For each proposed standard, there are many people who know Ayurveda and many Yunani physicians available in India who can quickly complete the curriculum.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) the formation of a suitable Registration Board for admitting competent practitioners into the medical register,

(b) any changes in, or additions to, the existing legislation on medical registration.

Answer to question 7

At first glance, there doesn't seem to be any harm related to the medical registry for traditional medicine. However, what has the government thought about this? That still cannot be completely clarified. Either they understand this question to be a puzzling conjecture or imagine it to be a riddle. Or is it that no other answer can be given, despite making this request? The aim of the registration act is to formally enter the names of doctors in a register. However, there is a type of attack being made on indigenous vaims and atibba here. These poor fellows are being used. If we accept that the registry law is necessary and broaden it, then the result will, some day or another, ruin traditional indigenous medicine.

With respect, I humbly ask the generous members of the committee: why are the masters of indigenous medical systems being subject to the clutches of the law without any reason and without giving them any aid? The government can do what it has agreed upon. However, it should also listen to our petitions and what we request; otherwise, it will seem to people that the committee members' intention to improve indigenous medical systems is gone.

There is a need to set forth a medical register. The people should be informed about the rules by which the register will be used so that regular people can make objections before it is passed.

Regarding whether there should be any changes or additions to the existing law on the medical register: I request that a copy of the existing law should please be dispatched. That would be better.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Answer to question number 8

The medicines that are made according to the methods of indigenous medical systems, their medicine-making and work with chemicals, which I may have discussed above, are made by hand. Because they are prepared with plants and roots grown in the country, they are spared the tariff of the customs department and so are inexpensive to prepare and cost little to buy. If we look closely at the constituents in the medicine of daktari, then we can see that their price is comparable to that of our medicines. However, the expenses of their pharmacies of their lovely bottles and colourful labels and the cost of bringing them from Europe to India and then, in most places, the expense of the tariff of the customs department, this all increases their expenditure relative to indigenous medicines. The very same drug, once it is prescribed by a doctor, given to a sick person out of one of those bottles, the cost isn't just a doubling but a four-fold increase, which most fellow Indians cannot bear. They are drawn to indigenous medical systems and the experts of indigenous medicine sympathize with these poor fellows and treat them.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

Answer to question 9

It is a universal law that when a people's state is destroyed, its sovereignty recedes. The old sciences are wasted.

While the sciences do not completely disappear, they diminish with respect to the times. They are looked upon with prejudice, and they lose esteem in people's eyes. I am stunned when somebody calls a perfectly scientific medical tradition conjectural medicine or unscientific, or somebody else says it is dead. However, the truth is against this. Our Indian subjects are habituated to this therapy, used to this treatment. Whenever nature (*fitrat*) attracts something towards it, the natural disposition (*tabī'at*) is inclined in that direction and the temperament (*mizāj*) also keeps a kind of compatibility with it. Wouldn't it be nice if our ancient medical tradition was understood to be professional in the government's eyes? It would then achieve the ascendance it had in the old days. That would be very good.

When people call this ancient medical tradition dead, that is merely an error in their thinking. It is a result of ignorance. If it were really dead, it would not be possible for it to have the successful achievements it has today. Imagine that traditional medicine is dead – cannot the government revive it with a little attention? Can it not provide competent, attentive practitioners to fulfil its intention? The ancient indigenous traditions include subjects from several sciences related to medicine. Whoever has command over those sciences can fulfil the government's intention. In order to preserve the indigenous medical traditions and to benefit from them, a school should be opened on behalf of the high government. The beauty of its traditional education ought to be seen. After a just comparison between the two medical traditions, East and West, the extent to which the indigenous medical traditions are full of precious gems will be clear.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

Answer to question 10

The question of whether to keep indigenous medical traditions as they are or to improve them is a graceless question, which has been made in the form of a riddle. The answer to this question has been alluded to in detail in the previously given answers. However, it seems appropriate to submit something here as well since, leaving aside one quarter from the total of India's thirty-three core subjects, the remaining three quarters of the subjects are benefiting from it. Moreover, there is a savings in the expenditure of the government, may it forever endure. Western medicine loots from the government treasury, having understood it as its own. Eastern medicine protects the government's treasury out of sympathy and goodwill. It thinks of the survival of an ancient science without any external aid for the goodness of its fellow men.

Can Western medicine, whether it is good, very good or the best, arrange for the treatment of all of India's subjects? Can the government's treasury be adequate to treat the difficulties and conditions of its beloved subjects? Given the

number of doctors appointed at this time by the government, even if they were the most competent of all, would they be enough to treat thirty-three cores of subjects? Not ever.

If one were to pay close attention, experience proves that some modernist subjects have given their hearts to daktari, while some traditionalists are enamoured with Ayurveda, and some are attached to the Yunani system. In any case, these are the three systems of medicine that are prevalent in the country, what are called Eastern medicine and modern medicine, that is, Western medicine. Here it could be alleged that, because of being considered unscientific by the government, the indigenous systems of medicine ought to have been erased from the Earth. However, it is proved that there is something in them, some precious gem that the country's people, having become their adherents, obtain benefit from. If we closely examine the state of demand for them through experience, then we find it astonishing. That is, there is a great demand for them. It is clear that, given the extent of demand for them, the extent of their soundness is also very great. They are scientific up to a certain point, relative to their needs. According to the fair-minded, they are worthy of being accepted as scientific. The indigenous systems of medicine can be maintained with great ease. The rare and unique points within them can be used to benefit our fellow beings.

The government. We can request to maintain our indigenous medical system as follows. Having made a complete curriculum, presenting the greatest benefits of indigenous medical systems, showing their experience [and] proving each related subject through observations and practice, we will present it to the committee in a short span of time so that the government can maintain them. Local boards can benefit us in the following way. If they establish schools everywhere where there is professional education and after taking a formal examination, the students are given an opportunity to be appointed to positions where they can render their services.

The benefits of our universities. In each university which offers higher education and in which students are admitted after having obtained a certain capability, this time could present a good opportunity to align the Ayurvedic and allopathic system. This encounter would put at hand an excellent means of incorporating the best, refined and productive subjects of each system into the other.

The progress of indigenous medical systems will certainly be achieved through non-governmental means, such as voluntary associations and individual consultation. However, it is my opinion that a certain period of time is needed for this. That is because Western and Eastern systems are in a particular kind of struggle, and it is due to this struggle that there is an absence of progress.

It should not remain a secret that no sciences vanish from the Earth. But, yes, because of the adverseness of the times and the godlessness of the country, they can certainly diminish. They can become covered in the dust of misfortune. Since the government has expressed the intention of offering patronage and support to the ancient sciences, having researched whether they are scientific or not and after them being proved scientific, it would be a greater favour if they might lavish a little of their attention on one more thing. That is that it would be better if their investigation could be conducted in the presence of their experts. I respectfully request from the members of the committee that whatever issues are worthy of debate, should be heard and whatever matters require a decision, it would be better if their answers were taken. I finish this speech respectfully, requesting again that, because I am a partisan of one system, if I have used an uncivil word anywhere, I ask for forgiveness for this.

USMAN REPORT, VOL. 2, PP. 215-272

Testimonies from the Presidency of Madras written in English

This section of the report contains sixteen reports from the Presidency of Madras, all written in English in the original and therefore not included here.

USMAN REPORT, VOL. 2, PP. 273-324

Testimonies from the Presidency of Madras
written in Sanskrit

M.R.Ry. Ayurveda Bhushana M.V. Sastri Avargal

Translated from the Sanskrit by TRUPTI PATIL-BHOLE

Question 1

What is the division or divisions of the indigenous systems of medicine—Ayurveda, Unani or Siddha—that you propose to deal with?

Out of the three systems of medicine (viz. Siddha, Unani and Ayurveda) which are being discussed, I am devoted to Ayurveda. That's why, with the same intention, I am willing to describe it here.

Question 2

(a) What is the theory or theories of causation of disease according to your system?

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism?

(b) What are the principles and methods of diagnosis and treatment followed in your system?

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.

2a)

While explaining this concept, preceptor *Suśruta* states that, 'that which unites a living being with sorrow is disease'. In this, a living being [*puruṣa*] is the one

which is formed by a combination of a body formed of five natural elements (i.e. earth, water, fire, air, and space) [*pañcamahābhūta*] and a soul.

This human being is named as *karmapuruṣa*. Diseases caused in the person [*karmapuruṣa*] give him suffering. While elaborating [on] these diseases, *Suśruta* states them to be of four types:

- 1 Accidental/external
- 2 Pathophysiological
- 3 Psychological (related to the mind)
- 4 Natural

Accidental/external: These types of diseases are due to accidents.

Pathophysiological diseases: These diseases are caused by wrong food intake, , habits and lifestyle.

Diseases related to the mind: These are due to emotional states of mind, viz. anger, grief or emotional pain, fear, elation (happiness), sorrow/emotional pain, feeling of strong desire for something which is possessed by another person, finding faults in other people, feelings of low self-esteem, jealousy, sexual desire and greed. These cause certain diseases.

Natural: The natural phenomena also sometimes give us suffering. These include hunger, thirst, ageing, death, and sleep.

The seats of diseases are both mind and body.

Diseases can be classified into two types (viz. curable and incurable) according to their treatability.

According to severity, diseases are of two types: mild and severe.

According to the seat of the diseases, it can be divided into two types, related to mind and body.

According to [their] causative factor, diseases can be classified into two types: pathophysiological and accidental/external.

According to main seat [location] in the body, diseases can be classified into:

- 1 Those originating [or having their root cause] in stomach and duodenum
- 2 Those originating in the large intestine.

There are three types of diseases: heat-related, water-related, and air-related.

Two types of diseases have been elaborated in the *nidānasthāna* [the section on the cause of disease, presumably in the *Suśrutasaṃhitā*], viz. due to instability of mind and body [*rājasika*] and due to inertia of mind and body [*tāmasika*].

There are many attributes in the human body which have three types each.

This is the elaboration of three pillars of the healthy body, three types of strength of the body, three volumes, three types of diseases, three seats of paths of diseases, three types of physicians and three types of medicines.

Three types of diseases have been elaborated as pathophysiological, accidental/external and psychological.

Pathophysiological: These arise from disturbances in body physiology.

Accidental/external: These arise from supernatural powers, poisons, toxins, wind, heat (causing burns) or wounds, and injury from animals, etc.

Psychological [related to the mind]: These arise due to not getting or achieving desired things in life or by getting undesired things.

All types (pathophysiological, accidental/external, psychological and natural) are actually due to imbalances in the air/wind element (*vāta*), fire/bile element (*pitta*) and water/phlegm element (*kapha*) [i.e., the three humoral substances or body elements].¹ The common factor in these four types of diseases is pain or suffering.

Their origin is of two types: pathophysiological and accidental/external.

Their seat can be: mind or body.

Their types can be unlimited and uncountable due to various types of body variables and various organs in the body affected due to various reasons/causative factors. The main causes of accidental/external types of diseases are injury and loss of teeth and nails, black magic or witchcraft (*abhicāra*), curses (*abhiśāpa*), false charges or defamation (*abhiśaṅga*), defeat or strong attachment with someone, injury by weapon, strangulation, tying of rope, beating by sticks, some chants, afflictions caused by malign forces, radiations, and supernatural powers, etc.

The main causes of pathophysiological diseases are disturbances/imbalance in the three body elements (*vāta*, *pitta*, *kapha*). The basic cause of pathophysiological and accidental/external types of diseases is either of the three in number, viz.

1. Improper use of senses by circumstantial or other reasons.
2. Improper functioning of intellect, logical reasoning, memory.
3. Natural progression or natural phenomenon like ageing.

Disturbances in the three elements of the body are evident in all diseases. In accidental/external types, first, there is an accident causing pain and suffering,

¹ Editor's note: We have standardized the translation of *vāta*, *pitta* and *kapha* and their correlates in the other vernaculars to "wind", "bile", and "phlegm" in this volume, but would like to note that the translator's preference was to leave the terms untranslated or to render *vāta* as "air element" and *pitta* as "fire element".

and the three elements get disturbed afterwards due to the accident. In pathophysiological types, the three elements are affected first, and their disturbance leads to diseases which cause pain/suffering. (This has been elaborated in *mahāroga adhyāya*).

Diseases have been divided into pathophysiological and accidental/external, and they also are said to have two seats, body and mind.

There is a discussion about types of diseases in this way. Diseases are mainly of four types and secondarily of four types. Thus, diseases and their types have been explained.

The references that do not apply here will not be mentioned.

The main definition of diseases is “affliction, affection of person (body and soul) by sorrow/pain/suffering”. This creates curiosity about how the pain/suffering originates. This question has been posed by *Vācaspati Miśra*, using the verse by *Īśvara Kṛṣṇa* in his *sāṃkhya* philosophy.

Vācaspati Miśra has explained that sorrow/suffering is of three types: 1. arisen from bodily and mental causes within one's self (*ādhyātmika*), 2. arisen through [malign] entities (*ādhibhautika*), and 3. arisen through supernatural causes (*ādhidaivika*). Here the preceptor *Suśruta* explained that those which are self-dependent which are known as *ādhyātmika* [while] *ādhidaivika* and *ādhibhautika* were elaborated in *sūtrasthāna* and *śārīrasthāna* previously.²

The affliction of a person by some suffering or sorrow is disease. The diseases are of three types:

1. arisen from bodily and mental causes within one's self (*ādhyātmika*)
2. arisen through (malign) entities (*ādhibhautika*)
3. arisen through supernatural causes (*ādhidaivika*)

² Table added for clarification by the translator.

It includes 7 types of diseases, viz.

1. Relating to generative power (*ādibalapravṛtta*)
2. Relating to birth (*janmabalapravṛtta*)
3. Relating to the power of body elements/humours (*doṣabalapravṛtta*)
4. Relating to the power of a strike (*saṁghātabalapravṛtta*)
5. Relating to the power of time (*kālabalapravṛtta*)
6. Relating to the power of supernatural forces (*daivabalapravṛtta*)
7. Relating to the power of the self arisen (*svabhāvalapravṛtta*)

Relating to generative power (*ādibalapravṛtta*): It includes the abnormalities in sperm and ovum leading to formation of the zygote, and the person taking birth shall have certain diseases like skin disorders and piles, etc.

They are again of two types: formed due to *rasa* [wrong diet and lifestyle] or formed due to *dauhṛda* [ignoring the cravings of pregnant mother].

Relating to the power of birth (*janmabalapravṛtta*): Due to wrong diet and lifestyle habits of mother, these diseases occur in the child.

Relating to the power of body elements/humours (*doṣabalapravṛtta*): It is abnormal eating and living habits or lifestyle. These too are of two types, viz. originating from stomach, duodenum, and large intestines. These can be affected mainly by the involvement of two types: 1) affecting body, and 2) affecting mind.

Both there are named as arisen from within one's self (*ādhyātmika*).

Relating to the power of a strike (*saṁghātabalapravṛtta*): It is caused by (malign) entities (*ādhibhautika*). It is just like a fight of the strong with the weak. These are accidental/external and [consist of] two types, viz. 1) occurring due to weapons and 2) due to bites of snakes, etc.

Relating to the power of time (*kālabalapravṛtta*): [These] diseases occur due to cold, heat, rains, etc.

It is of two types: 1) due to spoilt or abnormal [weather, appropriate to the season] (*vyāpannakartṛka*) and 2) due to normal [weather conditions, appropriate to the season] (*avyāpannakartṛka*).

Relating to supernatural power (*daivabalapravṛtta*): It is caused due to curses, etc. It is of two types: 1) due to lightning and 2) due to afflictions by ghosts, etc. It is again of two types: chronic and sudden.

Relating to the power of the self-arisen (*svabhāvalapravṛtta*): There are natural phenomena like hunger, thirst, ageing, and death. These are either timely (*kālakṛta*) or untimely (*akālakṛta*). If good care is taken [following the regimen prescribed by Ayurvedic physicians], these are timely and if care is not taken, then these occur in an untimely way.

The above-mentioned last three types are supernatural (*adhidaivika*). This includes the sentence by *Vācaspati Miśra* that this elaboration includes all types of diseases. Diseases arisen from bodily and mental causes within one's self (*ādhyātmika vyādhi*) are of two types, i.e., pathophysiological and psychological. Pathophysiological diseases are due to imbalances in the body elements wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*). Psychological diseases are due to emotional factors like sex, desire, anger, greed, longing, fear, desire, sorrow (*viṣāda*), and missing something, etc.

The suffering felt by each person may be different due to their willpower and strength of mind. The diagnosis of various disorders have been elaborated further, to start with.

2a)³

The causative factors for all types of diseases is disturbance in (vitiation of) the three body elements (*tridoṣa*).

- 1 *vāta* (air/wind element)
- 2 *pitta* (heat/bile element)
- 3 *kapha* (water/phlegm element)

According to the preceptor *Caraka*, wind, bile, and phlegm (*vāta*, *pitta* and *kapha*) are the three body elements. If all of these are disturbed, it can cause major diseases in the human body. [This is stated in the *vātakālākālīya adhyāya*].

All types of pathophysiological disorders cannot exist without the three elements (*vāta*, *pitta*, and *kapha*). Whichever diseases occur in the human body due to vitiation of blood, flesh, fat, etc. are due to involvement of these three humours (*doṣa*) only. [This is stated in *aṣṭodarīya adhyāya*.] In accidental/external disorders, suffering and pain originates first and disturbances of [the] three elements follow.

In pathophysiological disorders, first, there is a disturbance in the three body elements, leading to suffering and pain. [This has been elaborated in *mahārōgā-dhyāya*.]

Due to combinations [in the disturbances of three body elements/humours], various treatment modalities are necessary which do not exceed six, just like the number of body elements, which does not exceed three. [This has been elaborated in *laṁghanabṛmhaṇīya adhyāya*.]

³ The recurrence of the numbering is due to the author answering Question 2 twice, using different sources.

The humours (*doṣa*) are the three body elements (viz. *vāta*, *pitta*, *kapha*) which are actually helpful for the body. However if they are affected and disturbed, it causes diseases and hurts the body. [This has been elaborated in *rasavimāna*.]

The diseases like fever, diarrhea, inflammation, body wasting, diabetes, and skin disorders, etc. cannot exist without disturbance in three body elements. Just as the bird does not leave its shadow even while flying in all directions, diseases do not occur without being caused by wind, bile, and phlegm (*vāta*, *pitta* and *kapha*). The characteristic seats in the body and the diseases caused have been explained. [This has been elaborated in *aṣṭodarīya*.]

Vitiated (disturbed) wind, bile, and phlegm cause various diseases. The signs of vitiated body elements have been explained.

In *vividhāśītapītīya adhyāya*, it is elaborated that the same vitiated body elements get in contact with or are in contact [with] body tissues, which get affected, too [*śariravicaya adhyāya*].

Fever occurs due to eight etiological factors, ie. due to:

- wind (*vāta*)
- bile (*pitta*)
- phlegm (*kapha*)
- wind and bile (*vāta-pitta*)
- wind and phlegm (*vāta-kapha*)
- bile and phlegm (*pitta-kapha*)
- external [causes] (*āgantū*)
- all three elements (*tridoṣa*)

(This has been elaborated [on] in *jvaranidāna adhyāya*.)

Due to vitiation of the three body elements, diabetes-like diseases occur. At once, all body elements get vitiated at once, causing major skin disorders [*kuṣṭha*], four types of psychosis [*unmāda*] due to a combination of [vitiated] wind, bile and phlegm. [This has been elaborated in *apasmāra nidāna*.]

Most body disorders are caused due to faulty constitutions and wrong eating habits that lead to an imbalance of the three body elements [elaborated in *vedot-patti adhyāya*.]

The root of all diseases lies in the disturbance of the three body elements. Just as the three phenomena (traits of mind) viz. enlightenment [*sattva*], instability (*rajas*), and inertia (*tamas*) are present in all events taking place in the world, in the case of the human body, all diseases are attributed to a disturbed state of three body elements, wind, bile, and phlegm.

Further, there are subtypes and variations as there are differences in the involvement of body tissues and excretory organs, other organs and different causes which inflicted the disease. The disturbed body elements (*vāta*, *pitta* and *kapha*) naturally are in the body, and can take residence in the tissue or organs which have a weakness, empty space or disability. [This has been elaborated in *vyādhisamuddeśīya adhyāya*.]

The root cause of all diseases is disturbed body elements. Hence, the diseases which may occur do so due to imbalance in body tissues and are also mainly caused by disturbed body elements. [This has been elaborated in *doṣabhedīya adhyāya*.] Hence, it is clear by the explanation that body elements cause all diseases when they are disturbed.

The preceptors *Caraka*, *Suśruta* and *Vāgbhaṭa* all have stated the same concept. Unless the three body elements get disturbed, disease would not occur. They all believe that the extraneous reasons for the disturbance of three body elements can be classified into three types:

1. Sense organs/other organs: When these organs are used excessively, or in a very minimal way or improper way (*asātmīya indriyārtha samyoga*).
2. Improper functioning of intellect, memory, and improper interpretation, leading to improper lifestyle or decisions [*prajñāparādha*].
3. Due to natural phenomena like ageing and death [*pariṇāma*].

There is no controversy among the main literary works of Ayurveda and among physicians of Ayurveda about this. Which curiosity exists here? If the dominance of body elements (*doṣa*) is so crucial, then which causes are responsible for it? There are many causes.

Vijayarakṣita believes that the three body elements are only circumstantial (*nimitta*). He believes that until there is a circumstantial reason, only then will there be disease due to those reasons, just as the loss of oil and wick extinguishes a lamp.

Since ancient *Vedic* times, many texts have been written on health care and medicine. However among the available texts, the most important are: *Caraka saṁhitā*, *Suśruta saṁhitā* and *Aṣṭāṅgahrdaya* of *Vāgbhaṭa*. All other texts are reliant on these three. There are other texts, like the *Rasārṇava*, that are mainly based on medicines of mineral origin. Hence, in this presentation, the references from the above-mentioned three scriptures are stated and elaborated.

These three texts illuminate that the three body elements in the disturbed state are the main causes of diseases and the reasons for the disturbance are:

1. Improper use of sense organs
2. Improper functioning of intellect, memory and decision making

3. Natural phenomena like ageing and death.

These three texts hold and project the same opinion, which I want to stress here, and I want everyone to know the same; this is my deep conviction. Not just this, but in Ayurvedic science, one disease itself becomes a cause for other diseases. According to *Mādhava (Mādhava Nidāna)*, apart from causative factors, one disease becomes the cause of another.

For instance, fever can lead to hemorrhage (a disease of blood and the bile (*pitta*) element *raktapitta*).

Vāgbhaṭa describes the three types of diseases as:

1. occurring from known/recognisable causes
2. due to previous unlawful deeds
3. due to a combination of two mentioned reasons.

This makes it clear that disturbed elements (*doṣa*) due to improper behavior of the senses, the improper use of intellect and memory, and natural phenomena (like aging) are the causes of all diseases.

The detailed elaboration of the same concept [diagnostic procedures] can be seen in the chapter on causes (*nidānasthāna*) of the *Caraka saṁhitā*, *Suśruta saṁhitā*, and *Mādhavanidāna*.

Conclusion: Modern physicians may be equipped with ultramodern tools, yet they can only fractionally explore the concepts of ancient wisdom concerning patients and the wise physicians of Ayurveda. I believe it is not possible for them to fully understand the immortal concepts of Ayurveda. Why? Because ancient wisdom in the form of Ayurvedic concepts is fully based on both knowledge and science. Science is the outer layer of this ancient wisdom, and knowledge is its inner layer. Just as the soul resides in the heart in a mysterious [or unexplored] manner, similarly the ancient knowledge of Ayurveda seems mysterious. I stay neutrally ignorant for those who show disbelief or no faith in the ancient wisdom of Ayurveda. Some other people boast of visualisation of objects which are beyond the capacity of human eyesight, with the use of astonishing instruments like microscopes. Such people may be experts in a certain (branch of) modern science, but in my opinion, they lack knowledge. This is because the facts cannot be fully explored just by microscope. Because beyond all these things, we ourselves, within our body, have a wonderful soulful state called *brāhmī sthiti* [the spiritual status that consists of the stable or firm mind in the state of meditative consciousness in the waking state and grounded in the Absolute].

With the same thought, *Caraka* says, “Those who are truly intellectual should leave behind thoughts of disbelief and disrespect.” Why? Because the facts which can be understood or interpreted by our sense organs are limited. The facts which cannot be directly interpreted are unlimited. They cannot be directly appreciated by our sense organs via direct sensation [like seeing, hearing, touching, etc]. [To understand] these facts, we have to make use of knowledge-gathering tools such as trusting the words of wise physicians and literature [authentic reference literature], logical interpretation, reasoning, and knowledge the relationship between cause and effect.

The sense organs which give us direct perception of knowledge are themselves not completely explored and understood by us. Many attributes of knowledge are not possible to achieve by sense organs due to attributes like closeness, distance, covering or weakness of the senses as well as due to a lack of consciousness of the self due to mixing with similar other attributes and dominance of other similar attributes or subtleness.

It is false to say that the ancient wise physicians have researched the basic concepts of knowledge. These have been researched by Western experts. Physical senses and physical tools/instruments lead to physical knowledge, in which the Western experts are competent. The experts of Western systems of medicines cannot properly understand the Eastern systems in the correct manner. Many basic theories or concepts are still in exploration by them, and all facts are not in a “completely explored” state. There are some controversies, as well. In such a situation, what needs to be explored should be contemplated by the interviewers themselves.

Meaning: In the Ayurvedic technique of medicine and with the help of tools like direct interpretation, knowledge of the relationship between cause and effect and trust in wise philosophers, various concepts like duty (*dharma*), actions (*karma*), mind (*manas*) body (*śarīra*), reincarnation, have been explained.

In this aspect, where does modern medicine stand? What about unexplored phenomena which are beyond the perception of our sense organs? How can the sense organs (which have limitations) perceive the knowledge that is beyond their limits or capacities? How can someone who does not know the soul understand the soul?

The knowledge of such concepts/facts/phenomena is difficult to achieve. It may only be partially understood by modern tools, and I hope that the concepts or facts will be accepted satisfactorily without being contradicted in modern scientific discussions.

The knowledge of diseases (or any fact) can be obtained three ways:

1. *āptopadeśa*: authoritative teachings by experts
2. *pratyakṣa*: actual perception [by the sense organs].
3. *anumāna*: inference [knowledge of the relationship between cause and effect]

It has been documented which reasons cause diseases, which organs are affected, and which symptoms are seen in terms of the usual signs, perceptions, smells, colours, etc.

The reasons affecting systems/organs, signs, and symptoms [of diseases] in terms of colour, odour, visual signs, etc. and name of the disease have been elaborated. The treatment line also depends on these, and it has been elaborated. If no treatment is to be given (for the incurable disease stage), it has also been mentioned.

Those who wish to assess a disease should carry out an assessment of all symptoms of the patients using the sense organs (except taste) i.e., by visual exam, touch, smell and sound. This includes the examination of the sounds of patients' intestines (peristaltic sounds).

Sound appearing from the movements of joints and specific speech pitches and other sounds in the body can be assessed by hearing. Colour, proportion, shades, and understanding visual signs of the body constitution [*prakṛti*] of a patient's body can be assessed by visual examination. The taste of various fluids, etc. should not be examined by direct senses [via taste], it has to be interpreted by logic and via questioning. The smell of patients' bodily fluids (such as strong sweat odour and other smells) can be interpreted through the sense organ of the nose. The interpretation of proper and abnormal body temperature should be done through touch (through palpation).

All of the above states are assessed via direct interpretations through the sense organs along with logical interpretation.

Other aspects are interpreted through inference, e.g., assessment of:

1. the digestive fire of a patient [*agni*] through his digestion capacity,
2. the strength of a patient by knowing his capacity for exercise,
3. the capacity of [the patient's] sense organs by conducting an examination (of the capacity of hearing and viewing, etc.)

Asking the patient questions helps to assess the severity of diseases (if it is mild or severe).

The patient should be assessed by a physician by visiting his home. The patient then should be examined by inspection, percussion and touch, and interrogation.

It is a one-sided opinion that “There (are) three ways of examining a patient”. It is not the correct opinion.

There are six ways (tools) through which a patient must be examined:

1. through hearing (*śabda*)
 2. through touch (*sparsa*)
 3. through taste (*rasa*)
 4. through visual examination (*rūpa*)
 5. through smell (*gandha*)
 6. through questions [asked of the] patient
-
1. The facts which can be assessed through hearing, such as expulsion of air/wind element (*vāta doṣa*) along with haemorrhage and bubbles with sound [in stools, etc.].
 2. Attributes which are examined through touch are coldness, heat, smoothness, roughness, softness, and hardness, signs in diseases involving fever and swelling/inflammation.
 3. Attributes which are assessed through (vision) eyes include: the build of a body, body nourishment (a general assessment), signs of long life, strength, and skin color.
 4. Taste is not used as an assessment tool.
 5. Through smell [of the patient’s sweat, wounds, etc.], [observe the] different types of smells present in debilitating conditions and incurable conditions. [In Ayurveda, there is mention of the signs of a patient who would die soon and who should therefore not be treated.]
 6. Through questions, knowledge of the habitat of the patient can be known, as well as the season, the food, and the living situation the patient is used to alongside the disease history and present complaints, strength, digestion capacity, passage of urine, stool and sweat, seasonal variations or obtaining knowledge of the state of [the patient’s] mind and soul.

A direct interview of a patient and/or his relatives is taken and the preceptor *Vāgbhaṭa* advocates examination of a patient by three routes or methods:

1. Inspection
2. Touch/palpation
3. Interrogation

1. Through inspection: In a patient who has diabetes or cough, the colour of sputum or urine is assessed. The overall build of the patient's [body], and the shades of urine, stools, vomitus, etc. are examined by inspection.
2. Through touch: Through touch and palpation, patients' fever, tumours or abscess-like conditions are examined. The coldness, heat, immobilization/stiffness, palpation/fluttering, and smoothness and roughness are assessed by touch.
3. Through questions: Questions are asked to patient to assess the pain, tastelessness [when consuming food], vomiting, perception of correct taste, perception of no taste or incorrect taste [of food], soft bowels, hard bowels, dreams during sleep, disease history, congenital anomalies, progression of disease, and happiness or grief, etc. [Patients] should be assessed by interrogation through questions (as referenced in preceptor *Arunadatta*).

Sound, touch, colour, and smell, etc. should be directly interpreted by the physician, except [for] taste.

It is elaborated here that, while examining the pain a patient is having, how should the patient be examined? How the patient should be examined [causes curiosity to arise] but the preceptor *Vāgbhaṭa* solves this by the three examinations. *Arunadatta* also follows same path and the preceptor *Caraka* has elaborated on the methods of examination as follows:

- 1 Direct perception through sense organs
- 2 Reference to learned physicians and texts
- 3 Through inference, the knowledge of the relationship between cause and effect

The taste of any [bodily] fluid, like the urine of a patient, should not be directly perceived by a physician's sense organs, but should be known by questions. The preceptor *Suśruta* also believes that the three ways of examination are not enough and has said examination is to be done in six ways (using the five senses and by asking questions).

Meaning: In the Ayurvedic field of medicine, examination of the patient should be done by three methods (at a minimum) or six methods (in depth) and eight methods are detailed (including the knowledge of the cause and effect relationship and by following the guidelines by wise physicians and textbooks). Detailed study of disease is the next step to knowing the disease completely, and the aspects involved are as follows:

- 1 Causes [*nidāna*]

- 2 Prodromal signs [*purvarupa*]
- 3 Main signs/symptoms [*rūpa*]
- 4 Relieving factors [*upaśaya*] such as food and lifestyle
- 5 A map of pathophysiology (knowledge of disturbance of body elements viz. *vāta*, *pitta* and *kapha* and tissues, organs, systems) [*samprāpti*]

Cause (*nidāna*) is an aetiology or causes, prodromal symptoms (*pūrvārūpa*) are signs occurring as a warning of upcoming disease. Symptom (*rūpa*) is the main sign and symptom of disease. Relieving factors (*upaśaya*) means consumption of medicines and food which is helpful to reduce the signs and symptoms and pathophysiology or, at times, provide comfort to the patient. *Samprāpti* is the map of pathophysiology. The pathophysiology differs according to the involvement of body element [*doṣa*] types, the severity of diseases, the season or time involved, [and age].

Enumeration of pathophysiology (*sāṃkhya samprāpti*):

- 1 Eight types of fever
- 2 Five types of tumours or cysts
- 3 Seven types of skin disorders

It may have dominance of 1, 2 or all 3 body elements/humours (*doṣa*) in a minimal or maximum manner.

By rule, there are two types of disorders: pathophysiological and accidental and four types of diseases:

- 1 Curable
- 2 Incurable
- 3 Mild
- 4 Severe

There is an elaboration of Ayurvedic concepts of disease mapping and the involvement of body elements in varying quantities (*vikalpa* and *aṃśāśakalpanā*).

The severity and season/time of disease (aggravation as well as relieving) depends on the season's day/night change and the time of food consumption by the patient. This is the summarised explanation while the details are elaborated by preceptor *Mādhava*.

2c)

According to our concepts, the body element (*doṣa*) in aggravated, reduced or imbalanced states are brought back to normal during the treatment. I shall explain in brief here.

Suśruta noted that treatment is based on two lines:

1. Surgical
2. Nonsurgical methods like medication, etc.

In surgically treatable diseases, the use of nonsurgical methods like medication etc. is allowed. However in non-surgical lines, surgery is not performed.

Caraka states that treatment is of three types:

- 1 That which depends on the sacred (*daivavyapāśraya*)
- 2 That which depends on reasoning (*yuktyavyapāśraya*)
- 3 That which triumphs through good character (*sattvāvajaya*)

That which depends on the sacred (*daivavyapāśraya*) includes spiritual practices like chanting hymns, wearing gemstones, offering animal sacrifice [*bali*], offering prayer to sacred fire [*homa*], reciting benedictory words, fasting, taking punishment for bad deeds, and going for sacred pilgrimage. It includes controlling and taming our mind, not opting for wonderful or larger-than-life deeds.

In pathophysiological diseases, treatment is of three types:

- 1 Internal medication
- 2 External application of medication [local application]
- 3 Surgical intervention

Internal medication includes diet and medicines for internal use which enter the body and cure.

The external forms of treatment include oleation, fomentation, external application of medicinal paste, a shower [or pouring] of decoctions, massage, etc., which cure certain diseases.

Surgery includes incision, breaking, cutting, scraping, removal, suturing, probing, the use of alkaline medications [*kṣāra*] and leech therapy.

I hereby state that diseases are of three types:

- 1 Pathophysical
- 2 Accidental

3 Psychological

The treatment differs for the (differing) types. The line of treatment has been explained previously with references from the preceptors *Caraka*, *Suśruta* and *Vāgbhaṭa*.

As the described body elements of the three types of treatments have been told, I shall elaborate on internal medicine, which is important for diseases caused by wrong food intake, in more detail.

In Ayurveda, pathophysiological diseases are treated after inspecting the disturbed state of body elements (*vāta*, *pitta*, *kapha*). Hence as the described elements (*doṣa*) take residence in organs where they cause disease, treatment is finalized accordingly. Here, treatment means “ending the pain” (or ending the trouble). Treatment for each body element is different.

Preceptor *Vāgbhaṭa* has stated:

- 1 Treatment for the wind/air element is: oleation, fomentation, removal of the body element by milder methods of body cleansing, consumption of food having a sweet taste, sour taste or salty taste, and warm food or hot food, application of oil to skin, massage, wrapping, irritation, medicinal showers, alcohol prepared from flour [*paiṣṭika madya*] and alcohol prepared from jaggery [*gauḍika madya*], oily/unctuous and warm enemas, consumption of various fatty substances [ghee, oil, animal fats, etc] which are mediated by digestive and carminative drugs [*siddha sneha*], the regimen of medicated enemas and especially [consumption of] soups of animal meat and oil.
- 2 Treatment for the bile/fire element is: consumption of cow ghee, purgation using sweet and cool drugs, consumption of foods having sweet, bitter and astringent tastes, taking smells of aromatic, cool and soothing medicinal drugs, applications of pastes of camphor, sandalwood and valaka on a regular basis, spending time in moonlight in the *pradoṣa* duration of the Hindu calendar on an open terrace, listening to songs, being in the company of dear friends, living in the company of an adorable child, living in the company of an obedient and loving wife, living in places with a swimming pool, garden, water pond, lake or beach [that has] sandy shores and the consumption of soothing substances like milk and ghee, and purgation using medicines.
- 3 Treatment of phlegm/water element: The Ayurvedic procedure of medicinal vomiting [*vamana*], purgation [*virecana*], consumption of food having qualities like dryness, reduced quantity, penetrating (pungent), hot, pungent, and astringent in taste, old wines, sexual activity, staying awake at night, various exercises, worrying, applications of dry powders as body scrubs, es-

pecially vomiting induced by Ayurvedic medicines, soups of green gram, etc, honey, fat-burning medications [herbs], consumption of medicinal smoke, fasting, gargling and leaving all comforts of life [doing strenuous work or workouts].

In the above mentioned script, *Vāgbhaṭa* has elaborated a summary of treatment. The main aspect in Ayurvedic treatment includes the removal of disturbed bodily elements by physical methods like vomiting, purgation, enema and blood-letting. In the case of body elements that are reduced in quantity, they are nourished and enhanced. When body elements are disturbed, they are brought back to normal levels or a balanced state (by alleviation through digestion of carminative drugs, fasting, exercise, sunlight, wind, etc.) All this can be found in preceptor *Vāgbhaṭa (aṣṭāṅgahr̥daya)* in chapters *doṣopakramaṇīya* and *dvividhopakramaṇīya*.

Meaning: Four types of diseases have been elaborated in Ayurveda.

- 1 Easy to treat
- 2 Difficult to treat
- 3 Incurable but controllable
- 4 Incurable and uncontrollable (a bad prognosis that is untreatable)

Apart from the fourth type, all others are treatable. The third type cannot be totally cured but it does not cause any threat to the life of the patient. The first two types are completely curable. The third type, though incurable, does not separate from the body, but does not harm the life of the person affected.

Based on my experience, I am daring to share that this rule is not applicable to contagious (*saṁkrāmika*) diseases. For instance, I have absolute faith in my decisions I took in many of my efforts for treating the diseases, viz. diarrhea, colitis, piles, tumours, low digestive capacity, ascites, disturbance of the three elements at one time (*vāta*, *pitta*, *kapha*), wasting of the body, lung infection, tuberculosis-like conditions, hepatomegaly, diseases of blood and the *pitta* element, herpes, diseases of the *vāta* element, [such as] psychosis, epilepsy and many [other] such diseases.

2c)

In my opinion, Ayurvedic medicine (to a great extent) is the best and most widely effective in treating diseases like colitis, pain in the abdomen after eating food (ulcer of stomach), diseases involving polyurea and blood dysentery, fever involving body elements, major skin diseases, diseases of the palate, tonsillitis,

epilepsy, (...), diseases of babies and postnatal diseases in women. I will share the related actual experience.

Question 3

(a) Are you connected directly with any institution providing medical relief or medical education on indigenous lines?

(b) Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of

(1) adequacy of medical relief provided; and

(2) suitability as centres of medical education?

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.

3a)

I am associated with Ayurveda school in Chennai. The association is in the form of my work as a member of the managing committee. I have established a medicine pharmacy named Gopalashram, which is independently visited by [more than] 5,500 patients each year.

3b)

I have roamed around South India and visited many villages, towns and streets. I have visited clinics and schools there. The management there is not satisfactory in the following aspects:

- 1 Treatment of patient
- 2 Central place of Ayurvedic medical school/college

In these centres, there is no satisfactory Ayurvedic treatment of diseases, which can be treated by surgical equipment, instruments, alkali [*kṣāra*], burns indicated by a heated rod [*agnikarma*], leech therapy, etc. Neonates affected by diseases and post-pregnancy diseases, poisoning cases and other such cases can be treated by oleation, fomentation, enema by decoctions, oil enema, etc. The main hub

related to teaching and learning (Ayurveda) is Chennai. There are two common educational institutions there. Even there there is no satisfactory teaching and learning.

Meaning: These are the reasons for the shortcomings mentioned above:

1. About the first shortcoming – The four shortcomings are observed, where there ideally should have been four qualities. Just like there are no expert surgeons (who have experience in Ayurveda surgery), there is a lack of expert nurses, a lack of quality medicines and a lack of patients who, at their own expense, can stay in these institutions and detail their states/ailment to physicians. The main cause of this mismanagement is poverty. In other words, laziness and hostility on part of the ruling government is responsible. The four shortcomings can be seen replacing the four qualities of any state.
2. About the second shortcoming – For effective teaching and learning, abundant and intellectual students are lacking. Expert physicians (Ayurvedic), professors, libraries, museums, herbal gardens, funds and operation theatres are lacking. In this situation, I would give the message that Sanskrit committees should take responsibility for the smooth functioning of the above-mentioned institutions by instituting mentorship.

3c)

It is embarrassing to state that there is no fully-equipped institution based on Ayurveda or Indian healthcare sciences to date.

The solution to this problem may be as follows: It will be fruitful if those members or politicians look after the management of above-mentioned institutions that have full faith in Ayurveda. The University Commission is capable of doing this.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

4a)

The topics/subjects related to learning and spreading the knowledge of ancient health care sciences should certainly be accepted, in my opinion.

- 1 In respective medical departments, students should be kept under the expert guidance of Ayurvedic scholars in that area, so that they can teach students at all times.
- 2 Professors and students should have uninterrupted access to well-equipped clinics, drug stores and libraries.
- 3 All physicians, in their clinics, should independently conduct discussions on their expertise.

Meaning: In this way, there should exist such institutions with expert Ayurvedic physicians. However in India, there are no institutions of such desired qualities. Two or three institutions can be found in Chennai, however, these are not up to the mark. In the case of efforts put forth by the government or any other similar body, the creation of well-equipped institutes could be possible.

4b)

In this era, it is possible to establish institutions like those described in Ayurvedic scriptures. On one side, if it is rendered that the politicians are destitute about this, then the way out we should consider be:

- 1 Accomplishment of most of all desires
- 2 Subsistence as intended as early as possible

Meaning: If this issue cannot be answered completely, then for the time being; it will be beneficial to an extent to include Ayurvedic experts and students in allopathic medical institutes and other existing medical institutions.

Question 5

Do you agree with the view of the Calcutta University Commission that “There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”? If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

In the name of Ayurveda, knowledge of other medicinal sciences (pathies) has been integrated into the practice by Ayurvedic physicians, through traditional know-how or through independent practice for a long time or through their experience. However, those who know Ayurvedic concepts well, but still behave in a political way to please the higher authorities in universities are disinterested (ignorant) and do not favour Ayurveda, in my opinion. Not just this, I am also willing to challenge Western medical concepts with the help of Ayurvedic concepts with great effort.

Thus, in the present situation, I feel that it is a problematic idea to form a singularity between ancient and modern medical concepts.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, and also study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate*

(L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D. of our Universities).

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

As you say that for those willing to learn Ayurvedic theory, they should also learn physics, chemistry and biology and bring into practice the modern medical branches of pathology, bacteriology, biology, surgery, etc., then the answer is as follows:

The inclusion of new techniques to study or to know Ayurvedic principles is insignificant. With the help of modern technology, it is not possible to gain knowledge of Ayurveda. However in the field of modern medicine, the knowledge of Ayurvedic concepts should be given to the students (upcoming Ayurvedic doctors) and this teaching work should be done by Ayurvedic experts, in my opinion.

Meaning: Although I do not agree with the teaching of modern medicine techniques as a part of Ayurvedic study itself; still, if it is taught under the leadership of Ayurveda, then I would accept it. I will tell you about the textbooks which are relevant here as and when the references come forth in future.

6a)

The learned and seeking experts should be subdivided into three groups. In each department, the faculty should be appointed to a higher and subsequent position according to their lineage/category/degree [*gotra*].

6b)

There should be a common entrance test by Chennai University for eligibility to enter the course of study of medicinal knowledge. In this way, the eligible (successful) students become encouraged.

6c)

Unlike Siddha and Unani, Ayurveda must be taught in Sanskrit. It will certainly be understood by students.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

I feel it is better to keep silent on the seventh question.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Among the ancient and modern treatment systems, modern medicine is expensive. There are many reasons for this. These are:

All modern medicines are not manufactured in India, and they are not brought into India directly from a particular country. Hence, the leaders of various countries and businessmen in different locations levy taxes and huge fees on this medicine. The agent (who trades in such medicines) levies more charges on these drugs, and the Western physicians impose quaternary benefits. Hence, modern medicines naturally and eventually become more costly.

The second reason is the lifestyle of physicians practising the Western medicinal system. They live an exclusive lifestyle. For the lifestyle (that they live) and the instruments and equipment which they require for the same cannot be produced anywhere else (in India). They [Western medical system physicians] have immense respect for foreign-made products and hence they compel their patients' high expenses.

The third reason is that they believe that not only the instruments and medicinal drugs but also the food ingredients coming from foreign countries are more beneficial or of better quality. Due to all these reasons, modern [medical] treatment is more costly, in my opinion.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

This question is very useful, principal and meaningful. However, what kind of answer would satisfy the interviewer [remains] unknown to me. Still, to an extent, I shall answer this as is my duty.

The decadence of Ayurveda has been evident in just one reference, however in many references, over and over again, many strikes caused this decay.

Those who know the facts say this: During the Vedic era, there was no other literature available other than the three *Vedas*. At that time, Ayurveda was established as an extract of the form of an auxiliary (*upaveda*). Eventually, according to the nature of people, some other philosophies that were in opposition to Ayurveda were developed. This included *Bārhaspatya*, *Lokāyatika*, *Cārvaka*, etc. At that time, followers of these other branches developed disrespect for the *Vedas*. This is the first reference.

The second reference is the time of dominance of the *Upanishads*. In this era, although the main literature of the *Vedas* was still respected, there was some ignorance.

The third reference is the era of non-violent principles of Gautama Buddha's teaching. All other thoughts and processes were sidelined during this era. Due to compliance with the Buddha's teachings of non-violence, surgeries were not performed.

The fourth reference is as follows: The intrusions through wars waged by the Chinese, Mughal (*Yavana*, *Kālayavana*), Huna, Shaka, etc. kings led to the spread of their medicinal sciences, which did not allow for the spread of Ayurvedic medicine.

The fifth reference is of today's era, where Ayurveda's heartbeats is lowered, its breathing has slowed down and it is waiting for its last moments. Ayurveda is not in a good state. It must be thought about. All Ayurvedic literature is not accepted as it is. Many shortcomings are blamed in this literature. Ayurvedic physicians are even condemned as wicked and smugglers. Their speech is considered prattle. They are never considered to be eligible for higher posts in the government, educational institutions and other similar places. Perhaps even the association of modern physicians with Ayurvedic physicians is considered sinful and embarrassing, as openly ridiculed by modern physicians. Even when searched with a microscope, such behaviour was not evident in the ancient times.

Apart from above-mentioned problems, there are some personal shortcomings involved as well.

The ancient sages and Ayurvedic physicians were humble and spiritual, but in later times, physicians started being immoral. Only earning money had become the main goal or objective of all physicians. By the principle that evil people survive in the absence of noble ones, a number of physicians made extensive monetary gains. Later, such fraudulent quacks established the theory that even without thorough learning of medicinal sciences, it is possible to earn money through the profession. Hence, the great tradition of teaching/learning was destroyed and became extinct.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

For the rejuvenation of that medicinal branch (Ayurveda), charioteer-like members have suggested some solutions to the problems in Chennai.

The following way should be followed for the betterment of Ayurvedic by:

- 1 State/government
- 2 Federal law [*Māṇḍalika*]
- 3 Universities
- 4 An independent committee / persons

Steps to be taken by:

- 1 The state - From their heart, Ayurveda should be accepted fully, and Ayurveda experts should be felicitated like modern physicians. In all states, government departments, government-aided departments and in all other unions, Indian Ayurvedic physicians should be appointed. They should establish Ayurveda colleges and pharmacies (to manufacture Ayurvedic medicines). They should establish research institutions based on Ayurveda.
- 2 Federal law [*mandalika*] – There should be a profuse spread of knowledge about Indian Ayurvedic medicine. Again, in suitable places, beautiful herbal gardens (Ayurvedic plants) should be cultivated. Skilled, knowledgable

Ayurvedic physicians should be appointed in Indian Ayurvedic drug-manufacturing companies and should be encouraged.

- 3 Universities – Just like other educational branches, an exam should be taken and a degree of Ayurvedic knowledge should be offered to students after (their successful) completion of the educational processes (in college).
- 4 Independent persons – They should collect (donations) or generate enough funding for Ayurvedic drug-manufacturing units (pharmacies) and distribute these funds to good organisations. Libraries should be established through the collection of ancient, old and newly printed texts. The daily newspaper, monthly magazine and yearly books should be published (based on Ayurveda).

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Translated from the Sanskrit by TRUPTI PATIL-BHOLE

|| Shree ||

I offer my gratitude towards Lord Dhanvantari, who himself is the expression of Ayurveda and who showed a way towards the great tradition of medical knowledge. I hereby present this in front of the honourable members of my nation's committee.

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I am providing appropriate answers to the questions regarding the Ayurveda fraternity about my nation's medicinal system.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism.

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

The word ‘Ayurveda’ elaborates properties and actions of the drugs which cause anabolism or catabolism. This system gives knowledge of beneficial and harmful substances and advises to refrain from harmful aspects, and such meaning of the word ‘Ayurveda’ is appropriate.

There is a specific resultant combination of five great elements (*mahābhūta*) such as earth, through which the physical body is formed. For this body, the main causes are the three body elements/humours (*doṣa*), which are omnipresent, the seven body tissues (*dhātu*), and the excretory products (*mala*), like sweat, urine, etc. This includes the three body elements, i.e., wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*),¹ the body tissues (*dhātus*), i.e., nourishing fluid [i.e. food that has undergone the first digestive process] (*rasa*), blood (*rakta*), flesh (*māṃsa*), fat (*medas*), bone (*asthī*), marrow (*majjā*), and semen (*śukra*), and the excretory products. When the body elements remain in equilibrium, the body does not succumb to disease conditions and it stays stable.

In such a way, while being in healthy equilibrium, in due course of living the body elements, tissues and waste products (*doṣa*, *dhātu*, and *mala*) are increased or decreased due to the use of synergistic or energetic drugs [substances], due to their properties or their functions. Such a disturbance is known as disease.

Undisturbed [normal] body elements, body tissues, and excretory products carry out following functions in the body. The undisturbed wind/air (*vāta*) element by its own power favours the body; by generating energy, breathing in and out by natural urge, generation of urges of hunger and thirst, proper functioning of nourishing fluid (*rasa*), etc., body tissues (*dhātu*), proper functioning of organs like the eyes show excellence in their own functions.

The undisturbed bile/fire (*pitta*) element by its own power generates natural warmth in organs, carries out digestion, generates the power of vision in the eyes, generates hunger and thirst, gives functional power to the tongue and to the sense organ of taste, generates skin complexion, intellect, velour, softness, and nourishes the body. The undisturbed phlegm/water (*kapha*) element by its own power

¹ Editor’s note: We have standardized the translation of *vāta*, *pitta* and *kapha* and their correlates in the other vernaculars to “wind”, “bile”, and “phlegm” in this volume, but would like to note that this translator’s preference was to leave the terms untranslated or to render *vāta* as “air element” and *pitta* as “fire element”.

generates stability in the body, maintains the joints of bones, generates oleation there, generates the feelings of forgiving, and regulates heat. Thus, undisturbed phlegm/air nourishes the body. When the seven body tissues are normal, they carry out functions respectively, i.e., nourishment, increase of vigour (*ojas*), balancing of the imbalanced [body parts], oleation, sustaining, filling, and reproduction. When faecal matter, urine, and sweat are normal, they respectively support the body, transport the liquids, and hold the liquids (*kleda*).

Now I shall explain the effects of an increase of body elements, i.e., wind, etc. out of proportion. When wind (*vāta*) increases, it causes thinning of the body, black colour, desire for heat or hot substances, tremors, bloating, constipation, decreased body strength, insomnia, decreased capacity of sense organs, giddiness, too much talking, and sadness. When the bile (*pitta*) element increases, it causes yellowing of stools, urine, eyes, and skin. There is increase in hunger, burning sensations occur, and sleep deprives. Similarly, when the phlegm (*kapha*) element increases, it gives birth to loss of appetite, salivation, laziness, heaviness, coldness, white colour, loosening of body parts, breathlessness, and cough. Increased nourishing fluid (*rasa dhātu*) leads to the same problems as increased phlegm (*kapha*). Increased blood (*rakta*) causes diseases such as red herpes, splenomegaly, tumours, skin disorders, decrease of wind (*vāta*) and blood (*rakta*), tumours, gum-boils (*upakuśa*), jaundice, skin tags, loss of appetite, confusion (*moha*), etc. An increased flesh body tissue [muscle mass] (*māmsa dhātu*) leads to increased volume of the thyroid gland, tumours, cysts, increased thyroid, and obesity at thighs. It causes an increase of muscle mass at the neck area, etc. Increased fat causes diseases like increased muscle mass. Apart from this, increased fat leads to dyspnoea after slight exertion, fatigue, and slackness in buttocks and breasts. Increased bone leads to excess bones and excess teeth. Increased marrow (*majja dhātu*) leads to heaviness in the eyes, heaviness in the body, tumour-like growths with roots in the chest. Increased semen (*śukra*) leads to an increased sexual desire and stones of semen. Increased faecal matter leads to bloating in the abdomen, heaviness, and pain. Increased urine leads to pain at the bladder, it causes the feeling to micturate even after micturition. Increased sweat leads to excessive sweating, foul-smelling sweat, and causes itching. Similarly, the condition of excretory products at the eyes, nose, etc. should be assessed by excess of secretion and heaviness.

When there is depletion of the wind element, it leads to malaise, reduction in speaking, slow movements, and improper perception. When the bile element depletes, there is loss of appetite, coldness, hampering of skin complexion, etc. When the phlegm element depletes, there is giddiness, feelings of emptiness at the seats of phlegm, constriction of heart, and the loosening of body joints. When

nourishing fluid (*rasa*) depletes, there is dryness, fatigue, wasting, feelings of sleepiness and intolerance towards noise or sound. When blood depletes, there is craving for sour, craving for cold, loosening of veins, and dryness. When muscle mass depletes, it leads to sluggish sense organs, wasting of neck muscles, wasting of buttocks, weight loss, and pain at joints. When fat depletes, it leads to waist thinning, splenomegaly, and body wasting. When bones tissues deplete, it leads to pain in the bones, falling-out of teeth, hair loss, and nail loss. When marrow depletes, it leads to osteoporosis, blindness, fainting, illusion etc. When semen (*śukra dhātu*) depletes, ejaculation is delayed, it contains blood, or at times only blood is ejaculated. There is extreme pain in the scrotum and there is a feeling of fumes passing from the penis. When faecal matter depletes, there is the movement of gases in the intestines as if there is coiling and pain in the heart and chest area due to the upward movement of gases. It also causes obstruction in the respiratory function. When urine depletes, it leads to difficulty while passing urine, and the urine is less in quantity and discoloured with blood. When sweat depletes, hair follicles fall or develop goosebumps and the skin becomes dry and blistered. Similar phenomena are observed in the case of other excretory products. If there is dryness, non-sensation, or lightness observed, then there is depletion of the respective excretory product.

So far, I have explained symptoms of equilibrium, increase, and depletion of the elements in the body, such as wind, which lead to a healthy and diseased state of the body. Henceforth I shall explain the properties of the three body elements (*doṣa*) and the causes of their increase and depletion. If the properties of the normal body elements are known, it is easy to understand the opposite properties responsible for the increase or the depletion of body elements such as wind.

The normal properties of body elements are elaborated: The natural properties of the wind element are dryness, lightness, coldness, and roughness, minuteness and movement. The properties of bile are moisture, sharpness, heat, lightness, foul smell, flowing, liquid nature, etc. The properties of phlegm are oiliness, coldness, and heaviness.

Now I shall expand on the topic: Just as the five natural powers (*mahābhūta*) are the main constituents of the body, the same are the basic reasons for the origin of substances. Just as the body elements such as wind, etc. possess properties like heaviness, oiliness, dryness, heat, etc., similar properties are possessed by medicines, mercury, and other minerals, metals, etc. In this way, the basic constitution of all substances of the human body and of the universe are the same, and hence the properties associated with the causative factors are reflected in the actions. Though the constituent factor of living beings and substances of the world is the same in the living beings, fire (*agni*) and air (*vayu*) are more dominant. Hence,

the living world has a soulful state and the non-living substances have none. Substances with a majority of earthen composition are called 'earthen', and the same is true in case of the other four great elements (*mahābhūtas*). For the origin and development of each substance, the five constituents are essential. First, some base is required, which is the earthen element. Then, a seed is required, which is the water element. To create a sense of fulfilment, a mild soothing effect is needed, which is provided by the water element. For transformation to take place, heat is essential, which is provided by the fire element. To develop with many branches, air is necessary, and the seat of air is space (*ākāśa*). In this way, substances are formed with five constituent factors.

The constituent factors result in different compositions. Hence, some substances possess ten properties, such as lightness, etc. Similarly, in the other types of substances, other properties exist, such as heaviness. The properties such as heaviness also exist in the taste of the substance. These tastes are sweet, sour, salty, bitter, pungent, and astringent, and are known as 'six tastes'. They show a nourishing effect in descending manner.

It is clear from the elaboration that the five basic constituent factors are the root causes for the creation of living beings and non-living substances. When this is the fact, it is a valid reason to explore why earth and space elements are excluded, and the three others are used to explain health and diseases in the human body. After the explanation of how these factors [five *bhūta*] stay in the body is given, the explanation of this question will take place. Of the five factors, earth merges with water, space merges with air, and thus air, fire, and water remain. These are responsible for the creation and the nature (characteristics) of living and non-living objects as per Ayurvedic concepts.

The same are also existent in sperm and female generative fluid/ovum. Some factors create the body. Due to special activities, they are known as wind/air element, bile/fire element, and phlegm/water element.

Previously, I mentioned six tastes. Of these, sweet, sour, and salty alleviate the wind element. Bitter, pungent, and astringent alleviate the phlegm element. Astringent, bitter, and sweet taste alleviate bile. Opposite tastes aggravate the particular body element (*doṣa*). Pungent, bitter, and astringent aggravate wind. Sweet, sour, and salty tastes aggravate phlegm. Pungent, sour, and salty tastes aggravate bile.

In this way, those substance which normalize the increased or decreased body elements (*vāta*, etc.) are known as pacifying (*śamana*) medicines. Those which aggravate body elements (*vāta*, etc.) are aggravating (*kopana*) medicines. The substances which maintain health are medicine or substances intended for well-being (*svasthahita*). Food comprised of six tastes and four types, when consumed,

gets in contact with the digestive fire. In the intestines, the effect of tastes takes place which is called maturation [i.e., conversion of food into a state for assimilation] (*vipāka*). It is of three types: sweet and salty tastes transform into sweet maturation, sour taste makes sour maturation, and bitter, pungent, and astringent lead to pungent maturation. These three states of maturation create an equilibrium of wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*) and carry on life for a long time.

All consumed food gets digested in the stomach and the intestine with the help of various types of bile (*pitta*), i.e., “colouring” (*rañjaka*) and “cooking” (*pācaka*) bile. Nourishing and waste parts get separated from the food. Out of this, the nourishing part (*rasa*) gets digested by one’s own digestive fire of tissue (*dhātvaṅni*). It is again divided as nourishing and waste parts. The nourishing part goes into the liver and spleen. It gets coloured by *prāṇavāyu* [a type of *vāta*] and colouring bile (*rañjaka pitta*), which is then called blood (*rakta*). The waste part is known as phlegm. The blood is digested by its own digestive fire and divided into a nourishing and a waste part. The nourishing part is flesh (*māṁsa*) and the byproduct part is bile. In this way, transformation into body tissues takes place. Just as the ghee stays merged with whole milk, the last body tissue (*dhātu*) stays merged in the whole body. When there is coitus, semen merges with female generative fluid/ovum. After due course it [i.e., the foetus] grows by a nourishing diet consumed by the mother. It develops organs such as hands and feet. The child appears on the earth as a living being.

Hence, all the consumed food gets in contact with the digestive fire. It is transformed into sweet taste, and phlegm (*kapha*) with bubbles is formed. Acid is formed due to burning (*vidāha*). In the small intestine, it is absorbed with the help of bile (*pitta*). It is divided into nourishing and waste parts. Nourishment of the body takes place from it. Then the food attains a pungent taste, it converts into faeces, and it is excreted out.

From this it is clear that the five great elements (*mahābhūta*) consist of the five powers of fire. These five fires cause the digestion of the respective five types of substances. Similarly, the fractions of the five types of elements cause the digestion of the related fractions of substances. The digested part is segregated separately and nourishes similar body tissues. For instance, the earthy substances nourish earthy body tissue, and the same is the case for others.

The principle behind this is that food is converted into nourishing fluid (*rasa*). This fluid nourishes the sequential body tissues respectively the seven body tissues. Due to the mildness or strength respectively, sequential tissues are nourished or diminished leading to their increase or loss. Similarly, while the body is nourished, if light substances are repeatedly consumed, then elements with similar

characteristics increase. While one body element increases, the opposite one diminishes.

In such a way, timespan, resources, and actions in minimal, improper, and exaggerated forms lead to vitiation of body elements, which leads to disease. The balance of these leads to the equilibrium of body elements, leading to (good) health.

Vāgbhaṭa has elaborated: When the organs are utilized to carry out their own function in a minimal way or organs are absolutely unused, this is known as deprived use. When the organ is used excessively, it is exaggerated use. When the eyes visualize minute, bright, horrible, very close, or very distant objects or unpleasant and pervert objects, this is called improper use of organs. It is terrible. Similarly, sensations like too loud noise, foul smells, etc. are understood.

There are three seasons, i.e., cold, hot, and rainy. When there is little coldness, heat, and rain, it is the deprived season. When they are in excess, it is the exaggerated season. Improper use is nothing but contradicting proper symptoms. Functions are of three types, i.e., functions of the body, functions of the speech, and functions of the mind. When there is exaggeration in these, this is known as excess use. Forceful urges or suppression or urges, haphazard movements of the body, falling, getting obstacles, etc., talking while chewing, with anger, hatred, fear, etc., violence, etc.: the ten unpleasant actions are known as improper functions. These might have been done in the present or the past life.

These verses have described deprived use, improper use, and excess use leading to the occurrence of disease. These are not solely responsible, since the following factors also lead to the occurrence of disease.. Through consumption of affected, improper, and intolerable foods and liquids, consumption of affected water, excessive sex, sleeping during daytime, suppression of urges resulting in aggravation and alleviation of the body elements, i.e., wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*), which are occupied in the whole body and are essential for good health, in this human body formed of five factors (*mahābhūta*) different diseases take place in the limbs, gastrointestinal system, and bones, joints etc.

When improper food is consumed, prior to the manifestation of any disease, there are the stages of aggravation or reduction. The stage before aggravation, when there is a collection of causes leading to an increase of body elements, is called anabolism (*caya*). The stage prior to actual disease, when there is the collection of causes for decrease or reduction, is called reduced action (*sāda*). At this stage, body tissues such as nourishing fluid, etc, are filled with fluids (*kleda*). When fluid increases, in some diseases twenty or unlimited noticeable or unnoticeable microorganisms arise. Then, body elements (*vāta*, etc.) and their seats in the form of body tissues (*rasa*, etc.) either increase or reduce. They [i.e., the body

elements] cause various diseases in one organ or in all of them due to characteristics like dryness, etc. This is the concept of those who know Ayurvedic principles. In this way, I have extensively described the causative factors of diseases in our opinion.

Hence, the causative principles for the occurrence of diseases in Ayurveda never overrule the principles of modern medicine, which have been experimentally derived and which will be concluded in the future. This should be accepted without jealousy by people, even though it may be in a reluctant manner.

(b)

In Ayurvedic science, the diagnosis of disease is undertaken in three ways, i.e., inspection, touching, and questioning. Among these, by inspection there is knowledge about yellow or white colours, shape, proportion, nourishment, shadow, stools, urine, vomits, etc. By touching, there is knowledge about fever, tumours, abscesses, splenomegaly, and hepatomegaly. By questions there is knowledge about pain, tastelessness, soft stool tendency, dreams, planetary positions at the time of disease occurrence, incompatible (*dviṣṭa*) substances, happiness, sadness, etc.

Previously, touching was explained as “touching by hand.” The hidden meaning is that the previously elaborated techniques, like inspection, etc., help to understand the nature of disease, and also the blood vessel, which is a sign of life, is felt, and the details of its pulsations are understood by a special touch by the finger. I state that those who know Ayurveda understand also by this examination that the disease occurred due to the increase or decrease of body elements.

The knowledge of pulse (*nāḍījñāna*) means knowledge about the blood-carrying vessel, which exhibits a specific pulsation when blood flows through it, by the touch with a finger. A large artery emerges from the heart and carries blood. It divides into many branches and sub-branches. Through this, the nourishing fluid (*rasa dhātu*) and blood fill each body organ from head to toe. Just as the canals of water nourish the fields, this nourishing fluid nourishes the whole body. In this regard, there are many blood vessels in each hand. One of the blood vessels is easily palpable by the touch with a finger. In females, the vessel of the left hand is a little broader in its place of origin. Hence, it should be examined there itself and not in the right hand as per experts. The method of assessing pulse (*nāḍī*): One *āṅgula*² below the inflexion of the thumb of patient, the doctor should place the index finger (*tarjanī*), middle finger (*madhyamā*), and ring finger (*anāmikā*)

² *Āṅgula* is the measurement unit in Ayurvedic measures which is equal to the thickness of the finger of a human hand.

gently and with equal pressure and with slight increased pressure so that the fingers can feel the pulsation occurring due to the force of blood in a different way. With the help of this, an expert physician (*vaidya*) knows the speed of wind (*vāta*) in the index finger, bile (*pitta*) in the middle finger, and speed of phlegm (*kapha*) in the ring finger.

By knowing the speed of body elements with the help of the pulsation of artery, diseases which occurred due to increase, decrease, and combination of three body elements can be assessed without much effort. Similarly, [good] health can be assessed too. When wind is increased, the pulsation felt by the index finger is like the movement of a snake or leech, which is curved and fast. This speed of pulsation is felt clearly by the index finger, hence Ayurvedic experts believe that the index finger is placed to examine the wind element (*doṣa*). When bile is increased, the pulsation felt by the middle finger is a jumping pulsation, like the speed of a rooster or a frog. This is the place or site for assessing bile. When phlegm is increased, the ring finger (*anāmika*) can feel the pulse as dull and slow, like the speed of a peacock, a tortoise, and a swan. This is the place for assessing phlegm.

If there is excess consumption of heavy and dry food, like green peas, black gram, green gram, then gas is released during the digestion of such substances. When it exceeds the normal, it leads to bloating, pain, and gases and comes out by upper and lower routes. After that, the remaining gas in the body mixes with the blood, which carries the nourishing fluid (*rasa*), and goes to the heart. Due to the functions of the heart, like contraction, dilation, and resting, the wind (*prāṇa vāta*) is generated, its force causes the blood to reach till the insertion of the thumb, and the blood mixed with gas can be felt by the index finger of the examining physician as the movement of a snake, like curvy speed. Though this can also be felt by other two fingers, the blood with high speed reaches at the index finger and is obstructed there, and it can be felt there like an obstructed water flow. Hence, this is the place to examine wind according to the experts of Ayurveda. When sharp penetrating pungent food of hot potency is consumed, the blood is affected by the heat and acidity caused by such food. This blood circulates in the artery, which can be palpated by the middle finger like the speed of a jumping rooster and a frog. Hence, we believe it is the place to examine bile. When food of oily, unctuous, and cold properties is consumed, the phlegm increases, and it is added to the blood. Such blood, when it travels through the artery, does not receive sufficient space in it and proceeds slowly, like the speed [or movement] of a peacock or a swan. This is felt by the ring finger, hence it is best place to examine phlegm.

When two body elements are affected at a time, or all three body elements are affected at a time, the speed of the pulse (*nāḍī*) should be examined. For example, when two elements are affected at a time, the dominant element can be examined at its place, and then the secondary element is examined, and it is felt after the first one, at the latter's own place. When two elements are equally affected, the speed of both can be felt at places of both in similar ways. When three body elements are affected, the pulse (*nāḍī*) is irregular. It is often fast, often very loose, often irregular, at times nil, at times away from its own place or with other abnormalities.

When body elements like wind, etc. are in proper equilibrium and proportion, the pulse is firm like an elephant, palpable at its own place, deep, pleasant, of uniform speed and like a wave. When body elements are decreased, there is no change in places where the elements like wind, etc. are felt. However, there is a little change in the pulsation. Also, the places at the insertion of the thumb, where places have been elaborated for checking the pulse, it shifts a little towards the heart. Hence, elements like wind, etc. exhibit their specific pulsation in their own places.

I have, in such way, to some extent elaborated the general characteristics of pulsation diagnosis. If I were to elaborate the details, I shall have to elaborate the five specific types of speeds according to the symptoms of diseases occurring in each organ. I avoid writing it here due to fear of excessive elaboration (*vistārabhaya*).

Generally, a disease is known in these ways. Then the patient is principally assessed with the help of causes, signs, and symptoms prior to disease, signs and symptoms of the main disease, relieving factors and pathophysiology.

Here, by the etymology "that which indicates or describes a disease is called cause (*nidāna*)," the above-mentioned five details are expressed by the word 'cause' (*nidāna*). But the first of the five [tools to know a disease] is cause (*nidāna*), which means 'the causes of the disease.' The reasons are classified into two types as close or nearby [causes] (*sannikṛṣṭa*), and distant causes (*viprakṛṣṭa*). Elements like wind, etc. suddenly get disturbed due to their reasons. When they lead to disease, they become close (*sannikṛṣṭa*) causes for the disease. Due to improper food consumption, improperly formed body tissues (*rasa*, etc.) cause disturbance in body elements. When these disturbed body elements create disease, they become distant causes (*viprakṛṣṭa*). The diet comprised of properties such as heaviness leads to indigestion, which is called undigested matter (*āmadoṣa*). This gives rise to diseases such as fever, etc. Then, the heavy, etc. substances are the close reason for the formation of undigested parts, and they become the distant reason for diseases such as fever, etc.

Those symptoms that give knowledge about disease which are going to appear in future are called prodromal symptoms (*pūrvarupa*). For instance, prior to diarrhoea, there is gas formation leading to distension, pain in abdomen, etc. symptoms arise, and they give knowledge about future disease. Heaviness in the body, pain in the waist, yawning, tastelessness, and goosebumps indicate upcoming fever. The same is understood for this concept in case of other diseases too. This prodromal symptom (*pūrvarupa*) is of two types, general and specific. The prodromal signs, like goosebumps, arisen due to the combination stage of disturbed body element (*doṣa*) and body tissues (*dūṣya*) are general. It does not necessarily prevail as the main disease symptom. Specific prodromal symptoms, however, certainly stay in the further stage when the symptoms of disease appear. Complete expression of prodromal symptoms leads to the formation of symptoms (*rūpa*). The prodromal symptoms with such types also have two other types, i.e., body-related and mind-related. They are as follows: In fever, the prodromal symptoms like tastelessness, etc. are body-related and depression, sadness, or hatred for good advice are mind-related prodromal symptoms. The factor which provides knowledge of a disease that is already formed is called expressions of symptoms and signs, e.g., the expression of tastelessness, etc. indicates fever, the expression of cough, etc., eleven symptoms, indicate the body wasting with tuberculosis-like signs (*rājayakṣmā*).

The relief or feeling of comfort obtained by interventions such as medicines is called relieving factor (*upaśaya*). These interventions are of six types, cause-related, disease-related, related to both, opposite to cause, opposite to disease, or unlike the last two.

The rise of disease due to the course of disturbed body elements is known as 'disease formation' (*samprāpti*). It is of five types, numerical (*saṁkhyā*), variation (*vikalpa*), dominance (*prādhānya*), force/strength (*bala*), and time (*kāla*). For instance, fever is of eight types, diabetes is of twenty, cough has five types. Stating the number of variations in occurrences of disease is the numerical disease formation (*saṁkhyāsamprāpti*). Fractional consideration of body elements which came together is the variation of disease formation (*vikalpasamprāpti*). Division of diseases as independent disease or dependent disease is the disease formation according to dominance (*prādhānyasamprāpti*). The disease formation according to non-dominance (*aprādhānyasamprāpti*) is embedded in this itself. Whether the cause (*nidāna*), etc. is complete or it is partial decides the 'strength' or 'weakness' type of disease formation (*samprāpti*). Day, night, season, food consumption, time, etc. are considered for explaining disease formation according to time (*kāla-samprāpti*). The example of disease formation (*samprāpti*) is that the undigested

part in the stomach leads to weakness of the digestive fire, and it blocks the body channels and causes fever.

Ayurveda experts do not just use these methods for diagnosing the disease, but there are many types of examinations, for example examining the eight aspects such as tongue etc. In this way, by using any of the stated means of elaboration, it is possible to diagnose a disease. Then, by collectively using these means, when an expert Ayurveda physician (*vaidya*) essentially recognizes the disease, then his efforts never end in failure. Does this need to be said?

Thus, using various methods, like the five types of body elements, substances, taste, potency, pulsation of the arteries and eight places, etc., the path of disease diagnosis has been excellently illuminated in Ayurveda. These are the means for getting knowledge of diseases.

It should be stated here that many centuries ago, Śāka and Yavana arrived here from other islands. They obtained the Ayurveda textbooks and studied here. They gained great knowledge of medicine. This has been stated in history. However, by not considering this, in the unfortunate era of today (*kalīyuga*), a few people blabber in an unbridled way and shamelessly say that Ayurveda does not follow the scientific methods. In such a situation, the thinking of improving the Ayurveda fraternity and once again establishing Ayurveda at the seemingly appropriate top position of the crown of medical technology with the help of respecting Ayurveda-related government personnel is like searching for a rabbit's horn [i.e., it is impossible]. In terms of its scope, Ayurveda is extremely thoughtful and full of high effectiveness. Describing Ayurveda would be like continuous recitation in the ears of a deaf person or like crying in the wilderness. These unsuccessful efforts do not have any objective. However, we still remember the treatment-related expertise of our great sages, those who long lived on the Indian continent (*bharatakhaṇḍa*) for thousands of years with the help of [rejuvenators and curative] medicines that destroyed ageing and disease. We started talking about anything with the speech lightened by the tiny light of modern science, which is like a firefly. Now I shall elaborate about treatment.

Prior to any treatment, the patient should be examined on a very subtle level. This examination is as follows. Which body element is disturbed? What is the reason behind this disturbance? To what extent are the body tissues (*rasa*, etc.), which are seats of body elements, deformed? Which country does the patient reside in? What is his age? What is the mental strength of the patient? What is his body constitution (*prakṛti*)? When did this disease occur? What is the strength of his digestive fire (*agnibala*)? How is his mind? What is suitable for this patient? What is unsuitable for this patient? What is the stage of the disease? What is the seat of the disease? A physician who considers all these many subtle factors and

gives its opposite treatment sequence by the proper use of pacification (*śamana*) and purification (*śodhana*) never fumbles, and no one would disagree with this.

Unlike other treatment methods, Ayurveda treatment is not limited to instantaneous results. In the beginning itself, this treatment pleases the mind and offers long-lasting happiness. Treatment is of many types, like “against causes,” “against disease,” “against both,” and “similar to both.” From among these, against causes means the use of diet and routine opposite to characteristics of the body elements which caused the disease. For instance, diseases involving anabolic causes and undigested matter (*āma*) are treated by catabolism, by a regimen such as fasting, and by the use of catabolic drugs. For diseases caused due to cold, its opposite, i.e., hot potency drugs, diet, and regimen should be employed. Or, for the increased phlegm (*kapha*) due to sleeping during the day, treatment should entail refraining from sleep. In this way, I have elaborated the direction of treatment opposite to the causative factors.

Now I shall elaborate treatment against disease. Those drug substances and lifestyles which irrespective of the body elements eradicate the disease by their own potential are called “drugs against diseases”. For instance, *pāṭhā* is an herb used as drug to stop loose motions in diarrhoea. It suppresses the disease irrespective of body elements like wind (*vāta*), etc. Other examples are catechu (*khadira*) in skin diseases (*kuṣṭha*), *śirīṣa* in toxicity (*viṣa*), mica ash (*abhrakabhasma*), turmeric (*haridrā*), and gold in all diseases. This is the treatment regimen against the disease. In spite of employing these, if the disease persists, treatment should be given against both cause and disease at the same time. Buttermilk plays the same role in wind- and phlegm- involving colitis. Due to its dry, astringent, sour properties, it reduces both wind and phlegm. It cures colitis by its specific activity against colitis. With this proper treatment, the disease is certainly cured.

Henceforth, I shall elaborate on treatment given by substances acting in ways similar to the disease symptoms. If the disease is not cured by the three ways mentioned previously, then this is used. The line of treatment is same as the nature of disease, but it results in a cure. For instance, in the inflammation of the bile type, poultices, etc. of hot and bile-increasing drugs is applied; or in the disease of vomiting, vomiting is induced by the drug *madanaphala*, or chebulic myrobalan (*harītakī*) is used in diarrhoea (*atīsāra*), or poison for poisoning. In this way, the direction about line of treatment has been given.

Which expert physician will not be able to conquer a group of diseases, who from time to time employs treatments like oleation, steam, induction of vomiting, purgation, oil enema, non-oil enema (*nirūha*), nasal drug instillation, etc. by intellectual logical arguments and logical interpretation of all factors like the

patient's body tissues, site, strength, time, digestive fire, etc.? Is there any disease on earth which is not curable by such a physician?

In this way, it is not appropriate here to give partial descriptions of the banyan-tree-like Ayurveda that has many branches and that is very dense. I am stopping here due to fear of excessive elaboration (*vistārabhaya*). If anyone is curious, they should learn the classics by sages such as Caraka, Suśruta, or Vāgbhaṭa and similar texts like *Vaidyacintāmaṇi*, *Rasaratnasamuccaya*, *Bhaiṣajyaratnāvalī*, etc., because these are our textbooks for diagnosis (*nidāna*) and treatment (*cikitsā*).

Diseases like a foetus in an abnormal position by which it may not be normally vaginally delivered (*mūḍhagarbha*), glaucoma (*adhimantha*), abscess, fistures, infected wounds, urinary obstructions, and fistulas can be treated by medicines. Here, the ancient physicians consider surgery as appropriate treatment. How should surgical intervention be done? What are the procedures prior to surgery? What is the main procedure? What is the post-operative procedure? How should the instrument and equipment be according to place and use? How many types of surgeries? How many types of bandages? How should the skin over the ear, nose be sutured? How to deliver the obstructed foetus without help of instruments and equipment? Our ancestors have perfectly elaborated the use of surgical instruments in diseases like blindness (*timira*) and glaucoma (*adhimantha*). If there is curiosity, the previously mentioned books should be referred to.

Additionally, texts about surgery, otolaryngology, medicine, planetary knowledge, toxicity, rejuvenators, and aphrodisiac medicines written by great sages, i.e., Nimi, Kāṅkāyana, Bhadrāsana, Videha, Gālava, Cakṣuṣya, Hiraṇyākṣa, Kāśyapa, Bhoja, etc., should be studied.

(c)

Some patients do not have the availability of funds to experience the pleasures of the medical systems of foreign countries. Some patients are denied treatment by foreign doctors for being “untreatable.” Such patients take refuge to Ayurveda or Unani treatments. We can practically see such patients being cured from diseases. Those with envy however cannot see this. The names, addresses, diagnoses, and treatment compendia can be seen in charitable Ayurveda schools. Each physician does not maintain such books as there is no objective behind it.

If someone asks what is the difference between treatment by other parties and the Ayurveda system? Our answer to that would be “give us a chance to show the difference.” It was told previously too that we treat those who could not be treated by other practitioners. The root cause for such treatment is in the medicines which have immense efficacy, i.e., medicinal mineral ashes (*bhasma*), cinnabar

(*sindūra*), tonics (*rasāyana*), medicated butters (*ghrita*), oils (*taila*), distillates (*āsava*), spirituous liquors (*āriṣṭa*), pastes (*kalka*), decoctions (*kvātha*), and which were created by a medicinal system created by the great ancestors. Before the use of such medicines, oleation and steam therapies are performed. These pre-treatments (*pūrvakarma*) are used to remove the disease from its roots. When such medicines are used, the disease does not understand where to run to, does this need to be mentioned?

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

(a)

I am a professor in an Ayurveda medical college in Chennai city.

(b) (1)

In various medical courses, as per own potential some ease in pacifying (*śamana*) medicine has been brought in this country. It is appropriate to say there is no well-equipped place for medical education. When such is the situation, this institution follows the saying, “In a treeless region, even a castor (*eraṇḍa*) is called a great tree.” I feel the officials in medical education schools should tackle the problems according to their opinion.

(c)

If the shortcomings in the Ayurvedic education systems are to be overcome, then some part of the funds spent on the respected medical branches of political people is needed to be spent for Ayurveda, and then the position of Ayurveda will also become as strong as the Western medical systems. Due to this, knowledge of Ayurveda would spread faster amongst common people.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;

(2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;

(3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a) (1)

Over a period of time, due to many reasons, there was lack of practise. Hence, the branch of surgery was tarnished. No one would disagree that for proper education, students should be selected to learn under some great master, who is an expert in surgery through repeated practise as well as skills of the hands and surgery.

(2)

To improve knowledge of self-experience in this way, who would argue about such students going to foreign surgery colleges as well as staying with an Ayurvedic master?

(3)

Similarly, in the surgical branch, for innovative thinking, who would dispute gaining accessibility of a suitable master as well as students?

With this object as focus, to date, no efforts whatsoever have been taken either in the capital city or anywhere else. How is it possible to say that the desire of the mind will be fulfilled?

(b)

Today, this subject of physicians (*vaidya*) is in the custody of ministers, hence we do not believe that the goal has crossed limits.

(1)

Just like Western medical schools, multiple Ayurveda health schools should be established in this country to carry out treatments by Ayurvedic ways using methods such as purification (*śodhana*), five treatments (*pañcakarma*), etc. Who would argue that teacher-student coordination should be done?

(2)

Keeping this goal in our vision, this committee will take appropriate efforts.

Question 5

Do you agree with the view of the Calcutta University Commission that

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

In the opinion of the subject committee of Kalikata University, how it is possible to mix Ayurveda and Western medical technology and spread it everywhere in this country?

It is true, both parties are looking to cure diseases – this is the similarity between them. But the equipment used for that definitely differs, and it is very sad that the committee of the university has forgotten this. Ayurvedic treatment has evolved with the principles of the three body elements. Western medicine is unlike that. Ayurveda does not employ wind-increasing drugs of pungent, bitter, and astringent tastes for wind-dominant fever diseases and others. In Western medicine, drugs dominant in bitter and astringent taste are used in fever treatment. In reality, even if such experiments fail, they are not considered. In this situation, combining both medical systems will destroy the glory of both systems. That is why the committee should not try anything in this regard.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

In the syllabi of the Ayurveda system, is it not necessary to incorporate new subjects like physiology or the study of chemicals. Also now, it is enough to increase the duration of the guessed education. There should be no addition to the knowledge of Ayurveda. However, this committee should remember that, because the knowledge of surgery has downgraded, for its sophistication intensified knowledge of new modern surgery will be suitable for education.

(a) (b) (c)

I feel that other aspects like, syllabus, rules, and regulations of examinations, passing, conferring of degree, etc. should be done following the rules of the Ayurveda Council.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

It is of little use to create plates showing numbers of Ayurveda physicians. However, it is more adverse, hence if this work is kept in the authority of the committee of Ayurvedic people, then it is possible to accept it. Otherwise it is not, I feel sad to mention this.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

To fulfil the specific objectives of Western medicine, medicinal drugs from our country are transported via ships to other lands, converted to new medicinal form, and then returned back to this country. The expenses required for this are not required for Ayurvedic medicines, and this is a big advantage [of Indian medicine]. Additionally, to use such derived medicines, hundreds of Western medical experts from other islands are merrily appointed on thousand-fold salaries, and this incurs large expenses, which are not required for Ayurveda, which is the second benefit. The third benefit is that luxurious palaces built for patients by spending hundreds of thousands of rupees are not necessary. The fourth benefit is that the expenses needed to pay the salaries of nurses continuously roaming cheerfully and playfully in the highest and advanced heights of palaces will not be necessary. That which

ten physicians from such frivolous Western medicine cannot achieve, just one Ayurvedic physician can achieve. Additionally, Western medical experts do not have to put any efforts into manufacturing medicines. It should not be forgotten that Ayurvedic physicians need to take such efforts. Here in Chennai, in the Kairavani area, there is a charitable Ayurveda pharmacy established by Kalval Kanna Sheth. Elsewhere nearby, in the area of Shulai, there is a charitable medical clinic belonging to Cengalvaraya Nayaka. Around seven hundred patients daily take the benefit of treatment from both these pharmacies. Both these charitable pharmacies have only two Ayurvedic physicians (*vaidya*). Both of them, with the help of two or three servants, manufacture the expected medicines as and when required. Collectively, the total expenditure at both these pharmacies is 12,000 Rupees. Considering this expense as basic, the committee should think appropriately about how much money is spent daily on patients in hospitals based on the Western system, and they should understand the comparison between the two.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

The ancient kings like Aśoka and Bhoja have preserved Ayurveda, however today's kings [i.e., politicians or government officials] are not willing to preserve Ayurveda in the same way as they take care of Western physicians, and this is the reason for the poor condition of Ayurveda.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) the State,
- (b) the local boards,
- (c) the Universities,
- (d) private agencies (individuals or associations).

The way in which officials in political circles, rulers, universities, and other committees introduce innovation among Western physicians, if the same is done in case of Ayurveda without any partiality, then what can be said? With the help of

our own and foreign people, health and life care can be implemented respecting Ayurveda.

The one who is primordial, whose lotus feet have been worshipped by gods
and daemons,
the one who has destroyed senility, fear, and death,
the one who holds such various medicines,
I offer my salutations to that Lord Dhanvantari.

M. R. Ry. Ayurvedacharya N. Madhava Menon Avargal,
M. R. Ry. Ayurveda Bhushana K. Subrahmanya Sastri Avargal,
M. R. Ry. Ayurveda Bhushana K. A. Venkatachala Sastri Avargal,
M. R. Ry. Ayurveda Bhushana G. Bhanu Vaidyar Avargal,
and M. R. Ry. Ayurveda Bhushana P. Somasundara Devar Avargal

Translated from the Sanskrit by TRUPTI PATIL-BHOLE

I offer my prayers to Lord Dhanvantari.

These are the answers to the questions asked by the national medicinal physicians committee, which has been appointed by government personnel in Madras. These answers have been accepted in the conference of the local unit of Ni. Bha. A. board on 12/4/22.

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

We perform the clinical practice of the Ayurveda system.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism.

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

According to Ayurveda, diseases occur due to imbalances in the body elements of wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*).¹ Sage Vāgbhaṭa stated that “the imbalance of body elements is disease, and the equilibrium of body elements is health.” It is very much necessary to explain the details of their equilibrium in order to understand the nature of their imbalance. Hence, just as a direction I shall elaborate it here.

This body is formed of substances named body elements (*doṣa*), body tissues (*dhātu*), and excretory products (*mala*), which are derived from the five basic elements (*pañcabhūta*). Among these, wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*) are the body elements (*doṣa*). Each has five types. The site, function, and names of each are different. When in equilibrium, they conduct all functions in body and mind.

Just as for the formation of any instrument, its organ-like parts, i.e., wood plate, nails, pipe, wire, and for their composition wood or metal are required, the necessary substances for forming the body are the body tissues (*dhātu*). The waste products of the body in particular sites are the excretory products (*mala*).

Now I shall elaborate in a general manner on the appearance of body elements (*doṣa*), what their functions are, and how they carry out functions of body and mind as follows:

Wind/air (*vāyu*) – The wind (*vāta*) of the body has characteristics such as dry, light, cold, rough, fine, and speedy. That wind is formed by the two basic elements (*mahābhūta*), namely air and space. Its five types are “upper forward” (*prāṇa*), “down-and outwards” (*apāna*), “middle” (*samāna*), “diffused” (*vyāna*), and “upper” (*udāna*) wind. These five names of wind (*vāyu/vāta*) correspond to their respective sites and functions. It supports the body through functions like enthusiasm, breathing in, breathing out, efforts, acceleration, generation of natural urges,

¹ Editor’s note: We have standardized the translation of *vāta*, *pitta* and *kapha* and their correlates in the other vernaculars to “wind”, “bile”, and “phlegm” in this volume, but would like to note that this translator’s preference was to leave the terms untranslated or to render *vāta* as “air element” and *pitta* as “fire element”.

transport of body tissues, freshness of sense organs, etc. The principle of Ayurveda is that without the body element of wind, the other body elements or waste products (*mala*) cannot carry out any function. Even when a tram is fully equipped with all parts, all its joints are assembled in an excellent manner, and the joints are well lubricated, it still cannot move even an inch without the electrical power. The situation is similar for a body without normal [function of the] wind element. In short, the meaning of this is that the body may have muscles, arteries, veins, etc., however they all need the power of the wind element to carry out their functions.

Bile/fire (*pitta*) – This body element (*doṣa*) is responsible for heat in the body. Although it is made up of five basic elements (*pañcamahābhūta*), the fire (*tejas*) element is predominantly present in it. Its properties are sharpness (*tīkṣṇa*), heat (*uṣṇa*), lightness (*laghu*), strong smell (*visra*), liquidity (*sara*), moisture (*snigdha*), and fluidity (*drava*). Its five types are “cooking” (*pācaka*), “colouring” (*rañjaka*), “brightening” (*bhrājaka*), “causing to see” (*ālocaka*), and “energizing” (*sādhaka*). As it is derived from fire (*tejas*), this body element generates continuous and normal heat in the body. In the normal state, it helps the body with functions like hunger (*kṣudhā*), thirst (*trṣṇā*), taste (*ruci*), brilliance (*prabhā*), mental vigour (*medhā*), intellect (*buddhī*), valour (*śaurya*), and softness of body (*tanumārdava*).

Phlegm/water (*śleṣman*) – This body element arises from earth and water. This body element protects the body tissues with its watery nature, so that increased wind (*vāta*) and bile (*pitta*) do not attack or harm the body. Its properties are oiliness (*snigdha*), coldness (*śīta*), heaviness (*guru*), slowness (*manda*), smoothness (*ślakṣṇa*), moisture, and inertia. Depending on their particular sites and functions, its types have names such as “moistening” (*kledaka*), “awakening” (*bodhaka*), “hanging down” (*avalambaka*), “satiating” (*tarpa*), and “connecting” (*śleṣaka*). It supports the body with the help of functions like oiliness (*snigdhatva*), stability (*sthiratva*), joining all joints (*sandhibandhana*), forgiveness (*kṣamā*), etc.

These body elements occupy the whole body, but their prime centres have been mentioned. I am listing these exactly as they are:

Sites of wind (*vāta*) – especially the large intestines (*pakvāśaya*), waist (*kaṭī*), thighs (*sakthī*), ears (*śrotra*), bones (*asthi*), and the skin (*sparsānendriya*).

Sites of bile (*pitta*) – especially the umbilical area (*nābhī*), stomach (*āmāśaya*), sweat (*sveda*), serum (*lasikā*), blood (*rakta*), nutritional fluid (*rasa*), sight (*drṣṭī*), and the skin along with organs for sensation (*sparsānendriya*).

Sites of phlegm (*śleṣma/kapha*) – especially the chest (*uras*), throat (*kaṇṭha*), head (*śiras*), joints of bones (*parvasandhī*), stomach (*āmāśaya*), nutritional fluid

(*rasa*), fat tissue (*medas*), sensory organ for smell (*ghrāṇendriya*), and tongue (*jihvā*).

Body tissues (*dhātu*) – These are seven, i.e., nutritional fluid (*rasa*), blood (*rakta*), flesh or muscles (*māṃsa*), fat (*medas*), bones (*asthi*), bone marrow (*majjā*), and semen or similar fluid (*śukra*). Their functions respectively are providing nourishment (*prīṇana*), providing life (*jīvana*), coating (*jīvana*), lubrication (*snehana*), stability (*dhāraṇa*), and filling (*pūraṇa*).

Waste products (*mala*) – Waste products are stool (*purīṣa*), urine (*mūtra*), sweat (*sveda*), nasal waste secretions (*śembūḍa*), impure secretions of eyes (*dūṣikā*), earwax (*piñjūṣā*), etc. Their functions are holding (*avaṣṭambha*), transport of fluids (*kledavāhana*), holding the body fluids (*kledadhāraṇa*), moisturising of body channels (*srotasa-snehana*), etc.

When the body elements (*doṣa*) are not abnormal, then they carry out their own functions and sustain normal health. As long as they stimulate the body tissues (*dhātu*) at correct and suitable times to carry out their own functions and favour the body they are called body element (*dhātu*). They support the body, hence they are called “*dhātu*.”

Here a curiosity arises: wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*), which are known as *dhātu*, are responsible for supporting the body. How are these body elements (*doṣa*) cured [since the literal meaning of *doṣa* is “fault” or “problem”]? I will explain this. Wind, bile, and phlegm increase or decrease due to harmful diet and lifestyle or habits, and they are led out from their own sites. They contaminate the body tissues (*dhātu*) and waste products (*mala*) where they settle, and hence they are known as “problem” (*doṣa*). They become problems in this way.

The disturbance of body elements is as follows: Minimal presence (*hīnayoga*), abnormal presence (*mithyāyoga*), or excessive presence (*atīyoga*) of time or season (*kāla*), use of various sense organs (*artha*), and *karma* (deeds) proves to be the cause of disease, and their balanced or correct presence or use is the reason for good health. Due to minimal presence, abnormal presence, excessive presence of time or season, use of various sense organs, and deeds, the body elements (*vāta*, *pitta*, *kapha*) are affected. Concerning this, although in the technical classics many types of times or seasons have been mentioned based on minute ways and intensities of seasons, generally, there are three main types of seasons, such as hot/summer (*uṣṇa*), cold/winter (*śīta*), and rainy/monsoon (*varṣā*) weather. In summer, if the natural heat in the atmosphere is reduced, it is an abnormal season (*mithyāyoga*). If the heat is in excess, it is an excessive presence (*atīyoga*), and if there is less heat, it is a minimal presence (*hīnayoga*). It is considered correspondingly in the case of cold and rainy weather.

Sense function (*artha*) – If there is minimal, excessive, or abnormal use of sense organs or other organs, then it gives rise to abnormality in the body elements (*doṣa*), just like the seasons. The same should be logically interpreted in case of activities (*karma*) as well.

I shall now explain how these body elements are affected: “Everything is enhanced by similar properties and is reduced by opposing properties.” The body elements, body tissues, and excretory products increase in amount by consumption of substances similar to their own properties, and they decrease by consumption of substances with opposite properties to them. Since this rule is seen everywhere, there is no violation of this seen anywhere. The reason for this is the theory of direct assessment (*pratyakṣa pramāṇa*). When sugar is added to milk, the sweetness of milk is enhanced. If the herbal drug *kāḍecirāita* (*Swertia chirayita*) is added, which has opposite properties to sugar, the sweetness of milk certainly decreases. Similarly, dryness increases wind (*vāta*) and oiliness decreases it. Bile (*pitta*) increases by heat and reduces by cold. Oiliness or moisture increases phlegm (*kapha*) and dryness decreases it. From this, it is proved that entities like body elements increase with the help of similar drugs (*dravya*), similar atmosphere (*kāla*), similar place (*deśa*), and similar lifestyle (*vihāra*) and that they decrease by their opposite causes.

In the medicinal system, “drug substance” means an entity formed of the five basic elements (*pañcamahābhūta*), and it is the seat of taste (*rasa*), potency (*vīrya*), post-digestion effect (*vipāka*), characteristics (*guṇa*), and action (*prabhāva*). The variation seen in the morphology and functions of a substance is attributed to the state of combination of the five basic entities in it while the substance was formed. A particular substance is regarded to be of that basic entity (*mahābhūta*) which resides predominantly in that particular substance. For instance, substances derived of earthen (*pārthiva*), watery (*āpya*), airy (*vāyavya*), spacious (*nābhasa*), and fire (*āgneya dravya*) substances. However, without the combination of all five basic entities, no substance can originate or be created merely by one entity. Substances possess taste, characteristics, potency, post-digestion effects, and action. Due to these, the substance is capable to carry out its own function.

Taste is the perception of the substance, understood by sense organ of taste [i.e., the tongue]. There are six types of tastes: sweet (*madhura*), sour (*amla*), salty (*lavaṇa*), bitter (*tikta*), pungent (*kaṭu*), and astringent (*kaṣāya*). Out of these, sweet taste is formed of two basic entities (*mahābhūta*), earth (*pr̥thvī*) and water (*jala*). Sour (*amla*) taste is formed from the basic entities earth (*pr̥thvī*) and fire (*agni*). Salty taste is formed from the basic entities water (*jala*) and fire (*agni*). Bitter taste (*tikta*) is formed from the basic entities space (*ākāśa*) and air (*vāyu*). Pungent

(*kaṭu*) taste is formed from the basic entities fire (*agni*) and air (*vāyu*). Astringent (*kaṣāya*) taste is formed from the basic entities earth and air (*vāyu*). Of these six tastes, sweet, sour, and salty tastes reduce wind. Bitter, pungent, and astringent tastes increase wind. Pungent, sour, and salty tastes increase bile. Sweet, sour, and salty tastes increase phlegm. Tastes are unlimited in number by variations of substances with main tastes and additional mild tastes as well as by synergism and antagonism of different tastes.

Characteristics reside in the substances and are twenty in number. They are heavy, light, slow, sharp, cold, hot, oily, dry, smooth, rough, moist, liquid, soft, hard, stable, moving, minute, large or thick, clear, and sticky. Of these characteristics, since heavy, etc. characters are similar to *kapha*, they increase it. Hot, etc. characteristics are similar to bile, and hence they increase it. Characteristics of dryness, etc. are similar to wind, and hence they increase it. At the same time, opposing characteristics reduce the body elements.

Potency (*vīrya*) is a discrete potential of substances, which is different from taste and post-digestion effects. It is mentioned in the *Suśruta Saṁhitā* that “potency is that by which substances or drugs show their action” (*Sūtrasthāna*, chapter 41). Hence, the effective exhibition enriched by taste, post-digestion effect, and efficacy is known by the name of “potency” (*vīrya*), since the characteristics, i.e., heavy, oily, cold, mild, light, dry, hot, and sharp were mentioned as “potency” by Vāgbhaṭa. Functions like alleviation, increasing digestive fire, taking away of the abnormal body elements by medicinal vomiting, digestion, etc., such activities take place through the properties or characteristics like oily, hot, sharp, etc., and hence these characteristics are routinely considered as potency. Hence, the term “potency” is correctly conferred upon the characteristics. The heavy, etc. characters are like extract forms of all the existing characteristics, and they have higher potency. Due to the absence of this capacity, the term “potency” is not applicable to taste, post-digestion capacity, etc. Few other people believe that hot and cold are potencies. Vāgbhaṭa states that out of the eight characters, two have specific strength: “Though drugs substances have various characteristics, fire and water are the dominant entities in it.” Potency is of two categories, including the logical potential and the potential beyond perception. The logically understandable power or capacity of taste or substance to perform a specific function is its logical potential. The potential beyond logical interpretation is known as “special effect” (*prabhāva*). The potential of drugs as rejuvenators is beyond logical perception. The special potential of drugs is the efficacy beyond perception and beyond the logical efficacy residing in drugs, their post-digestion effect, and their taste. This is the opinion of lord Dhanvantari as mentioned by Shivadas.

The final effect that arises by the combined effect of substance, post-digestion effect, special potential, and effect of the characteristics is called “potency” (*vīrya*). It is of two types, cold and hot. Hence, all substances of this world are divided into two types, cold and hot. In other words, they are said to have hot potency or cold potency.

Post-digestion effect (*vipāka*) – The theory is that all food consumed by us is converted to only three tastes, i.e., sweet, sour, and pungent – as a post-digestion effect. This post-digestion effect can be assessed from results. From among these, the sweet effect is of cold potency, and sour and pungent effects are of hot potency. Among tastes, sweet and salty tastes result in sweet effects, the sour taste results in sour effects. Pungent, bitter, and astringent tastes result in pungent effects (*vipāka*). This is the theory. This effect is known as well as experienced by the results seen after food digestion.

Special effect (*prabhāva*) – This is evident in the case of some substances. As a general rule, by the cause there is an effect. However, this special effect is an astonishing special phenomenon, which disobeys the rule. For instance, when the root of the *Sahadevī* plant is tied over the head, fever subsides.

In this way, the substances that have taste etc., are similar to body entities and cause anabolism, and when different they cause catabolism or reduction. This is for certain. Imbalances in body elements are due to their increase or decrease. When in an increased state, the body elements exaggerate their functions. In a decreased state, their functions are reduced. In a balanced state, they perform functions in an appropriate way. The body elements which in a normal state nourish the body are themselves responsible for the destruction of the body when in an abnormal state. Hence, they should be protected from rise or fall by following correct behaviours. As per causes, the body elements lead to different types of increase, decrease, infection, and abnormality involving all three body elements due to decreased use, abnormal use, and excessive use of seasons or time, sense organs and other organs, and deeds. The body elements mix with each other and cause abnormalities. In this way, it is not possible to establish or state how many abnormalities they can produce. According to Ayurveda, there is no controversy or opposing opinion to the statement that “disease is the imbalance in body element (*doṣa*).” We cannot say how this theory would be appropriate in examinations of modern sciences, since we do not have adequate knowledge of that science.

(b)

For the diagnosis of disease, various examination sequences have been laid out in many instances in the literature of the Ayurvedic system. Here, first, the patient should be examined by seeing, touching, and interrogation. By the means of inspection, all body parts of the patient should be observed. Due to this, at a particular time the abnormalities in the patient's body constitution, faeces, urine, tongue, inhalation, and exhalation can be understood. By touching [or palpation], there is confirmation about aspects of the patient's body like heat, coldness, softness, hardness, etc. and special knowledge about pulse speed. By questioning, diagnosis is made after considering symptoms, sites of pain, hunger, thirst, taste, lack of hunger, relieving and aggravating factors, etc. These three methods are generally employed everywhere in order to briefly know about the diseases. However, at the time of the patient's examination, for an inferential knowledge about his outer and inner state, an examination must be conducted using the five senses and questions, i.e., by six ways of examinations. The detailed explanation should be derived from the *Suśruta Samhitā*.

SYSTEM OF PATIENT'S EXAMINATION

Before we can describe the types of examination of the patient, I will first write how many types of disease exist, because this is essential for the diagnosis of disease and for fighting it.

There are seven types of diseases: congenital, foetal, self-inflicted, other-inflicted, seasonal, by (malign) forces, and natural.

1. Congenital diseases stem from abnormalities of the sperm and ovum, and they are either from mother or father; e.g., diseases such as skin disorders, haemorrhoids, diabetes, etc.
2. Foetal diseases are due to the abnormal lifestyle of the mother by not complying to the pregnancy cravings. These include deformed spine, deformed legs, *kilas*, and also diseases due to faulty maternal nutrients passed on to the foetus.
3. Self-inflicted diseases are due to anabolism, catabolism, and due to one's own faults.
4. Painful inflicted diseases includes injury, fractures, impacts, anger, grief, fear, etc. and abnormalities of body and mind.
5. Seasonal diseases means due to abnormal weather conditions, like cold weather, or by not taking good protective care in such situations, thus leading to diseases like fever, etc.

6. Diseases by (malign) forces means those by disobeying god or teachers and inflicted by curses (*atharvaṇa*), etc., which lead to diseases like fever and being affected by ghosts.
7. Natural diseases means hunger, thirst, and ageing, all timely or otherwise [untimely]

Such different types of diseases are not apart from the main classification as pathophysiological and accidental/external. Pathophysiological means due to the body elements. In those, first the wind, etc. become abnormal, and then there is ailment. Accidental/external ones are due to external causes. First, there is pain, and later on wind, etc. are affected.

Such different types of diseases exist, and their examination should be done by knowing causes, prodromal symptoms, main symptoms, and relieving factors and understanding the path of disease formation. These five ways are useful to diagnose a disease, and hence the term “cause” (*nidāna*) is appropriate for these. Knowledge of disease is certainly delivered, and hence the term “*nidāna*” [*dāna* = to deliver or to give], or it indicates the diseases, hence the term “*nidāna*.” In this respect:

- 1) Cause (*nidāna*) – The abnormality in wind, etc. due to improper diet and life-style becomes the cause of disease.
- 2) Prodromal symptoms (*pūrvārūpa*) – The symptoms which give knowledge of forthcoming disease are prodromal symptoms.
- 3) Symptoms (*rūpa*) – After the disease is formed, its symptoms give knowledge about its nature.
- 4) Relieving factors (*śamana*) – The feeling of relief or happiness given to the patient by medicines, food, or behaviours, which are either against the cause and the diseases or similar to the cause and the disease.
- 5) Map of disease formation (*saṃprāpti*) – “A map stating the reasons and how the body elements (*doṣa*) got affected, how they travelled and created abnormalities, which tissues or organs were affected, and how disease was formed” is *saṃprāpti*.

Apart from this, the detailed status of the affected tissue or organs (*dūṣya*), region, strength, digestive fire, body constitution, age, mind-set, habitual comfortable entities, and food should be assessed to diagnose the disease. If diagnosis is made in such a manner, all diseases (even newly formed diseases) can be diagnosed and treated by Ayurvedic experts. The reason for this is that this type of methodology of diagnosis and treatment was established by the ancient sages with great and pure intellect. These procedures of diagnosis and treatment were established with basic principles regarding the interrelation of body, mind, soul, physical entities,

and principles of the soul. Hence, the generators of this system have made it clear that these methods will never be inappropriate in past, present, and future.

“A physician (*vaidya*) should never be embarrassed if a disease cannot be named at the time, since not all diseases have a phenomenon which can be termed. One who carries out treatment by observation of details of affected tissue or organs (*dūṣya*), region, strength, digestive fire, body constitution, age, mindset, habitual comfortable entities, and food; never fails.”

TREATMENT PRINCIPLES

The patient to be treated is either eligible for anabolism or for catabolism, hence the treatment protocol is divided in anabolic and catabolic treatments. Previously, it has been stated that diseases are due to an imbalance of body elements (*doṣa*), and this imbalance is of a catabolic or anabolic type. Imbalance of body elements is disease, and their balance is good health. Hence, for attaining health, increased body elements need to be reduced and reduced body elements need to be increased in order to make them balanced; this is proven. Hence, as the patient is either eligible for anabolism or catabolism, the required treatment should be anabolic or catabolic.

Anabolism – Generally, such treatment is performed using earth and water dominant substances. They lead to anabolism.

Catabolism – To convert obese bodies into lighter ones, this treatment is carried out. It is carried out using substances with dominant characteristics of fire, air, and space.

Treatment is divided in two categories, purification (*śodhana*) and pacification (*śamana*).

Purification (*śodhana*) – The stored and troubling body elements (*doṣa*) are taken out from the body from their root; this is purification. It is of five types: strong purgation (*nirūha*), emesis by medicine (*vamana*), purgation by medicine (*virecana*), nasal instillation of medicine (*nasya*), and bloodletting. These conduct the purification/evacuation of wind, bile, and phlegm (*vāta*, *pitta*, *kapha*), and blood (*rakta*). These processes of purification are numerous according to the particular disease, stage, combination of body elements, body constitution of the patient, region, season, strength, and the expert physician's thoughts. There is no better way to get rid of body elements that are very much increased and blown.

Pacification (*śamana*) – The treatment which neither removes the body elements nor increases the normal body element, but which creates an equilibrium

of the imbalanced body elements within the body; this is known as pacification (*śamana*). Even anabolism reduces only wind or wind along with bile.

The theory of the Ayurvedic system is that all treatments, including those special processes like oleation, drying, stopping, sudation, scraping, digestion, carmination, life enhancing, and nourishing, are incorporated in anabolism and catabolism. Ayurvedic physicians believe that the body is formed of five basic entities [i.e., the five *mahābhūtas*]. Hence, for their actions and nourishment, the fulfilment and nourishment is provided by food substances with minute parts of the particular basic entity. If the rules of food consumption are disobeyed and there is an improper consumption, some basic entities are nourished and others are malnourished. Fractions of increased entities create desire for their opposing characteristics. Malnourished entities create a desire for characteristics similar to themselves. Hence, the treatment should first be by catabolism (*lañghana*) and later by anabolism (*bṛmhana*). In such a manner, treatment is accomplished by reducing the increased and increasing the reduced.

Disease – Its types are pathophysiological and accidental/external. These are also of two types, treatable by drugs and treatable by instruments, alkalis, and fire. Here, the types of treatment for diseases which can be treated by medicines have been generally explained, but there are many aspects for more minute and detailed elaborations. I am not willing to elaborate these detailed thoughts, which would make the answer too lengthy. However, the surgical aspect has been properly elaborated in Ayurveda, and to highlight this I shall explain a few aspects of it. Those diseases which cannot be treated by anabolic and catabolic medicines may be treated by instruments, alkalis, and fire, and all the ways to relieve the patients were properly explained. The delivery of the foetus in normal and abnormal conditions were properly elaborated. The details of surgery and obstetrics should be derived from the *Suśruta Samhitā*.

Regarding the instruments of surgery, their number (26), their appearance, their names (*maṇḍalāgra*, *vṛddhipatra*, *utpaladhāra*, *śarāryāśya*, etc.), curability, incurability, assessment, appropriate and inappropriate sites for surgery, main procedures (incision, breaking, scrapping, cutting, probing, extraction, liberation of fluids, stitching, etc.), appropriate indication for cleansing (*kṣālana*), purificatory (*śodhana*), drugs for healing in liquid or paste form, bandaging methods, bandage materials, normalising the scar, etc. were clearly elaborated. If today Ayurvedic physicians do not easily carry out surgeries, it is not that they do not have the methods, but that they are not trying it due to fear of the rulers. This can be the explanation. If they receive the opportunity, undoubtedly they will become popular surgeons.

There are special treatments for different organs. Eye drops, nourishing procedures for eyes (*tarpana*), special liquid extraction processes (*puṭapāka*), and collyriums are for ophthalmic treatment. Nourishing and alleviating nasal medicines (*nasya*) types, *kaval*, and medicinal boluses and gargles (*gaṇḍūṣa*) are for oral diseases. *Picu*, *śirobasti*, and *seka* [external oil applications on the head] are for head disorders. Urethral enemas (*uttarabasti*) are for bladder disorders. These are various types of treatment.

It is more difficult for Ayurvedic physicians than other physicians to give treatment, due to aspects like medicine preparation, collection of herbal drugs, testing of drugs, cultivation of drugs.

We have experiential trust that in Ayurveda there is adequate material to treat those curable diseases by means of a methodical cause-and-effect relationships. There were no hopes previously to have in existence some committee for “*āyurveda tatva nirṇaya*,” i.e., for decisions regarding Ayurvedic principles for the examination by physicians. Hence this is our request. In Madras city, there are various Ayurvedic charitable colleges. One should study those and who was treated there to take a decision on this matter and to arrive at explanations in this regard.

As a matter of fact, how many of the latest and well-equipped modern medical hospitals are present in this city? How many charitable English hospitals are present? How many surplus assistant physicians are present? How many have expertise in the medical system? Nevertheless, without the availability of essential services and facilitation, Ayurvedic charitable colleges or hospitals give services to thousands of patients. The reason for this is the excellence of physicians in the colleges and hospitals. There is no other reason.

It can be analysed that diseases of wind, mental disorders, skin disorders, herpes, body wasting and diseases of blood and wind are specifically treated by Ayurvedic treatment. If you ask for the basis of this statement, there is evidence for it. Mostly, the patients of these diseases visit many clinics and receive treatment of well-known modern doctors, and since there is no cure by them, the patients seek the help of Ayurvedic physicians. There is further evidence, namely some unbiased allopathic expert physicians encourage the patients to receive medical treatment from the Indian system during their initial visit. There is no written evidence of this apart from our experience, and it cannot be practically shown or displayed. Hundreds of such certificates must be available with those who are doing medical business.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

(a)

These are the persons available here:

1. Madhav Menon – Minister of All India Ayurved Mahamandal
2. Ayurvedbhushan K. Subramhanyashastry – Sub-Professor at Ayurved College Chennai
3. Vaidyavisharad K. A. Venkatachal Shastri – N.B.A. Mahamandal and University's income and expenses superintendent
4. Ayurvedbhushan C. Bhanuvaidya – Registered medical officer at Chenkalvaraya Orphanage Home and chief physician at associated Ayurvedic clinics (*dharmasala*).
5. Ayurvedbhushan P. Somasundardevar – N.B.A. Mahamandal's local member.

(b)

(1) Not satisfactory and not adequate.

(2) Not appropriately satisfactory. There are no hospitals attached to medical colleges. Hence, there is difficulty in getting direct knowledge in all technical subjects. To solve this difficulty, we think that hospitals affiliated to Ayurvedic colleges should be established. Permission should be given for cadaver dissection for learning anatomy (*racanā śārīra*), and most importantly, adequate funding should be provided by the government.

(c)

The answer of the third question, (b) should be appropriate here.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;

(2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;

(3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(4) (a)

(1) Certainly

(2) Certainly

(3) Certainly.

There are still 2-3 colleges in this country which are somehow functioning without adequate funding to purchase necessary equipment.

1. Ayurvedic college in Chennai.
2. Venkat Raman Ayurvedic College.
3. Ayurved College of Arya Vaidya Shala in Kaliket City.

First in this list is Ayurved College in Chennapuri (Chennai). For the practise of Ayurveda in South India, Pandit Gopalacharya spent his life and money selflessly, and due to his continuous strenuous efforts this unique college has been famous

for a long time. The other two colleges are functioning due to the efforts of their founders. However, as there are few funds, there is no facilitation for teaching and bringing essential elements. Due to the lack of adequate facilities, it cannot be said that these colleges are functioning properly. Hence, these colleges should be taken over by the government and should be provided adequate funding assistance. Then they can have proper facilities and these colleges will be able to accomplish their ideal goals.

(b)

This ideal situation cannot be created suddenly. The present medical colleges should get government recognition. Then as per feasibility they should be provided with government aid by yearly funding. If there is support from the government, there will be a timely improvement and enrichment of these colleges. It is undoubted that very soon they will attain ideal qualifications.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

I do not accept the opinion of N.B.A. Mahamandal. The reason is that it is commonly seen that graduates and degree holders of modern medicine are side-lining their degree obtained by great efforts, investing great time and money, and are following Ayurveda. On the opposite side, it is never seen that popular Ayurvedic physicians diverge from their own system.

Also, it is the time to think about the progress of the Indian system of medicine. It is not the time to think about integrating Eastern and Western systems of medicine. For this reason, I cannot understand why this theme came into

existence. If the thought behind is that “there will be progression or facilitation of the Indian system of medicine”; then it is impossible, because by such mixing, the Indian system of medicine will dissolve into the Western system. Thus, it will be a way to destroy Indian medicine and not its progression. However, if all Indian systems of medicine are collectively studied, it will be of great benefit.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

The novel subjects in the English medical system mentioned in this question are of no use actually for knowledge of Ayurvedic principles. However, for the direct knowledge of Ayurveda and for the clinical practise, some fractions of the modern subjects would be beneficial in today's era.

(a)

About the syllabus – the syllabus of N.B.A. University itself should be accepted. Accordingly, different types of degrees should be defined. The study duration as accepted by the university is appropriate.

(b)

Knowledge of Sanskrit literature and knowledge of local languages is a must.

(c)

For teaching purposes, there should be a division into a higher and lower class. In the higher class, teaching should be in Sanskrit language. In the lower class, teaching may be in the local language as necessary.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

Registration of Indian physicians is truly essential. If there is registration in our country, the everyday moment-to-moment increasing number of self-acclaimed so-called fake physicians who do not know the system and are irresponsible will reduce. Due to this, the false defamation of learned and alert physicians will end, because the effect of misconduct by the previously mentioned quacks is affecting Ayurveda. It is not easy to choose a good Ayurvedic physician from the community of physicians who have with their own wish learnt the business of medical field, and who are indulged and involved in many attractive things with a lot of vain talk.

However, still, the future pure development of Ayurveda should be the ultimate objective, and then this arrangement should be done, though it would be by great effort.

(a)

First, there a committee (*maṇḍala*) of popular Indian physicians should be formed. This committee should be independent in their work. It should not be under the control of physicians of the English system. The authority of registering Indian physicians should be with this committee. This committee should, by proper procedure, check the eligibility of the current Ayurvedic physicians with or without degrees and complete their registration. There should be a rule that only after this process, those physicians with a valid degree will be registered. The registered

physicians should have proper rights in this subject. Currently, the proper institute for this work is Nikhil Bharatvarshiya Ayurved Mahamandal.

(b)

I have not studied the current rules on medical registration, hence I am not willing to comment on them.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

I feel that it is easier to pay the costs of Indian medicine treatment rather than English medicines. People should judge by themselves through checking the number of patients and expenses in the care of patients in English and Ayurvedic hospitals.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

There was a downfall of Indian physicians. Its reasons are the disrespect of the government, forceful campaigning of allopathic [English] medicine, and the ban or rules imposed on purchasing toxic or mildly toxic drug substances [of Ayurveda] by Indian physicians to increase the business of the allopathic system of medicine.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a)** *the State,*
- (b)** *the local boards,*
- (c)** *the Universities,*

(d) *private agencies (individuals or associations).*

In the present time, the way the uniting or strengthening of Western physicians was carried out, should be carried out for Ayurveda too, by the state, local boards, and universities.

M. R. Ry. Ayurvedaratnam K. Seshasastri

Avargal – Sringeri

Translated from the Sanskrit by JANE ALLRED¹

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I pursue Ayurveda for the sake of Siddha. The division stated in the question – i.e., ‘the branch of Siddha’ – is not sound. The received tradition of Ayurveda is founded upon perceptual experience; knowledge coming from the sciences is thus identical to experience. Humans share our natural cognitive capacities with birds and beasts. But such empirical knowledge cannot be gained from scientific expertise (*viññāna*). Indeed, knowledge gained from the sciences alone can bring scientific expertise. Only such expertise may be called Siddha.

Suppose, however, that Siddha is a separate division of medicine. Even so, it would be indistinct from the received tradition of Ayurveda. We may even restrict, however you may like, our sources to whichever traditional medical knowledge is passed according to regional languages. Even still, the branch of Siddha would in every way exemplify non-distinction from Ayurveda. You might try asking someone versed in non-Indian sciences this question as well.

¹ Sheshasastri’s use of language has presented a couple of unique challenges. For the most part, I have translated sentences so as to be legible to the non-specialist. As is always the case with such a goal in mind, I have often spurned a more literal translation of a passage in favor of one which fluently captures its intention. For certain words which are technical in nature, which have no clear English translation, or for which I have chosen a slightly non-standard translation, I have provided the Sanskrit in brackets.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stands the tests of modern scientific criticism?*

(b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

The texts from Caraka, Suśruta, and Vāgbhaṭṭa have traditionally been used for Ayurveda. These texts are the standard (*pramāṇa*) insofar as they set the subjects of study for all doctors about the causes of disease and so on. All of these fields of study guard our path to knowledge (*pramāṇa*) intently; they alone are canon. Though somewhat contradictory, we may understand them in a similar manner to scripture. Every learned person informs us about disease; it is rooted in several possible causes, the list of such causes beginning with a corruption of the humours (*doṣa*). A canonical text on etiology called the *Mādhavanidāna* proceeds in this way. Blossoming with knowledge, it expressed this long ago and much better; thus, it would be fruitless to supply a description here. And thus more, Ayurvedic specialists should not exchange the truth of this science for another; this tradition alone provides the path to knowledge (*pramāṇa*).²

Ayurveda began from the mouth of the Vedas. Though the compositions of modern science are well thought through, they have existed but for a millennium. Modern truths are divided on every word. Even for a very long time, Ayurveda has maintained its brilliance without alteration [i.e., it has one form]. Ayurvedic texts have been strung together by those bulls among sages, beginning with

² The word used here for ‘theory’ is *pramāṇa*, an important term in Indian Epistemology. Literally, it means a source for knowledge, which does not entirely encapsulate the idea of a theory. In particular, *pramāṇas* describe more general means of knowledge, such as perception and inference, and do not refer to a specific theory. Here, the author is concerned with testimonial knowledge from informed experts, which somewhat captures the idea of a theory, insofar as a theory is constructed by scientific experts to explain an aspect of the world. To provide fidelity to the standard uses for the term, I have provided more standard translations of the term, using multiple translations according to the context.

Ātreya. They are mighty, disciplined, and have acquired inner heat (*tapas*) through austerity. They have granted themselves unspeakable power, and they possess yogic insight (*yogaśīti*). These texts have required protection from those learned in Ayurveda even from the very beginning. How could a single modern scientific truth, divided in its practices and on every other matter, possibly replicate these texts, which are undivided on every matter?³ In such a manner, we will continue hearing of truths such as 'Homeopathy.' All sciences may be compared according to the results of their form of treatment. Even granting that the English doctors mentioned in the question come later, how could one version of this modern truth possibly develop over a long period of time when this truth changes at every word, and how could these doctors possibly compete with truth of the Ayurvedic tradition? Who, being embraced according to today's truth, will be authoritative when another is embraced tomorrow? How could such a truth, moreover, rival the Ayurvedic tradition day by day? In regards to effectiveness in curing disease, there is no comparison whatsoever to be made of the truths of the sciences of those who approach the path of many ways, considering how they observed the causes of malaria and the causes of the plague.⁴ This is how I see it.

(b)

Here, as before, we turn to the texts of the Ayurvedic tradition, which are protected and sustained by those educated in it, the truths of which have been passed uninterruptedly for a very long time. Reproduced in such a manner, these subjects, which are established through observation, may be offered to answer such questions; they are ever watchful, and explain the nature of diagnosis as so: "One should examine a patient by means of observation, touching, and questioning. One should examine the disease according to its cause, premonitory signs, symptoms, consequences, and extent."⁵ Thus, I go to the procession of texts beginning with *Mādhavanidāna* for these matters. I do not wish to explicate a whole portion of the text. Such a description would be for vain, given that there is no clear cause for it

Today, modern medicine is fit for the countless numbers of villagers, who have been protected by indigenous doctors. Hardinge, the former Viceroy of India, clearly said upon the establishment of an Ayurvedic college (in Delhi), "For-

³ In order to make sense of this sentence, I have read the first instance of divided [*bhinna*] as a misprint for undivided [*abhinna*].

⁴ He is presumably sarcastically referencing the deadly Mysore Plague, and the failure of medical institutions to deal with it, here.

⁵ Translation of this verse of Vāgbhāṭa's provided from Dominik Wujastyk, *Roots of Ayurveda*, (New York: Penguin Books, 2001), 285.

eign doctors do not have an ounce of help to give the villagers.” Those amongst the villagers who are free from disease are seen through the biases of city people. I can say with certainty that whichever contemporary indigenous practice should be discarded, it should be done so because it strays from the diseaseless path of the Ayurvedic tradition. Honing their skills well, previous Indians set regular practices grounded in the prescriptions of the Ayurvedic tradition into constant practice for all. Today villagers live well without the help of foreign doctors; when they become ill, they are helped by indigenous doctors; I can thus say with certainty that the goals of indigenous doctors, in this regard, are the extreme opposite of the continuously changing goals of modern medicine.

(c)

Vāgbhaṭṭa says: “That medicine which is born in whichever place is used.” Just as whichever grain grows in whichever place, that grain is a natural staple for the region, so too traditional medicines, such as local roots, are primarily suitable for those who live in whichever place, because of its conformity to the local constitution. Thus, indigenous medicine, produced by a secure source of knowledge, is preferable. Though foreign medicine is founded upon coherent scientific theories, it is not suitable to us Indians; this is true. Indians and Westerners have exceedingly diverse constitutions because of their various customs, such as their diet; this is true for all. The medicine called *bobhavi*, whose qualities conform to its natural habitat and so on, is certainly healthy. Thus there should be funding for indigenous medicine as well as funding for the medical care of foreigners. Whether foreign medicine is effective in some way or another, or if local medicine is not effective, we find differences through experience – this much is clear.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If you answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

Working previously at a position at Śṛṅgiri Jagadguru with the kingdom of Mysore, as well as at a temple (Mujarai), and on the regional level (Kuḍur district board), respectively for twenty-five, eight, and seven monthly pay periods, I set up a medical practice on the outskirts of Śṛṅgiri. And I am a representative for the Nikhila-Bhārata-Varṣīya-Mahāmaṇḍala-Vidyāpīṭha [NBVMV].

(b) (c)

There are neither sufficient provisions for indigenous medical practice nor for the study of indigenous medicine through current channels for indigenous medicine. Even if there were a government college in the city of Mysore, we could hardly infer the success of such a school; there are simply too many extraneous circumstances.

Firstly, no, there are no opportunities for accreditation in the instruction of Ayurveda. Moreover, there is no readily available expertise on introductory education on Ayurveda in Sanskrit, nor is there any in English; nor is there a primary college anywhere else in the country. And students with no English are shunned, despite their mastery of Sanskrit. And students who have even a little understanding of the English language are embraced; though they may be clever, they do not know Sanskrit. Yet, the Ayurvedic canon is always primary. Its brilliance shines in Sanskrit alone. Some newspaper⁶ has reported that the original sources for Ayurvedic knowledge – Caraka, Suśruta, and Vāgbhaṭṭa – have been deemed useless. But truth exists so that it may be studied. Those who have passed the school final exam mostly do not enter an Ayurvedic college. And these people think in the following way: “Why should we subject ourselves to practicing Ayurveda? We will not earn more than thirty rupees a month, even if we put in hard work. Thus, we will enter another field.” And there is moreover a painful absence of college administrators and government representatives who have mastered the

⁶ Here, the text reads *kayācid vṛttapakrikayā*. Given the similarity between the characters for *tri* and *kri* in the Kannada script, as well as the fact that *pakrikā* does not seem to be a word, I have read this as a misprint for *patrikā*, which means some sort of leaflet. I have thus interpreted *vṛttapakrikā* as a possible neologism for ‘newspaper,’ taking the common meaning for *vṛtta* as ‘news.’

sacred tradition of Ayurveda. These positions are restricted to those who are better in English science and to those learned in its medical practices. Such authorities are not typically aware of the beauty and brilliance which naturally are the sacred art of Ayurveda, narrated,⁷ as it is, in the most rapturous of language. They think, instead, the sweetness of Ayurveda is excelled by that of Western medical traditions. They want to please the class of ministers and teachers out of fear of losing their salary. If they do know the subject, they do not explain it in public out of fear of losing prestige.

Moreover, suppose that the Mysore government granted provisions to district, municipal, and temple organizations of indigenous doctors. 50 rupees per month is considered sufficient for the salary for doctors and the expenses of medical practice and regulations. Usually, a salary for a doctor is 10, 15, or 20 rupees. Expenses of medicine are reckoned to be 15 rupees. Thus, an Ayurvedic college is considered supported with a mere 50 rupees a month. Meanwhile, English medical schools usually get over 1,000 rupees a month. To sustain Ayurvedic medicine with such provisions would be as much as to keep a flower afloat in the sky. The preparation of various purifying herbs such as oils and powders, according to principles, could supply only one doctor amongst many. And yet, the whole sum is distributed amongst each and every doctor. The proportion between support for indigenous medicine and English medicine is as an ant to an elephant.

N.B. A committee has been put together by the government of Mysore for the sake of researching indigenous medicine. This government order regarding the creation of the committee explains “wherever support is given, it should be comparable to English medicine in every way.” Government medical administrators are afraid of the assemblies and committees because of this order. This order has set a fire in my heart which cannot be quelled. (18 September 1919, Mysore, *Kanada Gazette*) (What else is there to say?)

Additionally, the governance of the branch of Ayurveda is not dealt with separately. Regional and royal doctors as well as district and taluk ministers make regulations concerning Ayurveda, though they have not studied it. Ayurvedic doctors are not accepted as participants in any government associations; they are hardly noticed, despite being crucial.

Thus, even these two criteria [i.e., the sufficiency and adequacy of indigenous medical institutions] are not satisfactory

⁷ Here, there is a smudge in the text. It is most accurately transcribed as *ka***ta*. Given that *kathita* (narrated) makes the most sense in this context, I have translated the text assuming this is the intended word.

(c)

I have explained the lack of provisions in detail above

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;

(2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;

(3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

These three ideals would be steps to attaining impeccable fortune for the art of Ayurveda. I become delirious with joy upon thinking of them.

N.B. Faced with adversity in this age of Kali, or perhaps simply being under a spell of ill fortune, the people of India search and search for schools directed toward such results. Schools in cities such as Madras, Bombay, and Mysore lack these ideals entirely. This is how I understand our despair.

(b)

I do not completely understand the question here.

Question 5

Do you agree with the view of the Calcutta University Commission that “There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

The opinion of the administrators of Calcutta University is not particularly sound. Only if those described in the manner above (that is, those who can recognize the body’s vital points (*marman*) according to the various sciences written in Sanskrit and who are also skilled in the highest of English sciences) held no such opinion, could their subtlety of perception win over my sensibilities, accustomed as they are to Indian sciences (that is to say, only then, would they cause me to relinquish my indifference to English science).

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I can say with confidence that the juxtaposition of various sciences, each established, among other things, with its own variety of methods, would do naught to shatter the elegance natural to whatever is being taught. Let there thus not be any addition.

(a)

The NBVMV has searched our encyclopedias for certifications which they could adopt. Here is my opinion: I have advanced practitioner (*bhīṣaj*), specialist (*viśārada*), and senior doctor (*ācārya*) as the best certifications the NBVMV could provide to approximate the modern certifications of L.M.P., L.M.S., M.B. B.S. [*sic*], etc.

(b)

The qualifications and duration for the study of the Ayurvedic Sciences are:

- i. A practical understanding of the words and meanings of Sanskrit
- ii. Knowledge of the appropriate regional language
- iii. Knowledge of English insofar as it can assist in the day-to-day

(c)

Instruction of Ayurveda is necessarily in Sanskrit, but supplemented by the appropriate regional language in the area.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a)** *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b)** *any changes in, or additions to, the existing legislation on medical registration.*

(a) (b)

Those who go about healing without formal education in the art of medicine (how a root from such and such a tree is to be mixed in such and such a way, to whom such and such treatment should be given – these sorts of matters) cannot possibly teach their methods. Thus, senior doctors who are skilled in their work and who know science in a manner which may be put into formal procedures cannot be neglected.

Vi. Sū. says: “Those posing as genuine practitioners (*bhīṣakchadmacara*) and those who have merely learned through experience (*siddhasādhita*) are to be punished by the king,’ so dictate the teachings of Ayurveda. For otherwise, science would be without repute. It is foolish to suggest that we merely act through experience. But experience is just those strong imprints born from an awareness of science [in a previous life]. People share the same sorts of awarenesses as birds and beasts. But such awarenesses cannot be born from scientific expertise.”⁸

This would be the easiest option: there should be special seminars for the sake of instructing such practitioners (i.e., training).⁹

Here, perhaps the Nikhila-Bhārata-Varṣīya-Āyurveda-Mahāmaṇḍalam (NBVAM), which has promised aid to each and every princely state (*prāntikamaṇḍala*), could establish some central sub-committee (*upasamiti*) as well as a committee for each and every princely state.¹⁰ In this committee, there should be a representative for the [British] king or a representative for the respective princes in the position of superintendent. But there should be representatives who have expertise in Ayurveda, or who have partial expertise in both Ayurveda and English medicine. In matters requiring special knowledge, the superintendent should necessarily defer to the word of the representatives.

N.B. There are doctors of English medicine who are enamored with indigenous medicine and yet think English medicine to be superior. But this is merely according to methods in line with their own education. Or they may alternatively consider indigenous medicine merely through translation, or only for the sake of showing the superiority of English medicine.

Let an association governed by the Āyurveda-Mahāmaṇḍalam and the taluks create some certificate (*nāmapāṭṭika*) for doctors, after considering each and every

⁸ It appears that a portion of the author’s response to question one was lifted, in a slightly altered form, from this quotation.

⁹ Here, the author simply writes the English word, ‘training,’ transcribed into Kannada letters.

¹⁰ *Prāntikamaṇḍala* literally means a periphery region. Given that the author later mentions the kings of these realms, I assume he means a princely state.

matter. Principally, it should signify that they are certified according to the standards of modern instruction.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Foreign medicine requires an abundance of wealth. How so? Generally, primary resources are taken from Indian and other countries, and made into medicine after being brought into Europe. Other medicines, received from other regions (e.g., America) and incorporated into the wealth of European nations, are then brought to India, along with the costs of transport. And moreover, technological pursuits, vital to English medicine as they are, require funding. On top of these manifold primary costs, there are also the salaries of English doctors (it is evident they feel entitled to a large salary). And such is the immeasurable cost of English medicine.

Because of the absence of these costs, the meager requirements of indigenous medical systems are self-sufficient.

N.B. In regard to estimating the daily travel costs for an indigenous doctor, I believe that only six pies are necessary per patient.¹¹

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival.

To search for the cause of the decline of indigenous systems of medicine is essentially to research the connection between the construction of a dam and the disappearance of water. The saying [by Kalidāsa] comes to mind: "Circumstances move up and down like the rim of a wheel." And yet, the art of indigenous medicine has not yet entirely climbed this staircase to damnation. Now, then, we must inquire into what must be done.

Suggestions for the revival of Ayurveda:

¹¹ A pie was the equivalent of 1/192 of a rupee.

1. First, the circulation of knowledge. We should establish medical colleges, showered thoroughly with riches, in every important location. Students herein should be instructed in Ayurveda, and it absolutely must be made explicit that students will be given a salary and that these funds will not be appropriated by Western medical families.
2. For the advancement of practitioners who have received their certification, facilities, including pharmacies (*śilpagrham*) and clinics (*āturagrham*), should be built.
3. Ancient medical texts from the whole of India should be gathered into one place and be commented upon in the manner received by books from highly credible sources. The most important texts should be written in regional scripts and as well translated into the respective regional language.
4. There should be an effort to identify herbs, as recognized according to descriptions of mavers who have sought them and recommended their use.
5. A stimulus for people trading strong herbs, primarily through trade in the betel nut plant. Opportunities for this business must be provided.
6. The subsidisation and acquisition of well-educated doctors and the dismissal of uneducated doctors and malpractitioners. Doctors highly skilled in their work should be educators.
7. Distributing knowledge into the general public through a standard textbook made available in each and every regional language, intended for the discussion of Ayurveda.
8. A complete census of indigenous doctors, administered like that of the English doctors. The granting of authority (*adhikāra*) and legitimation in courts.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

(a)

The state should look upon indigenous doctors as they do English doctors. There should be a doctor in every subject and in every government assembly.

(b)

District boards should settle a fixed budget to purchase sufficient resources for supporting the costs of a medical branch for the medical practice of indigenous doctors in every taluk and village. They should aim for establishing a medical college in every district capital. Or some incentive should be provided, such as scholarships for students from the district to go to national colleges. A skilled Ayurvedic doctor should be appointed for a position in the district government for the oversight of local colleges.

(c)

In regards to universities, health regiments (*svāsthya*) from indigenous sources should be set in motion according to the texts on the matter. The people of India for countless ages have been bound to our traditional observances (festivals and full moon feasts).¹² They are not comfortable with adopting foreign observances. Thus, texts which provide regiments for health and well-being according to the Ayurvedic tradition should be translated and distributed to every roof.

(d)

In regards to independent organizations, those with expertise in well-being, according to Ayurveda should teach people about the causes of disease, preventative practices, and their treatment. They should offer [themselves] to government officials [for aiding] the welfare of the people insofar as they have time to do so.

¹² Here, he uses the Kannada word *habbahannime*. According to Ferdinand Kittel, this term was a compound (*habba* means festival and *hannime* means full moon) used primarily in Mysore. It presumably is akin to a generic term such as holidays. I am not sure why he elected to use the Kannada word, if it is not a proper name. Perhaps he wishes to express the regional character of festivals across India, or perhaps he felt the Sanskrit *sampradāya* was not an adequate expression of the idea, and without finding an English translation, as he typically does, simply used the Kannada term he wished to express. I myself am unclear on why well-being and holidays are related, and what this has to do with the University.

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M. Duraiswami Ayyangar Avargal

Translated from the Sanskrit by TRUPTI PATIL-BHOLE

ANSWERS TO THE COUNTRY LEVEL MEDICAL COMMITTEE

Distinguished scholars, I shall further elaborate on the answer to question six, sub-question (C). I am presenting the answers to it in Sanskrit language. I feel that you will accept it happily. The compilation of questions by you is dominated by the intentions of western scientists. By grasping this, if someone is convinced to think the way you think, I am hereby going to state the truth and it may defile the minds of scholars of Ayurveda. Hence, I am not willing to think of its pros and cons.

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I practise on the basis of Ayurveda. Since ancient times, this country finds only two popular medical fraternities, namely Ayurveda and Unani medicine. In that respect, texts in the Sanskrit language originated first. Then, local languages originated by simulation of this language. No one clearly talks about any new system apart from what is stated in Sanskrit texts and what is present in the texts of the Dravidian [i.e., Tamil] language, which would pretend that it is a third Indian system. Siddha medicine (*siddhavaidyaka*) is a never-before heard name and has no evidence. Recently, only two to three years ago, a few Ayurveda physicians (*vaidya*) from some corner of Madras have announced the name “Siddha”, which has never been heard before. Masters [siddha] like Nityanātha, Somadeva, Candrasena, Govinda, Nāgārjuna, and Vāgbhaṭa wrote texts such as *Rasaratnākara*, *Rasaratnasamuccaya*, *Rasendracintāmaṇi*, *Rasendrasārasaṅgraha*, *Rasarāja-sundara*, and *Rasaprakāśasudhākara* in the Sanskrit language. The meanings of

these have been printed and published in an excellent manner and are easily available. Hence, the name *Siddhavaidya* of some of the texts in the Dravidian [i.e., Tamil] language does not prove to be appropriate, because the term “Siddha” has an unethical claim on a group of Sanskrit books. Also, due to the availability of various technical terms, clarity of language, formulation of topics, and the style of statements of formulation of medicinal combinations and their sequence the Sanskrit *Rasagrantha* [texts] as well as other texts in the Sanskrit language are better and more suitable for use. Hence, they can be understood when an intelligent person reads them just once. Just as the Sanskrit texts have stated that there are three body elements (*tridoṣa*), seven body tissues (*saptadhātū*), and five basic entities (*pañcamahābhūta*) as forming the body, the same was stated on the basis of the system in the texts of the Dravidian [i.e., Tamil] language. Regarding medical formulations, the Dravidian texts do not contain any more information than the Sanskrit texts. However, some people believe that the elaboration of *rasaśāstra* medicines in the Dravidian text is better than that in the Sanskrit texts, but even these, I believe, are baseless claims. There is clear proof that the basis or origin of texts written by *Agastī* and others about *rasaśāstra* are the basic Sanskrit texts themselves. See the words from the textbook *Kariśal* written by *Agastī*:

“வெகுவித மாயுருவேதத் திரந்தம் தொகையுணர்ந்தோதித்தொருத்த வைத்தி
யார்த்த சத்தினுகரம் இரட்சிந்தாமணி இரட்சுடாமணி விரட்சிபிரகாரணம்
இரசமாலை விரகாமதேனு இரசதந்திரநூல் இரசராசாங்கம்
இரசவகை வடநூலிவை சிறவும் வைத்தியசிந்தாமணி வைத்தியார்த்தம்
வைத்தியருடாசி வைத்தியசிகாமணி * * *
சத்திர வைத்தியந்தானனிலை ருத்திரமும்பதிறொகை சிருகோடி
யுளது நெகதமுமோதியுணர்ந்து அனவிலுலகு னுயிர்கோயகவ
இருள்ளை யகற்று மிரவியைப்போல அருளொளிபோல் தமிழாக விரித்தனன்
* * *
முடிவில் முதல்வன் முத்திரும் சொற்குறிதரும் கவிலையம்பதியென் னும்
பொதியமலை யகத்தியமுனிபுண்கவனே.”

“Gathered after reading and studying a collection of many different ayurvedic verses, these are Sanskrit texts on mercurial methods: *Vaittiyārttarattiṇākaram* (*vaidya-artha-ratna-ākara*), *Iracacintāmaṇi* (*rasa-cintā-maṇi*), *Iracacūṭāmaṇi* (*rasa-cūḍā-maṇi*), *Iracappirakaraṇam* (*rasa-prakaraṇa*), *Iracamālai* (*rasa-mālā*), *Iracakāmatēṇu* (*rasa-kāma-dhenu*) *Iracataniranūl* (,The book *rasa-tantra*”), *Iracarācāṅkam* (*rasa-rājāṅga*), and [there are] also other

texts: *Vaittiyacintāmaṇi* (*vaidya-cintāmaṇi*), *Vaittiyārttam* (*vaidya-artha*), *Vaittiyakuṭāri* (*vaidya-kuṭhāri*?), *Vaittiyacikāmaṇi* (*vaidya-śikhāmaṇi*).***
Indeed, [the books on] powerful medicine are innumerable. Having read and studied all two crores of the verses of the collection of *Thirty sūtras* (*cuttira-muppatu*), he unfolded [them] in Tamil like a light of grace similar to the Sun that removes the darkness, as the diseases of the living beings of the world spread. ***

[he =] The one who is the first in accomplishments, a preceptor and a sage, Agastya of the Potiyam mountain which is called the abode of Kailasa , who composes the chapters of words that bestow liberation.”¹

This verse has clearly stated that after the self-study of many Sanskrit texts on mercurials (*rasa*) and other medicinal texts, the great sage Agastī elaborated it in the Dravidian [i.e., Tamil] language. You also should see the reference appearing after the auspicious verse of text *Teraiyar Śekharappā* [a Dravidian text]:

“ தமிழின்புற வசனம் பெறு தனுவந்தரிவடநூல்
இமிரும்பத முழுதங்ககி யெழுதம்படி வருமே
அமலன்பரை யருளுஞ்சுத ரருளுங்குரு வரனும்
தமரன்புறு தயவும்புரி தகவுங்கொளரிவனே.”

“O man of knowledge, accept the grace of the immaculate god and the highest goddess, the grace of the Son (*cutar*?), the superior excellence, the favour abundant [like] benevolence [among] relatives, and the manifested wisdom, which indeed come into being in the form of poetical writing [containing] all the sounding words of the Sanskrit book of Dhanvantari which has obtained the Tamil outfit.”²

In addition, with many such strong reasons it can be said that there is no different system called *Siddhavaidya* and that this is only an imaginary and never heard before title.

¹ Translation from the Tamil and corresponding Sanskrit titles in brackets by Ilona Kędzia.

² Translation from the Tamil and corresponding Sanskrit titles in brackets by Ilona Kędzia.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism.

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

A short answer to this question is that the disturbance of body elements (*doṣa*) is the cause of all diseases. For the enlightenment of the committee, here I will briefly describe the disturbances of body elements (*doṣa*) and the characteristics of disturbed body tissues (*dhātū*).

OUTLINE OF BODY ELEMENTS (*SAṆGRAHA*, I.E., COLLECTION)

There are three body elements, i.e., wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*)³ (generally they hold the whole body, hence the name “that which supports” (*dhātu*) is appropriate). During the formation of any disease, first all these body elements, or any two or one of them, leave their normal state and attain strong or weak abnormality. Then they disturb the body. Thus, as these three cause abnormality in the body, the name *doṣa* [meaning “faulty”] is established in classical practice and it is logical as well. The seven substances which hold the body are body tissues (*dhātū*), i.e., nutritional fluid (*rasa*), blood (*rakta*), flesh (*māṃsa*), fat (*medas*), bones (*asthī*), marrow (*majjā*), and semen in males and menstrual contents or ovum in females (*śukra*). When these become abnormal, they are called “those that spoil” (*dūṣya*). Impurities (*mala*) are excretion products, i.e.,

³ Editor’s note: We have standardized the translation of *vāta*, *pitta* and *kapha* and their correlates in the other vernaculars to “wind”, “bile”, and “phlegm” in this volume, but would like to note that this translator’s preference was to leave the terms untranslated or to render *vāta* as “air element” and *pitta* as “fire element”.

faeces (*purīṣa*), urine (*mūtra*), sweat (*sveda*), nasal secretions, earwax or excretory products. All of these are taken care of by wind, bile, and phlegm (*vāta*, *pitta*, and *kapha*). They control them and carry out all external and internal functions (especially related to the body tissues (*dhātū*)). Among these, the body element water is the main one. In this way, our theory states that the body keeps functioning due to body elements (*doṣa*), body tissues (*dhātu*), and excretory products (*mala*). The body elements will be explained in a somewhat extensive manner here.

GENERAL FUNCTIONS OF THE BODY ELEMENTS (*DOṢA*)

Normal functions of wind (*vāta*) – Inhalation and exhalation, willingness, contraction and relaxation, perceptiveness of senses, realisation of urges, normal movement of body tissues are carried out by wind in order to support the body.

Normal functions of bile (*pitta*) – Hunger, thirst, various desires, radiance, vision, intellect, gallantry, softness of the body, digestion of food, and maintenance of normal body temperature are carried out by bile to favour the body.

Normal functions of phlegm (*kapha*) – Stability, unctuousness of the body, various joints, sexual desire, forgiveness, intellect or wisdom, strength, and liquidity are maintained by phlegm to care for the body.

SPECIFIC USES OF BODY ELEMENTS (*DOṢA*)

Scholars of Ayurveda outline how body elements (*doṣa*) and body tissues (*dhātū*) are related to the five great elements (*pāñcabhautika*) [i.e. the five basic entities of earth, water, fire, air, and space]. Wind (*vāta*) originates from air and space, bile (*pitta*) from fire, and phlegm (*kapha*) from earth and water. It is validated that each body element is of five types according to site specification and function specificity.

The five types of wind:

- 1) “Upper forward wind” (*prāṇavāyu*) – Its site is the head and brain. It travels in throat region and chest. Its functions are to hold the organ of intellect, i.e., the heart (in the brain) and the mind and carry out functions like spitting, sneezing, belching, breathing, swallowing, and acceptance of food.
- 2) “Upper wind” (*udānavāyu*) – Its place is in the chest. It travels in the throat, nose, and umbilical areas. Its functions include the desire to speak, attempting various deeds, energy, strength, skin colour, nourishment of body channels, intellect, grasping of knowledge, memory, and mindfulness.

- 3) “Diffused wind” (*vyānavāyu*) – Its site is the heart, it travels through the whole body. It acts swiftly. Its functions include speed, relaxation and contraction, upward and downward movement, closing and opening of eyelids, yawning, eating, cleaning of body channels (*srotas*), sweating, tear formation and tearing, production of semen and female reproductive fluid (*śukra*), separation of waste and nourishing parts from food and nourishment of body tissues (*dhātu*).
- 4) “Middle wind” (*samānavāyu*) – It resides in the place of the digestive fire. It travels everywhere in the large intestine, small intestine, and stomach as well as the fluid channels of the body. It accelerates (*dīpana*) the digestive fire. It carries out the functions of holding the food, its digestion, separation of waste, nourishing of parts, and downward direction of waste products.
- 5) “Down-and outwards wind” (*apānavāyu*) – It resides in the lower abdominal region. It travels in the sites of the urinary bladder, waist, penis, scrotum, and thighs. It carries out excretion processes of faecal matter, urine, menstrual blood, semen and foetus [in the childbirth process].

The five types of bile:

- 1) “Cooking bile” (*pācaka pitta*) – It resides in the stomach (*āmāśaya*) and the intestine (*pakvāśaya*). If the heat properties enhance, there is a reduction in the cold properties. The bile digests the food with the help of wind and moisture (*kleda*) and separates the nourishing and the waste parts. By staying in its own place, it aids the other types of bile.
- 2) “Colouring bile” (*rañjaka pitta*) – While the fluid (*rasa*) is converted to blood (*rakta*), it is given its colour by this bile.
- 3) “Energizing bile” (*sādhaka pitta*) – The bile which generates intellect, wisdom, self-respect, and vigour is “energizing bile”.
- 4) “Causing to see bile” (*ālōcaka pitta*) – The one that resides in the eyes and carries out the function of seeing is “causing to see” (*ālōcaka*).
- 5) “Brightening bile” (*bhrājaka pitta*) – This bile resides inside the skin, nourishes the skin by heat and its own brightness. It digests locally applied drugs like medicated oils over the skin, poured medicinal liquids, and locally applied medicinal pastes.

The five types of phlegm:

- 1) “Hanging down” (*avalambaka*) – Its site is the chest. By its own potency, it regulates the heart and other organs.
- 2) “moistening” (*kledaka*) – Its site is the stomach (*āmāśaya*). It moistens the food bulk and aids digestion with the help of cooking bile (*pācaka pitta*).

- 3) “Awakening” (*bodhaka*) – It stays in the mouth, especially the tongue. Its primary function is the knowledge of taste.
- 4) “Satiating” (*tarpaka*) – Its site is the head. It nourishes all organs.
- 5) “Connecting” (*śleṣaka*) – It is in the joints of bones. It unites them and facilitates the function of joints.

In this way, the body elements (*doṣa*) are embedded in all organs, and since they are invisible they support organs by their own various groups. Consistently, they support the body’s stability, and hence the three body elements are also known as the three pillars. When in a normal state, they support the body, and when in an abnormal state, they cause diseases.

GENERAL CHARACTERISTICS OF DISTURBED BODY ELEMENTS

When wind is disturbed, it results in signs and symptoms such as thinning of the body (*kṛśa*), blackening /darkening of skin (*kṛṣṇavarṇa*), shivering (*kaṁpa*), throbbing (*sphuraṇa*), desire for hot substances (*uṣṇa*), sleeplessness (*nidrānāśa*), reduction of strength (*balahānī*), reduction of the capacity of organs (*indriyahānī*), pain in bones (*asthiśūla*), drying up of bone marrow (*majjaśoṣa*), constipation (*malavibandha*), bloating in the body (*ādhmāna*), pain in the abdomen (*āṭopa*), unconsciousness or fainting (*mūrcchā*), depression (*dainya*), fear (*bhaya*), sadness (*śoka*), or unnecessary and excessive talking (*pralāpa*). Disturbed bile causes symptoms such as yellowing of skin, sleepiness due to fatigue (*glānī*), weakened senses (*indriyadaurbalya*), hampering of vitality (*ojobhramśa*), desire for cold substances (*śītābhilāṣā*), burning sensation (*dāha*), bitterness in mouth (*tiktāsyatā*), thirst (*tṛṣṇā*), delusion (*moha*), reduced sleep (*nidrālpa*), anger (*krodha*), yellowing of faecal matter (*pītamala*), yellowing of urine (*pītamūtra*), or yellow eyes (*pītanetra*). Disturbed phlegm causes symptoms such as feeling cold (*śaitya*), white skin colour (*pāṇḍura varṇa*), obesity (*sthaulya*), laziness (*ālasya*), heaviness (*jaḍatva*), obstruction of body channels (*srotorodha*), sleep (*nidrā*), sleepiness (*tandrā*), dyspnoea (*śvāsa*), cough (*kāsa*), excess salivation (*praseka*), nausea, reduced digestion capacity (*agnimāndya*), stiffness of joints (*sandhigraha*), etc.

GENERAL REASONS OF DISTURBANCES OF BODY ELEMENTS (*DOṢA*)

Briefly, consumption of various types of unhealthy and improper food is the main reason for disturbances of the body elements. I shall elaborate this in a more detailed manner: 1) Too little (*hīnamātrā*), excessive (*atimātrā*) or improper

(*mithyā*) use of senses. 2) Too little (*hīnamātrā*), excessive (*atimātrā*) or improper (*mithyā*) natural seasons like cold and heat waves. 3) Bad deeds or sins (*duṣkarma*). Such three causes exist, or else: 1) Consumption of improper food substances. 2) Performing improper actions or behaviours. (The same is known as improper diet and behaviour.) Hence, the disturbance of body elements is the cause of disease, this is the basic principle.

SPECIFIC CAUSES OF DISTURBANCES OF BODY ELEMENTS

The abnormality in the geographic location, time, air, and water becomes the reason of diseases. The cause of epidemic diseases is abnormal site, time, air and water. Some specific reasons are injury, snakebites (*viṣadamśa*), and burns by fire (*agnidāha*). These are the causes of accidental/external diseases.

Henceforth your question comes. I think the question how to research our basic principles with the help of new examinations is directed towards the theory of the three body elements (*tridoṣa siddhānta*). Why should the basic principles of Ayurveda fit in the investigation procedures of modern technological and instrumental research sequences? Or let it be anyway. I have a book based on the elaboration of principle of the three humours/body elements by the methodology of modern science that is based on interpretation. It is attached herewith. The answer to this question by the committee is included in it.

(b)

In Ayurveda, there are two solutions to knowing about the diseases, namely 1) the examination of the patient and 2) the examination of the disease. In this respect, 1) the examination of patient includes three common solutions, i.e., inspection (*darśana*), touch or palpation (*sparśana*), and questioning (*praśna*). Inspection by seeing is performed by the examination of eyes (*netra*), tongue (*jivhā*), faecal matter (*mala*), and urine (*mūtra*). Through touch, the examination of normal or abnormal organs is carried out by assessing firmness, hardness, softness, and also the examination of pulse. Questioning is used to assess and examine pain, for example prick-like pain. Specific examinations include 1) pulse examination, 2) urine examination, 3) faecal matter examination, 4) tongue examination, 5) examination of speech, 6) examination of touch, 7) examination of eyes, and 8) examination of shape.

2) Knowledge of the disease is obtained through causes (*nidāna*), prodromal symptoms (*pūrvārūpa*), signs or symptoms (*rūpa*), knowledge about pathophysiology (*samprāpti*), and knowing about relieving factors (*upāśaya*).

Of these, the main cause of disease is of two types, immediate (*sannikṛṣṭa*) and distant (*viprakṛṣṭa*). Food and lifestyle habits which cause the disease are the immediate causes (*sannikṛṣṭa nidāna*) of that disease. As per our system, there is an increase of phlegm in the *śiśira* season [the beginning of winter]. Then, with due course of time, this phlegm gets vitiated (*prakopa*) and leads to disorders of phlegm in our experience and according to our principles. We practise according to these. Here, the phlegm which increased in the *vasanta* season [the second half of winter] is the distant (*viprakṛṣṭa*) cause for those diseases occurring due to phlegm. This concept can be stated as “the abnormality in body elements like wind, etc. is the cause of disease.” There is also a basic cause for abnormality of body elements. Here, the cause which is directly related with disease is the immediate cause (*sannikṛṣṭa hetu*). This means the disturbance of body elements (*doṣa*). The cause of the disturbance of body elements (cause of disease, which is a little distant) is called distant cause (*viprakṛṣṭa hetu*). Due to the consumption of dry and oily or moist substances, the causative phenomenon that takes place in the body is the immediate (*sannikṛṣṭa*) cause. One that one inherits from mother and father is a distant (*viprakṛṣṭa*) cause. One which immediately gives rise to disease is the main cause, and one which is unable to cause immediate disease is the deviating (*vyabhicārī*) cause, thus there are also two such types of causes. Furthermore, the cause which gives rise to seed of disease by causing disturbance in body elements is called the cause which leads to the growth of disease (*utpādaka hetu*), and the cause which exaggerates a hidden abnormality in the body leading to expressing of the disease is called manifesting cause (*vyañjaka hetu*).

Prodromal symptoms (*prāgrūpa*) – The suggestive symptoms which give us knowledge about future diseases are prodromal symptoms.

Symptoms (*rūpa*) – The expressed symptoms of disease.

Relieving factors (*upaśaya*) – In practice, there are two aspects, 1) relieving (*upaśaya*) and 2) non-relieving (*anupaśaya*).

1) The feeling of pleasure or relief obtained due to use of medicines, etc. is known as a relieving (*upaśaya*) factor. It can be briefly described as the relief due to the reduction of disease obtained due to medicines, food, or lifestyle which is either opposite to the cause, opposite to the disease, and opposite to both or similar to the cause, similar to the disease, and similar to both. The result is opposing. The same is known as “that which does not oppose disease” (*vyādhisātmya*).

2) The result opposite to relieving (*upaśaya*) is known as “non-relieving” (*anupaśaya*). (When the disease is not relieved, this is known as non-relieving. The same is also known as “that which opposes disease” (*vyādhi asātmya*). If you are willing to know how this relief/no-relief (*upaśaya/anupaśaya*) can help with knowledge of the disease, then I would elaborate further. If a diagnosis of disease

is not established or if the disease is complicated, then we can analyse if the obtained result by the use of medicines and other changes is relieving or non-relieving and it helps us decide the actual form of the disease. Hence this is also used as a tool in arriving at knowledge about the disease.

Pathophysiology (*samprāpti*) – the process that describes everything about the disease from the basic stage in which the seed in the form of disease germinated and its growth until its full expression, detailing the complete formation of the disease. (*samprāpti* means the knowledge about how the body elements got disturbed, how they spread in the body tissues (*dhātū*), and how they caused disease there). Pathophysiology (*samprāpti*) is of various types, but I shall not elaborate the types here.

The five means, which we employ for knowing about the disease, have all been told here briefly. They are collaboratively known as the five causes (*nidāna-pañcaka*).

TREATMENT (*CIKITSĀ*)

I proudly state that there is no inferiority in the treatment of Ayurveda in comparison with any Western medical system. Our medical system consists of rules of treatment which are well-established as well as a well-practised.

The first rule of treatment: Treatment is performed using medicines and rules regarding food and a specific lifestyle. 1) Medicines include external and internal use of decoctions, etc. 2) Treatment is carried out by a dietary regulation, like the use of rice, soups, rice-soups, etc. 3) Treatment is carried out by interventions like running, sitting, sleeping, staying awake, jumping, sitting in an airy location, a sunny location, etc. Six types of medicines, food and lifestyle are considered, each either opposite to the cause, opposite to the disease and opposite to both or similar to the cause, similar to the disease and similar to both.

The second rule: There are prime rules of treatment, like general treatment and special treatment. Of those, general treatment has two branches, medicine (*kāyacikitsā*) and surgery (*śalyacikitsā*). (Surgery is also included in special treatment.) The above-mentioned six rules are for general treatment. The special treatments have been excellently developed in eight branches, namely medicine (*kāyacikitsā*), diseases of newborns and children (*bālacikitsā*), planetary treatments (*grahacikitsā*), diseases above the neck (*urdhvāṅgacikitsā*), surgery (*śalyacikitsā*), treatment of poisoning or toxicology (*viṣacikitsā*), and aphrodisiac and sexual health treatments (*vājīkaraṇacikitsā*).

The third rule: Out of these eight types of treatments, medicine (*kāyacikitsā*) is of two types, namely purifying (*śodhana*) and alleviating (*śamana*).

PROCEDURES IN MEDICINE (*KĀYACIKITSĀ*)

- 1) Oil application (*snehana*) is of external and internal types.
- 2) Heat treatment (*svedana*); it is generally of three types, strong, medium, and weak heat application. It specifically has many types, such as dry heat (*tāpasveda*), liquid medicinal tub-bath (*upanāhasveda*), steam (*uṣmasveda*), *śālvaṇasveda*, and *jontākasveda*.
- 3) Medicine-induced emesis (*vamana*).
- 4) Medicine-induced purgation (*virecana*).
- 5) Enema (*bastī*); it is of three types, elimination enema (*niruha*), oily enema (*anuvasana*), and urethral enema (*uttara*). For the ease of administration, there are many procedures, like fat enema (*mātrābastī*). Enema therapy (*bastīcikitsā*) of Ayurveda is very unique and used in the treatment of many diseases. It is prime among all other procedures, since it gives instant relief and also nourishes (*bṛṁhana*) and scrapes off abnormal body elements. The enema procedure is also administered in children, elderly, thin, and obese people as well as those with weak body tissues (*dhātū*) and women with trouble having children [infertility].
- 6) Nasal instillation of medicines (*nasyakarma*); it is of three types, eliminating (*recana*), nourishing (*bṛṁhana*), and alleviating (*śamana*). The two types of oleation (*snehana*) are curative oily errhine (*marśa*) and preventative oily errhine (*pratimarśa*). Depending on the drugs to be used, eliminating errhines (*recana*) can be of many types, like nasal administration of drug extracts (*avapīḍana*), nasal administration of medical powders (*dhmāna*), etc.
- 7) Smoke inhalation (*dhūmapāna*); it is of three types, unctuous (*snehana*), medium (*madhyama*), and strong (*tīkṣṇa*).
- 8) Mouth wash (*ganḍūṣa*) [i.e., filling the mouth to its full capacity with liquids like medicinal decoctions or medicinal oils without allowing movement]; there are four types of mouth wash, unctuous (*snehana*), alleviating (*śamana*), purifying (*śodhana*), and healing (*ropaṇa*).
- 9) Medicated paste held in the mouth (*kavalgraha*).
- 10) Nourishment for the eyes (*netraprasādhana*); it is of four types, eye drops (*āścyotana*), collyrium (*añjana*), nourishing/hydrating treatment (*tarpaṇa*), and treatment with plant essences extracted through an enclose roasting process (*puṭapāka*).
- 11) *Śirobastī* [*bastī* for the head region].

PROCEDURES IN SURGERY (*ŚALYACIKITSĀ*)

Surgical treatment is subjectively different from medicine. I shall not elaborate its branches and sub-branches here. Due to the difference in subjects and diversity of the subject, this treatment is vast. However, for providing information to the committee, I shall describe the subject briefly. All briefly-mentioned subjects given below are included in surgical treatment (which is known as treatment with instruments by the general public):

- 1) Surgical procedures (*śastrakarma*); it includes different types of instruments, such as instruments with a circular end, *vṛddhipatra*, *utpalapatra*, *karapatra*, and *kartarīśastra*, as well as all types of processes carried out with the help of these, such as cutting (*chedana*), breaking, piercing (*bhedana*), piercing (*pātana*), cutting (*kartana*), etc.
- 2) Cauterization with fire (*agnikarma*), in which heat by direct fire or by substances like red-hot oily substances or stones, etc. is applied to the relevant organs.
- 3) Cauterization with alkaline substances (*kṣāra karma*) is milder than cauterization with fire (*agnikarma*). It is the appropriate remedy for the burning procedure in delicate subjects and in delicate organs where it is not possible to use fire.
- 4) Bloodletting (*sirāmokṣa*); it is the procedure carried out for letting out abnormal blood from the blood vessels.
- 5) Use of leeches (*jalūkāprayoga*); leeches (*jalūkā*) are useful for letting out abnormal blood from persons of delicate built and delicate organs (where the use of instruments is not possible).
- 6) Cupping with a fire bowl (*alābughaṭikāprayoga*); for carrying out the removal of abnormal body elements (*doṣa*) from diseased organs and for letting out blood from deep organs, an earthen vessel with fire (*agnigarbha ghaṭa*) is used.
- 7) Delivery of an abnormally situated foetus (*mūḍhagarbhacikitsā*); the delivery of a foetus stuck in the uterus with an abnormal position, alive or otherwise, is taken out by instruments such as *garbhaśaṅku*.
- 8) Surgery above the shoulder (*śālākyam*); even though it is included in surgery, this system is considered separate, in order to show that the treatment by instruments in organs above the sternal notch, like the eyes, ears, throat, and palate, is different.

We treat all diseases. We [Ayurvedic physicians] and other people conclude that our treatment is very advantageous. Thousands of patients visit Ayurveda clinics.

They accept Ayurvedic treatment with trust, and hence the truth of this matter is validated. The patients who receive treatment from us appreciate us and appreciate our intention behind treatment. While practising Ayurveda freely, Ayurvedic doctors do not write about the treatment procedures and the results obtained, and therefore it is not possible to provide evidence about references of our successful treatments. However, attached herewith is the record of the number of patients and numbers of the cure of their diseases from SKPD Ayurveda Medical School.

(c)

Yes, we conclude that in some diseases and some situations Ayurvedic treatment is better than the treatment of other systems in terms of the result. We treat paralysis (*pakṣavādha*) and facial paralysis (*ardita*). Even today it is well-known that the Ayurvedic treatment for these diseases in the Kerala region is successful. Ayurvedic physicians also perform correct treatment of rheumatism (*āmavāta*), menorrhagia (*pradara*), piles (*arśa*), body wasting (*yakṣmā*). The patients affected by these and other similar diseases seek out our treatment after unsuccessful treatment by Western-system physicians, which states the position of our treatment system.

(The certificates of patients treated at S.K.P.D. hospital were attached as an appendix. It should be referred to.)

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

(a)

Yes, indeed I am the chief physician in the Ayurveda college at Śrīkanyakā-parameśvarī Devasthāna.

(b)

(1) I cannot say whether all Ayurvedic clinics (*vaidyāśālā*) here are capable of all types of treatments. At present these are simple Ayurvedic clinics, they are not hospitals. Hence, the Ayurvedic clinics of this time do not conduct procedures like oleation (*snehana*), heat treatment (*svedana*), Ayurvedic enema (*bastī*), and surgery, which are useful for treating major diseases. There is no facility to prepare to dispense all the best-quality medicines of Ayurveda. The reason behind this situation is poverty on one side and lack of support from the government on other side.

(2) The Ayurvedic clinics of today's time are not well-equipped with essential aspects and instruments to teach all subjects which can be learnt through special study. The schools of today's time are not able to appoint capable and learned Ayurvedic physicians (*vaidya*) to teach the principles of this system, due to the inability of the institutions to pay them a proper salary. There is no combination of a hospital, a facility for surgical treatment, an herbal garden, a ward for women for post-delivery care, a medicine preparation unit, and a library intended to make an Ayurveda college (*kalāśālā*). My teacher, the great physician Vaidyaratna Gopalacharya, who with great struggle, ran such an Ayurvedic college in Madras (*madranagarī*), which fulfilled most of the aspects mentioned earlier. Today, it exists only in the form of his memories and fame.

Hence, in that era the institute proved to be ideal, which is satisfying. Because I pursued my education there and I have taught there too, I felt it was appropriate to mention today's miserable condition of this institution.

(c)

It is a known matter by everyone that there is lack of essential resources required for treating patients by using sufficient Ayurvedic procedures and to study that [Ayurvedic] system with determination. For the prosperity of Ayurvedic treatment and Ayurvedic study, there is only one suitable solution, and that is respect by the government. Just as the government's respect [support] is provided for the

promotion of Western medicine, Ayurveda should be respected too. The government personnel should establish, with a strong foundation, well-equipped Ayurvedic colleges (*kalāśālā*), examinations (*parīkṣā*), Ayurvedic clinics (*vaidyaśālā*), and Ayurvedic medicinal stores. They should definitely make efforts towards this. Especially for the sustenance of these institutions and Ayurvedic physicians, an independent government department should be established. First, the Ayurveda clinics (*vaidyaśālā*) in the respective areas should be improved.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*
- (3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a) Subjects for the excellent study of education of Indian medicinal systems

(1)

In principle, it is the best stand to let the students of respective subject of studies stay with the teachers with first-class eligibility in that particular subject.

(2)

Yes, it is expected to facilitate the work of students and professors with the help of well-established hospitals, drug manufacturing units, libraries, and museums.

(3)

Teachers should receive the opportunity to independently study their own subjects. For that the correct arrangements must be done now.

In the view of Western thinkers, for the sublime goal all these are mere desires of the mind, and in spite of these being new, there is nothing new or not achievable in this according to the ancient promoters of Ayurveda and the Indian physicians (*vaidya*) who know the principles of spiritual wisdom. Because in the past too these subjects have been practised. Students used to learn by staying with physicians who were expert in their respective particular subjects. Once the stay in the teacher's home (*gurukula*) with the learned physician guru was over, the students used to enter their own specialization subject (*viśikhā*) after getting permission from the guru and the king. (Please refer to *Viśikhānupraveśa adhyāya* from *Suśrutasamhitā*). Since the beginning itself, Ayurvedic physicians (*vaidya*) had the facility to gain experience in the processes of medicine manufacturing, because within the places of teaching there was a place for a laboratory (*rasaśālā*) [a manufacturing unit of iastrochemical (*rasaśāstra*) formulations] and medicine manufacturing. Every Ayurvedic physician (*vaidya*) used to utilize self-prepared medicines only. Hence, the students who resided in the company of these physicians used to receive knowledge of medicines and the process of medicine manufacturing. Even today, in Madras, there are many Ayurvedic clinics (*vaidyaśālā*) which follow this path of Ayurveda. Those who have received qualifications by learning the system, are now officers or authorities. If these institutions are somewhat respected by being provided financial support, they will become well-known and ideal Ayurvedic clinics (*vaidyaśālā*). However, I must also say that to my knowledge, the Ayurvedic colleges (*kalāśālā*) or Ayurvedic clinics (*vaidyaśālā*) of your expected quality are not available here. I want to conclude that if the Ayurvedic colleges and Ayurvedic clinics in Madras are well-respected, then there will be the establishment of the basic foundation of Ayurvedic study. Nothing is impossible in this regard, and it does not require unlimited funding.

(b)

Yes definitely. All the goals you have mentioned will not necessarily be achieved today by themselves.

(1)

Our prime intention is to gain knowledge of Ayurveda by its “as it is” study, to follow this system, to facilitate treatment by knowledgeable Ayurvedic physician, and to provide positions of authority and political powers to Indian Ayurvedic physicians just the way political power is provided to Western physicians; and by all these means respecting Ayurveda in all ways.

(2)

I shall delineate those things which can be concluded. Ayurvedic schools should be divided into two groups: 1) for attaining basic skills, and 2) for attaining advanced skills.

REGULATION OF TEACHERS AND SYLLABUS

I suggest that for the basic examination there should be study for a three-year duration, and accordingly I shall outline its sequence. Anatomy (*śārīra*), general healthcare (*svasthavṛtta*), the study of herbal drugs (*dravyagūṇaśāstra*), and the study of iatrochemical (*rasaśāstra*) drugs (*rasatantra*) should be taught in the first year; the study of diseases (*rogavijñāna*), formulations (*auśadhayoga*), and general medicine (*kāyacikitsā*) in the second year; surgery (*śalyacikitsā*), obstetrics (*prasūtitantra*), toxicology (*agadatantra*), and experiential education in the third year. For the teaching of these subjects, it is essential to have five teachers: One for anatomy and general healthcare, one for the study of herbal and mineral drugs, one for the study of diseases and general medicine, one for toxicology and medicinal formulation study, and one for surgery and obstetrics. For all the five teachers, a monthly salary of ₹150 should be provided. For the specialization, examination studies should last for four years. For these, anatomy, normal healthcare, the study of herbal and mineral drugs should be imparted in the first year; the study of diseases, medicinal formulations, and general medicine in the second year; surgery, otorhinolaryngology, and toxicology in the third year; and the study of mental disorders, obstetrics, paediatrics, and experience study, i.e., internship, in the fourth year. There should seven teachers for the same. However, initially for some time of the specialization, students may be trained in the classroom of the basic course. It is necessary to make two separate wards for teaching some specialized subjects (mental disorders, obstetrics), for which there should be two additional registered and authorized teachers. Each should be given a salary of ₹ 150 per month. There should an appointment of a head in charge for these. The

administrator of the college should be under him. He should be well-qualified to teach in all classes, if the need arises, and he should have a minimum salary of ₹ 350 per month. The decision of passing or failing in examinations should be taken as per the below-mentioned numerical marking to indicate the results of exams. One who obtains the optimum passing marks should qualify as eligible for basic examination, and one who scores above the basic passing marks should be given specialization examination.

HOSPITAL

A hospital should be established, equipped with all facilities, where a minimum of twenty patients can be treated. Otherwise, any of today's Ayurvedic clinics (*vaidyaśālā*) may be converted into a hospital. These regulations should be followed in time.

In this regard;

Two Ayurvedic physicians (₹ 200 for prime, ₹ 125 for others)

Two formulation experts (₹ 35 each)

Three nurses (₹ 30 each)

Four servants (₹ 20 each)

One servant for cleanliness (₹ 5)

Two servants to carry garbage (₹ 5 each)

The overall monthly expenses of any hospital that is not very large should be ₹650 for the management of physicians and other staff.

(1) It is also essential to appoint a manager, a writer, an accountant, and servants, etc. for looking after the work of the Ayurvedic college (*kalāśālā*) and the Ayurvedic clinic (*vaidyaśālā*). For their salary, a gross arrangement of ₹ 400 should be made separately.

(2) Expenditure of ₹ 500 should be for medicines, food of patients, bed and seating arrangement, instruments, equipment, substances for weighing, and balance, etc. of other substances.

I have not yet elaborated about an upgrading of any present Ayurveda college (*kalāśālā*) to an ideal one. I have yet not elaborated about the conversion of present Ayurveda schools to one or more hospitals, or, keeping this in mind, the initial establishment of colleges or hospitals and the expense for the same.

For the upgrading of any Ayurvedic college, the expenses of the project would be about ₹ 1,500 (₹ 300 for the iatrochemical (*rasaśāstra*) pharmacy, ₹ 500 for the library, ₹ 700 for the museum, hence ₹ 1,500 as a total). For conversion and

restoration of available Ayurvedic clinics (*vaidyaśālā*), there ₹ 1,500 should be reserved. (Thus, funds would be necessary for twenty beds, mattresses, bedsheets, various vessels, instruments like enema-dispensing instruments, and substances needed in the pharmacy.)

	Expense in (Indian) Rupees
Running expenses of college and hospital	<u>3,000</u>
	3,000
<u>Current monthly expenses</u>	
Expenses for professors in the medical college	1,400
Expenses for physicians and servants in the hospital	650
Expenses for clerks, etc. in these institutes	400
Expenses of medicines, instruments, etc.	500
Other expenses (which have not been thought of)	<u>50</u>
Total expenses	3,000

Hence, it is clear that for an ideal Ayurvedic hospital and an ideal Ayurvedic college, the funds spent in a year are ₹ 36,000. If ₹ 4,000 are added to this, only ₹ 40,000 per year are used for this work.

It is usually not necessary for a college to have multi-storey buildings with many open spaces, gardens, seating arrangement, or hostels with many rooms. The functions of a college can be properly carried out in a site with a very basic building structure. The students and teacher should sit in a properly cleaned place that is available at very limited cost or on very basic benches. Such a building should be created using funds of ₹ 25,000.

Question 5

Do you agree with the view of the Calcutta University Commission that

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

Sir, I feel that the opinion of the Kolkata university committee is not at all acceptable by people like me. I shall elaborate my view, which is opposite to theirs. The people who follow the Western medical system, sequentially study the Ayurvedic system and use our medicines, and some of them praise our system from the heart, while some others praise it superficially and call themselves Ayurvedic practitioners. Hence, I say that it is clearly seen that interest in Ayurvedic principles and their usefulness is growing. If the Indian systems get government assistance and aid for teaching, learning, and treatment, then many doctors who follow the Western system of medicine will come forward to study the Indian medical systems and further follow the same. In this way, with the rejuvenated traditional medicinal system, I believe that Ayurveda will dominate medical practice. I hope for a medical practice of this type.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masters, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).

(b) The preliminary qualification and periods of study for each of the standards proposed.

(c) The medium or media of instruction proposed.

I am not of the opinion that the study of so-called modern science like physics, chemistry, biology, etc. should not be used for the education for Ayurveda physicians. Due to long-standing government disrespect and due to the lack of other help, in the branches that can be mastered with proper experience, such as

anatomy and surgery, it is very difficult to receive any proper education in these subjects due to the scarcity of expert professors. Hence, the subjects should be concise and edited for the experiential learning of these subjects, and the assistance of professors of anatomy and surgery who belong to the Western system would be necessary in the colleges for some duration.

(a)

For the study of the Ayurvedic medicine system, there should a division between basic knowledge and specialized knowledge, which I wrote as an answer to the fourth question.

(b)

In this case, it will be appropriate to separate the authoritative degrees, conferred upon as per the eligibility of the basic exam qualifying scholar as getting a “general medical practitioner” (*bhiṣak*) or “excellent general medical practitioner” (*bhiṣagvara*) qualification and the special examination qualifying scholar as “decorated (physician of) Ayurveda” (*āyurveda bhūṣaṇa*) or “skilled in Ayurveda” (*āyurveda viśārada*) [i.e. “Specialist”].

ESSENTIAL SYLLABUS FOR SPECIALIZED KNOWLEDGE

- (1) Anatomy (*śārīra*) – Study course syllabus according to Western opinion.
 - a) Formation of the body (*śarīrotpatti*) – details of sperm and ovum, definition of the body (*śārīraparībhāṣā*)
 - b) Elaboration of bones – Their use, number, location, appearance, etc.
 - c) Elaboration of joints (*saṅdhivivarana*) – Their types, uniting of muscles, etc. there.
 - d) Muscles (*peśī*) – Their types, uses, and appearance of *kaṇḍarā*.
 - e) Appearance of channels (*srotas*) – Elaboration of the heart, veins, arteries, *rasāyanī*, blood, lymph, etc.
 - f) Elaboration of organs of breathing, the organ of speech, tongue, palate, throat, *kloma*, etc., lungs, *kalā*.
 - g) Viscera (*koṣṭha*) – Knowledge of the mouth, saliva, teeth, covering over teeth, *abhijivha*, *upajivha* [parts of the tongue], food pipe, stomach (*amāśaya*), intestine (*grahaṇī*), small intestine, large intestine, *unḍuka*, liver, pancreas, spleen, etc.

- h) Uterus, urinary bladder, kidneys, urethra (*mūtra srotas*), membrane which prepares semen (*śukradharākālā*), *phalagranthī*, *bījakośa*, birth canal (*apatyapatha*), etc.
- i) Head, nerves in head (*mastiṣka nāḍīvijñāna*), brain (*mastulunga*), spinal cord (*suṣumnā*), spine (*suṣumnākāṇḍa*), *nāḍīgranthī*, *nāḍīcakra*, etc.
- j) Organ of senses – The eyes, eyeballs, optic nerve (*drṣṭināḍī*), *āsrūkālā*, *paṭala*, etc., olfactory organ (*ghrāṇemdriya*), nasal passage (*ghrāṇamārga*), olfactory nerve (*ghrāṇanāḍī*), organ related to hearing (*śrotremdriya*), passage of organ of hearing (*śrutipatha*), ear lobe (*karṇapālī*), etc.
- k) Vital spots (*marman*) – Their sites and appearance.
- l) Skin (*tvac*) – Elaboration of skin
- m) Waste products (*mala*) – Site of origin and elaboration.
- n) Principles of wind, bile, and phlegm (*vāta*, *pitta*, *kapha*)

TEXTS FOR TEACHING

- (1) *Carakaśārīra*, *Suśrutaśārīra*, *Vāgbhaṭaśārīra*, etc. [Chapters on the body in the Caraka-, Suśruta- and Aṣṭāṅgahṛdayasaṃhitā and Aṣṭāṅgasamgraha]
- (2) *Dravyagūṇa* [Texts on properties of substances] – Properties (*guṇa*), taste (*rasa*), potency (*vīrya*), post-digestion effect (*vipāka*), etc., aspects of each substance.
- (3) *Rasatantra* [Texts on iatrochemistry] – Knowledge of *mahārāsa*, *sādhārāṇa-rāsa*, *uparāsa*, iron (*loha*), etc., appearance and processes of specialized purification (*śodhana*) and incinerations in *puta* (*māraṇavidhi*)
- (4) *Svāsthavṛtta* [Healthy lifestyle] – Day regimen (*dinacaryā*), seasonal regimen (*ṛtucaryā*), protection of food items (*annarakṣaṇa*), physical exercises (*vyāyāma*), etc.
- (5) *Rogavijñāna* [Symptoms of disease]– Elaboration of appearance of diseases, the symptoms, and ways of their diagnosis.
- (6) *Kāyacikitsā* [General medicine] – Treatment included in *aṣṭāṅgādi cikitsā*.
- (7) *Śalya-śālākya* [Surgery] – surgeries of whole body and ear, nose, throat, eyes etc
- (8) *Prasūtitantra* [Obstetrics]– childbirth related knowledge
- (9) *Kaumārabhṛtya* [Pediatrics]– knowledge about neonates and children's diseases
- (10) *Mānasaroga* – Mental disorders
- (11) *Agadatantra* – Toxicology
- (12) *Auśadhayogavijñāna* [Pharmacology]– Knowledge of medicinal combinations

Out of the subjects necessary for special examination, I firstly outlined anatomy (*śārīra*). I also suggested other subjects. I explained in detail all necessary subjects for special examinations according to the regulations of Nī. Bha. Aa. University. In the same way, for the basic examination, the same regulations also apply for the necessary syllabus in my view.

The duration must be fixed by the university to obtain special knowledge based on eligibility; and getting appropriate honours and conferring of special degrees like “Scholar of Ayurveda” (*āyurvedācārya*) or “Eminent physician” (*vaidyaratna*) by award or through examination, predominantly in a single subject or in multiple subjects. The appropriate decision in this regard can be taken by consultation of other subject principles, by writing excellent and large reference books or textbooks (*upanyāsa*), or by presentation of the extraordinary meaning of principles to prove one’s eligibility or skill.

(b)

General practitioner (*bhīṣak* or *bhīṣagvara*) – General knowledge about literature, having practical knowledge equivalent to modern schools, and knowledge of subjects in the country’s language would be appropriate as an eligibility to study for this exam.

Specialist (*Āyurveda bhūṣaṇa* or *viśārada*) – Good command over subjects like dramatic art (*natak*), figure of speech (*alaṅkāra*), etc., adequate knowledge about techniques related to words and law, and good knowledge of English language.

Scholar (*Ācārya*) – Appropriate eligibility as Ayurveda scholar (*ācārya*) will be after passing the examination of Specialist (*āyurvedabhūṣaṇa* or *viśārada*).

(c)

To acquire knowledge of the discipline (*śāstra*), the Sanskrit language would be appropriate for all. For the basic or general examination, the students should have the option to be taught in the regional language as well.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

For the physicians (*vaidya*) of the nation, registration is essential. This registration is very useful for confirmation and improvement of professional ethics (*svarupa-dharma*), eligibility, and medical practice. If this subject is thought upon deeply, it is understood that registration rules should be mandatory for the country's Ayurvedic physicians (*vaidya*). If these rules had existed from the beginning, it would have led to great benefits to the nation and the system [of Ayurveda], and this is accepted by many experts. Please consider this. Many colleges and schools were established for learning the Western medical system. For the same, many examinations are conducted. Eligibility certificates are given to those who pass the exams. In the university and colleges, according to the nature of subjects, the name and place of each medical doctor is available in the register. As such a system is familiar to them, it is easily possible to assess the progress or decline of the Western medical system. For the confirmation of the eligibility of Indian Ayurvedic physicians (*vaidya*), no system has been in place to date. Thousands of *vaidyas* and *vaidyamānis* freely roam in the country and follow such an attitude. Learned people and government authorities are aware that from among those people who practise the Ayurveda system, there are only a few good physicians that can be counted on the fingertips. However, poor-quality physicians (*kuvaidya*) are unlimited. I feel there must be over a hundred in Madras itself. As the government authorities have shown disrespect towards the country's medical system, there is a scope to cheat the Indian system and there is no control over those who follow right or wrong paths. Hence, there are many poor-quality physicians with wrong intentions, and good-quality physicians do not normally fit in such situations. Hence, they have to suffer, being equally known to the poor-quality physicians. For the people with diseases who are intent on receiving proper systematic treatment, without any political control it is impossible to identify the good-quality physicians (*vaidya*) among an unlimited number of poor-quality physicians with improper intentions. Why? Because there is no separate rule regarding these from the government authorities. This subject is essential for the lives of people, and

the ignorance or non-interest of the government officials in this regard is not ethical or legal by any means. This can be understood by any sensible person.

Hence, I emphasize the need to establish the eligibility of practitioners of the Indian medical system, to confirm the code of practice of the Indian medical system in order to spread this system by legal ways, and to control those who dishonestly engage in business with medicine. It is certainly necessary to register Indian system physicians. For such a system, there will certainly be difficulties at the beginning. However, the government officials should set limitations and guidelines concerning this subject, which is related to life, by any judicial and executive ways. Many general people, having no basic knowledge, call themselves experienced and brilliant *vaidyas* just in one day. This type of wrong attitude must be quickly regulated.

(a)

A registration board should be formed, comprising a minimum of seven and maximum of fifteen members who qualify as scientists, and comprising eligible Indian system physicians eligible by examinations. In this board, a chairperson, two vice chairpersons, one minister, and other members should be appointed to conduct functioning. This board should be reformed after every five or every three years by voting to register Ayurveda physicians (*vaidya*).

(b)

It is not unknown to the country level medical committee that the existing legislation of medical registration has been created for the ease of functioning of Western physicians and by the promoters of the Western medical system. It is not unknown to other Western physicians as well. On the contrary, the existing law or legislation of the medical registration formed today and accepted by government officials is top to roots against the goodwill credit of physicians of the Indian system in a vocal and sarcastic manner. The legislation which side-lines the principles of the Indian medical system, has been created by opposing, biased Western physicians with poor knowledge. "In this legislation or law, which rules are to be changed and which are to be included as per your view?", asks the medical committee. It is not possible or easy for us what to add and alter in this legislation, in which rules have been compiled that are pseudo-dominant; it is like finding sand at the other end of the seashore. However, in brief, I would like to state this. It leads towards being infamous for Indian system physicians to engage in medical practice with registered practitioners. The non-registered practitioners especially

of the Indian system do not receive any rights or authorities, and the rules which state this are firstly avoidable and subject to change. It will be ethical to form these types of rules by first making all arrangements in all aspects for the study of Ayurveda.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

It is well known that the cost of treatment in the Indian system of medicine is lower than that of the allopathic medical system. I will give the example of treatment expenditure in the last two years from our KPD *vaidyaśālā* and other allopathic clinics:

1917-1918

Per head expenses in <i>cintādrīpetha</i> clinic (allopathic)	0-2-2
In <i>vālayyanayaḍū vaidyaśālā</i>	0-2-1
In <i>vaṇṇārāpetha vaidyaśālā</i>	0-3-2

Despite including salaries of medicine manufacturers and servants, the per capita treatment expenses at Śrīkanyakāparameśvarī Devasthāna Ayurveda hospital is 0-1-5.

1918-1919

Per head expenses in <i>cintādrīpetha</i> clinic (allopathic)	0-2-10
In <i>vālayyanayaḍū vaidyaśālā</i>	0-2-10
In <i>vaṇṇārāpetha vaidyaśālā</i>	0-3-3
Śrīkanyakāparameśvarī Devasthāna Ayurveda hospital	0-1-8

From this, we understand that the expenses for treatment in the Western medical system is double or perhaps triple than in Ayurveda. It is understood that if we assess the expense of Santamas Convent Hospital, it is more than 0-7-3 per person or even above that. Hence, I state that Ayurvedic treatment is possible at low cost.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival?

Firstly, due to the acquisition of powers by *śaka*, *hūṇa*, *yavana*, the abduction of the systems by them, the ban on surgical procedures by Buddhist authorities, and many such reasons there was a decline in the Ayurveda system. After that time, the disrespect of government officials, the establishment of the Western medicinal system in this country, and giving all respect [and support] to that system [allopathy] are the reasons for the decline of the Ayurvedic system.

As mentioned in the answers to question three, four, and six, if government officials support Ayurveda, then I am confident that Ayurveda will be uplifted from this predicament.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

Government officials, local councils, universities, and apart from these also charitable people and firms should respect and promote the flourishing of the Indian medical system as well, just like they respect and promote the Western medical system.

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Testimonies from the Presidency of Madras
written in Tamil

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Pandithar Avargal

Translated from the Tamil by D. V. KANAGARATHINAM
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Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani or Siddha – that you propose to deal with?

Among the various “indigenous medical practices” (*cutēca vaittiya muraikaḷ*), I will start by explaining the “Tamil Siddha” (*tamiḷ cittar*) medical practice. In the South, the Tamil language has been in use since olden times; so, my explanation is in accordance with the practice of “Siddha medical texts” (*cittar vaittiya nūl*) in the Tamil language. Of them, it is only in accordance with the practices given in the Tamil Siddha medical texts and not with the texts by experts in medical practices in other languages. Moreover, our country being South India, the medical practice is based on the types of flora (*tāvaravarkkaṇḱalaiyum*) and agricultural products (*viḷaiporuḷḱalaiyum*) available here as well as the medical texts which have been written in the vernacular language. Since the medical practitioners are Hindus, born and raised in the Hindu nation, the names [of the institutions] are in honour of the nation, such as “Society of Hindu Medicine” (*indu vaittiya caṅkam*), “Medical Institution [according to] the Hindu Dharma” (*indu tarma vaittiya cālai*); however, [this medicine] is also referred to as “Tamil Ayurvedic medicine” (*tamiḷ āyuvēta vaittiyaṁ*), “Tamil Siddha medicine” (*tamiḷ citta vaittiyaṁ*), and “Hindu medicine” (*indu vaittiyaṁ*).

¹ A first draft was prepared by Prakash Venkatesan. It served as a basis for the final revised translation by Lingeshwaran Venkateshwaraloo and D. V. Kanagarathinam.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

Although there are several reasons for the causation of disease (*nōy*), according to the Siddha medical science (*cāstiram*), here I will explain about the causation of certain diseases based on the Siddha texts, which are aligned with modern medical methods.

“Who largely feeds, nor measure of the fire within maintains,
That thoughtless man shall feel unmeasured pains.”²

In addition,

“Because of the rapidity of the five elements (*ai-m-pūtam*)
Combining together [according to their] activity (*vivakāram*),
Most probably
The creation of beings occurred.
They change in the course of time,
Grow or diminish,
Creating disease (*nōy*).

² *Tirukkural* 947 (1982: 114). *Tirukkural*, English Translation and Commentary by Rev Dr G U Pope, Rev W H Drew, Rev John Lazarus and Mr F W Ellis. First published by W.H. Allen, & Co, 1886, Reprinted by The South India Saiva Siddhantha Works Publishing Society, Tinnevely, Madras, India, 1962, 1982.

To know what the disease is,
 Evaluate and find out by looking at the ‘eight qualities’ (*irunāṅku kuṇam*).
 Keep an eye on the nature of the pulse (*nāṭi*),
 Infer [the disease] according to the method (*vīti*) of the levels of
 Air (*vāyvu*), Fire (*tī*), and Water (*appu*) in the body (*uṭal*).”

In addition,

“Because of our actions (*ceykai*), because of our varieties of food (*uṇṭi*),
 because of the diversity (*pētam*) of land (*maṇ*), because of the change
 (*mārram*) in wind (*kārru*), because of the qualities (*kuṇam*) of water (*taṇ-ṇīr*),
 because of the many germs, and because of the celestial disorders (*viṇṇatiṇ*
tōṣam), many diseases (*nōy*) occur.

Listen, I will explain about disease:
 The subtle tingling (*cori*), eruption (*ciraṅku*),
 Becoming whooping cough (*kakkirumaḷ*), and arising as consumption (*kṣaya-*
rōkam)
 Restless enteric fever (*vesha curam*), unexpected cholera (*vānti-pēti*),
 Warts (*kāyvu*) and measles (*ammai*) will spread rapidly.”

In addition,

“Phlegm (*cilēṭṭumam*) is water (*taṇ-ṇīr*),
 Bile (*pittam*) is Fire (*tī*),
 And
 Wind (*vātam*) is Wind (*kārru*).”

It is to be noted [from the above poems] that many different names [for diseases] have been given and mentioned in the Siddha texts.

We infer the causation of disease through critical study of many texts similar to the above-mentioned excerpts, along with the experience of treating many diseases numerous times.

According to the doctrine (*karuttu*) of the above-mentioned Siddha texts, the reasons for the causation of disease are explained [as follows]: this human body (*carīram*) is physically (*pautīkam*) constituted by the “five elements” (*pañca-pūtam*); the “human body” (*carīram*) in the physical (*pautīkam*) form and life

itself (*uyir*)³ is created by these five elements and their essence (*cattu*). In this body, when there is variance in the *vātam*, *pittam*, and *cilēṭṭumam* [i.e., air, fire, and water or wind, bile, and phlegm], there is change in the form of increase or decrease in the essence of the “tissue cells” (*kaṇṇarai*) of the organs (*uruppu*); there is deficiency (*vikalam*) in the wind *pirāṇaṇ*, resulting in the contamination of pure blood, heating up (*vetuppu*) of the muscles (*tacai-nār*), causing burning (*kāntal*), resulting in increase in the boiling up (*koṭippu*) of *pittam* leading to the causation of many diseases. To illustrate (*tiruṣṭāntam*), although there are many reasons for the causation of diseases, like consumption (*kṣayarōkam*), cough (*kāca-rōkam*), and breath-cough [dyspnoea] disease (*cuvācakācarōkam*), I am going to explain just some of them here.

That is to say, some beings (*tēki*) among children who are born different due to defective (*keṭuti*) semen and blood (*cukkila-curōṇitam*) of the father and mother [respectively] are affected with mesenterica disease (*kaṇai-c-cūṭu*) during their early age (*ciṟu-vayatu*). Certain other beings are affected with “loss of semen or spermatorrhoea” (*cukkila-naṣṭam*) due to excessive copulation (*kalavi*) during their youth (*pāliyam*). Wrong mealtimes (*akāla pōjaṇam*), tiring walking (*kaṭunaṭai*), open-eyed wakefulness/insomnia (*kaṇ viḷippu*), serious worry (*ārāttuyar*), repression of excrement and urine (*malajalamatakkal*), and a countless amount of venereal secretions (*kāma nīrai kaṇakkillātu viṭuttal*) due to various reasons: these are all sources of the causation of disease.

To elaborate on the above, when the fire (*kaṇal*) increases in the body, the blood “boils up” (*koṭippu*) and there is dullness in the “power of digestion” (*tīpāk-kiṇi*), causing variance in the essence of life (*āṭma-cattu*) present in the blood. This results in an increase of the air that is wind (*vātam*) and the fire that is bile (*pittam*) from their “standard measures” (*māttirai*), and therefore the small wind channels (*cuvāca-k-kuḷal*) dry up. The temperature (*uṣṇam*) of the seven “bodily constituents” (*tātu*) that are hair (*rōmam*), muscle (*tacai-nār*), blood (*rattam*), flesh (*māmicam*), nerves (*narampu*), bone (*astī*), and marrow (*mūḷai*) reduces over time, and chyle (*iraca-tātu*) loses its characteristic of turning into blood, hence the “nourishment” (*pōṣaṇam*) for other “bodily constituents” (*tātu*) is reduced, causing heat (*tāpitam*) resulting in the “essence of vital breath” (*pirāṇātāra-cattu*) known as *ōjes*, depleting day by day. With the breathing spheres (*kōḷarai*) losing their functions, small lumps are formed and, over time, the lumps mature, thereby creating germs, weakening the strength of the body and resulting in fever. And

³ In *The Smile of Murugan*, chapter fourteen, entitled “The Cittar: An Enigma”, Zvelebil (1973: 228) translates *uyir* as “soul, life-force” and notes that “*uyir* does not exist apart from *uṭal* ‘body’, just as body has no life without *uyir*.” Kamil V. Zvelebil, *The Smile of Murugan. On Tamil Literature of South India*, Leiden: E.J. Brill, 1973.

over a certain period of time, the flesh (*māmica tātu*) decreases and ruins the body. The reasons mentioned above may lead to or cause many diseases, such as consumption (*kṣayarōkam*) and cough (*kācarōkam*), according to the principles of the Siddha medical texts.

For certain other beings, heat (*akkiṇi*) increases in the “root support” known as *mūlādhāra* (*mūlātāram*) affecting the marrow (*mūlai*), boiling up the blood and the wind *pirāṇaṇ*, which is the vital air of the body that causes respiration and resides in the lungs (*nurai-y-īral*). This warms up (*vetuppu*) its normal functioning of expansion and contraction; the operation of the “digestive organs” (*jīraṇa-karuvi*) reduces, and this, over time, results in lack of interest in food, lack of sleep, slenderising of the body, formation of phlegm (*kapam*) in the chest, and weakening of the strength of the joints (*poruttu*) as well as causing periodical fever (*curam*), thereby destroying (*keṭu*) the body, as has been proved according to the experiences of “established doctrine” (*cittāntam*) through the critical study of Siddha texts.

For certain other beings, fire increases in the bones (*asthi*), draining the blood, increasing the bile (*pittam*), taking away the sense of taste, causing the formation of phlegm in the chest, and, over time, weakening the physical strength and creating disease (*tōṣam*) due to “internal heat as in a fever of moderate intensity” (*uṭ-kāntal*). We are aware of this.

(Examples of above mentioned [causation of disease])

“Whoever is born, they have wind (*vātam*) and bile (*pittam*),
Like an ocean filled with water, but in the endless increase and
Decrease, we may know the diseases (*nōy*) and the symptoms (*kuṛi*) of them;
The disease, the known, will be chased away, then suffering will not follow,”

it is explained.

“If there is increase or decrease in any of the three starting with wind, as established by the learned, this will cause disease,”

it is explained.

Apart from this, the adequate reasons for diseases such as cholera (*vānti-pēti*) and diarrhoea (*viṣa-pēti*, “cholera”) that are present everywhere [are as follows]:

This fatal disease known as *cāmaḷa* [literally meaning “darkness”] is floating in the atmosphere (*ākāyam*); while descending to the earth (*pūmi*), it becomes mixed with the “air rendering it poisonous” (*viṣa-k-kārru*). It is said to enter

the body and, according to the three humours of the system that are wind, bile, and phlegm (*vātam*, *pittam*, and *cilēṭṭumam*), it alters the condition of blood; the watery components (*nīrppakutikaḷ*) in the blood of the patient passing out through mucus (*caḷi*) and membrane (*cavvu*) of the digestive pathway (*jīraṇapātai*) is the nature of this disease.

However, weakness (*palayīṇam*), “degradation of happiness” (*cuka-tāṣi*), excessive heat (*kāṇkai*), living in places with impure air, impure water, at lower altitudes and in marsh lands, and having indigestion due to consumption of food that causes dullness: these are also causes of this fatal disease, according to the above traditional saying (*curuti*) and as we comprehend from experience. Those are: smallpox (*kompaṇ*), abscess of intestines (*kuṭarppaṭuvan*), and cholera (*akkaraṇ*).⁴ Those affected with the disease *kompaṇ* will die in 720 minutes or 30 *nāḷikai* [1 *nāḷikai* is 24 minutes]; those affected with *kuṭarppaṭuvan* in three days, while most of those affected with *akkaraṇ* continue to live.

Apart from this, looking into the reasons for the causation of fever reveals that there are many types of fever such as “fever due to the predominance of *vāta*” (*vāta curam*), “fever due to excess of *pitta*” (*pitta curam*), “fever due to excess of *vāta* and *pitta*” (*pittavāta curam*), “fever that occurs in mountainous regions” (*malaicuram*)⁵, “fever due to poison” (*viṣa curam*); seasonal change (*kāla-keṭi*), unsuitability of the land (*mārupāṭu*), and change in water and food: these are factors that cause [fever].

Looking into how the heat (*akkiṇi*) is naturally spread over all the organs in the body and maintains the balance of the body reveals that, along with the heat (*akkiṇi*) that is present, heat known as “heat as a cause” (*kāraṇakkiṇi*), arising due to various reasons and increasing the functioning of the existing heat, is what is known as fever (*curam*).

When there is increase and decrease from the standard measures of wind, bile, and phlegm (*vātam*, *pittam*, and *cilēṭṭumam*), depending on what has increased the fever is named accordingly, such as *vāta curam*, *pitta curam*, *kappa curam*, *pittavāta curam*, *malaicuram*, or *viṣa curam*, and, when these are brought back to their normal state, causing that fever to stabilise, “fever due to the complication of humours” (*tona curam*), etc. are also stabilised similarly.

⁴ According to Sambasivam Pillai (vol. I.1: 49-50): *akkaraṇ* is “one of the three kinds of Cholera contemplated in the Tamil Medical science.” T. V. Sambasivam Pillai, *Tamil-English Dictionary of Medicine, Chemistry, Botany, and Allied Sciences*, 5 vols, Madras: Research Institute of Siddhar’s Science, 1931-1978.

⁵ Probably a kind of malarial fever.

To continue, to consider the reason for the inception of the disease leucorrhoea (*veṭṭai*) according to the poem: “One who [unnecessarily] loses semen goes insane and declines,” there are two types. To look into how, during the copulation of the mother and father, with the maturity of the “[male] semen and [female] blood” (*cukkila-curōṇitam*), for certain beings born out of the uterus (*karu*) thus formed many types of discharges, white fluid and yellow fluid are seen at an early age; this is known as natural leucorrhoea (*veṭṭai*). The second is acquired leucorrhoea (*ceyarkai veṭṭai*) – because of the excessive union of man and woman, according to the nature of their bodies and the “change of times” (*kāla-pētam*), the semen heat or the blood heat will pass through the urethra (*nīr-t-tārai*), forming wounds (*pun*) and pus (*cīl*); that wound will be seen as yellow or white; this is acquired *veṭṭai*. To explain this would be endless, hence I will stop here.

The majority of this will be in accordance with modern scientific research and the contradictions will be minor, in my opinion.

(b)

(1) The examination [of the patients] (*pariṭṭai*) is made in accordance with the practice [taught] in the Siddha treatise, through experience, through verbal communication with the patient, and the physical condition of the patient, by inferences from the eight types of examination, and by examining the pulse (*nāṭi*). The treatment is given accordingly through reliable medicines and in line with the “course of time” (*kāla-k-kiramam*).

(2) In my opinion, in providing treatment according to our practice there are generally no side effects and, moreover, the disease is cured. However, most Tamil medical practitioners do not have the practice of keeping accounts of their treatments and medicines. Until now, one did not feel the necessity to show the accounts for the treatment and the “inventory” for the medicines (*jāptā*) to others; hence, there is not the practice of maintaining accounts. Some practitioners who sell medicines maintain accounts. However, they do not treat “severe diseases” (*makā-rōkam*), and they do not take responsibility for treating the diseases themselves. Now, in our “Society of Dharma Medical Institution” (Caṅka Dharma Vaittiya Cālai), there is information about the reality (*vāstavam*) of the treatment of diseases and also a logbook for the related accounts.

(c) There is no reason to deny that indigenous systems of treatment are more efficacious. The reasons are that the medicines are available easily and from nearby

places. The proof is that numerous diseases can be treated with many medicines that can be made at low cost.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

I am directly connected with the Tanjore Hindu Medical Society (Thanjai Hindu Vaittiya Sangam) and Dharma Medical Institution (Dharma Vaittiya Cālai).

(b) (1)

There is a requirement for an adequacy of medical relief to be provided. There are not enough centres of medical education. I cannot say that the situation is satisfactory.

(b) (2)

First: there are no educational institutions for Tamil medical practice. There must be appropriate medical texts for the practitioners to learn and practise (*ap-piyācam*). Second: youngsters aspiring to become medical practitioners must study, pass, and graduate before practising. Third: it must be mandatory to study and practise in the Tamil medical educational institutions; those who have not practised in that way must join medical unions and study and graduate through experience; it is to be noted that there must be an order imposed on medical practitioners.

(c)

There is not sufficient provision for medical relief and medical education on indigenous lines. Medical educational centres must be established in each and every big city. There must be free provisions, such as scholarships (*upakāra-c-campalam*) for training medical practitioners and helping them to attain certificates (*kaṛ-cāṭci-pattiram*).

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*
- (3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

I think the suggestions in the three paragraphs 1, 2, and 3 are very important and must be implemented.

(b)

(1) It cannot, as far as I know, be said that there are appropriate Tamil medical educational institutions in the Presidency. Siddha medical institutions seem to have been established, and if arrangements are made for those institutions to follow the traditions, in my opinion the ideal will be attained. However, this is not possible without the support of the government.

(2) I do not think that the above mentioned arrangements are too demanding for the present situation. For Tamil Siddha medical practice to progress, it is important for the government to take appropriate steps to aid financially and support the medical unions.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

Calcutta University Enquiry Committee has been practising the Western system of medicine and has been using English in the Aryan (*āriya*) medicinal system. This has not, however, been in practice in South India and, moreover, such medicines and equipment as those required to prepare the medicines are not easily available here. The medicines required may also come from places as much as 1,000 miles distant, where the Tamil language is not known, and it therefore takes time for these medicines to be prepared. Most of the practitioners are neither aware of the names of the Western medicines nor have used such medicines, and this makes their assumptions unacceptable.

Just as medicinal practitioners in Calcutta have been aware of the English medical practices, in the same way Tamil practitioners who study the South Indian Siddha texts should also be aware of the practices of Western medicine. It would hence not be possible at the moment to state that the difference between the two medicinal systems would disappear.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I believe it is expedient to include:

(a)

Compendium of syllabus: First lesson is human anatomy (*carīrak kūrīlakkaṇam*), Siddha method for examination of the pulse (*siddhar nāṭi parīkṣa*), Materia Medica (*patārṭta kuṇa cintāmaṇi*), texts on tonics (*racāyaṇa pakuti cāstiram*), pharmacopeia (*tāvaravarkka nūl*), physiology (*tattuvātikaḷiṇṭolil*), reasons for their changes (*vikalppam*) and their characteristics (*kuṇam*), etc. It is necessary that these be learnt. Such elements require three to four years of learning and experience.

(b)

Students should have the necessary command over the Tamil language and should know English to the extent of being able to read and write.

(c)

The reason for Tamil being the medium of instruction is that all the Siddha medicinal texts have been written in Tamil.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a) the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b) any changes in, or additions to, the existing legislation on medical registration.*

Practitioners practising at various places and those working with medical institutions, including charitable medical institutions, and also those who are self-employed have been following indigenous methods for twenty-five to thirty years. Though it has become essential for such practitioners to register, it is also essential and compulsory for other practitioners to practice for a few days under an appropriate scholarly expert and receive certificate of merit.

(a)

In our opinion, experienced practitioners have to be registered, and those with no experience have to be identified by experienced practitioners and medical unions; among them, those who satisfy the rules have to be registered through a board, which it is necessary to establish.

If a condition is placed to the effect that Tamil practitioners should be registered and if not they would not be accepted as genuine practitioners, then this would pave the way for quacks (*pōli vaittiyarkaḷ*) to learn and follow the medicinal texts and hence become more experienced. Registration would make experienced practitioners come forward to help the country and become specialized like Western practitioners are. Hence, registration is essential.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

There is a huge difference between the cost of treatment in the Tamil Siddha method and the Allopathic medicinal system.

The reason being that the scope of the practice of using indigenous medicinal herbs to treat many diseases and in providing Tamil medicinal practitioners with an understanding of western medicinal recipes and techniques is narrow, and hence it cannot yet be stated that the differences between the two medicinal systems would diminish. In the process of using indigenous medicinal herbs to cure many diseases, preparations such as decoctions (*kaṣāyam*), sweet or pure water (*tīnīr*), devotional songs (*kīrtam*), tonics (*racāyaṇam*), medicinal electuaries (*lēkiyam*), dried medicines (*vaṭakam*), medicinal pills (*māttirai*), medicinal powders (*cūraṇam*), and extracts from a single herb (*ēka mūlikaiyiṇ cattu*) are used.

In order to use the above-mentioned medicinal herbs in the Allopathic system of medicine to produce distilled spirit, to separate into several remedies, and to extract oil, the appropriate equipment is necessary. Situations that necessitate the transportation of South Indian medicinal herbs to foreign countries, the processing of them, and then bringing them back to our country turn out to be very expensive. Because it is much more natural to use indigenous medicinal herbs, which suit the indigenous people and their region, [one needs] less medicine and less time for the treatment, and this in turn lowers the expense. Moreover, through the use of different kinds of minerals and particular medicinal herbs in making cures, such as pungent water (*kāracāra jeyanīr*), sweet or pure water (*tīnīr*), calcinated medical substances (*pūppuṭam*), and medicinal salt (*vaiṭṭiya muppu*), diseases can be cured effectively with less expenditure of time and money. Hence, there is a wide gap between the expenses of the indigenous medicinal system and those of the Allopathic system of medicine.

The two verses mentioned below will correctly explain the above stated opinion:

Poem

1. “Listen to another secret that lights up knowledge.
If the faeces (*mala-nīr*) become very much coagulated,
this is the medicine for dysentery (*pēti*);
If the body is a strengthless one,
an ‘enema,’ as it is called in English, is set up,
for the water to enter the bladder (*nīr-p-pai*) properly,
and covered with castor oil (*muttu-eṇṇey*).
The fluids of the phlegm and faeces
are excreted with freshness.”

2. “An instrument (*karuvi*) is required for this method.
 Listen to the practice of the holy Siddha method.
 We are sharing this out of experience.
 The goodness of tamarind (*puli*) and salt (*uppu*) are appropriate here
 and are mixed with castor oil (*kuru-taṇṭu-ney*)
 and applied on the whole of a clean cloth,
 which is twisted and rolled into a wick,
 and inserted into the anus (*apāṇam*).
 The faeces will be excreted naturally without blockage.”

What has been clearly stated above must be analysed. If a person suffering from constipation is not cured with diarrhoea medicine according to English medicinal practices, then their treatment involves the use of a type of evacuating medicine called an enema, which is inserted into the anus to cause the faeces to be excreted.

To make this enema, certain equipment is needed. Such equipment costs a minimum of 3 rupees, and without such equipment this treatment is not possible.

However, in Tamil Siddha medicinal practice the above-mentioned method of treating constipation may be done at a cost of just 1 *anna*. That is, mixing 1 *pala* (a unit of standard weight) of salt (*uppu*), 1 *pala* of tamarind (*puli*), and 3 *pala* of *Asafoetida* (*inṅku*), grinding it with castor oil (*viḷakkeṇṇey*), applying it on a cloth (*tuṇi*), twisting (*tiri*) it into a wick, and inserting into the anus (*apāṇan*) will release the constipated faeces. Between these two types of treatments, the English treatment requires equipment as well as medicines, while for the Tamil treatment the medicines alone are enough. It can be stated that there will be progress in the same way in all other aspects.

Hence, though expenses may vary within the Tamil Siddha medicine practice, it is uniformly effective.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

(a)

The reasons for the decay of indigenous medicine: the first reason is that the government has not created financial initiatives for indigenous medicinal practitioners and indigenous medicines in order to help the indigenous medicine practices

to thrive; it has rather been neglecting them. The second reason is the lack of any enquiry into the aid needed by the existing medical unions and lack of support for the same. Tamil medicinal researchers and the Tamil medicinal charitable trusts formed and run by those researchers are not appreciated as the dispensaries are, and this is a reason for the decline.

(b)

In order for the indigenous medicinal practices to thrive, just as how the government is supporting already formed and running “charitable board” (*cattira vāri*), charitable ‘fund’ portfolios, township (*taluk*) boards, and charitable food provision in municipalities and in other schools in every district, similarly it must also support ancient Tamil charitable medicinal trusts by including these within the charitable board dharma ‘funding’ or within the township (*taluk*) board in order to revive them.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a)** *the State,*
- (b)** *the local boards,*
- (c)** *the Universities,*
- (d)** *private agencies (individuals or associations).*

It is all the more important and necessary to establish indigenous hospitals in many places and to formulate and promote regulations as in English dispensaries; to support students and women who wish to learn medicine with appropriate facilities and stipends; to monitor and encourage students who wish to learn the Tamil medicinal system just like those who wish to become “English [medical] dressers;” and to establish colleges in many places and make the study of medicine compulsory.

M. R. Ry. Swami Virudai Sivagnanayogigal Avargal, Kovilpatti

Translated from the Tamil by D. V. KANAGARATHINAM
and LINGESHWARAN VENKATESHWARALOO¹

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I am going to explain about the Tamil Medical system (*Tamil vaittiyam*). It is also known as Tamil Ayurveda Medical system (*Tamiḷ āyulvēta vaittiyam*), Tamil Siddha Medical system (*Tamiḷ citta vaittiyam*), Dravidian Ayurveda Medical system (*tirāviṭam āyulvēta vaittiyam*), and Tamil Medical system (*Tamiḷ maruttuvam*).

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system?*

Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

¹ A first draft was prepared by Prakash Venkatesan. It served as a basis for the final revised translation by Lingeshwaran Venkateshwaraloo and D. V. Kanagarathinam.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

Altered, excessive, or inadequate intake of food by human beings; indigestion of food; spoilage of water, air, clothes, and conduct (*naṭai*) of humans; worms, poisonous microorganisms (*nañcu cirruvir*), and poisoning; contact with a disease-affected person; blockage of the fourteen types of paths; experiencing anxiety, doubt, etc.; seasonal and temporal changes; and excessive, inadequate, contaminated, or varied levels of the humours of the body (*meyttātu*), namely, wind (*vaatham*), bile (*pittam*), and phlegm (*aiyam*) are the causation of diseases. The blockages of the fourteen paths are: fart (*kucu*), faeces (*malam*), urine (*nīr*), sneezing (*tummal*), thirst (*nīrvēṭkai*), appetite (*paci*), sleep (*tūkkam*), cough (*irumal*), fatigue (*ilaippu*), long breath (*perumūccu*), yawn (*koṭṭāvi*), tears (*kaṇṇīr*), nausea (*vānti*), and sperm ejaculation (*vintirakkam*).

In short, every animate and inanimate being in the world is made up of the five elements (*aiṃpūtam*). The human body is also made up of five elements; similarly, trains (*pukaivaṇṭi*) and machines (*iyantiram*) also are produced and powered by these five elements. The parts of the machine are made of earth (*maṇ*) that has been filled with water (*nīr*), that water is boiled by fire (*tī*), which emits vapour (*āvi*), and the sky (*viṇ*) gives space for all these activities. Among them, the three main factors, such as vapour, fire, water, are responsible for the functioning of the ‘machine.’ Likewise, wind (*vata* (*vāyu*)), bile (*pitta* (*tī*)), and phlegm (*nīr*) also act in the body. If the level of vapour and acid rises or lowers in a ‘machine,’ then they have to be removed or added to respectively, depending upon the condition of the ‘machine.’ We are witnessing that when such elements are at the necessary level, then the ‘machine’ runs properly. The actual state of the human body can also be realized in a similar manner.

In the human body, all solid structures are made up of the earth element; all fluids are the water element; digestive acid (*cerinīr*), bile (*pittam*), and bodily temperature (*veppam*) are the fire element; movements of the body and eye are the air element; sound and space are the sky element; among these five, the three elements air, fire, and water are considered wind (*vaatham*), bile (*pittam*), and phlegm (*aiyam*), respectively. Wind, bile, and phlegm always work collectively with the base element earth and the subtle element sky.

If the elements air, fire, and water, known as wind, bile, and phlegm respectively, are in harmony, the body will be healthy. Given the above-mentioned reasons, increase, decrease or spoilage of these three elements lead to wind, bile, and phlegm diseases respectively. When steam and acid have reached a high level in a machine, they are reduced by being expelled. Likewise, when the humours have reached a high level in the body, they are reduced by being expelled or changed through purgatives (*pēti maruntu*), and when they have reached a low level, they are increased by administering the drug: this is referred to as the practice of medicine.

*Tirumoolar Tirumantiram, vaittiyam 600*²

This body has been created by these five that have already existed;
While separated as flesh, it takes the nature of the earth (*priti*),
Flowing blood, so to say, takes the nature of water (*appu*),
Afflicting fire (*vaṇṇi*) is the cause of healthy heat. 31

With heat exhaled from the nose (*nāci*),
See that which heads in and out is air (*vāyu*),
Encroach whole places in the bare body, swiftly go steadily,
Stand like the healthy nectar sky (*vāṇ*). 32

Listen, healthy earth will be placed in the nose,
Fire takes its place in the eye,
Water takes its place in the tongue,
But air touches everywhere, 33

Sky will act through the ear.
Of these five, three are intense;
The clever air stays as wind (*vaatham*),
Crouching fire enters as bile (*pittam*), 34

Entered water will touch the body as phlegm.
Disease will occur by these three
Will damage said experienced yogis
Who know the changes that occur caused by them. 35

² This is not the *Tirumantiram*, but a medical text written by Tirumoolar known as *Tirumoolar Tirumantiram vaidyam 600*. There is no reference translation for this text.

Medicine (*maruntu*): Medicine acts against (*maruppatu*, literally “refuses”) changes, disease, and death. From the word *maru*, the suffix *r* changes (*vikāram*) into *r* to form the word “*maruntu*.” Altered, reduced, or excessive wind, bile, and phlegm in a body due to the reasons mentioned above are the causations of diseases.

Tirukkural

The learned books count three, with wind as first; of these,
if any one prevails, or fails, it will cause disease.³

(b)

According to the texts of the Tamil medical system, the medical system consists of four components, namely, the physician (*maruttuvaṇ*), drugs (*maruntu*), the person consuming the medicine (*maruntuṇpāṇ*), and the person serving the medicine (*maruntūṭṭuvāṇ*) or a caregiver (*uḷai celvāṇ*).

Tirukkural 950

For patient, leech, and remedies and he who waits by patient’s side,
The art of medicine must fourfold code of laws provide.⁴

The principles of the Tamil medical system are explained according to the principles of the medical practitioner. This is as follows:

*The principles of the practitioner (maruttuvaṇilakkaṇam) –
Tirumantiram 8,000*⁵

The practitioner who knows well about
Three eyes, four heads, five faces,

³ *Tirukkural* 941 (1982: 114). *Tirukkural*, English Translation and Commentary by Rev Dr G U Pope, Rev W H Drew, Rev John Lazarus and Mr F W Ellis. First published by W.H. Allen, & Co, 1886, Reprinted by The South India Saiva Siddhantha Works Publishing Society, Tinnevely, Madras, India, 1962, 1982.

⁴ *Tirukkural* 950 (1982: 114). *Tirukkural*, English Translation and Commentary by Rev Dr G U Pope, Rev W H Drew, Rev John Lazarus and Mr F W Ellis. First published by W.H. Allen, & Co, 1886, Reprinted by The South India Saiva Siddhantha Works Publishing Society, Tinnevely, Madras, India, 1962, 1982.

⁵ *Tirumantiram 8,000* is a different text from the well-known *Tirumantiram 3,000*. There is no reference translation for this text.

Six hands, eight bodies, and ten legs
Will cure disease.

Listen to this practitioner carefully, three eyes, four heads,
Five faces, six hands – the state of the body is eight, ten legs;
Who knows the meaning of this cures disease; others kill,
The remedy will not work, and [they] attain hell after death.

The medical practitioner (*maruttuvan*) – The principles of the medical practitioner are compared to the parts of the body, and a medical practitioner is hence described as a person with 1. three eyes, 2. four heads, 3. five faces, 4. six hands, 5. eight bodies, and 6. ten legs.

The meaning of this list is as follows.

The three eyes are:

- 1) Purity of medicines (*maruntin cutti*)
- 2) Character of the remedy (*maruntiyalpu*)
- 3) Glossary of names of remedies (*nikaṇṭu*)

These three understandings being the primary principles of a practitioner are regarded as the eye of a practitioner.

Medicines (*maruntukkal*) – curative (*nīkkam*), preventive (*kāppu*), suffusive (*nīraippu*) are the three classes of medicines:⁶

- curative (*nīkkam*) – drugs which cure diseases
- preventive (*kāppu*) – drugs which prevent diseases
- suffusive (*nīraippu*) – drugs which help to re-establish healthy functions of the system

Tirumantiram 8,000

Naṇṇaṭai yūṅkāl naṇalnōy torru
Maṇṇiṭā vuraikum vaḷaṇcey kāppām
tuṇrunōy nīkkal colvilak kākum
kunṛiya cattuk koṭutta nīraippē

⁶ Three classes of medicine are mentioned in the Tamil medicine: preventive (*kāppu*), curative (*nīkkam*), and suffusive (*nīraippu*). T. V. Sambasivam Pillai, *Tamil-English Dictionary of Medicine, Chemistry, Botany and Allied Sciences*, Madras: The Research Institute of Siddhar's Science, 1931, 2.1: 694.

These medicines are of three types: divine medicine⁷ (*tēvurai*), medicine intended for the human being (*makkaḷurai*), and surgical medicine (*cūruurai*). These three have sixty-six further divisions.

MEDICAL SUBSTANCES

1,008 types of herbal medical substances (*mūlikai maruntu carakku*); 25 types of salt (*uppu vakaikaḷ*); 64 kinds of mineral poison (*pāṭāṇankaḷ*), 112 types of secondary mineral (*uparaca carakkukaḷ*); 112 animal products (*uṭarporuḷkaḷ*)⁸ and essences of drugs (*cattukaḷ*); 9 types of metal (*lōkaṇkaḷ*), and 9 types of gem (*maṇikaḷ*).

Among the above-mentioned three types of medicines, there are twelve divine medicines (*tēvurai*) as listed below:

1. Ashes or metallic oxide (*nīru/parpam*)
2. Red metallic oxide (*centūram*)
3. Carbonate (*cunṇam*)
4. Consolidated medicine (*kaṭṭu*)
5. Sublimate (*paṭaṅku – pataṅkam*)
6. Mercury pill (*kaḷaṅku – kaḷaṅkam*)
7. Light (*cuṭar – viḷakkuvaṇṇa vurai*)
8. Fume (*pukai*)
9. Electric therapy (*miṇ - miṇcāram*)
10. Essence (*cattu*)
11. Alkaline liquid (*ceynīr - ceyanīr*)
12. Acid (*tīnīr - tirāvakam*)

33 TYPES OF MEDICINE INTENDED FOR HUMAN BEINGS (*MAKKAḷURAI*)

1. Fresh herbs and roots (*paccilai vēr*)
2. Drinking water (*kuṭinīr*)
3. Medicated powder (*poṭi – cūraṇam*)
4. Ghee (*ney*)
5. Meal-cake cooked in steam (*piṭṭavi – piṭṭaviyal*)
6. Hair oil (*muḷukkeṇney – muṭit tailam*)
7. Medicated oil drops falling from a burning wick soaked in oil (*cuṭar ney cuṭart tailam*)

⁷ Medicine used by gods of the celestial world, i.e., 12 sorts of drugs.

⁸ Substances found in animals, such as musk, bezoar, amber, etc.

8. Medicated oil to be consumed (*uṇṇeṇṇey – kuṭit tailam*)
9. Medicated oil to be poured into the nine openings of the body (*tuḷai ney – tuḷait tailam*)
10. Oil to apply on affected parts of the body (*piṭit tailam*)
11. Stain remover (*kaṛaipōkki – coripōkki*)
12. Medicine for the ears (*ceviyurai*)
13. Electuary (*iḷakam – lēkiyam*)
14. Elixir to prolong life (*karukkam – iracāyaṇam*)
15. Mistura (*kuḷampu*)
16. Opium (*kavāṭam*)
17. Cake (*vaṭakam*)
18. Pill (*uṇṭai – kuḷikai*)
19. Fomentation (*vemmaip poṭṭaṇam – orriṭam*)
20. Medicine prepared with poison (*nañcuṛai*)
21. Antidote (*murivu*)
22. Eye medicine or drops (*kaṇṇurai*)
23. Purgative (*pētiyurai*)
24. Emetic (*vāntiyurai*)
25. Anthelmintic (*puḷuppōkki*)
26. Diaphoretic (*vētu*)
27. Diuretic (*nīrpperukki*)
28. Diaphoretics (*vēppi – vēṭaiyākki*)
29. Waxy pill (*meḷuku*)
30. Errhine (*mūkkurai*)
31. Stermitatory (*tummi*)
32. Liquid essence (*pāku – carpattu*)
33. Medicine inducing pain (*vallurai – valitaru maruntu*)

20 SURGICAL MEDICINES (*CŪRUṬAI (ARAKKARUṬAI)*)

1. Surgery (*aṛuvai*)
2. Cauterization (*cūṭu*)
3. Hirudotherapy (*aṭṭai – cennīr pōkkaḷ*)
4. Scarifying the skin of the skull and inserting mercurial or other medical pills to revive suspended simulation (*kuṭōri*)
5. Tranquilizer (*veṛiyurai – mayakkurai*)
6. Stimulants to induce consciousness (*teḷivurai*)
7. Medicated ghee prepared with astringents (*tuvar ney – ārreṇṇey*)
8. Medicine that dissolves flesh (*karaicci – cataikaraikkum maruntu*)

9. Blisters (*puṇṇākki*)
10. Insufflation (*ūturai*)
11. Ointment (*kaḷimpu*)
12. Syringe (*pīccu*)
13. Liquid for cleansing wounds (*kaḷunīr*)
14. Surgeon's probe (*celākai*)
15. Poultice (*kaṭṭumākkani*)
15. Gargle (*koppaḷi*)
16. Liquid medicine (*nīrurai*)
17. Embrocation (*pūccu*)
18. Medicine of five elements (*pūtavurai*)
19. Effort (*muyarci*)
20. Midwifery (*maruttuvam – piḷḷai peruvittal*)

20 WAYS IN WHICH MEDICINES WORK (*MARUNṬIN CEYALVAKAI*)

1. Purgative (*pēti*) – faeces motion (*malapēti*), hydragogue or watery motion (*nīrppēti*), motion due to worms (*puḷuppēti*)
2. Emetic (*vānti*)
3. Errhine (*mūkkurai*) – Stermitatory (*tummi*), snuff applied to the nose (*naciyam*)
4. Eye medicine or drops (*kaṇṇurai*) – Pungent eye-salve used as a stimulant to revive a person who is in an unconscious condition (*kalikkam*), collyrium for the eye (*mai*), etc.
5. Medicine made from roots (*vērvurai*)
6. Preventive medicine (*kāppurai*)
7. Curative medicine (*vilakkurai*)
8. Suffusive medicine (*nīraippurai*)
9. Oil bath (*mūlukku*)
10. Fomentation (*orriṭam*)
11. Embrocation (*pūccu*)
12. Light (*cuṭar*)
13. Fumigation (*pukai*)
14. Tranquilizer (*mayakkurai*)
15. Antidote (*murivurai*)
16. Squirting (*pīccu*)
17. To cause blisters (*puṇṇākki*)
18. Hirudotherapy (*aṭṭai*)
19. Medicine that dissolves flesh (*karaicci*)

20. Medicine that relieves or heals (*ārri*)

These are the 20 types.

1. The four heads⁹ – air (*vaatham*), fire (*pittam*), water (*aiyam*), and the combination of the humours of the system (*tontam – kalappu*).
The research on these four is referred to as the primary aspect: to know about the element, origin, nature, operation, abundance, insufficiency, form, colour, and timing of these four.
2. The five faces – These are the states of the body, namely:
 1. Formation of the embryo (*piṇṭat tōrram – karuppōrpatti*)
 2. Internal parts of the body (*uṭpura vuṛuppukal*) (includes internal parts, such as teeth, etc., and external parts, like the head, etc.)
 3. From diseases to quality of medications (includes causation, nature of a disease, and the medication for them)
 4. Constituents of the human body and wastes (i.e., constituents of the human body, such as the seven fundamental organs,¹⁰ and the wastes of the body, like faeces, etc.)
 5. Body conditions (*uṭaṇilai*) – to be aware of the five element parts of the body, air (*vaatham*), fire (*pittam*), and water (*aiyam*) parts of the body, parts containing minerals, decline and improvement of health, state of breath (*uyirppiṇṇilai*), changes in the breath (*uyirpparuntal*), control over the mind (*uḷamaṭakkal*), vital parts or points (*varumaṅkal*), state of toxins (*naccunilai*), state of food intake (*amiḷṭtanilai*), cleansing methods (*uvaḷippumurai – tūyṭākkumurai*), methods to stay healthy (*nalam pēṇumurai*), methods of prevention (*kāṭṭaṇmurai*), signs of cure (*naṇṇilaikkurī*), symptoms of disease (*nōykkurī*), symptoms of death (*cākkurī*), and signs of preventing death (*cākākkurī*), etc.
3. The six hands – The six tastes are sweetness, sourness, saltiness, bitterness, pungency, and astringency. Among these air (*vaatham*) includes sourness, fire (*pittam*) includes bitterness, pungency, and astringency, and water (*aiyam*) includes sweetness and saltiness.

⁹ Primary factors are considered as the head of the body.

¹⁰ The seven constituent parts in the body are: lymph or chyle, blood, flesh, fat, bone, marrow, and semen. T. V. Sambasivam Pillai, *Tamil-English Dictionary of Medicine, Chemistry, Botany and Allied Sciences* (Madras: The Research Institute of Siddhar's Science, 1931), 1.2: 787.

It is necessary for everyone across the country to include the six tastes, which have the qualities of humours, in the food and the other substances consumed by them. So it is essential to have an understanding of this as well as what food must be consumed to prevent and cure diseases. Hence, these tastes are regarded as hands that are part of the body essential for any work.

4. The eight bodies are –

1. Pulse (*nāṭi*) – To know the characteristic symptoms of wind, bile, and phlegm (*vata*, *pitta*, and *aīyam*): natural actions (*taṇṇaṭai*), actions influenced by extraneous aspects (*puṛanaṭai*); fatigue (*iḷaittal*); rapid pulse with strong vibrations (*katittal*); leaping (*tullal*); troubling (*paṭuttal*); acceleration (*muṛpōkku*); deceleration (*piṛpōkku*); whirling (*cuḷarci*); and elevation (*kalittal*). To understand the minute aspects of the operations of following pulses: *pūtanāṭi* which shows the symptoms of death and the inter-pulsation¹¹ (*kurunāṭi*).
2. Eye – To identify diseases of wind, bile, and phlegm through the signs of colour (*nīram*); action (*ceyal*); wounding (*punṇātal*); hollowing (*kuḷital*); becoming small (*ciṛuttal*); enlarging (*paruttal*); becoming watery (*kalaṅkal*); trickling tears (*nīr vaṭital*); swelling (*vīṅkal*), and so on.
3. Tongue (*nākkū*) – To identify diseases through attaining the respective colour of wind, bile, and phlegm; attaining different colours; being defectless (*mācarriruttal*); a coating over the surface (*māppaṭintiruttal*); increasing water level (*nīr perukal*); being dry (*varaṇṭiruttal*), and so on.
4. Body (*uṭal*) – To identify diseases of wind, bile, and phlegm through the constitution of the body (*uṭaliṇ amaippu*); colour; stoutness (*taṭittal*); roughness (*curacurattal*); formation of lumps (*puṭaikaḷuṇṭātal*); numbness (*marattal*); fatigue (*iḷaittal*); swelling (*vīṅkal*); becoming lean (*varṛal*); wounding (*punṇātal*), and so on.
5. Faeces (*malam*) – To identify diseases through the colour (*nīram*) of the faeces; hardening (*kaṭṭiyāṇatu*); blighting (*tīyntatu*); digested (*cerittatu*); undigested (*ceriyāṭatu*); frothing (*nuraittatu*); slinging (*kavaṇ*); being mixed with pus (*cīl*), blood (*irattam*), and so on.
6. Urine (*nīr*) – Identification of diseases related to wind, bile, and phlegm, understanding whether they can be cured or not through the colour of urine (*nīriṇ nīram*); taste (*cuvai*); mixing or contamination (*kalappu*);

¹¹ The pulse between those indicating *vata* and *pitta* in the radial artery. T. V. Sambasivam Pillai, *Siddha Medical Dictionary* (Chennai: Department of Indian Medicine and Homeopathy, 2006), 2.2: 1013.

quantity (*aḷavu*); standard (*niṛai*); number of turns (*taṭavai*); essence (*cattu*); signs of diseases (*neykkuri*), and so on.

7. Touch (*toṭal*) – To identify diseases by touching the body to feel if it is hot (*cūṭāyiruttal*); extremely heated up (*kotittiruttal*); in nominal state (*potu nilaiyiliruttal*); cold (*kuḷirntiruttal*); chilled (*cilliṭṭiruttal*), sweaty (*viyarṭtal*); moist and sticky (*picupicuttal*); numb (*marāṭtal*), and so on.
8. Sound (*oli*) – To identify diseases while the patient is speaking by the loud sound (*uratta oli*); stable sound (*camavoli*); feeble sound (*tāl̥nta oli*); babbling (*pitarral*); laughing (*cirittal*); stammering (*kuḷaral*); weak voice (*kural kammal*); crying out (*peruṅkūccaliṭal*); sounding like a catapult (*kavaṇoṭu kalanta oli*); breath sound from lungs (*nuraiyīral mūccoli*), and so on.

4. The ten legs (*kālkaḷ*):

The ten winds (*vāyukkaḷ*) and ten pulses (*nāṭikaḷ*) are the essential tools for the working of the body (*uṭal*); sensory organs (*poṛi*); five senses of the body (*pulaṇ*), and organs (*karuvikaḷ*). Since winds function across the pulses and pulses function in combination with the winds, these two elements are jointly discussed.

5. The ten winds are:

1. Wind of life (*uyirkkāl – pirāṇaṇ*)
2. Wind of sound (*olikkāl – utāṇaṇ*)
3. Wind of action (*ceyarkāl – viyāṇaṇ*)
4. Wind of digestion (*cerikkāl – camāṇaṇ*)
5. Wind of excretion (*malakkāl – apāṇaṇ*)
6. Wind of vomiting (*vāntikkāl – nākaṇ*)
7. Wind of sight (*viḷikkāl – kūrmaṇ*)
8. Wind of sneezing (*tummikkāl – kirikaraṇ*)
9. Wind of yawning (*koṭṭāvikkāl – tēvatattaṇ*)
10. Wind of swelling (*vīṅkukāl – taṇaṇceyaṇ*)

The wind of life and the other winds which together make up the first five winds are also referred to as breath (*uyirppu – mūccu*), upper wind (*mērkāl*), extensive wind (*paravukāl*), central wind (*naṭukkāl*), and lower wind (*kīlkkāl*) respectively.

6. The ten pulses or subtle channels are:

1. Left pulse arising from the left testicle and terminating in the left nostril (*iṭakalai*)

2. Right pulse arising from the right testicle and terminating in the right nostril (*piṅkalai*)
3. Central pulse (*cuḷimuṇai*)
4. The pulse that corresponds to the third line of the urinary meridian and terminates in the left eye (*iṭakkaṇi – kāntāri*)
5. The pulse corresponding to the urinary bladder channel running along the spine (*valakkaṇi – hasti jimmā*)
6. The pulse on the left of *piṅkalai*, which forms complementary pairing with *kāntāri* (*valaikkaicci – pūṣā*)
7. The pulse behind *piṅkalai* which reaches the right eye (*iṭaikkaicci – yacasvini*)
8. The pulse which runs from the anus and flies up to the tonsils (*nākki – alampucā*)
9. The bow-shaped pulse descending from the pharynx, ascending to and ending at the nose tip (*kuṛicci – kuhī*)
10. The pulse corresponding to the spleen meridian that goes up and terminates in the tongue (*talaicci – caṅkiṇi*)

It is necessary to know about the state and functioning of winds such as the wind of life (*uyirkkāl*) and pulses such as *iṭakālai*.

The knowledge of a medical practitioner and the types of medicine has been explained by six types of research that a physician needs to know. The opinion is explained in the song below.

The nature of a practitioner (*maruttuvaṇiyal*) – (*Taila Varukka Curukkam*)

Praising the profound deity understanding many books,
 Cleanliness of tri-sensory organs, many diseases managed by a holy person
 Having friendship with noble [people] who have vast knowledge and are free from guilt
 Good character, lovable person,
 Truth, patience, measurements of place of suffering,
 Rule of substances, bases of body, *adal*, heat, *maanthal*,¹²
 And eight differences should be known profoundly
 If we look, those will be the ornament of a practitioner.

¹² I am not able to understand the terms *adal* and *maanthal*.

MEDICINE (*MARUNTU*)

The wind (*vaatha*), bile (*pitta*), and phlegm (*aiyam*) diseases which have various causes as stated above can be cured by eliminating the alteration (*vikāram*) in air (*vaatha*), fire (*pitta*), and water (*aiyam*). Many indigenous medical systems across the world and the research on the relationship between diseases and its cures come under two classes, namely, Homeopathy (*oppurai*) and Allopathy (*etirurai*). According to the Tamil medical texts, mercurial bead (*maṇi*), sacred words (*mantiram*), and medicine (*maruntu*) are the removing remedies. Among these, mercurial bead (*maṇi*), hardened extract of a leaf (*kaṭṭic cāraṇai*), ripened mercurial bead (*tīrnta iracamaṇi*), sacred words (*mantiram*) including those used to worship a deity (*teyva vupācaṇai*) and so on are the part of medicine (*maruntu*) which is categorized into three types, namely, divine medicines (*teyvavurai*), medicine intended for human beings (*makkaḷurai*), and surgical medicines (*cūruurai*). Medicine is also categorised into three, based on the relation between the medicine and the disease, namely, medicines in consonance with diseases (*oppurai*), medicines working against the disease (*etirurai*), and medicines with a mix of the above two effects (*kalappurai*).

STRENGTH OF MEDICINE (*MARUNTIN VALI*)

Medical substances: 1,008 types of herbal medical substances (*mūlikai maruntu carakkukaḷ*), 25 kinds of salts (*uppuvakai*), 64 kinds of mineral poisons (*pāṭāṇaṅkaḷ*), 112 types of secondary minerals (*uparaca carakkukaḷ*), animal products (*uṭarporuḷkaḷ*), essences of drugs (*cattukaḷ*), metals (*lōkaṅkaḷ*), and gems (*maṇikaḷ*). Based on the above types, medical substances are categorized into different strength levels.

Among these,

1. High power (*mikuvali – ati vīriyam*) substances are used as medicines in consonance with diseases (*oppurai*);
2. Moderate power (*cama vīriyam*) substances are used as medicines working against the disease (*etirurai*);
3. Low power (*atama vīriyam*) substances are frequently used as medicines with a mix of the above two effects (*kalappurai*).

In many instances, high and moderate power medicines may also come under the category of medicines having the combined effect of being in consonance with diseases and acting against diseases (*kalappurai*).

1. Medicines in consonance with diseases (*oppurāi*): a drug that causes a particular disease is administered to cure that particular disease. A drug which has the quality of wind (*vaatha*) is administered to cure the diseases emerged due to the invigoration of wind; likewise, drugs which have the qualities of bile (*pitta*), phlegm (*aiyam*), and a mixture of wind and bile are administered to cure diseases that have emerged due to the stimulation of bile, phlegm, and a mix of wind and bile, respectively. These drugs are referred to as medicines in consonance with diseases (*oppurāi*).

Example: Consuming mercury (*cūtam*) in its crude state (*paccāi-veṭṭu*) will cause mouth ulcers (*vāyirpuṇ*), swelling (*vīkkam*), arthritic diseases (*cūlaikkattu*), fever (*kāyccal*), paralysis (*kālmūṭakku*), and other such diseases. However, consumption of refined and processed mercury powder (*cūta parpam*) or mercury sublimate (*cūta patāṅkam*) will cure the same.

Consuming *Semecarpus anacardium*, also known as marking-nut (*cēṅkoṭṭai*), or body contact with its milky juice (*pāl*) or other harmful elements causes swelling (*vīṅkum*), swelling in patches (*taṭikkum*), and itchiness (*arippeṭuk-kum*) on the body; it will also lead to fever (*kāyccal*), eruption on the skin (*ciraṅku*), wounding (*puṇ*), arthritic diseases (*cūlai*), and cough (*irumal*). Consumption of purified marking-nut medicines will, however, cure the same.

Similarly, native bisulphate of mercury (*cavvīram*), white oxide of arsenic (*veḷḷai pāṭāṇam*), and thorn-apple (*ūmattu*) also belong to the category of medicines in consonance with diseases (*oppurāi*).

2. Medicines working against the disease (*etirurāi*): Administering drugs that have the quality of bile for wind disease and drugs that have the quality of wind for bile diseases; administering drugs that have the quality of bile for phlegm diseases and drugs that have the quality of phlegm for fire (*pitta*) disease; administering a cool remedy for heat and a heat-inducing remedy for cold; reducing excess and replenishing deficits. These drugs are referred to as medicines working against the disease (*etirurāi*).
3. Medicines with a mix of the above two effects (*kalappurāi*): discrete wind and bile substances and substances which are a combination of wind and phlegm, or bile and phlegm, or wind, bile, and phlegm are categories of different wind, bile, and phlegm medicines based on the characteristic of the substance they are combined with. In remedies like pills (*kulikai*), ghee (*ney*), oil (*eṇṇey*), electuary (*lēkiyam*), grained powder (*cūraṇam*), wax medicine (*meḷuku*), and medical oil (*tailam*), a primary substance that can cure a

particular disease is combined with other secondary substances. The remedy is named after the primary substance, and these are referred to as medicines with a mix of the above two effects (*kalappurai*).

When a substance that is a combination of wind and bile combines with a wind substance, then wind would be dominant, and when it combines with bile substance, then bile would be dominant.

Tirumantiram 8,000 maruntinīyaipu

If we formulate the principles of medicine,
Oppurai equalizes, *etirurai* opposes,
 Specialized *kalappu* two natures join together,
 As stated by Nandi.

Over the past thirty years, I have cured diseases that could not be cured by other medical systems with the help of the drugs of the Tamil medical system. Those who have learned this medical practice from me have also been similarly curing diseases. Right now, every month 1,500 patients are cured by consuming drugs of our Tamil medicine in the charitable hospital run by the Tamil Medical Association located at Washermanspet (Vannarapettai) in Chennai. The accounts and testimonials for the same are also being conserved as evidence.

(c)

- (1) Dyspepsia (*ceriyāmai*), indigestion (*ajīraṇam*), chronic dyspepsia (*kuṇmam*), dysentery (*aticāram*), chronic diarrhea (*kirāṇi*), etc. are the diseases of the stomach (*iraippai*)
- (2) Rheumatism (*mēkavāta cūlai*)
- (3) Chancre (*ilīnka puṇ*), gonorrhoea (*piramēkam*), venereal wound (*mēkappuṇ*), itchy wound in sexual parts (*uruppukaḷai arikkum puṇ*), inguinal bubo (*araiyāppu*) are syphilitic chancre
- (4) Skin diseases (*parrukaḷ - paṭaikaḷ*)
- (5) Rhinitis caseosa (*cirāyppīnicam*)
- (6) Rheumatoid arthritis – synovitis of the knee (*narittalaivātam*)
- (7) Polypus (*nācīkāpīṭam*)
- (8) A venereal disease of the penis (*ilīnkappurru – yōnippurru*)
- (9) Carbuncle (*piḷavai*)

These diseases are cured more quickly, easily, and effectively by the medicines of the Tamil Siddha medical system than by the English medical system.

- (1) Leprosy (*kuṭṭam*)
- (2) White leprosy (*veṇ kuṭṭam*)
- (3) Diabetes (*nīraḷivu – matumēkam*)
- (4) Paralysis (*pakkavātam*)
- (5) Convulsions (*valippu*)
- (6) Cough, fatigue (*irumal, ilaippu – kayam, kācam* (tuberculosis))

English medical practitioners have stated that these diseases are incurable. But many drugs are prescribed in the Tamil medical texts for these diseases; further, Tamil physicians are prescribing the drugs and curing these diseases.

SANSKRIT MEDICAL TEXTS

Caraka, *Suśruta*, and *Tanvantiri Nikandu* are the oldest and greatest texts among the Sanskrit medical texts. There is no reference in these texts to mercury (*iracam*), mineral poisons (*pāṭāṇam*), metals (*lōkam*), and essence of herbs (*cattu*) and its various forms, like calcined metals (*paṇṇam*), red metallic oxide (*centūram*), slacked lime (*cunṇam*), consolidated medicines (*kaṭṭu*), quintessence salt or universal solvent (*muppūkuru*), mercury beads (*iracamaṇi*), the eight kinds of diagnostic techniques (*eṇkuri – aṭṭavilakkaṇaṅkaḷ*), the best texts on pulse (*nāṭinūl*) and examination methods of urine and their indications (*nīrkkuri* and *ney kuri*). In the later stages, Sanskrit writers such as Nāgārjuna wrote about alchemy (*iracāyaṇa muraḷi*) and Śārṅgadharma, a fifteenth-century AD writer too, but have said little about pulse examination or about calcined metals (*paṇṇam*) and red metallic oxides (*centūram*). Thus, the divine medicines (*tēvuṛaikaḷ*), the eight kinds of diagnostic techniques (*eṇ vakaittērtal – aṣṭa stāṇaparikkai*), and substances like quintessence salt (*muppūkkuru*) and mercury beads (*iracamaṇi*) are included only in Tamil medical texts.

MEDICINES OF SANSKRIT AYURVEDA

1. 12 types of decoction (*kuṭṭinīr*) are:
 - (1) Medical juice or decoction warmed by a hot iron-rod (*curacam*)
 - (2) Medical pill prepared by mixed dried drugs with milk or water (*kalkam*)
 - (3) Decoction (*kvātam*)
 - (4) Ice (*himam*)

- (5) Decoction prepared in earthen pot (*pāṇṭam*)
 - (6) Infusion (*cīṭakaṣāyā*)
 - (7) Beverage (*pāṇīyā*)
 - (8) Ambrosia (*piramastayā*)
 - (9) Medicine from milk (*kṣīrapākā*)
 - (10) Medical oil (*pantam*)
 - (11) Gruel (*yavāku*)
 - (12) Electuary licked with tongue (*avalēkam*)
-
- (1) Porridge (*kañci*)
 - (2) Grained powder (*cūraṇam*)
 - (3) Medical pills (*vaṭikā – kuḷikai*)
 - (4) Bolus-like pills (*mōtamkam – uṇṭai*)
 - (5) Electuary (*kaṇṭapākā - lēkiyā*)
 - (6) Mixing of Medical drugs (*pāvanam*)
 - (7) Cooking within a closed cover made of clay, then taking the juice by squeezing and applying it to the eyes (*puṭapākā*)
 - (8) Sour beverage (*kāñcika – pulippuppāṇam*)
 - (9) Distilled spirit or tincture (*tirāvakā*)
 - (10) An acid obtained by distilling the following substances: alum borax, chloride of ammonium, sulphide of antimony, impure carbonate of potash, soda, rock salt, nitre orpiment, etc. (*cuvalpa tirāvakā*)
 - (11) An acid obtained by distilling a mixture of iron sulphate, rock salt, alum borax, and nitre in proper proportions with the aid of a still and then filtered (*caṅkat tirāvakā*)
 - (12) Spirituous liquor distilled from molasses (*ācavā*)
 - (13) Distilled mixture (*ariṣṭam – boiled arrack*)
 - (14) A medical preparation having ghee as the vehicle (*kirukā*)
 - (15) Medicated oil (*tailā*)
 - (16) Emetic (*vamaṇam – vomit*)
 - (17) Purgative (*virēcaṇam – purging*)
 - (18) Clyster (*vasti – a medicine for injection*)
 - (19) Medicine applied to the nostril (*naciya – nose medicine*)
 - (20) Fumigation (*tūmapāṇam – inhaling smoke*)
 - (21) Gargling medicine (*kaṇṭūṣam – gargling medicine*)

All these include different types of herbs (*mūlikai*) and distilled spirits.

POTENCY ACCORDING TO TAMIL MEDICAL TEXTS

- (1) Compared to powder (*poṭi – cūraṇam*), (2) juice (*cāru*) is more potent
- (3) Decoction (*kuṭṭinīr*) is more potent than juice
- (4) Electuary (*lēkiyam*) is more potent than drinking water
- (5) Medical pill (*kuḷikai*) is more potent than electuary
- (6) Wax medicine (*meḷuku*) is more potent than the medical pill
- (7) Salt water (*uppunīru*) is more potent than wax medicine
- (8) Distilled water or acid (*tīnīr*) is more potent than salt water
- (9) Medicine from mineral substances (*tātupporuḷ maruntu*) is more potent than distilled water or acid
- (10) Mineral poisons (arsenic) (*pāṭāṇam*) is more potent than medicine from mineral substances
- (11) The smoke emitted from mineral poisons (arsenic) (*pāṭāṇap pukai*) is more potent than mineral poisons (arsenic)
- (12) Calcined oxide prepared from arsenic (*pāṭāṇa parpam*) is more potent than smoke from the mineral poisons (arsenic)
- (13) Red oxide of arsenic (*pāṭāṇa centūram*) is more potent than calcined oxide prepared from arsenic
- (14) Calcined compound prepared from arsenic (*pāṭāṇa cuṇṇam*) is more potent than red oxide of arsenic
- (15) Calcined compound prepared from metal (*lōka cuṇṇam*) is more potent than calcined compound prepared from arsenic
- (16) Calcined compound prepared from the essence of minerals (*cattuc cuṇṇam*) is more potent than calcined compound prepared from metal
- (17) Mercury beads (*iraca maṇi*) are more potent than calcined compound prepared from the essence of minerals

These seventeen types of medicines are sequentially more powerful than each other. Hence, medical texts state that diseases which could not be cured by a previous drug should be cured by using the succeeding drugs. Thus, if the physician only has the knowledge of all the drugs, he could cure the diseases by administering various drugs even if one sort of drug fails.

THE POTENCY OF MEDICINES FROM ANOTHER ASPECT

- (1) Herbal medicine (*mūlikai maruntu*) is potent
- (2) Salt medicine types (*uppuvakai maruntu*) are more potent than herbal medicine

- (3) Distilled waters or acids (*tīnīrvakai maruntu*) are more potent than salt medicine types
- (4) Secondary mineral types (*uparacavakai maruntu*) are more potent than distilled water or acid medicine types
- (5) Animal products (*uṭarporuḷ maruntu*) are more potent than secondary mineral medicine types
- (6) Mineral poisons (*pāṭāṇavakai maruntu*) are more potent than animal products
- (7) Medicines prepared from metals (*lōkavakai maruntu*) are more potent than mineral poisons
- (8) Medicine types prepared from the essence of minerals (*cattuvakai maruntu*) are more potent than medicines prepared from metals
- (9) Mercury pills (*iracakuḷikai maruntu*) are more potent than medicine types prepared from the essence of minerals
- (10) Yoga (*yōkam*) is more powerful than mercury pills.

Tirumantiram 8,000

Great medical leaves (*mōlikai*), strong salts (*valluppu*), distilled water (*tī nīr*), Scented and poisoned substances (*uṭar poruḷ* and *pāṭāṇam*), metals (*lōkam*), Well-featured vital vitamins and minerals (*iṇṇiyar satti*), mercury pill (*raca-maṇi*), yoga (*yōkam*),

Each is stronger than the preceding one to cure diseases.

As stated above, *Tirumantiram* elaborates on the strengths of medicines. All these are covered in the Tamil Siddha medical system. From the above list of seventeen and ten medicines, the Sanskrit (*vaṭamoli*)¹³ medical system consists of only the first eight and three medicines on these two lists respectively. The rest of the high potential drugs on the list belong exclusively to Tamil medicine. Those high potential drugs have the strength to cure diseases that cannot be cured by other medical systems. Those medicines present in Sanskrit medical texts written in later periods were taken from Tamil.

¹³ In Tamil Texts, Sanskrit is called *vatamoli* because this language came from North of the Tamil region.

According to the previous census statistics:

Medical practitioners in the Madras Presidency:	
Male -	21,627
Female -	<u>4,188</u>
Total -	28,815
Of them,	
English medical practitioners -	app. 700
Sanskrit Ayurveda medical practitioners -	app. 300
Physicians belonging to Tiruvananthapuram and Cochin state -	app. 700
Unani medical practitioners -	<u>app. 500</u>
Total-	2,200
Female medical practitioners -	<u>4,188</u>
Resultant total -	6,388

Apart from these 6,388 practitioners, there are 19,427 remaining in the Madras Presidency. Hence, in approximation, there are at least 20,000 Dravidian or Tamil medical practitioners.

This Tamil Medical Society requests the government, district boards, municipalities, *taluk* boards and union boards for further aid to facilitate the growth of the Dravidian or Tamil Siddha medical system, which has been this presidency's ancient, low-cost medical system that cures all disease with high-quality medicines.

The Siddha medical practices, which are in Tamil, one of the Dravidian languages, have also been written in other Dravidian languages such as Telugu and Kannada. Later written Sanskrit texts of the fifteenth and sixteenth centuries AD, *Śārṅgadharma* and *Bhāvaprakāśa*, also contain many Tamil medical practices.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) suitability as centres of medical education?

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

In the questions three (a), (b) (1), (2), (c) and four (a) (1), (2), (3), it has been questioned whether there are institutions or schools for teaching Tamil medicine and, if so, what are the necessary measures to be taken.

At present, there are no such institutions to teach the Tamil medical system and hence nothing can be stated in relation to this.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(b) (1), (2)

Till now, there are no institutions established to teach the Tamil Siddha medical system. There are *lakhs* [hundreds of thousands] of Tamil medical texts. However, they have not been published without mistakes. In such texts, subjects like medical practices (*vaittiyam*), sacred words (*mantiram*), medicine for longevity (*karpam*), yoga (*yogam*), and knowledge (*ñānam*) are discussed here and there. Some texts discuss medicine exclusively. However, these various aspects are not

separated by chapter; instead, they are scattered and presented irregularly. So twenty-five to a hundred Tamil medical practitioners of this presidency should be selected as the members and a board to be established for Tamil medical texts, which would formulate and print academic texts for a three-to-four year course and maintain medical institutions for teaching the same.

As it will take a long time to do this, Tamil medical texts that are published currently can be prescribed as academic texts and be used to start the educational institutions.

Tamil medical practitioners who are well versed in both the Tamil medicine and texts should be appointed as teachers in the Tamil medical school.

To the students of such institutions,

1. Tamil medical hospitals,
2. Labs to train in making medicines,
3. Libraries,
4. Exhibits of medicines and other medical substances, and
5. Research units

should be established, where facilities have to be made for the teaching of students and trainers.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

This opinion could not be accepted by the members of the Tamil Medicine Society of Madras Presidency. 112 types of secondary minerals (*uparaca carakkukaḷ*), 9 types of metals (*lōkaṅkaḷ*), 25 types of salts (*uppu vakaikaḷ*), 64 types of mineral poisons (*pāṭṭāṇkaḷ*) and essence of the minerals (*cattu*) and also some thousands of medicines including calcined oxide (*paṟpam*), red metallic oxide (*centūram*),

calced compound prepared from metals (*cunṇam*), distilled water (*tīnīr*), consolidated medicine (*kaṭṭu*), wax medicine (*meḷuku*), and gems (*maṇikaḷ*) have been mentioned in the Tamil medical texts. These medicines do not belong to Sanskrit, Unani, and English medical practitioners but belong exclusively to Tamil. Hence, there is no need for Tamil medical practitioners to learn Western medical systems. I think that if Western medical practitioners accept and use Tamil Siddha medicines, the difference between them would be lessened.

If a few people want to combine both, other things should be done only after the medicine is reformed by establishing a Siddha pharmaceutical industry and research lab.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a precis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

White oxide of arsenic (*veḷḷai pāṭāṇam*) and sulfur (*kenti*) are regarded as non-metallic substances by English medical text writers. On the other hand, authors of Tamil medical texts state that they are metallic. Likewise, there are many differences between the pharmacopoeia of Tamil medicine (*carakku vaippu*) and the pharmacopoeia of English medicine. So, a new text has to be written after the texts of both systems have been examined, and this new text has to be prescribed as a text for the Tamil medical school. Medical texts may be written by incorporating the necessary aspects into the Tamil medical text from physics (*iyaṟporuṇūḷ*), physiology (*uṭaṟṟolil nūḷ*), anatomy (*uṭaṟkūru nūḷ*), and the

pathology (*nōyiyal*) of English medicine and can be prescribed as textbooks. The English medical texts on biology (*uyir nūl*) are fit to be completely translated. Though it is viable to translate the English medical texts on surgery (*aṟuvai nūl*) completely, the concepts in such texts such as mineral poisons (*viṭam*) and places or location of glands (*amuta nilai*¹⁴) have to be written about in detail.

(a)

The practice methods to be followed in institutions teaching Tamil Siddha medical system:

LESSONS AND TRAINING FOR THE FIRST YEAR

1. *Ācārakkōvai*
2. *Nālaṭiyār* (some parts of the text)
3. *Tirukkural* (some parts of the text)
4. Grammar (*ilakkaṇam*)
5. Nature of the medicine – *materia medica* (*patārtta cintāmaṇi*) which was written by Tēraiyaṟ (some parts)
6. Medicine – collection of 205 verses by Agatsya (*akattiyaṟ paripūraṇam 205*)
7. Human anatomy (*uṭarkūru*) – a treatise on medicine by Agatsya named *Akaṭṭiyaṟ vaiṭṭiya catakam* and another treatises on medicine by Agatsya named *Akaṭṭiyaṟ vaiṭṭiya ariccuvaṭi*.
8. Pulse (*nāṭi*) – collection of 100 verses on pulses by Tirumūlar (*tirumūlar nāṭi 100*)
9. Antidote (*muṟivu*) – antidotes in the treatise written by Yūkimuṇi (*yūkimuṇi peruṇūl*), a treatise on poison and its antidote (*viṣappirati viṣam*)
10. Method of prevention of diseases – texts with verses by Tēraiyaṟ and a few others
11. Practice – training in Tamil medical hospital (*tamiḷ vaiṭṭiya cālai*), pharmaceutical industry (*maruntu cey cālai*), and medical exhibitions (*poruṭkāṭci cālai*)

¹⁴ The situation of several glands in the body supposed to be capable of producing secretions or vital fluids. T. V. Sambasivam Pillai, *Tamil-English Dictionary of Medicine, Chemistry, Botany and Allied Sciences* (Madras: The Research Institute of Siddhar's Science, 1931), 1.1: 350.

LESSONS AND TRAINING FOR THE SECOND YEAR

1. *Tirukkural* (some parts)
2. Dictionary (*nikaṇṭu*) – An ancient Tamil lexicon named after its author *Piṅkalam* (*piṅkala nikaṇṭu*) – chapters on names of medical herbs, names of body parts, and names of medicines, a dictionary by Caṭṭamuṇi (*caṭṭamuṇi nikaṇṭu*), and a dictionary on medical science used as reference (*karukkiṭai nikaṇṭu*).
3. Nature of the medicine – *materia medica* (*patārttakūṇa cintāmaṇi*) (some parts), understanding the nature of humours in the body (a collection of 1,500 songs by Takṣhiṇāmūrti (some parts from the 1,500 verses of *Takṣhiṇāmūrti tirumantiram*), knowledge on taste, etc., and a collection of 8,000 verses of the *Tirumantiram* (some parts)
4. Physiology (*uṭarrolil nūl*) – 8,000 verses of the *Tirumantiram*
5. Eight kind of disease diagnoses (*aṭṭavitaparikkai*), pulse (*nāṭi*) – a treatise dealing with the diagnosis of diseases by feeling the pulse (*kuru-nāṭi*) (verses on pulses by eighteen Siddhas (*paṭiṇeṇ cittar nāṭiyirraṭṭu*), chapter on pulse by Yūkimuṇi with 800 verses), urine (*nīr*) – uroscopy (*nīrkkurī*), urine examination (*neykkurī*) (from the text by Tēraiyar)
6. Anatomy (*uṭarkūru*) – compilation of a one-hundred-verse text on medical practice (*vaiṭṭiya catakam*) and other such texts
7. Medicines – learning how to make the powder (*cūraṇam*), electuary (*iḷēkiyam*), wax medicine (*meḷuku*), medical ghee (*ney*), medicated oil (*tailam*), consolidated medicine (*kaṭṭu*), pill (*uṇṭai*), and how to calcine them (*nīrriṇam*).
8. The nature and condition of the womb (*karuppakkōḷ*) – 4,000 verses on the gem (*maṇi nālāyiram*)¹⁵ (some parts), a treatise on the womb by Agatsya (*akattiyar karuppakkōḷ*).
9. Pathology and medicine (*nōy mutal kuṇa maruntu*) – the texts *Uṭkimuṇi cintāmaṇi* with 800 verses and *Akattiyar kuṇa pāṭam*.
10. Practice (*payir̥ci*) – training in Tamil medicine hospital (*tamiḷ vaiṭṭiya cālai*), medicine formulation labs (*maruntu cey cālai*), medical exhibitions (*poruṭkāṭci cālai*), and libraries (*puttkacālai*)

¹⁵ Here *maṇi* (gem) indicates a fetus, so we are using gem. When it indicates a medicine or drug, it means alchemical pill.

FOR THE THIRD YEAR

1. A treatise by Tēraiyaṛ with repetitions in the stanza and changed meanings based on changes in the divisions of words (*tēraiyaṛ yaṁaka veṇpā*).
2. Pathology and medicine (*nōy mutal kuṇa maruntu*) – Yūkimuṇi's texts with 800 and 400 verses each (*yūkimuṇi 800, 400*), a treatise on the nature of medical drugs and their uses by Agatsya (*akattiyaṛ kuṇa pāṭam*), and collections of 1,200 verses on Ayurveda by Agatsya (*akattiyaṛ āyul vētam 1,200*).
3. Eye disease (*kaṇṇōy*) – a treatise on the eye (*nayaṇa cintāmaṇi*), a treatise on the principles of the eye (*nayaṇa viti*), Agatsya.
4. Cleansing drugs (*carakku cutti*) – medical treatises by Agatsya named *Akattiyaṛ Muṇṇēṇpatu*, *Piṇṇēṇpatu*
5. Fever (*curam*) – a text on fever (*curanūl*) written by (*Taṇvantiri*)
6. Wind-based humours of the body (*vātham*) – a text on the wind-based humours of the body (*vātanūl*) (*Taṇvantiri*)
7. Smallpox (*vacūri*) – a text on smallpox (*vacūri nūl*), a text on pernicious wind (*ūlīkkārru nūl*), a text on gems (*makāmaṇi nūl*).
8. Paediatrics (*pāla vākaṭam*) – a collection of 1,200 verses on protective medicines (*pāla vākaṭattiraṭṭu 1,200*).
9. General rule (*potu viti*) – a treatise on Ayurveda by Cuntarānantar (*cuntarānantar āyul vētam*), a text on general rules (*potu viti*).
10. Surgery (*aṛuvaṛi*) – two medical treatises on surgery with 500 and 700 verses each (*iraṇa cintāmaṇi 500, 700*).
11. Medicated oil (*tailam*) – a brief account of medical oil types (*taila varukka carukkam*), a treatise by Tēraiyaṛ, a collection of 800 verses by Pīramamuṇi (*pīramamuṇi 800*).
12. Physics (*iyaṛporuṇūl*)
13. Medicine – methods of preparing calcined metal (*paṛpam*), red metallic oxide (*centūram*), calcined compound prepared from metals (*cunṇam*), smoke (*pukai*), light (*cuṭar*), etc.
14. Practice (*payiṛci*) – training in Tamil medical hospital (*tamiḷ vaittiya cālai*), medicine formulation labs (*maruntu cey cālai*), and libraries (*puttkacālai*).

FOR THE FOURTH YEAR

1. A medicine formed by the combination of three salts (*muppu*)¹⁶ – technical terms by Agastya (*akattiyaṛ paṛipāṭai*), a treatise with 100 verses on *muppu*

¹⁶ A medicine formed by the combination of three salts – salt from fuller's earth, ammonium chloride and saltpeter. T.V. Sambasivam Pillai, *Tamil-English Dic-*

- by Koṅkaṇar (*koṅkaṇar muppu 100*), a treatise with 100 verses on *muppu* by Cuntarānantar (*cuntarānantar muppu 100*), a treatise with 100 verses on *muppu* by Yūkimuṇi (*yūkimuṇi muppu 100*), and the third chapter of Koṅkaṇar with 3,000 verses (*koṅkaṇar kāṇṭam III 3,000*).
2. Calcining methods (*nīrriṇam*) – a treatise with 300 verses on red metallic oxide (*centūram 300*), the first 600 verses of a medical treatise by Agastya called *Akattiyar vaittiyam*, and the last 600 verses of the same.
 3. Chemistry (*maruntu vaippu*) –
 - (a) Extracting the essence of drugs (*cattukaḷeṭuttal*), calcined metal prepared from the essence of the mineral (*cattupparpam*), preparation of red metallic oxide (*centūram*) and calcined compound prepared from metal (*cunṇam ceytal*), preparing mercury beads (*iracamaṇi kaṭṭal*), and the glossary of Caṭṭamuṇi with 1,200 verses (*caṭṭamuṇi nikaṇṭu 1,200*).
 - (b) Medicine prepared from animal products (*uṭarporuḷ maruntukaḷ ceytal*), 300 verses of Nantīcar (*nantīcar 300*), 1,000 verses of Nantīcar (*nantīcar 1,000*), a reference text on science (*karukkiṭai*).
 - (c) Proficient understanding about diseases of the head, nose, eye, ear, internal parts of the body (*uḷḷuruppu*) and pancreas (*kaṇai*), knowing the methods of curing and knowing the preparatory methods of drugs.
 4. Medicines for major diseases (*perunōy maruntu*) – Formulation of medicines for chronic dyspepsia (*kunṇam*), tuberculosis (*iḷaiippu – kācam*), cough (*irumal – kṣayam*), rheumatism (*vātam*), leprosy (*kuṭṭam*), white leprosy (*veṇkuṭṭam*), fits (*valippu*), diabetes (*nīraḷivu*), carbuncle (*aracapiḷavai*), and venereal disease (*ilīṅkappurru*).
 - (a) Knowing the period (*kālamaṛital*) of fever, condition of glands (*amutanilai aṛital*), harmfulness (*varumam aṛital*)
 5. Laws of medical practice (*vaittiya caṭṭam*)
 6. Practice (*payiṛci*) – training in Tamil Medical hospital (*tamiḷ vaittiya cālai*), medicine formulation labs (*maruntu cey cālai*) and medical exhibitions (*poruṭkāṭci cālai*)

From the syllabus mentioned above, as framed by Tamil Medical Text Society, some chapters can be added or removed. This requires the support and financial aid of the government.

(b)

Those who wish to study in the above-mentioned medical institution should have passed in the Tamil courses in the final year of school.

(c)

Since all the Tamil medical texts are in the Tamil language, they have to be taught in the Tamil medium.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

In order to register Tamil medical practitioners, since no one at present has studied and passed in Tamil medical colleges, the following method has to be practised until someone from such colleges passes:

(a), (b)

According to the fifth resolution passed in the Tamil Medical Conference held in Kovilpatti, Tamil medical practitioners who have presented discourses and lectures should be given titles like “Master of Medicine” (*vaittiyaapati* (vi.pi.)), “King of Medicine” (*vaittiya pūpati* (vi.pi.pi.)) based on the strengths and limitations of the discourse. According to this fifth resolution, those who write medical texts or discover rare medicines should accordingly be entitled “Teacher of Medicine” (*vaittiyāciriya* (vi.e.)), “Professor of Medicine” (*vaittiya pērāciriya* (vi.pi.e.)), and “Doctor of medicine” (*vaittiya taru* (vi.ti.)). Those with such titles, those winning awards from the exhibitions of the society, members of the society’s medical board, and practitioners from other Tamil medical societies should all be made members of the society. Among these members, a few have to be chosen as medical counsellors to constitute a registration board that would register Tamil

medical practitioners. Otherwise, registration should begin ten years after the establishment of Tamil medical colleges.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

The cost of Tamil medicines is much lower than the cost of English medicines referred to as Allopathy; Tamil medicines cure faster.

According to the English medical system, the cure for arthritics is a mixture dose, which costs 4 ana for one dose, and hence three doses in a day costs Rs. 0-12-0. For a month it costs Rs. 22-8-0. The minimum charges for consultation and treatment would be Rs. 10; it costs totally Rs. 32-8-0.

According to the Tamil medical system, drugs such as calcined mercury (*iraca parpam*), sublimated mercury (*iraca patankam*), and wax of black mercuric sulphide (*iraca kenti meluku*) cost Rs. 1 for four days and Rs. 2 for eight days, and the fee of the medical practitioner is Rs. 1.

According to the English medical system, the cost of medicines and medicated oil to treat paralysis for six months is Rs. 25 per month, amounting to at least Rs. 150 for six months, and the fee of the practitioner is Rs. 150. According to the Tamil medical system, the cost of ammoniated mercury (*vīraparpam*), calcined mercury (*iraca parpam*) for three times in a day for four days amounts to 4 ana and totally Rs. 6, and the fees of the medical practitioner is Rs. 6.

In this way, English medicines become more expensive. They also need to be consumed for a longer period. It is enough to consume Tamil medicines for fewer days. The cost is much less; for these reasons, the Tamil medical system costs less. Many diseases that have been stated to be incurable by the English medical system have been cured by drugs of the Tamil medical system. Tamil medicines also contain many medicines that prolong the lifespan.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

In the Madras Presidency, there are 22,832 head villages of Iyan estate. This is not inclusive of hamlets (*macarā kirāmam*). In those villages, there are more than 20,000 Tamil or Dravidian medical practitioners. There are no more than 670 English hospitals. Hence, it cannot be stated that Tamil medical methods have degenerated. However, many of the Tamil medical practitioners are not well-educated. This has happened because the government, authorities, and societies have failed to supervise and run the Tamil medical system and because there are no educational institutions to teach this medicine.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

In order to advance the Tamil medical system in the Madras Presidency, the necessary funds have to be collected and a Tamil medicine research society has to be established with qualified members. The society should also establish a library containing all eminent medical texts and a research unit to produce medicines based on Tamil texts. Students of Tamil medical colleges should learn preparatory methods of drugs in such research units. Tamil hospitals must be established in every municipality and union town of every district to employ those students who have passed out from such institutions. For the above purpose, government, local boards, and universities should provide the necessary financial aid.

M. R. Ry. Pandit Shanmuganandaswami Avargal

Translated from the Tamil by D. V. KANAGARATHINAM
and LINGESHWARAN VENKATESHWARALOO¹

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I am going to explain about Siddha medicine, Tamil medicine, or Tamil Ayurveda, which has been followed from ancient times in Tamil Nadu.

Question 2

(a) *What are the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

¹ A first draft was prepared by Prakash Venkatesan. It served as a basis for the final revised translation by Lingeshwaran Venkateshwaraloo and D. V. Kanagarathinam.

(a)

The subtle body (*cūkkuma uṭampu*) is the base for the gross body (*tūla uṭampu*) and helps it to function. If the strength of the subtle body differs, by increasing or decreasing from the necessary level, then this will cause disease to the gross body. If one eats and drinks and lives in a perceptible state that is contrary to the rules or norms of health, which have been formed according to region, time, and weather, this will cause disease. Diseases occur because of deep anxiety (*maṇak-kavalai*), the blocking of the fourteen paths of the body (*patiṇāṇku vēkaṇkaḷai aṭakkal*), uneven actions of the three organs (*tirikaraṇam*), mind (*maṇam*), speech (*vāḱku*), body (*kāyam*), because of actions in former births (*paḷaviṇai*), heredity (*paramparai*), having relations with a person who is affected by disease (*nōyūṭai-yār kalappu*), because of contagious diseases that spread through atoms (*tottuvi-yāti eṇṇum paramāṇu*), because of worms (*puḷu*) and poison (*viṣam*).

I believe this will be in harmony [with our method]. However, it would only be easy to explain to experienced persons who know both English and Tamil.

(b)

By examining the eight kinds of elements of the body – pulse (*nāṭi*), face (*mukam*), faeces (*malam*), urine (*amuri*), eyes (*kaṇ*), tongue (*nāḱku*), body (*uṭampu*), voice (*cattam*) – one can identify the disease and cure it by ascertaining it through the medicines which act in accordance (*oppurāi*) and counter-act (*etirurāi*), and through a mixture of the drugs mentioned above (*kalappurāi*).

These medicines have been curing diseases over a long period. However, there is no evidence for this because we do not maintain a registry. If you want proof, then I could produce testimonials.

(c)

Tamil Siddha medicine is superior to all other systems of medicine in the world. The reason for the superiority of Tamil medicine is that it has mercurial pills (*maṇi*) and a medicine to promote longevity (*karpam*) that protects a person from greying hair (*narai*), wrinkles (*tirai*), old age (*mūppu*), and even death (*cāḱkāṭu*). While other systems merely cure diseases, Tamil medicine provides a good life based on divine (*tēva*), human (*maṇita*) and demon drugs (*acura*)². One can learn this method only from yogis and not from other people. We also cure diseases

² This indicates surgical treatment in the name of demons.

using mercury pills (*maṇi*), mantras, and medicine as available in the Tamil system of medicine.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency?*

(a)

I am a member of the Madras Tamil System of Medicine Society and its head office, the Kovilpatti Tamil System of Medicine Society, and the charitable hospital of the Madras Tamil System of Medicine Society. I am trying to teach the Tamil system of medicine by establishing a college in Madras.

(b)

(1) They are not correctly ordered.

(2) There is no suitable place. Even if it functions properly, that is not enough.

There is a lack of establishing colleges, collecting necessary books, establishing libraries, setting up botanical gardens (*mūlikai tōṭṭam*), and establishing hospitals.

(c)

No. This will be fulfilled if we correct the defects mentioned in the answer 3 (b) (2).

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

It is necessary.

(4) (a) to (b) (2)

If the common people, municipalities, government, boards of *taluks* and districts help in the required way, we can establish eminent upper level and lower level colleges and write course materials with the help of eminent scholars; we can establish pharmaceutical industries (*maruntu cālai*), hospitals (*vaittiya cālai*), botanical gardens, libraries, and so on. If this continues properly for a year, then the results will be good.

Question 5

Do you agree with the view of the Calcutta University Commission that

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are

mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

We cannot approve of this because we have sufficient aspects to use it for ourselves and to give it to others. I do not like this for that reason.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I will accept only some of these. We can write out an elaborate syllabus only if we get enough time and funds.

From (a) to (b)

I also agree with the decrees of our head association, Kovilpatti Tamil Medical Association.

(c)

We can teach Tamil medicine in the Tamil language and even in other regional languages. It would be excellent if we took Tamil as a common language medium for teaching Tamil medicine in South India.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

(a) and (b)

I agree with the decree of our head association.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

The Tamil system of medicine, which consists of medicines such as those that act in accordance (*oppu*), those that oppose (*etir*), and mixtures of drugs (*kalappu*), is very cost-effective.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

The causes of the decay of the indigenous systems of medicine are that there is a common name Ayurveda for the texts of Tamil and Sanskrit medical texts, but

among those who speak Sanskrit just a few are well-educated, and most of these are public officials who support their texts and medicine without letting Tamils and the Tamil medicine grow. They instigate the government to support their medicine. Tamil physicians are practising medicine without proper study, while Aryans who are residing in South India are using Tamil drugs to cure diseases and cheating by claiming themselves to be Ayurvedic physicians; believing their words, landlords, patrons, and other officials fund only them and not Tamil practitioners.

Tamil Siddha medicine will develop and attain a good position only if we create pharmaceutical industries, botanical gardens, high-level colleges, and excellent course materials to teach students.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

(a)

It would be satisfactory if funds for Tamil medical institutions were allocated, honouring the testimonial given by the Tamil medical board, treating Tamil physicians as equal with English physicians, and one or two Tamil physicians being appointed in English hospitals.

Otherwise, the Tamil medical system would easily advance if a certain amount were allocated from the land revenue tax or if helped as the railway companies by collecting an interest of one, two, or three *tampiṭi*³ to rupees.

(b)

Every district (*jilla*) and *taluk* board, based on their [economic] capacity, could establish free hospitals and even help to run a Tamil medical college.

³ This is cash or small coins = 1/12 ann.

(c)

Supporting Tamil medical education along with Tamil language studies; if the Tamil medical board needs help, this could be done.

(d)

Anyone can privately fund, honour, and assist the Tamil system of medicine based on their capacity.

Societies should assist the Tamil system of medicine by recruiting qualified teachers for universities, printing necessary books, and creating new course materials according to changes of region and time.

I, along with others, appreciate the government and committee, which would provide funds and other necessities for the Tamil system of medicine as for English practitioners.

M. R. Ry. K. A. Venkatachala Shastriar Avargal,
Vaidya Vesharada, and M. R. Ry. G. Subrahmanya
Sarma, Eliyurkar Avargal, Vaidya Thirtha

Translated from the Tamil by D. V. KANAGARATHINAM
and LINGESHWARAN VENKATESHWARALOO¹

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I write the answer with reference to the traditions of Ayurveda and to the questions related to indigenous medical practices, which were published with noble intention.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

¹ A first draft was prepared by Prakash Venkatesan. It served as a basis for the final revised translation by Lingeshwaran Venkateshwaraloo and D.V. Kanagarathinam.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

Ayurveda means the disclosure of properties and actions of materials (*tiraviya kuṇa karmam*) in relation to the prolongation or curtailment of life (this explains those things (*vastu*) which can be of benefit or detriment to life), and it also means disseminating knowledge on the prohibition (*niṣētak nāṇam*) of materials that cause harm to life.

The fundamental foundation of the physical body that is made up of the five elements: the land element (*pirutivi*), the humour which is like the windy humour (*vātam*), the seven constituents (*tātu*), and the waste products such as urine (*mūt-tiram*) that are spread throughout the body.

Among these, wind (*vātam*) or 'air' (*kārru*), bile (*pittam*) or 'heat' (*cūtu*), and phlegm (*cilēṣmam*) or 'water' (*appu*) are the three humours (*tōṣam*) of the body; bodily fluids (*irasa*), blood (*rakta*), flesh (*māmsa*), bones (*asti*), fat (*mētas*), bone marrow (*majjai*), and semen (*cukkilam*) are the tissues/constituents of the body (*tātukkaḷ*); waste from body parts like the anus (*vastu*), the genitals (*pakvācayam*), the eyes (*kaṇ*), the nose (*mūkkū*), and the ears (*kātu*) are the waste products of the body (*malam*).

The body is in balance when the three humours of the body are maintained in equilibrium.

The humours (*toṣās*) of the body, the body tissues (*tātukkaḷ*), and the waste products of the body (*malam*), which are maintaining bodily health when in equilibrium, may tend to increase or decrease (*virutti kṣīṇaṅkaḷ*) because of the properties and actions of the materials.

The benefits for the body from the humours of the body, the body tissues (*tātukkaḷ*), and the waste products (*malam*) that are not poisoned are: air (*vāyu*), when it is in its normal state (*cupāvam*) and not subject to any change (*vikāram*), helps the body to perform tasks of stimulating the mind and body (*maṇḍōvākkāya*), e.g., strengthening (*ūkkam*), inhalation and exhalation (*uccuvāca niccuvācaṅkaḷ*); the urge to excrete urine and faeces (*malamūtrātikaḷ*); inducing hunger (*paci*), thirst (*tākam*), and aiding in effectively performing the normal tasks of the constituents in the body parts such as the head (*cirasāti*); and supporting the body through things like keeping the sense organs active (*tarṣaṇāti*).

Bile (*pittam*), when not subjected to any change, through its strength supports the body by creating the nominal level of heat (*uṣṇam*) in the body, providing

vision (*pārvai*) in the eyes, inducing hunger and thirst, offering the power to sense the taste of food (*patārtaṅkaḷ*), offering splendour (*kānti*), sharp intellect (*puttik-kūrmai*), comfort (*cauriyam*), and softness (*mirututtaṅmai*) to the body.

The unspoiled phlegm (*cilēṣmam*), through its strength, protects the body by offering strength to the body (*carīravaṅmai*), managing the strength of parts such as bones, creating smoothness (*sniktattaṅmai*) in such parts, and maintaining the level of heat (*uṣṇacakti*) in the body.

Seven fundamental constituents/tissues of the body (*iracati captatātu*), in their natural state, provide necessary strength (*tirup̄ti*) to the body, increase the vital power of the body (*ōjō*), make the body balanced so that it can function properly, moisturize with oil (*eṇṇey pacai*), support the body (*tāṅku* or *tari*), replenish health (*nirapp̄tāl*), and help in the development of the foetus in the womb (*karpōtpatti*): all of these are regarded as its essential functions.

The essential feature of unaffected faeces is to maintain the strength (*tiṭam*) of the body, to expel waste from the body through urine (*mūttiram*), and to carry waste through sweat (*viyarvai*).

Hereafter, the characteristics of the changes caused by the rise of the humour of the body from nominal to excessive levels are explained.

When wind (*vātam*) is excessive in the body, this results in symptoms such as bodily trembling (*uṭal naṭukkam*), constipation (*malapantam*), loss of strength (*palakkuraivu*), insomnia (*nittiraiyīṅmai*), shivers (*ciluciluppu*), giddiness (*talaic-cūṛṛal*), and the desire to be in the heat (*uṣṇattil virup̄pam*).

If bile (*pittam*) is excessive, this would lead to symptoms such as faeces (*malam*), urine (*mūttiram*), eyes (*nēttiram*) and skin (*carmam*) turning yellow, loss of appetite (*paciyaṅmai*), insomnia (*nittiraik kuraivu*), and burning sensation in hands (*kai*), legs (*kāl*), and eyes (*kaṅkaḷ*).

When phlegm (*kapam*) is excessive, this results in laziness (*cōmpal*), dyspepsia (*akk̄ṇi mantam*), secretion of excessive saliva (*vāyil nīr curattal*), the body turning pale (*tēkam veṅmai nīramātal*), weakness of body parts (*avayavaṅkaḷ taḷarcciyūṛutal*), cough (*irumal*), breathlessness (*perumūccu*), and excess sleep (*atika nittirai*).

If the levels of the seven fundamental constituents of the body are excessive, this leads to the same changes which occur due to the rise of phlegm. When there is an excessive amount of blood, this leads to acute hot boils (*visarppam* – *ak-kiṇiyammai*), leprosy (*kuṣṭam*), spleen growth (*plīka virutti*), haemorrhage (*irakta pittam*), dental problems (*palnōy*), loss of consciousness (*mūrccai*), and, in addition, the eyes, urine, and skin turn reddish. Excess of flesh (*māmisam*) results in tubercular glands in the neck (*kaṅṭamālai*), glandular swelling (*kiranti*), and tumorous growth of flesh (*arputam*) as well as bulkiness of the belly (*vayīru*), thighs

(*tuṭai*), and cheeks (*kaṇṇam*) and the growth of unwanted flesh (*turmāmisam*) in the neck and other parts of the body. When there is an excess of fatty (*mētas*) body constituents, even if one does light work (*arpavēlai*), one will feel tiredness, and the chest (*mārpu*) and belly (*vayiru*) will expand. Excessive growth of bones (*asti*) would cause tumours (i.e., osteoma) in bones (*elumpukaḷil muṭiccukkaṭṭu*), and the teeth will grow one behind the other. The excess of bone marrow (*majjai*) results in bulkiness of the bone joints (*santi*) and wounds that lead to heavy suffering (*atika upattiravam*). Excessive semen (*cukkiram*) leads to lasciviousness (*atika mōkam*) towards women and seminal concretions (*cukkirācmari*).

When there is an excess of faeces higher than the normal level, it leads to flatulence, gas in the stomach (*porumal*), rumbling noise in the stomach (*iraiccal*), burden in the stomach (*pāram*), and pain in the stomach (*vēṭaṇai*). Excess of urine leads to throbbing in the urinary bladder (*mūttirācayam*) and an urge to pass urine in spite of already having passed it. Excessive sweat leads to heavy sweating, bad odour (*turkantam*), and itching sensations (*tiṇavu*). Similarly, excessive waste products (*mala virutti*) in body parts like the eyes can be identified through their appearance (*kuruttaṇmai*).

HEREAFTER, THE SYMPTOMS OF DETERIORATED HUMOURS
ARE EXPLAINED:

If wind (*vata*) deteriorates, then it leads to bodily emaciation (*carīram ilai*), mind perplexedness (*putti taṭumāru*), and loss of consciousness (*mūrccai*), along with the diseases arising due to excess of bile (*pitta*). If bile deteriorates, then it leads to changes like dyspepsia (*akkiṇi mantam*), chilliness (*kuḷircci*), and reduction of the brightness of the body (*tēka kānti kuraital*). If phlegm (*kapha*) deteriorates, this results in the drying of the internal cavities, which form an abode for phlegm (*kapācayanḱaḷ cūṇyamātal*), reduction of heartbeats (*hirutayattiṇ tuṭippu*), and slipping of joints (*cantikaḷ*).

Similarly, when the seven fundamental constituents of the body deteriorate, this causes symptoms like: 1. Increased dryness (*atika varaṭci*); 2. Reduction in the level of blood and slackening of arteries (*tamaṇi*); 3. Drying of flesh in chest, cheek, and neck, weakening of sense organs and severe pain in joints (*cantikaḷ*); 4. Reduction of fat, enlargement of the spleen (*plīham*), and emaciation of body; 5. Gnawing pain in bones and weakening of nails (*nakam*), loss of teeth (*paṛkaḷ*), and hair (*mayir*) loss; 6. Drying up of fluid in the bone marrow and the occurrence of small holes on the bones and the darkening of vision; 7. Longer time for the ejaculation of semen, which contains drops of blood and causes pain and burning sensations.

If the faeces are at less than optimum levels, then gas twirls in the intestine (*kuṭal*) and creates an appearance of pulling the intestine tight while making an unusual sound. The gas creates unbearable pain on the sides of the body near the ribs (*vilāppuṛam*), while circling around the intestine and moving upwards to the chest to cause blockage of inhalation and exhalation of the breath.

When urine is at an insufficient level, it changes colour and is passed out with immense difficulty in lesser quantities. It also comes out with drops of blood.

When sweat becomes insufficient, the hair becomes rough and frizzy and starts shedding. The skin becomes pale.

If the waste products of eyes, ears, and nose become insufficient, this causes pain in these places and creates a delusion that the parts are not functioning (*cūṇiyam*).

Up until now, the properties of balance (*cama*) as well as the excessive (*virutti*) and insufficient (*kṣiṇam*) humours of the body, which are the main factors behind a healthy (*carīrārōkkiyam*) or unhealthy (*anārōkyam*) body, have been somewhat explained.

Hereafter, the properties and actions of the three humours (*tiritōṣam*) in the body, which are the main factors behind disease formation and the reason for such energies to become excessive or insufficient, are given.

Wind (*vata*) has characteristics such as dryness (*varakṣi*), lightness (*ilaku*), coldness (*cītam*), heat (*karam*), subtleness (*cūkṣmam*) [a very small thing that can pass through the subtle channels having small holes], and fluidity (*calam*) [with fluid characteristics].

Bile (*pitta*) has characteristics such as oiliness (*neyppacai*), sharpness, pungency (*tīkṣaṇam – kūрмаi*), high temperature (*uṣṇam – ilaku*), a kind of bad odour (*visram – oru vakai turnāṛram*), movability (*saram*), and liquidity (*travam*).

Phlegm (*cilesma*) has characteristics such as smoothness or slipperiness (*snik-tam*), coldness (*cītam*), slowness (*mantam*), sliminess (*slakṣṇam – maḷamaḷappu*), smooth sliminess (*mrutsṇam – mrutuvāṇa vaḷavaḷappu*), and stability (*stiram – perukip pōkāmai*).

ACTIONS OF INVIGORATED WIND (*VATA*)

The actions of invigorated wind are slipping of joints, spasm (*icivu*), experiencing a feeling like being hit by a stick, numbness (*timir*), weight loss, disease all over the body, sensations like being pierced by a needle, sensations as if the body is rupturing, blockage of faeces and urine, lowering of the capability of sense organs, lameness of hands and legs (*muṭaṅki paṅkamiṭtal*), faeces coming out like a rope, frequent horripilation (*mayirkkūccal*), dryness of the tongue, shivering

(*naṭukkam*), roughness on the body (*coracorappu*), occurrence of many small and big pores in bones, drying of essence minerals in the flesh and other body parts, sensation that body parts are being twisted and pulled, flesh trembling (*catai tuṭṭippu*), inability to stretch or bend hands and legs and becoming immobile (*stam-pittuppōtal*), astringent taste (*tuvarppu*) on the tongue, and the body turning blackish red.

ACTIONS OF INVIGORATED BILE (*PITTA*)

The actions of invigorated bile are unbearable burning sensations all over the body, appearance of redness in the eyes and other such parts, extreme heat, boils on body parts such as the mouth (*ventu pōtal*), bad odour from the mouth, more sweat, putrefying of bodily fluids such as blood (*klētatvam – aḷukakkūṭiya nilaimai*), copiousness of blood (*irakta srāvam*), spoilage of bodily fluids, fatigue (*taḷarcci*), giddiness (*talaiccurral*), loss of consciousness (*mūrccai*), becoming a madman (*veripittavan*), a sense of sourness and spiciness on the tongue, and the colour of the bodily lustre changing to a colour other than white and red.

ACTIONS OF INVIGORATED PHLEGM (*KAPHAM*)

The actions of invigorated phlegm are the body shining due to smoothness (*snikta taṇmaiyāṇa miṇimiṇippu*), roughness (*kaṭṇat taṇmai*), itching sensations (*tiṇavu*), a cold body (*cītaṣparcam*), heaviness in the body (*kuruttuvam*), obstructions in different channels of the body (*srōtō*), numbness (*viraippu*) in the body, swelling (*vīkkam*), dyspepsia (*akkiṇi mantam*), excessive sleeping, excessive salivation, the body turning white, a sweet taste on the tongue and the slowing down of bodily functions.

HEREAFTER, CERTAIN THINGS ARE EXPLAINED

How the earth (*priti*), one among the five elements, is the main source of the creation of the body (*tēha*), since it is also the main source of the creation of all substances (*tiraviyam*). The three humours that are responsible for the creation of the body have the characteristics of changing the body colour (*kuru*), shining due to smoothness (*snikta*), and dryness (*rūkṣa*). Likewise, the herbs (*ōṣati*), metals, and minerals (*irasōpāsāti*) that function based on the same principles have the same characteristics. It is necessary to know about the properties and actions of materials (*kāraṇam*) that cause the merging of the five elements, which are the reason behind the creation of the things mentioned above. Though all the five

elements are the reason behind the creation of the animate and inanimate (*jīvatra-vya*) alike, the characteristics of the elements wind, fire, and water are dominant in the creation of the animate, and the characteristics of the elements earth and space are dominant in the creation of the inanimate. Based on the predominance, things turn into animate (*citta – jīva*) and inanimate (*jaṭa – travya*). If the element of earth (*prīṭvi*) dominates in a material, this is referred to as earth material (*pārt-tilatravyam*); if the element of water (*appu*) dominates, then this is referred to as water material (*āpyatravyam*); in the same manner, the other materials are also indicated.

The five elements are essential for the formation and advancement of all materials. If any material is to form, it requires a basis, and that is earth (*pūmi*). Water is used to make it prosperous. Heat is necessary for its maturing. Wind is essential to divide it into different branches (*kiḷai*). Space (*ākācam*) is essential for its development and existence.

Just as the ways in which variations in the union of the essential natures of things (*tattuvāmcam*) cause characteristics such as lightness (*ilaku*) or shine due to smoothness (*snikta*) in medicinal substances, similarly, characteristics such as changing body colour (*kuru*) or dryness (*rūkṣa*), which are opposite to the above-mentioned characteristics, are also present in a few other medicinal substances. In addition, the *kurvāti* characteristics of the materials are also present in the tastes (*irasam – cuvai*) in accordance with such materials. Among such tastes within materials, sweetness (*iṇippu*), sourness (*puḷippu*), saltiness (*uppu*), pungency (*kāram*), bitterness (*kacappu*), and astringency (*tuvarppu*) are referred to as the six tastes (*ṣaṭrasaṅkaḷ*). In the above-mentioned order, each of these tastes has a higher potential than the preceding one for inducing benefits to the body. Hence from the explanation given here so far, it is clear that the five elements are the bases for the creation of all movable and immovable (*cētaṇācētaṇa*) substances. This being so, is it correct to consider just the three elements of wind, fire, and water for bodily formation and detecting bodily health (*rōkārōkyam*), without considering the elements of earth and space, which also exist in relation to the body? It is reasonable for anyone to raise such a question. However, there will be no space for such questions, if an explanation is given of how the milieu of the bodily creation is associated with the five elements. Hence, there will be some explanation about this.

According to Ayurvedic doctrines, within the five elements, water holds the characteristics of earth and wind holds the characteristics of space. These two elements of earth and space are not brought into account [directly] but rather indirectly, through means of the three particles (*tattuva traya*) of the elements of wind, fire, and water; they assign moveable and immovable (*cētaṇācētaṇa*) materials to

their characteristics. When these three elements together form the basis of the body, they are referred to as wind, bile, and phlegm (*vatam*, *pittam*, and *cilesmam*). Hereafter, I will write about the six tastes mentioned above.

Among the six tastes, sweetness, sourness, and saltiness (*maturām lavaṇaṅkaḷ*) balances wind, pungency, bitterness, and astringency balance phlegm, and astringency, sweetness, and bitterness balance bile, i.e., they balance the force of these humours of the body. Besides, bitterness, pungency, and astringency can also develop wind. Similarly, sweetness, sourness, and saltiness can develop phlegm, and pungency, saltiness, and sourness can develop bile. In such a manner, the substances which contain such tastes and aid in lowering the excessive humours and curing the diseases that arise due to excessive humours are called balancing medicines (*camaṇauṣaṭam*), the substances which instead raise the level of humours are aggravating medicine (*kōpaṇauṣaṭam*), and the substances which offer comfort to even healthy people are medicines that are beneficial to health (*svastahitaṣaṭam*).

In this way, when foods filled with the six tastes are consumed and passed to the intestine, sweet and salty food (*matura lavaṇaṅkaḷ*) transform into sweetness (*iṇippu*), sour liquids (*amala rasam*) transform into sourness (*puḷippu*), and medicinal decoctions transform into bitterness (*kaṭurasam*). The three tastes that have transformed in this manner balance wind, bile, and phlegm and help in living a long life.

First, food and drinks consumed by us enter the intestine and are converted by digestive bile (*pācaṇa pittam*), and then they are separated into essential components and again converted by the digestive fire/heat of the body tissues (*tāt-vakṇi*). Once digested, the unstable portion (*asattāṇa amcam*) attains the characteristics of phlegm, and the nutritious part (*sattāṇa amcam*) turns into the colour of blood with the help of colouring bile (*rañcaka pittam*) in the *prāṇa vāyu* [one of five different kinds of air present in the body]. This nutrition is again treated by heat and later forms essential components and waste products. The waste products have the characteristics of bile and the essential components are diverted to muscles (*māmcapēci*). That fat (*mētam*) converts to bone marrow (*majjai*) and that marrow converts to semen (*cukkilam*). At the time of intercourse (*sampōkam*), the semen spreads like ghee on milk and reaches the uterus (*curōṇitam*). In the course of a few days, the semen thrives with the help of essential components (*mātru campantamāṇa*), such as the five elements, and finally it is born in the world as a new life. The food consumed from birth is converted into essence (*matura rasam*) with foam and attains the feature of phlegm. That essence is then converted by digestive fire/heat (*jātarākkini*) and becomes acidic in nature. That acidic food, while running through the small intestine (*ciru kuṭal*), combines with

bile (*pittam*) and is again digested by the heat of the bile. Then, substances like coconut shells, which cannot be digested, finally harden and are excreted.

Hence, the five types of food essences with the characteristics of the five elements are treated appropriately by the five kinds of heat associated with the respective element. That is, each of the characteristics of the five elements treats appropriate food essence with those characteristics and separately supplies these to the body to nourish it. In other words, the earth-element-related features of the food substances nourish only the earth-associated portions of the body. Similarly, each of the five elements nourishes body parts with the characteristics of the respective element. Seven fundamental constituents of the body (*rasāti sapta tātuk-kaḷ*) are produced from the nutrients of food essence. They appropriately nourish one another. The characteristics of digestive fire/heat (*jāṭarākkīṇi*) are spread all over such bodily tissues. The reduction in the intensity of heat from the digestive fire (*jāṭarākkīṇi*) prevents the wet portions of food substances (*tiravāmcam*) from drying (*cōṣi*) and results in excess of constituent elements of the body, and the increase of the intensity of heat dries up the liquidity of nutrients and results in scarcity of constituent elements of the body.

With this pattern of nourishment, excessive consumption of a similar type of food with the same characteristics, like lightness (*ilaku*) and dryness (*rūkṣa*), results in the excess of a particular humour in association with those characteristics in the same way. When this humour is in an excessive amount, the humour in association with characteristics like bodily lustre (*kuru*) and oiliness (*snikta*), which are contradictory to the characteristics of lightness (*ilaku*) and dryness (*rūkṣa*), will deteriorate.

Similarly, sense organs (*pañcēntiriyam*) with senses such as sound (*capta*), touch (*sparica*), sight (*rūpa*), taste (*rasa*), and smell (*kanta*) that are not suitable in terms of their interaction (*cērkkai*), time (*kālam*), and actions (*karmam*) will harm the health and the soul. The combination of time (*kālam*), reason (*artta*), and actions (*karmam*) have three different types based on deficiency (*hīṇa yōkam*), faultiness (*mityā yōkam*), and excess (*ati yōkam*). When the sense organs have lesser association with their respective senses or when the balance is totally lost, then there is deficiency (*hīṇa yōkam*); when the association between sense organs and their respective senses is greater, then there is excess (*ati yōkam*); when the association of sense organs with their respective senses is against their nature – that is, if the vision of eye (*nēttirēntiriyam*) is excessively bright (*atika pirakācam*), horrific (*payankaram*), disgusting (*aruvaruppu*), ugly (*vikāra lakṣaṇam*), too distant (*atika tūram*), too close (*ati samīpam*) – then it is faultiness (*mityā yōkam*). Among these three *yōkams*, faultiness (*mityā yōkam*) is the most dangerous. Likewise, there are three different seasons, namely, winter (*cīta* –

paṇikkālam), summer (*uṣṇa – veyyil*), and monsoon (*varṣā – maḷai*). Among these, if there is a deterioration of respective characteristics associated with the respective seasons during the occurrence of the respective season, that is, reduction of coldness during winter, reduction of heat during summer, and reduction of rain during the monsoon, then there is a deficiency (*hīṇa yōkam*) with respect to that particular season; if those characteristics increase, that is, if there is more coldness, heat and rain than usual, then it is excess (*ati yōkam*); and if the seasons encounter characteristics which are contradictory, that is, winter with heat or rain or summer with rain or coldness, then it is faultiness (*mityā yōkam*).

Similarly, there are three types of deeds (*karmam*), namely, bodily activity (*kāyikam*), deeds performed by the faculty of speech (*vācīkam*), and thinking of the mind (*māṇasīkam*). If the deeds done by body (*carīram*), speech (*vāḱku*), and mind (*maṇam*) are not as effective as usual, or if there is an absence of such deeds, then it is deficiency (*hīṇa yōkam*); if such deeds are more than usual, then this is excess (*ati yōkam*); and deeds like controlling urine and faeces (*malamūtrāti*) or forceful excretion or performing the role of an organ through another organ are termed as faultiness (*mityā yōkam*).

As mentioned above, diseases occur in body parts like intestines (*kōṣṭam*), limbs (*cākaī*), joints (*santi*), bones (*asti*) and vital spots (*marmam*), due to the deficiency (*hīṇa yōkam*), faultiness (*mityā yōkam*) and excess (*ati yōkam*) of time, reason and deed; the consuming of cheap products such as food and drink that are not suitable (*orrukkoḷḷāta*) for the body; engaging in unnecessary arguments (*tuṣṭa vātāmpu cēvaṇam*); frequent change of weather; actions such as excessive copulation (*punaṛcci*), sleeping in the daytime and controlling faeces and urine, there is an increase or decrease or faultiness in wind, bile, and phlegm (*vata*, *pitta* and *cīlesma*) which spreads all over the body created by the five elements, as for instance earth.

Moreover, the body crosses the two stages, accumulation (*cayāvastai*) and aggravation (*sātāvastai*), in the time interval after the consumption of harmful food (*ahitāhāra*) and before the invigoration of the three humours. That is to say, before the occurrence of changes in humours, the necessary collecting elements for the invigoration is called accumulation (*cayāvastai*), and collecting the necessary elements for the deterioration is called aggravation (*sātāvastai*). During such stages in the body, the bodily tissues may become spoilt (*klētattanmai – aḷukakkūṭiya nilaimai*). If there is an increase in the spoilage of bodily tissues, then twenty types of cells (*jīvāṇukkaḷ*) in such bodily constituent elements are produced through harmful substances. It can be proved based on the acquired

knowledge² (*pirattiyatca pramāṇam*) that after the occurrence of the above-mentioned things, the altered humours and fundamental constituents in the body, of either excess or deficient levels, lead to different types of disease in either one part (*ēkāvayavam*) or many parts of the body (*sarvāvayavam*), based on the exhibiting characteristics of faultiness, such as dryness (*rūkṣa*), sharpness (*tīkṣṇa*), softness (*snēha*), and more. These are the principles for the causation of the diseases according to Ayurveda.

No scholar can deny that the principles of Ayurveda would stand above the principles that have been found up to now and are going to be found by the research of modern medical sciences.

(b)

According to Ayurvedic doctrines, there are three ways of diagnosing diseases in the body. They are sight (*tarcittal*), touch (*sparcittal*), and questioning (*vinavutal*).

Sight – the symptoms which can be seen through the eyes are changes in the colour of faeces (*malam*), urine (*mūttiram*), blood (*nēttiram*), body (*carīram*) and changes such as excessiveness and deficiencies appearing in different parts of the body during the disease.

Touch – the symptoms of diseases such as the occurrence of pulse due to circulation of the blood in regions like the root of the thumb (*aṅkuṣṭa mūlam*), spleen (*plīham*), liver disease (*yakruttu*), chronic dyspepsia (*kuṇmam*), abscess with pus (*vitratī*), various types of fever (*jvararōkam*) can be detected by touching with the hand.

Questioning – the questions to be asked are about tastelessness/aversion (*aruci*), pain in the body, the state of digestion (*jīrṇājīṇam*), symptoms of soft or hard stools (*mrutukrūrakōṣṭa lakṣaṇam*), sleep (*nittirai*), dreams (*svapṇam*), and the onset of the disease.

Just as diseases are identified through the above-mentioned methods, the diseases that occur based on the invigoration or deterioration of humours are also identified by inference of the pulse, which is one of the indigenous methods of diagnosis.

² *Pramāṇam*: means of acquiring certain knowledge, by which *pirattiyatcam* is one. The six means are *pirattiyatcam*, *aṇumāṇam*, *ākamam*, *uvamāṇam*, *aruttāpatti*, and *apāvam*.

EXAMINATION OF THE PULSE

The science of pulse (*nāṭi vikṇāṇam*) is the understanding of faultiness in the humours of the body through the pulsation of blood (*irattattutippu*).

In the organ known as the heart (*hrutayam*), a big blood vessel (*iraktatamaṇi*) that divides into various sub-branches spreads throughout the body from head to foot and delivers blood, which is the essence of food and supports the growth of organs. These blood vessels are also present in the hands. According to traditional sciences, the blood vessel of women is naturally bigger in the left hand than the right hand, and hence for women the pulse would be more apparent in the left hand.

By pressing an inch above the bottom of the root of the thumb (*aṅkuṣṭa mūlam*), while perfectly aligning the tip of the index finger (*tarjaṇi – āḷ kāṭṭi*), middle finger (*matyamai – naṭu*), and ring finger (*anāmikai – pavittira virāl*), three different pulses can be felt on these fingers. Through the pulse of index finger, middle finger, and ring finger, the state of wind, bile, and phlegm (*vata*, *pitta*, and *cilema*) can be understood respectively. Through pulse rates, the excess, scarcity, or faults in the three humours can be understood in order to find out the health condition of a person.

In general, when there is an excess of wind, the pulse in the index finger quivers haphazardly and hisses like a snake, a leech, (*aṭṭai*), and an earthworm (*maṇṇuḷi pāmpu*). When there is an excess of bile, the pulse in the middle finger quivers like the jumping of a hen (*kōḷi*) or frog (*tavaḷai*). When there is an excess of phlegm, the pulse in the ring finger quivers like a slow and smoothly moving peacock (*mayiḷ*), tortoise (*āmai*), or swan (*hamsam*).

When an excess of groundnut (*kaṭalai*), cowpea (*kārāmaṇi*), types of tuber (*kiḷaṅku vakai*), or hyacinth bean (*moccai*) is consumed, more gas is produced when these are digested in the intestine, causing the stomach to expand (*vayirrupporumal*) and make noises (*iraiccal*), and [the pressure] is then released through the anus (*apāṇam*) or by means of a burp (*ēppam*). The remaining gas mixes with the essence of the food and reaches the heart. It is strengthened after mixing with the breath in the chest region (*prāṇavāyu*), which can make the heart expand (*prasāraṇa – virital*), contract (*ākuṇcaṇa – kuvital*), and remain immobile (*virāmam – acaivariruttal*). The remaining gas emerges out of the heart at high speed and travels to the tip of the index finger in a haphazard way through the root of the thumb. While this can also be felt in the other fingers, the index finger is the only place that acts as an obstacle to the speed of the blood. Hence, the examination is clearer in this finger. As stated above, the index finger is the place

to know the state of wind and this is emphasized by Ayurveda. Other [diagnoses] are also similar to this.

As stated above, after the consumption of food and beverages which increase heat and cause high blood pressure and when the blood enters into the arteries, the pulse in the middle finger would be felt like the leaping of cocks (*kukkuṭam*) or frogs (*maṇṭukam*). When pressurised blood passes through the artery, the speed can be felt in the middle finger more obviously than in other places. Hence, the middle finger is the region of identifying an excess of bile.

Similarly, excessive consumption of food with high liquid content raises the level of water in the blood and pressurizes the artery by filling it excessively. The blood flow, which is now slow and similar to the quivering of a turtle, swan, or peacock, will be felt in the ring finger. Hence, this is the place to examine phlegm.

In the same way, when there are changes in two humours (*tōṣankaḷ*) of the body, the state of the dominant humour can be sensed first in its corresponding location and will be followed by that of the other humour in its corresponding location. When two humours are in an equal state, then they will pass to their respective places at the same time.

The pulse for the humour related to a combination of all three humours (*sannipāta*) will be rapid (*paṭapaṭattum*), crumbling (*citilamāka*), beating with a certain gap (*viṭṭuviṭṭu*), blank (*cūṇyamāka*), misplaced (*svastāṇattai ilattal*), and changing back and forth (*muṇṇum piṇṇumāka māri*).

When the three humours are in equilibrium, then they will not be misplaced and rather will travel within the nerves (*sirai*), strongly and clearly, one at a time, in a balanced motion (*samaspuraṇam*).

When the three humours are in scarcity, there will be no changes in the places of the humours as stated above, but there will be a little difference in the pulse rate. That is, the blood, which travels a little before entering into the vein near the root of the thumb, slows down when it reaches the place where the state of three humours would be similar and stays back as if it wants to get back into the blood vessel. This is when the blood flows in three types of motion as that of a snake, a frog or a peacock, according to the three humours and their corresponding regions, index finger, etc.

Until now, the general qualities of the pulses were mentioned. In order to explain about their special qualities, the role of different pulses of the hands (*hasta nāṭi*), such as primary (*pūrva*), supportive (*pārcuva*), posterior (*piruṣṭa*), or middle (*matyam*), must be analysed with respect to the characteristics of diseases occurring in every part of the body. Since it would take a long time to explain this, this explanation ends here.

After identifying the general qualities of such diseases based on the above-mentioned methods, the special qualities of diseases must also be identified through the five qualities (*pañca lakṣaṇaṅkaḷ*): root cause (*nitāṇam*), preliminary signs (*pūrva rūpam*), symptoms (*rūpam*), pacifying factors (*upacayam*), and disease development (*samprāpti*).

Among these five qualities, the root cause (*nitāṇam*) is the reason for the disease. However, the five qualities together are also generally termed cause (*nitāṇam*). The root cause, which reveals the reason behind diseases, can be divided into two types, namely, internal/direct cause (*sannikruṣṭa nitāṇam*) and external/indirect cause (*viprakruṣṭa nitāṇam*). Internal/direct cause is something nearby, while external cause is something far away. Internal cause is when humours present within the body become faulty and result in diseases. External/indirect cause is when unsuitable food enters the body, stays, and later, at the time of maturity (*paripāka kālam*), leads to changes in the humours and these changes in turn result in disease. Consuming food that cannot be digested quickly will cause the disease factor of improperly digested food (*āmatōṣam*). This improperly digested food can also induce other diseases such as fever. So these indigestible foods will be called an internal/direct (*sannikruṣṭa*) cause when causing the disease factor of improperly digested food, and the same food will be called external/indirect (*viprakruṣṭa*) cause when causing fever.

The preliminary [prodromal] signs (*pūrva rūpam*) specifically state the characteristics of the diseases that are going to occur. That is, signs like stomach ache (*vayirril vēṭṇai*), gas in the stomach (*porumal*), and rumbling noise in the stomach (*iraiccal*) are the preliminary signs of a person who is going to be affected by diarrhoea (*atisāram*). This symbolical state is called a preliminary sign. If a person is going to be affected by fever, then their body experiences preliminary signs like a kind of burden and pain in many places, such as the waist (*iṭuppu*), tastelessness (*aruci*), yawning (*koṭṭāvi*), and horripilation (*mayirkkūccaliṭṭal*). These are the preliminary signs of fever. Similarly, there are different preliminary signs for different diseases. These preliminary signs are divided into two kinds, namely, bodily (*cārīram*) and mental (*māṇasikam*). The preliminary signs of fever, such as the lack of taste, belong to the bodily signs. At the same time, anxiety (*maṇakkavalai*) and disgust (*veṟuppu*) belong to mental preliminary signs.

Symptoms (*rūpam*) are the natural symptoms of a particular disease. That is, fever is the combined occurrence of symptoms like tastelessness. Royal consumption (*irājyākṣamā*), also known as tuberculosis, is the combination of eleven symptoms, which include fever.

Pacifying methods or the proper administration of treatment (*upacayam*) is that which gives comfort to the patients by them taking medicine and other foods.

This means that if the medicine, food, and changes (*vihāram*) used to treat the root causes of disease (*nitāṇam*) or the disease itself are effective in curing, then they are known as a treatment; in other words, treating diseases by administering drugs against the root causes or the disease itself.

Disease development (*samprāpti*) would inform the invigoration of humours and their functions in the body. The characteristics of disease development (*samprāpti*) are five in number: number (*saṅkyai*), variants (*vikalpam*), predominance (*prātānyam*), strength (*palam*), and time (*kālam*). The numbering of disease development (*saṅkya samprāpti*) is the total number of internal divisions of diseases, i.e., internal divisions of gonorrhoea, fever, and tuberculosis are twenty, eight, and five respectively. Variants (*vikalpa samprāpti*) is how far humours have been invigorated from the optimum level when they are invigorated separately, as a pair or as three humours together. Predominance (*prātānya samprāpti*) is dividing the diseases into independent (*svatantaram*) and dependent (*pātanram*) (independent diseases mean that the diseases have emerged due to the invigoration of the humours; dependent diseases that are also called *apratāṇa* mean that the diseases have emerged due to the independent humours). If all the aspects of the diseases, such as root cause, early signs, and symptoms are strong, this is called (great) strength (*pala samprāpti*), and if only some aspects are strong, this is called weak (*turpala samprāpti*). The disease factor of time (*kāla samprāpti*) is a time of distress or suffering due to the invigoration of the humours, for instance, day-time and night time, in every season, after consumption of food, during the time of digestion, or at any particular time. The following sentence could be kept as an example for disease development (*samprāpti*) in that humours with the disease factor of improperly digested food (*āmadōsa*) decreases the digestive fire in the stomach, which leads to the creation of a fever.

Diagnoses of diseases are not being conducted based only on the methods that have been explained to this point. Many more methods, like the eight diagnostic techniques (*aṣṭa stāṇa pariṣai*), are conducted to diagnose diseases. The disease could be identified even if one exercises any single method of diagnostic technique. If this is the case, any physician could find the disease by exercising the right method of diagnostic techniques, could they not?

The five qualities (*pañca lakṣaṇaṅkaḥ*), the characteristics of humours (*tōṣasvarupaṅkaḥ*), and pulse examination are important methods of diagnosing diseases in Ayurveda. Finding methods [to treat] diseases based on the characteristics of diseases through examining the patient and the disease have been mentioned in technical terms (*saṁśepamāi*). This ends here.

It is very difficult to advance Ayurveda by establishing institutions with the help of the government, when the practitioners of Western medicine are

publicising Ayurveda as an unscientific system without considering the writings of historical texts that show there are many more unique medical methods in Ayurveda. These were found by foreigners after analysis of the medical texts collected from India many years ago. Even though the glorious explaining of Ayurveda is like preaching a great mantra (*maha mantra*) to a deaf man and would be of no use, I, who have little knowledge, will start to explain the knowledge which has been discovered through rigorous experiments by the sages who are immortals and belong to India.

Before starting to treat diseases, one should understand the above-mentioned aspects. That is, the physician can treat any sort of disease if he treats the disease by administering the right purification (*sōtana*) and pacification (*samana*) methods after understanding which humour is invigorated in the body of the patient. What is the root cause of it? How far have fundamental constituents been affected due to it? What is the nature of the environment where the patient lives? Which type of body (*prakruti*) does the patient have? And, after considering the age, strength, and duration of the disease, the mental state and food consumption of the patient, analysing the sufferings due to improperly digested food (*āmadōsa*) and finding the disease-affected part or parts of the body.

Unlike other systemic treatments, the treatment methods of Ayurveda give happiness to the patient at the start of the treatment itself. When [the practitioners] start to administer the treatment, they start to heal the patient. These treatments have been divided into: opposing the root cause (*hetu viparītam*), opposing the disease (*viyāti viparītam*), opposing the root cause and the disease (*hetu viyāti viparītam*), conforming (*tatarttakāri*), and so on.

Of these, there is the method opposing the root cause. This is pacifying the disease by administering drugs, food, and exercise that have qualities contrary to the root cause of the disease, i.e., the disease factor of improperly digested food (*āmadōsa*), caused due to indigestion, is treated by administering drugs which have the qualities directly opposite to the root cause. Likewise, the disease caused by cold is treated by administering drugs that have the qualities of heat, and the disease caused by daytime sleeping is treated by making the patient stay awake at night. These are all called methods opposing the root cause.

The treatment method contrary to the disease should be administered if the above-mentioned method such as contrary to the root cause does not cure the disease. This method is superior to the method contrary to the root cause that was mentioned above.

The method opposing the disease is when administering drugs into the body, and if that drug, without considering any aspect of the disease, eradicates the disease that has occurred for whatever cause. This treatment method is called

opposing the disease (*viyāti viparītam*), i.e., *Aristolochia bracteata* (*vaṭṭatiruppi*) cures dysentery by acting against its causes. Likewise, *Albizia lebbek* (*kāṭṭu-vākai*), Ceylon ebony (*karuṅkāli*), mica (*appirakam*) and turmeric cure poison, leprosy, and gonorrhoea respectively. This is the principle of opposing the disease (*viyāti viparītam*).

The method of treatment opposing the root cause and the disease (*hetu viyāti viparītam*) should be administered if the method opposing the disease has not cured the disease. This method is superior to the above-mentioned method opposing the disease.

The method opposing the root cause and the disease (*hetu viyāti viparītam*) are drugs that have qualities directly opposite to the root cause of the disease and to the disease itself, i.e., in the case of swelling, which is caused by the invigoration of wind (*vata*), the group of ten medicinal roots (*tacamōlam*) cures swelling and pacifies the wind that is the root cause of that swelling by acting in direct opposition to both. Likewise, buttermilk also cures a disease that has occurred due to the invigoration of wind and phlegm by acting in direct opposition to the root cause and to the disease itself. This method is called the method opposing the root cause and the disease (*hetu viyāti viparītam*). The conforming (*tatarttakāri*) treatment method (*hetu viyāti viparītam*) should be administered if the method opposing the root cause and the disease (*hetu viyāti viparītam*) has not cured the disease.

The conforming (*tatarttakāri*) method is a method used when the eradication of diseases are not cured by opposing methods through administering drugs which have qualities to produce those same diseases in a healthy body. For example, fomentation, which increases bile, is used to treat boils that are caused by the invigoration of bile. The principles of the conforming method are that to treat vomit, emetics are used, to treat dysentery, purgatives are used, and to treat poison, poisonous nuts such as the nut of the tree *Nux-vomica* are used.

The duty of the physician is to select the right method of treatment among the above-mentioned methods, such as opposing the root cause and the disease, and to administer it, even in the case that it does not cure the disease. Without wasting time, he [the practitioner] has to immediately administer the five treatments (*pañchakarma*) that include oleation (*sneak*), heat treatment (*sveta*), induced emesis (*vamaṇa*), purgation (*virēcaṇa*), enema (*āstāpaṇa*), enema (*aṇuvāsaṇa*), and nasal instillation (*nasyam*). We cannot think that there would still be a disease if this method of treatment is administered properly. The five treatments (*pañchakarma*) are induced emesis (*vamaṇa*), purgation (*virēcaṇa*), enema (*niruka*), nasal instillation (*nasyam*), and bloodletting (*rakta mōksaṇa*) along with pre-treatments, such as oleation (*sneak*) and heat treatment (*sveta*). If these aspects, which were explained in the texts of Caraka, Vāgbhaṭa, and Suśruta, were

written about in detail, there would be much more to say. If anyone wishes to know about these, they can learn about them by reading these texts. Diagnostic methods and treatments are followed according to the principles mentioned in the texts of Caraka and Suśruta as well as subsequent texts such as *Rasaratnasamuccayam*, *Baisajyaratnāvali*, *Yōkaratnākaram*, and *Vaitiyacintāmaṇi*.

Furthermore, it essential to cure diseases such as dead foetus (*mōṭakarppam*), ophthalmic (*ati mantam*), abscess with pus (*vitratī*), an abscess in which the pus or swelling burrows into the affected part (*nāṭivraṇam*), paraphimosis (*nirutta pakacam*), fistula (*pakantara*), and others with the help of surgery, when drugs do not cure these diseases. Suśruta explained in detail how to do surgery. What are the things that have to be done during the pre-surgery stage? What are the things that have to be done in the surgical stage? What has to be done after surgery? How many types of surgical methods are there? What are the binding methods? How can flesh be taken from the skull region after the examination and the transplant be done? How to remove the dead foetus with the help of surgery or other methods? How to use surgical instruments in treating cataract, ophthalmic, and other eye diseases? Which parts have to be treated to cure diseases by bloodletting? Other surgical aspects are also explained. Besides, the treatises that were written by Nimi, Kāṅkāyaṇar, Patasowṇakar, Hiraṇyākṣaṇ, Kacyapar, and Pōjaṇ have explained in detail the eight branches of treatment, such as surgery (*castira*), ophthalmology (*cālākya*), general medicine (*kāyacikitsai*), possession/mental health (*pōtavityai*), paediatrics (*cicu samrakṣaṇam*), toxicology (*viṣa cikitsai*), rejuvenation (*rasāyaṇam*), and aphrodisiacs (*vājikaraṇam*).

Those who are approaching Ayurvedic and Unani physicians and receiving drugs from them would be those patients who do not have enough money to spend on foreign medicine and are despised by the practitioners of foreign medicine. Everyone knows that those patients are being healed. Records including their name, caste, details of treatment, and other aspects have not been maintained by the practitioners of Ayurveda and Unani medicines, except in free Ayurvedic hospitals. It is the opinion of the practitioners in these hospitals that there is no use in that. If it were known that it is useful, it would have been maintained.

(c)

The committee is asking whether there is any evidence to prove that indigenous systems of treatment are more efficacious than other systems. I ask the opposite question to the committee: are you ready to arrange enough facilities to prove that our medical system is superior to other systems in many more ways? If so, what can prevent this also being proved? To give evidence of the superiority of our

medicine, there are drugs such as medicinal pills (*kalka*), decoctions (*kaṣāya*), medicated ghee (*kṛta*), medicated oils (*taila*), electuaries (*lehya*), distilled liquids (*āsava*), fermented decoctions (*arista*), calcined metals (*pasma*), wines (*śāra*), calcined red oxides (*sintūram*) and others that have been found by our ancestors to cure diseases. If pre-treatments such as oleation (*sneak*) and heat treatment (*sveta*) can eradicate the root cause of diseases without administering the drugs, we do not need to talk about the results after the administration of drugs.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

I am presently one of the lecturers at the Madras Ayurveda College (*ceṇṇai āyurvēta kalācālai*), one of the examiners (*parīkṣakar*) among the All India Ayurveda scholarly examiners (*intīya āyurvēta vitvat parīkṣakar*), and also as a member of the Ayurveda Association (*āyurvēta makāmaṇṭali*).

(b)

(1) It can only be said that among the various treatment methods in the knowledge forms of Ayurvedic methods (*āyurvēta kīramam*), adequacy of medical relief is provided only for the subsiding forms (*camaṇam-rūpam*).

(2) It cannot be said that the Chennai Ayurveda College is very suitable as a centre of medical education. It cannot be considered that there exists a medical university with all the facilities in this country. In the present declining state of our Indian

nation (*pāratam-pūmi*), this medical educational institution is being operated in accordance with the law of the saying “in a village with no trees, even a castor plant is considered to be a tree.”

It would be good in practice if necessary remedial actions were taken for the problems faced by these medical institutions and their adjoining treatment centres in accordance with the approval of their respective directors.

(c)

If there is a genuine intention to rectify the insufficiencies in the Ayurveda institutions, and if a part of the expenditure by the government towards their English medicine at present is spent towards Ayurveda institutions, [the method] will not only take a good position but will also spread all over the country within a short period of time.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a) In order to attain ideal medical training –

(1)

The students should be placed under the personal guidance of a teacher, who practises surgical methods (*calya tantra*) in Ayurveda treatment, which has

succumbed to deficient conditions over time due to various reasons, who is able to identify all the parts related to this subject, and who can clearly enable its development.

(2) and (3)

It is our request that enough time and appropriate arrangements have to be provided for independent investigations of the parts related to surgical methods. It will come as a surprise if this request is denied.

With no arrangements being made to attain this ideal, how can we consider that this ideal is attained in this Presidency or elsewhere?

(b)

Since this is one of the parts handed over to the charge of our ministers for protection and examination, at this stage the mind does not accept the thought of this ideal being too high for the present.

(1) Research and test laboratories based on Ayurveda, similar to those existing in the English medical institutions, must be established in our country.

(2) For this ideal to be attained, and in order for the medical institutions and medical education institutions operating in Chennai for a certain number of years to operate permanently without any deficiencies, if the required capital is invested in profitable sectors and that profit is handed over to an association (*samiti*) towards the expenditure, there will be no necessity for applying to the government with regard to the prosperity of the indigenous medical systems.

The committee should not neglect to establish an Ayurveda hospital in every taluk and each place with a dense population. Based on the ancient method of our country, the income of a village located in the respective taluk should be allocated according to the expenditure to the hospital. The committee must take appropriate measures to work towards this. If this is strengthened, it is not necessary to mention that our indigenous medical methods would attain an advanced state.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the

practitioners of Western medicine the traditional knowledge which is of real value and will reject, as western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and western 'systems' of medicine will then disappear."

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

How is it feasible to create a unified system of medicine comprising both English and Ayurveda systems all over the country as suggested by the Calcutta University Commission? There is a common principle to both the methods for treating diseases; however, I am deeply worried that the committee has not considered that the methods of treatment are not relative to each other. The Ayurvedic treatment is based on the three humours of the body, whereas the English system of medicine is not based on that. In the Ayurvedic treatment, there is no usage of medicines with pungent, bitter, and astringent [qualities] for fever caused by wind (*vata*) that increases wind. However, in English treatments, these medications are being used without any limit and stoppage of the above conditions. We are observing in practice that these English methods are being used without any awareness that they are not working well with the fever caused by wind and other diseases. Hence, there is no doubt that if these two systems are unified, they will lose their uniqueness. Hence, if there are no measures taken by the committee towards unifying these two medial systems, this will be of great help to Ayurveda.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

(a) (b) and (c)

There is no necessity to include the study of *prakṛti sāstra* [natural sciences?] or any other modern scientific methods in the syllabus of Ayurvedic studies. Doing that would only increase the duration of the Ayurvedic studies, instead of helping to improve the knowledge of Ayurveda. However, we once again request the committee to include surgical methods, such as *calya* or *cālākya* [ayurvedic methods of surgery below and above the neck], which are declining as part of the subjects of the modern methods, along with the knowledge of surgery based on texts such as *Suśrutasaṃhitā*. Other than this, the syllabus, examinations, and certificates (*upatānam – paṭṭam*) for graduates (*uttīrṇāḷavar*) should be based on the ordinance followed by Ayurveda Mahāmaṇṭali.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

(a) (b)

It is to be mentioned with deep sorrow that since there is very little convenience and many unmentionable inconveniences for the Ayurvedic medical practitioners in having their names registered, unless this subject is handed over to the Ayurveda Samiti with independent decision-making powers there will not be authorization at any time.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

The costs that are incurred in making Western medical drugs, whereby raw materials from our country are exported to foreign countries where the medicines are expensively produced by machines in laboratories and are imported back to this country to sell at a higher cost, are not required for Ayurveda.

In addition: (1) There is not the requirement to hire hundreds of practitioners from the distant country for this process and to dispense large amounts of money as salary. (2) There is not the requirement for buildings and constructions costing lakhs for the Ayurveda system as for universities and hospitals in the case of Western methods. (3) There is not the necessity to hire many servants in the hospitals to roam around freely. (4) Even with all the facilities in the Western medical hospitals, a work performed by a single Ayurvedic physician cannot be matched by a team of English Medical medical practitioners. They [the Western practitioners] do not even have to produce medicines. It is clear, for instance, that around 650 patients are being treated each day at the two Ayurveda hospitals in Madras, one being the trustee hospital (*tarma vaittiya cālai*) run by Calavala Cunnan Chettiyar in Tiruvallikkeni and the other being the trustee hospital run by Cengalvaraya Nayakar in Soolai. There are only two appointed practitioners in these respective hospitals. These practitioners appoint two assistants temporarily to produce medicines when required. The expenditure of these two hospitals does not exceed 1,000 Rupees a month. Taking this into account, we request the committee to inquire as to how many patients are consulting Western hospitals, such as Chennai General hospital, each day, and what amount of money is spent each month towards their those hospitals' expenditures, and also to compare the difference of expense of both systems of medicines.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

The government protecting their national medicine for their own good and not supporting medical systems such as Ayurveda and Unani belonging to this Indian

land is the reason for the decay of these systems. It cannot be said that the Western medical system is in any way superior to our Ayurvedic and Unani systems.

The steps to revive our indigenous medicinal methods have already been explained. When the opportunity arises, it is possible to demonstrate the superiority of our medical systems for the world to be surprised. For the causes of the decay of the indigenous systems of medicine, what else can be affirmed other than the negligence of the government.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

- (a) Our government
- (b) Local boards
- (c) Universities
- (d) Societies

If these foster and promote the Ayurveda system in every way, without any discrimination, as they are doing for the development of the Western medical system, there is no doubt that not only the people of our country but also the people of other countries will benefit from our traditions and live a healthy life.

Om. Goodness (*cupam*)

(Since this is written without knowledge of the Tamil Language, it is the responsibility of the scholars to bear with the mistakes in letters and words)

M. R. Ry. Pandit V. Ponnuswami Pillai
Avargal, Kumbakonam

Translated from the Tamil by D. V. KANAGARATHINAM
and LINGESHWARAN VENKATESHWARALOO

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

MEDICAL SYSTEM

The texts of the science of healing, called by the common name of Ayurveda, meaning “bodily well-being” was created by the grace of the eighteen *siddhas*, who were the Greats (*mahan*), for the benefit of the human world. These texts of the science of healing do not differ [from one another] in their essential philosophy but have a few small differences in the methods of healing. The texts on the science of healing have been composed in the three major languages of the country: Sanskrit, Hindustani, and Tamil. Through Sanskrit, the Ayurveda method has been taught; through Hindustani, the Unani method has been taught, and through Tamil, the Siddha method has been taught. I will now discuss Siddha medicine, which originated in Tamil Nadu and gained the first place in South India.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

CAUSATION OF DISEASE

“As any one prevail, or fail; twill cause disease” (*miginum kuraiyinum noi sey-yum*).¹ As mentioned by the early practitioners, the diseases that are divided into three, based on the humours such as wind, bile, and phlegm (*vata*, *pitta*, and *kapha*), would arise in one if his food and actions are not suitable to the nature of his body and if that increased or decreased, it would affect the blood, which is the base for well-being, and that leads to thinning, deterioration, and destruction of the body. Apart from this, many diseases may arise, associated with pregnancy and with karmic deeds.

Among the causes mentioned above, the theory of “temperance” is mentioned as the most important in modern science. Thus, it is acceptable for the present research. The second one is the theory of pregnancy that is also accepted by modern scientific research. “Hereditary disease” and “childhood complications” that are mentioned in the English method occur due to the above-mentioned causes. Thus, except for the theory of karmic actions that is mentioned in the last, all other theories of disease causation are in a position of being accepted by modern research. Even though the diseases that are caused by karmic actions are called “incurable diseases” in modern medical methods, it is difficult to prove this theory in the modern method.

¹ *Tirukkural* 941 (1982: 114). *Tirukkural*, English Translation and Commentary by Rev Dr G U Pope, Rev W H Drew, Rev John Lazarus and Mr F W Ellis. First published by W.H. Allen, & Co, 1886, Reprinted by The South India Saiva Siddhantha Works Publishing Society, Tinnevely, Madras, India, 1962, 1982.

(b)

DIAGNOSING THE DISEASE (*RŌKANITĀṆAM*)

Diseases are diagnosed through the examination of the body, understanding internal symptoms through questioning the patient, observing the natural signs of the diseases, and following the eight-fold method, that is, examining pulse (*nāṭi*), eyes (*kaṇ*), voice (*saptam*), reflex points (*paricam*), body colour (*niram*), tongue (*naku*), stool (*malam*), and urine (*mōtiram*). Based on the principle “disease, its cause, what may abate the ill” (*nōi nāṭi, nōi mutal nāṭi*)², the root cause of the diseases is identified by examining the pulse that is controlled by the three humours, namely wind, bile, and phlegm (*vata, pitta, and cilesma*).

METHOD OF PULSE EXAMINATION (*NĀṬI*)

The following is diagnosing the disease by examining the pulse: There are 72,000 channels in the human body, out of which “10 primary channels” are termed ten channels (*tacanāṭi*), which includes *iṭakalai, piṅkalai*, etc. There are “10 primary bodily winds” (*tacavāyu*) corresponding to the ten channels (*tacanāṭi*), which are named *prāṇaṇ, apāṇaṇ*, etc. The ten winds (*tacavāyu*) and the five most important channels out of ten channels (*tacanāṭi*) that are referred to as five channels (*pañcanāṭi*) and named *sōttiram* and *tōkku* correspond to the five elements (*pañcapūtāṅkal*), such as earth (*priti*) and water (*appu*), respectively. The three most important channels (*nāṭis*), which allow for very clear diagnosis, are named after wind, bile, and phlegm (*vata, pitta, and cilesma*). Wind, bile, and phlegm are contained in the faeces, water, and semen, respectively. The above-mentioned channels (*nāṭis*) form major channels (*gurunāṭi*) by having joined together, and this is located one inch away from the thumb. When the heart contracts and expands, the blood vessels discharge blood rapidly through the channels (*nāṭi*), and the blood returns to the heart also through the channels (*nāṭi*). The movements that are caused by the above-mentioned process are called “pulse beating” (*nāṭi naṭai*). The disease has to be diagnosed by finding imbalances in particular humours (*dōsa*) through examining the pulse beating through the major channels (*gurunāṭi*) and considering the duration of pulse beating (*vata, pitta, and cilesma*).

² *Tirukkural* 948 (1982: 114). *Tirukkural*, English Translation and Commentary by Rev Dr G U Pope, Rev W H Drew, Rev John Lazarus and Mr F W Ellis. First published by W.H. Allen, & Co, 1886, Reprinted by The South India Saiva Siddhantha Works Publishing Society, Tinnevely, Madras, India, 1962, 1982.

beat ten *nāḷikai*³ from morning, afternoon, and evening respectively) and the speed of pulse beating (wind, bile, and phlegm beat 1, ½, and ¼ speed).

CURATIVE METHODS

After having identified the disease and diagnosed the root cause as mentioned above, the disease should be treated by selecting the right method after analysis and administering one among the following curative methods, like giving drugs, bloodletting (*utirankaḷaital*), surgery, cauterization (*cuṭutal*), emetics, purgatives, nasal instillations (*naciyam*), oleation, using a pungent eye salve (*kalikkam pōḷal*), and others, after considering the physical condition of the patient, conditions of the disease (curable (*cāttiyam*), incurable (*acāttiyam*) and controllable or temporary cure (*yāppiyam*)) and stages of disease, such as initial, middle, and final.

During the period of the treatment, patient should have the following qualities, such as financial viability, trust in the physician, ability to explain the condition of the disease and to bear the treatment. The physician who is the healer should have the following qualities, such as not becoming afraid upon seeing the condition of the disease, learning from the best teacher, practising medicine for so many years, having a pure mind, words, and body, and being kind to the patient. The drugs should have the following qualities, such as curing many diseases, having a good taste, potency, reaction, and power of medicine, being easily available, and being suitable to the body condition. Along with the above-mentioned aspects, the disease should be treated through considering the conditions of climate, body, region, time, disease, quality of drugs, quality of ingredients of the drugs, hygiene, the strength of fire of the blood, drug-making methods (*kaipākam* and *ceipākam*), and duration of the administration of drugs. Further, in the case of the diet of the patient, food has to be suggested based on the conditions of his wind, bile, and phlegm and conditions of the disease, and, if necessary, that has to be changed. Besides, making necessary changes in the bathing pattern, dress code, and food by following a strict dietary regimen is also part of the treatment process.

Above all, it is essential for the physician to definitely know the antidote to the drugs which are being prescribed by him. Apart from this, there is the practice of finding the auspicious day and star constellations with the help of astrology to initiate the treatment. There is also the practice of treating certain diseases with the help of mantras and divine practices by some physicians.

³ One *nāḷikai* is 24 minutes.

THE COMMON MERITS OF INDIGENOUS MEDICAL SYSTEMS

I believe that as each country has its own culture, educational system, and religious practices, the medical systems also have emerged according to the environmental, climatic, and habitual practices of the country. The uniqueness and merit of the indigenous systems of medicine is also that indigenous medicines emerged in ancient times and were practised in many generations by our experienced ancestors, are based on the habitual practices of the people of the country, have as drugs the herbs and metallic products of the country, cure diseases without fail, are easily practised, are easily available to all the people for curing diseases, are maintained as a family medicine, and are practised with confidence due to long experience. Westerners have realised the importance of “Nature” (*iyarkai*). Strong efforts are being made to change the medical systems based on nature. Dr. Louise Khoonee’s water- and diet-based treatments, which are known as a natural cure, are a great example of this. Thus, these indigenous systems of medicine in which natural elements prevail should not be ignored. Further, diseases and their details in Western medicine could be changed at some point in time based on the opinion of the individual researchers, but this is not possible in the indigenous systems of medicine. Great scholars of the West opine that original principles are more present in the indigenous systems of medicine than other medical systems.

“The institutes (Indian Medical) fit in excellently with the Bacteriology and applied hygiene of the West. The hygiene of food and water, public conservancy, disease suppression and prevention are all carefully dealt with. – Col. W.G. King, C.I.E., I.M.S.” What can be understood based on the above-mentioned quote is that the things which cannot be confirmed in modern medical research have been determined in the indigenous systems of medicine many thousand years ago. Whatever research an indigenous physician makes, he cannot change the fundamental principles of this system.

The benefit or cure that is received by doing surgery in modern medicine with high expenses could be achieved by administering the drugs of indigenous medicines without suffering. Since it is also cost-effective, it can serve many more people than people currently served now. The crores of money going outside for purchasing drugs will be saved, and the medical budget for the government will also substantially decrease. It is not a hard task to reform the indigenous systems of medicine, since many experienced and practising physicians are in the four corners of the country. Due to all the above-mentioned points, there are common benefits of practising indigenous medicines.

Although I do not have the habit of maintaining records of my treatments, I am ready to submit reports of treatment of some particular diseases and special details about those diseases, if it is essential.

(c)

In some cases, the indigenous medical systems are more useful than the other medical systems. There is a lot of evidence to prove that our indigenous medical systems are more efficacious in treating diseases like pneumonia, influenza, venereal diseases, poisonous bites, and miscellaneous diseases than the other medical systems. Those affected by the above-mentioned diseases were successfully cured by the indigenous physicians after having failed to be cured by modern physicians. In my experience, I have also cured such cases. It is well known to all that the indigenous methods are popular for the treatment of epidemic diseases like cholera. Nervous disorders (*naramputtaḷarci*), loss of appetite (*arōcakam*), and other diseases are cured unbelievably well by indigenous medical systems. Many high-ranking government medical professionals have accepted that drugs of indigenous medical systems acted more efficaciously than drugs of the modern medical system in treating deadly diseases, such as influenza that has emerged in Bombay and killed 60 lakh people in India. In my personal practice, I have cured 95 out of 100 influenza patients. As indigenous drugs are able to cure leprosy and other diseases, which are still considered incurable diseases, these drugs are used in many hospitals. In indigenous medical systems, syphilis is cured by administering some drugs and without surgery.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

MY MEDICAL PRACTICE

I am part of an esteemed medical centre that has been run for generations. I am directly involved in and currently running the same institution.

(b) (1)

EXISTING MEDICAL INSTITUTIONS AND MEDICAL TREATMENT

I am not familiar with the medical institutions established around the country for medical treatment and medical training. However, I am aware of the procedures of operation and the benefits of some institutions.

TYPES OF MEDICAL INSTITUTIONS AT PRESENT

The present-day medical institutions can be divided into three important categories: (1) Institutions that only produce drugs for financial gain, like pharmaceutical industries. (2) Institutions with facilities to educate, train, and practice. (3) Institutions for treatments, like hospitals. The above institutions can exist independently or together.

SOME MEDICAL INSTITUTIONS

Some indigenous medical institutions in Chennai are providing good medical treatments. Though Venkataramana Dispensary, Vaidya Siddhasramam, Ayurveda College, Kuthusdipiya Dispensary, Andhra Ayurveda Pharmacy, and Chengalva Nayakar Dispensary are providing good treatment, they were not able to extend their treatment facilities in a large scale due to lack of grants-in-aid and some other causes. Though it is easy to point out that the number of medical treatments offered is low, considering the number of difficulties they encounter and other limitations, the work they are doing is commendable and we cannot expect more before offering them support. In princely states, the indigenous medical centres are being operated under the direct supervision of the kings, so they are providing excellent treatments. Government medical institutions (*Rajakiya Ayurveda Stāpaṇaṅkaḷ*) run by the government of Mysore are functioning exceptionally. We can say that those institutions are not inferior to any aspect of modern hospitals.

(2)

MEDICAL EDUCATION AND REFORMS

It has to be mentioned that the arrangements that have been made for medical education are very minimal. Further, the medical training that is offered is also not uniform. First, in order to truly advance indigenous medicine, the general opinion on indigenous medicines should be changed favourably. Second, syllabus, practical training, duration of the course, and regulations for students of the existing indigenous medical institutions should be made uniform, and the expertise and experienced indigenous physicians recruited according to the ratio of the medical systems. The attempt has to be made to change the present indigenous medical institutions like allopathic medical institutions with the help of the suggestion of those physicians. As the great interest shown by the government to support the modern medicine and its colleges and hospitals for spreading them among the public, similar interest should be shown to the institutions of the indigenous medical systems and they should also be brought under their direct control.

SOME DEFECTS OF EDUCATIONAL INSTITUTIONS

Lack of co-operation, efforts, financial resources, and government support greatly affect indigenous medical institutions. Moreover, the government that trains the students in modern medical institutions also employs them after their graduation, which increases their interest and motivation, but the case of the indigenous educational system is opposite to that. The best students are not interested in pursuing indigenous medical systems. If the government accepts and recognizes both medical systems equally, the existing defects can be addressed. The students of other states also are being graduated with great interest in the Mysore Government Ayurveda College (*Mysore Rajakiya Ayurveda Kalasalai*), which is being run by the support of the government.

Since I feel that the contents of the question of 3) (b) (1) and (2) and (c) are similar, I will not write an answer.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

NECESSARY QUALITIES OF MEDICAL EDUCATIONAL INSTITUTIONS

I certainly think that it is essential that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects; that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums; and that the teachers should have sufficient leisure time to be able to pursue independent investigations in their own subjects.

I do not have a direct association with indigenous institutions that provide satisfactory medical education in other presidencies. However, as mentioned earlier, I have no doubt that certain indigenous educational institutions that are in Chennai, Mysore, and other princely states are functioning sincerely and diligently. The main reason is that they are receiving substantial support. Ayurveda College of Chennai (*Ayurveda Kalasalai*) is one of the institutions widely appreciated by many. It has to be mentioned that their teaching curriculum, training methods, laboratory, special intensive training, library, and graduation policies are nearly satisfactory. Chennai Corporation (*Chennai Paripālana Capai*) grants Rs. 1,000 every year to Ayurveda College based on the exceptional quality of the drugs it is producing from its laboratory and the standard of education it offers. Similarly, training facilities for students have been established in Venkatramana Dispensary and its facilities have been drastically improved with the wholehearted contribution of Rs. 16,000 of Mr. Calcutta Rathakrishnan Aiyyar. Mysore Government Ayurveda College and Hakeem Ajmal Khan's Tibbi College are first-rate educational institutions.

(b)

AIMS OF MEDICAL INSTITUTIONS

It seems that although it cannot be considered that the three mentioned ideals are too high for the present while considering the current difficult state of the indigenous medical system, it will take a long time to achieve the ideal.

The indigenous institutions should have the main ideals to shape a Western society that is considered civilized and rational and to make the world respect indigenous medicine, along with creating awareness among Indian people about the uniqueness of indigenous medical systems that are not inferior to modern medicine. The ideals prescribed by the committee must be considered short-term goals towards making progress.

It is not an easy task to immediately change and modernize the indigenous medical educational institutions completely on the same lines as the allopathic institutions. Planning and policy-making in order to reach ideals should be handed over to a medical committee consisting of people who have done research and have experience in their field. In the case of medical education, ideal medical institutions that have been mentioned by the committee have not been established in many places due to confidence in tutelage (*guru-śiṣya*) teaching methods and family teaching rather than the modern school method. However, as the modern type of medical institution is essential in the present situation of our country, advancing indigenous medical institutions, based on the ideals mentioned above, is good.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

CALCUTTA UNIVERSITY COMMISSION AND INDIGENOUS MEDICAL SYSTEMS

I agree with the fundamental principle in the view of the Calcutta University Commission regarding a unified system of medicine. However, it is not my opinion that the distinction between Indian and Western 'systems' of medicine will disappear to the extent that they cannot be differentiated. It is essential for the unification that the Western practitioners truly accept the merits of the indigenous system and that the indigenous practitioners agree to reject those methods which are not effective. It is my opinion that the popularity of Western medicine in the country in the name of "modern research" and with the support of the government, and also the theories and practices which are not effective but are continued by indigenous physicians in the name of "tradition" should be challenged. It is not good to consider those experienced principles of indigenous medicines as unscientific due to not meeting the standards of modern research. Because how we can conclude that the results achieved by the outcome of "modern research" are the final ones? The principles of Western medicine are changed according to the findings of individual researchers, are they not? Thus, it is not fair to mention that the theories of the indigenous medical systems should be accepted only upon standing the test of experiments carried out by modern research.

UNIFYING WESTERN AND INDIGENOUS MEDICINES

When unifying the two medical systems that have different characteristics and practices, it is essential to maintain mutual trust and to have high-mindedness to impart the knowledge that is unknown to each other from the other respective system, for the benefit of both systems. It is important that practitioners of both the systems undergo certain changes in their characteristics and actions to easily achieve the above-mentioned ideal. This is the first step to achieve the ideal. The indigenous practitioners also, considering the recognition gained by Western medicine practitioners through having done their research, get interested and should do research with perseverance to make others easily understand the merits of their system.

Though Western practitioners also naturally have an interest and belief in their own system, they have to come forward truly to lend their support in many ways to those indigenous physicians who are working hard to equate the efficacy of their medical systems with Western medicine and to gain worldwide reputation and recognition. It is my belief that if they work as mentioned above the mentioned ideals can easily be achieved.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

INDIGENOUS MEDICAL EDUCATION AND MODERN SCIENCES

It is my opinion that the curriculum of indigenous medicine should include some of the modern sciences which have a simple teaching methodology and advanced research.

At the beginning of the training, before any indigenous practices are taught, subjects which are acceptably drafted to make them part of the school curriculum, such as chemistry, anatomy, physiology, and surgery, can be added to the curriculum of studies of indigenous medicine. However, as subjects such as physics, biology, pathology, and bacteriology are good in indigenous systems and they also have different opinions for some principles, the task of reforming these subjects should be handed over to a panel of experts.

(a)

EXAMINATIONS OF INDIGENOUS MEDICINES

The students who are interested in pursuing modern medical studies in allopathy are allowed to join medical education after the qualifying school-final exams, and they are conferred the degree L.M.P after completion of the four-year training. Similarly, fix the same time frame for those who wish to study the indigenous

medicine and conduct two examinations, with one after the completion of the second year and another at the end of the course. One who qualifies the first examination is eligible to join the second part of the course. The first examination is the entrance examination and the second one is degree examination.

DEGREES OF INDIGENOUS MEDICAL PRACTITIONERS

There could be various suggestions about issuing the degrees and naming the degrees. Ayurveda practitioners prefer the titles of “*Vaittiya Vicārata*,” “*Vittiyā Pūṣaṇa*,” and others. Unani practitioners prefer the title of “*Hakim*.”

It is my opinion that the same modern degree L.M.P can be conferred to the indigenous medicinal students after the completion of the degree examination. If modern universities are issuing degrees like M.A. (Literature), M.A. (Tamil), M.A. (Philosophy), and B.A. (Mathematics group or History group) to the students according to their respective courses, after completion of the fourth year, the indigenous medical students can be given the degrees such as L.M.P (Ayurveda), L.M.P (Unani), and L.M.P (Tamil) based on their respective subjects. Likewise, degrees such as L.M.P and M.B.C.M can be conferred according to the skills of the practitioners. The level of the degree should depend on the level of the knowledge of science.

ELIGIBILITY CRITERIA AND COURSE DURATION

The students who wish to join the institutions which offer the course for L.M.P degrees should have basic knowledge about the indigenous medical systems, upper status in English, health, and a good code of conduct. Some exceptions can be given to those who are coming from traditional medical families, even though they fail to fulfil all the eligibility criteria mentioned above. As mentioned above, four years is sufficient as the duration of the course. There is no need for specifying the course duration for the higher-level courses. Individuals can attain their higher degrees according to their intelligence and availability of time.

(c)

LANGUAGE

There may be a difference of opinion regarding the medium of the course. However, as each indigenous medical practice has been written in a particular language, Ayurveda, Unani, and Siddha medical systems should be taught in

Sanskrit, Hindustani, and Tamil languages, respectively. English can be used as a secondary language.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

MEDICAL REGISTRATION AND INDIGENOUS PHYSICIANS

I feel that it is essential to extend the medical registration to the indigenous medical practitioners, in order to motivate skilful practitioners and to encourage them by furnishing them with the same respect as the Western medical practitioners, in order to restrict greedy practitioners who are practising without sufficient training, which leads to many mistakes, thereby diminishing the reputation of indigenous medical systems, and in order to protect accomplished practitioners who have attained their knowledge and experience from family systems of practice rather than from a medical school.

BOARD OF MEDICAL REGISTRATION

It is necessary that substantial attention be given to the formation of the board of registration. The members of the board must be selected with proper consideration. As has happened in the past, members who do not have trust in the indigenous medical systems and who do not whole-heartedly support the development of the indigenous medical systems should not be allowed to become members of the committee. If they become the members, it will not only fail to get the expected results but also cause mental agony to people for whose benefit the board is formed. It is relevant here to mention that the report of Dr. Koman, who was appointed by the government with the good intention of advancing the indigenous systems of medicine, was opposed unanimously by the indigenous medical practitioners and their associations. The government should completely stop the practice of taking suggestions from the experts who practice other medical systems

during the junctures of decision-making for the advancement of indigenous medical systems. An indigenous medical registration board consisting of 18 members may be formed by appointing six members each from Ayurveda, Unani, and Tamil medical systems who are experienced and popular and are widely accepted by everybody. Additionally, it will also be good if those members practise medicine along with having expertise and an advanced research attitude.

(b)

MEDICAL REGISTRATION ACT

It is difficult to comprehend what sort of answers are expected by the committee to this question. If the question is pertinent to the reform of the Medical Registration Act according to indigenous medicines, I think that accepting the basic policies of the registration act and the task of amending other existing rules and regulations can be handed over to the above-mentioned medical board. In addition, before making any decision regarding the extension of the Medical Registration Act to indigenous medical systems, it is good to know the final opinion (on this subject) of the All India Indigenous Conference gathered in 1920 at Indore that is going to be published soon. Further, the reports of the Delhi-Tibbi Association and All India Ayurveda Association, who all are working for the same cause, are in the final stages, and considering them would be immensely beneficial.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

COMPARISON OF THE COST OF TREATMENTS OF INDIGENOUS AND WESTERN MEDICINES

It must be mentioned that the cost of treatment according to indigenous systems is much lower than the allopathic system.

Raw herbs of our country are taken to foreign countries, where they are converted into drugs by machines in laboratories that have been established by exorbitant expenses, and these drugs are brought back to this country with the addition of transportation costs and customs duties, which results in high cost. In addition, as these medicines are not produced in a way conducive to the local environment

and climatic conditions, they do not provide more benefits. However, according to indigenous systems, drugs are produced by herbs and metals, such as plants, climbers, leaves, barks, roots, copper, silver, gold, and others that are mostly available in nature across the country and easily obtained without any exceptional expense. Further, these drugs are produced by a few simple and unique purifying processes. Moreover, since these medicines are made in accordance with the life-style of the people and the climatic conditions of the place, they are more effective.

The diseases like venereal and carbuncular diseases that are cured by administering external surgery in allopathy can be cured by administering one or two effective internal drugs in the indigenous medical systems. In particular, in the case of venereal diseases, it is easy to heal the disease by spending at substantially lower costs in the indigenous systems of medicine than expenses of high cost incurred in allopathy.

Allopathic practitioners prefer to get more remuneration than indigenous practitioners. Hence, it becomes almost impossible for the common people to get treatment at the hands of an allopathic practitioner.

The expenditure of the government towards the medical sector, which operates with a greater number of employees, expensive buildings, laboratories, and many practitioners with huge (thousands) salaries will reduce by crores.

I do not doubt that indigenous systems will help to achieve a low-cost medical service, spread all over the country for the additional benefit of crores of people.

Further, things would be apparent if we compare the cost of treatment of indigenous medical hospitals and the Western medical hospital in Chennai. It would be obvious how low the cost is for indigenous medical systems, if the cost of expenditure incurred by Chengalva Nayagar Dispensary was estimated.

Monthly List

1	Hindus	8,430
2	Eurasians	368
3	Muslims	1,769

On average, 352 persons have been treated per day. 429 patients also have been treated on a single day. If estimating the monthly expenditure of such a big hospital, the cost per person is only 7.5 *tampiti*⁴. No one can expect any medical treatment for less than this cost. Moreover, based on the fact that hundreds of

⁴ A small coin = 1/12 ana.

Eurasian people have received treatment from here, it is a clear testimony that superior treatment and drugs are being given. Thus, it is evident that the cost of treatment in indigenous systems is substantially lower.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

CAUSES OF DECAY OF THE INDIGENOUS SYSTEMS OF MEDICINE

1. The wide spread of Western culture in India and the unfortunate attraction of the people towards it, as a consequence of which a few dangerous policy changes occurred in peoples' minds, resulting in changes of their lifestyle, and a decrease of respect and trust in the existing ancient policies and philosophies – this is the main reason for the decay of indigenous systems of medicine.
2. Introduction of a foreign educational system into the country, which has resulted in educational institutions turning into factories that produce government servants, and the non-inclusion of indigenous medical systems into the educational system are the next reason.
3. The British government, which may be believed by many people to be working for the welfare of Indian citizens, introduced its medical system, i.e., Western medicine, and quickly established medical institutions such as colleges, hospitals, and laboratories with public money and with concern for the advancement of the medical system, but it never made attempts in the case of indigenous medical systems and further had a negative opinion about these medicines, never having interest to do research on these medicines and to know about the merits of these medicines and never accepting these medical systems as scientific ones. Besides, due to the persuasion of those who knew the merits of these systems, some agencies like the municipalities of Cocanada, Ongole, Dindigul, and Chittoor offered grants-in-aid to these medical systems, and when this news reached the government, it immediately stopped the grants-in-aid along with issuing a warning towards them. The government first blocked and later allowed the Chennai Corporation to provide financial aid to Chennai Ayurveda College. The above actions resulted in sadness and lack of faith among the indigenous medical practitioners, which is another reason for the decay of indigenous medical systems.

4. When English became the official language of the government and the text-books for all the subjects in the educational system were compiled in that language, the books of Ayurveda, Unani, and Siddha medical systems were left in the Sanskrit, Hindustani, and Tamil languages, respectively, and there were no attempts to make them available as textbooks.

5. Indigenous medical practitioners value experience more than research and the master-student system more than educational institutions. Hence, in this country there was no possibility of establishing medical educational schools similar to those in Western countries.

6. Most indigenous medical institutions declined into darkness and were unable to compete with the modern medical institutions, which are operated everywhere and enjoyed the support and financial aid of the government.

7. Experienced hereditary practitioners who were practising skilfully also were not able to run the business with respect and recognition due to the competition of modern medicine.

8. As there are no laws like the Medical Registration Act to restrict practitioners who are practising without sufficient training and experience and that cause damage to society, many people began to practise for a livelihood that resulted in diminishing the credibility of these systems.

9. There is no indigenous medicine movement under the leadership of the people that seeks the patronage of the people and works with dignity to preserve its value, working diligently for the development of indigenous medicine with a cooperative effort. However, some attempts which have been made in some places in this country also were spoiled due to internal politics.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

INDIGENOUS MEDICAL SYSTEMS FOR THE GOVERNMENT

Before thinking about how the government is going to improve indigenous medical systems, it is good to think about the need for the government to accept them. We are coming to know through history that these medical systems which originated in the period when there were no signs of civilization in foreign countries were recognized and celebrated by the emperors from Aśoka to Aurangazeb and kings of princely states. Further, they did not only provide affordable treatments all across the country but also indeed followed these divine indigenous medical systems and experienced the benefits by living a healthy and long life.

Hereafter, the main things that must be done by the government: The notion that indigenous medical systems were devised without any scientific research and that they are a compilation of limited theories should be abolished. If just explored, it can be mentioned that there are only very few other medical systems in the world based on scientific principles, as in the case of indigenous medical systems. It is not right to think that these indigenous medical systems, which have guided the world by having determined the subtle channels of the body to be 72,000 after having conducted many years of research in anatomy; which have discovered ways to diagnose diseases through the pulse (*nāṭi*) without the help of any instruments; which have found out the truth that the colour of blood changes based on the condition of the bile (*pitta*) and that the location of the semen is at the chest, are not based on scientific principles.

Although some of the principles in the indigenous medical systems may seem futile from an external point of view, if they conduct a little investigation it will be very evident that the ancestors have devised these principles only after the requisite research. For example, it is a principle in the Hindu religion not to touch saliva; if one did so, the hands should immediately be washed or a bath should be taken. Foreigners never consider this a useful principle. However, it has now been discovered through research that “saliva, when exposed to air, accumulates a poisonous substance in it.” From this, it is very evident that many findings arising now out of scientific research were known to Indians thousands of years ago.

THINGS TO BE DONE BY THE GOVERNMENT

1. The indigenous medical systems should also be recognized immediately as a medical system that has effective treatments and experienced practices.
2. After accepting this, the government, with the help of qualified experts, must take steps to implement these systems by creating educational institutions with

relevant curricula, integrated hospitals, and laboratories for each of these medical systems separately. Excellent arrangements should be taken by establishing a few institutions on an experimental basis in Chennai or by observing the existing institutions that are running satisfactorily.

3. It is important that all the indigenous medical institutions be operated under the direct supervision of the government. The government must make necessary reforms and recommendations based on the reports which are sent periodically after inspections.

4. In order to ensure the proficient operation of all the indigenous medical institutions that are to be established everywhere, a committee of employees can be formed, consisting of qualified indigenous medical practitioners or a vigilance department.

5. In the case of the unfeasibility of the above-mentioned fourth arrangement, existing institutions may be advanced by providing grants like the grant-in-aid method, which is practised in the education system after inspecting the existing institutions that are run by independent persons or societies.

6. Moreover, the government may form a Medical Advisory Committee, which consists of an equal number of members of experts from Ayurveda, Unani, and Tamil medical systems, for providing recommendations and suggestions periodically to advance indigenous medical systems.

THINGS TO BE DONE BY LOCAL BOARDS

1. The institutions which may not require the direct supervision of the government or where this may not be possible can be handed over to the local boards.

2. Since it is important that the herbal farms that are a source for the raw materials for most of the indigenous medical systems to be located closer to the indigenous medical institutions, the task of establishing these farms in the convenient places and maintaining them must be handed over to the local bodies.

3. A library that comprises medical texts collected from various places should be established in important places for the benefit of indigenous physicians to undertake their research during their spare time on indigenous medical systems. By

doing this, the difficulties faced by everyone in finding a specific practice or science can be eliminated.

4. The tasks of creating designs relating to the buildings for indigenous medical institutions, constructing those buildings with the help of their engineering department, and helping the people who are doing work related to this must be handed over to the local bodies.

THINGS TO BE DONE BY UNIVERSITIES

1. Universities must introduce indigenous medical educational courses, compile the respective subjects, take up examination-related work, and extend the same help provided to allopathic schools to indigenous medical schools.

2. A medical examiners board should be formed to prepare question papers for examinations, make arrangements for conferring awards, and other related works. The members of the board must be selected carefully with due consideration of their eligibility. The universities must take up the tasks of handling the remuneration of the board members, determining the fee for students appearing for the examinations, and responsibly managing the indigenous medical schools.

THINGS TO BE DONE BY INDIVIDUALS AND ASSOCIATIONS

1. To inspire and motivate the indigenous medical systems by improving co-operative efforts in the medical practitioners' society and society in general.

2. Like joint-stock companies, capable individuals should build pharmaceutical industries, produce effective drugs of indigenous medical laboratories, and help poor people by supplying these drugs at low cost.

3. To print brochures abundantly that clearly indicate the merits of the indigenous medical systems and the importance of advancing them and to distribute them for garnering the attention of the people.

4. Medical journals or magazines should be run to publish unique philosophies of scientific texts, findings of modern research with quotes from the researchers in a way that it is understandable by everybody and also to improve the unity among medical students and practitioners and for social advancement.

5. Debating societies should be established in many places for discussion among medical practitioners regarding the critical issues mentioned in the medical treatises and subjects received with conflicting opinions.
6. To make efforts to enable continuous research on the indigenous medical treatises through associations that work for development or by appointing experts on behalf of these associations, and to match the outcome of these researches wherever possible to the questions posed by Western countries.
7. To establish new free medical dispensaries and support existing medical dispensaries to treat poor people.
8. To arrange indigenous medical camps in the essential places through Boy Scout Organizations, in which the youngsters are trained for social service and medical treatment and sent to various places at the time for special occasions to serve.
9. To periodically set up medical exhibitions to promote the commendable drugs produced in line with the treatises and the scholars (pandits) who produced them with great difficulty.

M. R. Ry. Pandit R. M. K. Veluswami Pillai Avargal

Translated from the Tamil by D. V. KANAGARATHINAM¹

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

The speakers of Sanskrit classified “secondary Vedas or auxiliary knowledge” (*upavētam*) as four, however, *upavetams* are not of Sanskrit origin. Ayurveda (*āyurvētam*) or Ayurveda (*āyurvētam*), which has four classifications, is also not of Sanskrit origin. Ayurveda consists of four large texts of knowledge known as Vedas (*vētam*), six departments of teaching known as *śāstras* (*cāstiram*), eighteen ancient literatures (*purāṇam*), and sixty-four types of knowledge on performing arts (*kalaiñāṇam*). For the four Vedas, Brahma created secondary Vedas that are knowledge of social, economic, and political systems (*arttavētam*), knowledge of life (*āyurvētam*), knowledge of music and dance (*kāntarvavētam*), and knowledge of archery (*taṇurvētam*). Ayurveda, which is one among the four, is a text that talks about the laws of preventing disease (*nōy*), curing the affected disease, and how to live a healthy and pleasant life in this world. It is also mentioned in certain other books that the “teaching of doctrine” (*upatēcam*) on Ayurveda from Śiva to Devī was passed on to “the chief attendant of Śiva” (*nanti*) by Devī, and Nanti passed that on to divine beings (*tēvar*), hermits (*muṇivar*), and supernal/perfected beings (*cittar*).

Eighteen *Cittars* including Agasthiyar who were trained and experienced in the sixty-four performing arts, such as the art of medical practice (*vaittiya-cāstiram*), alchemy (*iracavātam*), astrology (*cōtiṣam*), the art of abstract devotion including the postures (*yōkcāstiram*), the art of mantras (*mantiracāttiram*), the art of architecture and sculpture (*cīrpacāttiram*), music (*caṅkītam*), musical

¹ A first literal translation was prepared by Prakash Venkatesan and Lingeshwaran Venkateshwaraloo. It served as a basis for the final revised translation by D. V. Kanagarathinam.

instruments (*vāṭṭiyam*), archery (*taṇṇurvittai*), the art of examining gold (*cu-varṇapariṭcai*), the art of examining precious stones (*irattiṇapariṭcai*), the art of examining horses (*acuvapariṭcai*), the art of charioteering (*iratapariṭcai*), the art of examining elephants (*kacapariṭcai*), the art of characteristics of battle (*yuttalakṣaṇam*), wrestling (*malyuttam*), the art of entering into the air and becoming invisible (*ākāyappiravēcam*), the art of walking in the air (*ākāyakamaṇam*), the art of leaving one's own body and entering another body at will (*parakāyappiravecam*), the art of magic that cannot be detected by the senses (*intiracālam*), the art of magic (*mantiracālam*), the art of suspending the action of fire (*akkiṇittampam*), the art of counter-acting the natural properties of water (*calattampam*), the art of counter-acting the natural properties of air (*vāyuttampam*), the art of interpreting marks on the body (*cāmuttirikalakṣaṇam*), and the art of political practice (*nīticāttiram*), compiled the sixty-four knowledges of arts together and published "hundreds of thousands" (*laṭcam*) of medical books in Tamil.

The word Ayurveda in Tamil and Sanskrit medical texts is "medicine intended for humans" (*makkalurai*), "demonic treatment of diseases or surgical operations" (*sururai*), such as decoctions (*kiyālam*), medicinal powders (*cūrṇam*), clarified butter (*ney*), electuaries (*lēkiyam*), but not "divine treatment" (*deivaurai*), such as calcined medicinal powder (*paṇṇam*), red metallic oxide (*centūram*), and powder dust (*cuṇṇam*).

Medical practice is one of the sixty-four knowledges of the performing arts. The Siddhas (*cittar-kal*) who published these medical texts also did this in languages such as Sanskrit, Devanagari (*nākaram*), and Telugu, and hence there is no evidence to support that Ayurvedic practice is Sanskrit medical practice, and to thus separate it into Tamil medical practice and Siddha medical practice. Hence, my answers for your question on Siddha medical practice should be taken in the context of Tamil Ayurveda.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory of theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

Before talking about the causation of the disease according to the Tamil Ayurveda medical practice, it is not mentioned in your question whether it is about the causation of diseases in human beings or animals. However, before answering about the causation of diseases, it is difficult to not talk about certain subject matters. According to Tamil texts, there are 4,448 diseases. Agasthiyar, the “greatest” (*makā makattuvam*) among the 18 Siddhas, has mentioned in the Tamil medical text *Pāṇṭu Vaippu 600* that the diseases that affect the humans are 72,000, that the human body consists of 72,000 nerves, and that there is a disease for each nerve. To write about the diseases affecting each nerve according to their nature and characteristics as well as about medicines for each one of them, there needs to be “one crore or ten million” (*kōṭi*) texts. When such a great Siddha says that there needs to be one crore texts, there must be a person in the age of a multiple hundred years to answer such a broad question.

Causation of 72,000 diseases in 72,000 nerves	72,000 types
Diseases in the head (<i>ciracu</i>)	10,864
Diseases affecting between centre of the body to top	40,672
Diseases affecting below the centre of the body to the foot	20,464
Total	72,000

Even here it is divided into three categories. The 348th song of *Agasthiyar Pāṇṭu Vaippu 600* is such a massive theory, and how that will stand the tests of modern science is only to be answered by a sage (*ñāṇi*) who is aware of occurrences of the past, present, and future (*tiri-kāla-varṭta-māṇam*).

It is not a subject for a person like me, who is powerless to know what is going to affect us in the next minute, to talk about. It is mentioned in *Agasthiyar Pāṇṭu Vaippu 600* that even if one is able to attain the banks of the sea of Tamil medical practice, it is not possible to attain the banks of this subject.

However, in general, there are four main reasons for the causation of diseases that we can talk about. The causation of diseases lies in the food one consumes as mentioned in *Vaithiya kaaviyam 1,500*, which is an abridged compilation of *Agasthiyar Pāṇṭu Vaippu 600*. It will be clear if we look at pages 8 and 9, where the songs 33, 35, 36 and particularly the 33rd song is about the causation of diseases.

1. Disease is increased by wind (*vāyu*), and that wind is formed due to dullness, which is caused by excessive intake of food, meat, confectionaries, and buffalo milk.

The body is developed by food, which, when taken excessively, will kill the body, as it is its own revenge. The food that is consumed beyond the requirement of the body is the seed for all the diseases as mentioned in the 35th song.

In addition, he says “Listen to me, I will tell you states (*thathuvam*) for every seed (*sakala vithukkum*),” which when viewed further: the human body that consists of five elements is made up of 96 states, that is, 96 instruments (*karuvikal*), and there are three regions (*sthanam*) for the diseases. According to the food one consumes, the diseases affect the respective region.

2. The “ten tubular vessels of the body” (*tacanāṭi*) and the “ten vital winds of the body” (*tacavāyu*) and in that the wind *apāṇaṇ* in the faeces [level of *vātam*], the wind *pirāṇaṇ* in the water [level of *pittam*], and the wind *camāṇaṇ* in the phlegm (*aiyam*) together form “the three humours of the body” (*muttōṣam*). In addition to the three channels (*nadis*) that are *idai*, *pin*, and *suzhi*, there are seven other channels (*nadis*) [...]

Similarly, according to the characteristics of the food one consumes, the functioning of the ten winds (*dasavāyu*) changes.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

I have been involved for the last 20 years at the Tamil Ayurveda Hospital (*vaittiyacālai*), established by me, in treating patients through Tamil medical practice.

(b) (c)

Since there is not an educational institution established by the government to teach the Tamil system of medicine, there have to be measures undertaken for teaching medical education in each district in their respective language.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a) (1) (2) (3) and (b) (1) (2)

It is important for the students and practitioners to visit hospitals, laboratories, libraries, and museums.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are

mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

I agree with the view of the Calcutta University Commission. The modern scientific methods must also be taught along with the Tamil medical system.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

The curriculum of studies of indigenous medicine should include a study of modern scientific methods such as such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches.

The indigenous medical educational institutions must teach in the same Tamil language as present in Madurai, Thanjavur, Trichy, Tirunelveli, etc. in all other Tamil regions. Similarly, they must be taught in the respective languages in other regions.

Agasthiyar Ayulvetam 10,000 and Dhanvantari 12,000 are the important books. Reading both or even one is sufficient to attain proficiency (pāṇṭittiyam). Since the characteristics of all the drugs (patārttam) are explained in Agasthiyar

Nigandu 12,000, it must be recovered from the government museum or from the Thanjavur Saraswathi Mahal and must be published.

(a)

The suggestions of the respectable committee can be considered regarding the graduation degrees.

(b)

The preliminary qualification and periods of study can be decided with time and experience.

(c)

It is sufficient to have the language spoken in the respective regions as the medium of instruction.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

(a)

A registration board can be formed.

(b)

At the moment, I am unable to talk about changes in the existing legislation on medical registration or give any suggestions on it. There will be a Tamil Medical Conference next month where all the practitioners from Chennai district will be present. Since this subject is to be discussed in the conference, in case your

submission of this report to the government happens to be in June, and if you have to interview us in person, that can be in May, as our conference will end in April.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

A single medicine produced at low cost according to Tamil medical practice can help treat many different diseases. The 25 types of salts (*uppu*), 120 types of secondary minerals (*uparacam*), and 32 types of arsenic (*pāṣāṇam*) that are required to treat all diseases are all found only in India. Moreover, since India is filled with practitioners with the skills to produce the prepared arsenic (*vaippuppāṣāṇam*) and since the medical herbs are available everywhere, the treatment costs are low.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

The great help to and preservation of the Tamil medical texts undertaken during the ruling period of the princely states in India was not offered in the last 200 years. Hence, many Tamil medical texts have become damaged or lost.

The persons in the government that have possession of Tamil medical texts must allow them to be examined by us, and steps must be taken to publish the required texts and also to search for old texts.

Adequate financial aids must be offered either to practitioners or to a union formed in each district. With that aid, the union can produce many major medicines, which are not possible to be produced by a single practitioner.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

(a) *the State,*

(b) *the local boards,*

(c) *the Universities,*

(d) *private agencies (individuals or associations).*

(a) (b) (c) (d)

The state, local boards, universities, and private agencies must offer a tender (*tarkāstu*) for “fuller’s earth” (*pūnīr*) lands to grow medicinal herbs. The state must ensure that the land does not lose its fuller’s earth and must maintain and protect these lands.

Fuller’s earth (*pūnīr*) is important for the development of Tamil medical practice. The medicine that does not mix with the fuller’s earth will not cure diseases according to the 34th song of *Agasthiyar pin 80* and many other texts of medical knowledge.

M. R. Ry. Pandit N. Veeraraghavaperumal Pillai Avargal

Translated from the Tamil by D. V. KANAGARATHINAM

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I intend to describe the Tamil medicine, also named Siddha medicine (*citta vaittiyam*), which pertains to the Tamil region and is the most ancient among the indigenous systems of medicine (*cutēca vaittiya muraikaḷ*).

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

The causation of diseases are contrariety in habitual practices (*nīṇṭa nāl aṇupava paḷakkam*), dietary regimens (*ākāram*), sleeping (*nittirai*), and sexual patterns of each one (*maituṇam*), climatic changes (*cītōṣṇamārutal*), fear (*payam*),

associating with others (*vācaṇai*), poison (*viṣam*), and karma (deeds of former birth, *paḷaviṇai*), heredity (*paramparai*). That theory (*koḷkaikaḷ*) would withstand the test of modern scientific criticism.

(b)

According to diverse Tamil medical texts and expertise obtained by training from teachers (*guru*), diseases are ascertained by an eightfold diagnostic technique (*aṣṭavita pariṭcai*, lit. “eightfold examinations”) of eyes (*kaṇkaḷ*), sound (*cattam*), body reflection (*tēkaparicam*), complexion (*varṇam*), tongue (*nāḱku*), stool (*malam*), urine (*mūttiram*), and others (*maṛṛavai*), and they are treated by dispensing internal and external drugs: decoctions (*kiyāḷam*), powders (*cūraṇam*), medicinal pills (*māttirai*), electuaries (*lēkiyam*), oils (*eṇṇey*), ghee (*ney*), medicated oils (*tailam*), plasters (*pattu*), fomentations (*ottaṭam*), calcined metals (*paspam*), red metallic oxide (*centūram*), lime or alkaline products (*cuṇṇam*), and others. Though records of cured patients are not kept, testimonials from them sent by post or in-person are retained.

(c)

I am aware of those patients who, failing to get a cure in other systems of medicines, have been cured by Tamil medicine.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If you answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

Apart from being a member of the association and dispensary of indigenous systems of medicine which are established to unite indigenous physicians and for marketing indigenous drugs and affording medical relief to the public respectively, I have been working as a physician of the free medical dispensary of Chennai Tamil Medical Association (*Chennai Tamil vaittiya caṅkam*). Moreover, I have been serving in the Tamil medical school (*Tamil vaittiya pāṭacālai*) which has been in operation for a few months.

(b)

(1) Existent institutions of Tamil medicine are inadequate for providing medical relief at present.

(2) Those institutions do not deserve to be centres of medical education, and their status, too, is not satisfactory. While taking into account the current status of indigenous systems, the existing establishments are not adequate for teaching and affording medical relief to the public. Further, the defects in the existing medical institutions, libraries, dispensaries, and the errors in the medical texts (typographical errors) that are not updated and published in accordance with the present are significant flaws in the development of indigenous medicines. There is no doubt that Tamil medicine would progress like Western medicine besides conferring a benefit to the government, if the latter would indeed encourage Tamil medicine to advance further by funding and would examine the aspects as mentioned above.

(c)

Same answer as to question 3 (b) (2).

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

Imparting medical training in Tamil medicine is essential.

(1) Placing the students under the personal guidance of teachers of first-rate ability is vital.

The answer to the questions between (2) to (6) is:

It is conspicuous that many physicians (*vaidya*) are exercising their medical services with the approbations of their teachers (*guru*) from whom they received an education. There would be no impediment to Tamil physicians becoming equal to practitioners of Western medicine, if the government were to foster and encourage Tamil medicine without any bias. The government should initiate in this regard, with rectitude, instead of resentment.

Some are preparing medical texts for those students who wish to learn Tamil medicine, but this seems to be lagging. If financial support were received those texts would be published quickly.

[N. Veeraraghavaperumal Pillai has not answered question 5]

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

It would be suitable to receive the opinion of the Kovilpatti Tamil Medical Association (*Kovilpatti Tamil vaittiya caṅkam*) to the questions 6 (a) to (b).

(c)

Instruction in Tamil medicine should be given only in the Tamil language.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

The answer to the questions from 7 (a) to 7 (b) is that in the current scenario, extending medical registration to the practitioners of Tamil medicine is not significant, because some physicians (who do not know other drugs) employ only a single drug, apply a single medicated oil, and use a single medicinal leaf (*pac-cilai*). Some physicians administer medicinal leaves to treat even bone fractures.

Other than that, medical registration may be extended when defects, mentioned in answer to the questions 3 (b) (2), are rectified by the honourable government and, further, lead to a fruitful result, if it is appropriate in that case.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

I do not need to express the cost of treatment of Tamil medicine when womenfolk heal many diseases without spending a single paise.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

Most people opine that causes of the decay of Tamil medicine are due to the withholding of encouragement and financial assistance by the government. Hereafter, the committee knows well that Tamil medicine would advance if the government would back it without prejudice.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a)** *the State,*
- (b)** *the local boards,*
- (c)** *the Universities,*
- (d)** *private agencies (individuals or associations).*

I have to thank the committee on behalf of Tamil physicians and supporters of Tamil medicine for their effort to recommend that the government foster and promote Tamil medicine without bias to a certain extent, though not to the same degree to that of aid rendered to the practitioners of Western medicine.

M. R. Ry. Vaidya Ashraya S. R. V. Das Avargal

Translated from the Tamil by D. V. KANAGARATHINAM¹

Based on my experience, I have answered the questions that have been asked about national medicine by the committee and also have sent them for your perusal. I have received these questions on 25th December 1921. As I had to write the answers in a short time, I request you to forgive me for any mistakes which might have occurred. Unless those mistakes are a lack of my ability to analyse Ayurveda and express this to strangers, it is not pertinent to Ayurveda. Ayurveda is perfect, is it not? I request you consider these answers as my final verdict on Ayurveda as it has been written based on my 20 years of experience in this field.

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

Ayurveda – it is a conscientious acknowledgement by everybody, everywhere, and forever that ever since the time of eternity, the base of all the wisdom in the world and the oldest among the books in the world are our Vedas. There are Upavedas for those Vedas, Ayurveda is also one. Ayurveda is the longevity of life. Just as wisdom is not possible without the Veda, health is also not possible without Ayurveda. Ayurveda has been practised from time immemorial in our country. That is our national medicine. After the conquest of our country at various points of time by various kings of various countries, although our people

¹ The translation of this report posed even more of a challenge than the other Tamil chapters, because of the author's use of colloquialisms, sayings, and quotations from ancient Tamil scriptures. Translations of sayings are somewhat approximate or literal as they do not have an English parallel. I left some obscure quotations from ancient texts whose meaning was unclear to me untranslated. Images of the text passage in question are inserted instead. Summaries of the passages' content were kindly provided by Ilona Kędzia, Jagiellonian University, and can be found in the notes.

already attained high esteem in all aspects, they attempted to infuse their religion, customs, doctrines, and culture and spread them in our country. Of them, except returned aspects, what we have today are the rest of the aspects. In that respect, Unani and English medicines are in the medical field. Although most of the Muslims at present handle Unani, like a ghost who came to visit, a chased ghost which stayed a long time, it is also trying to spoil efforts of Ayurvedic physicians who are protecting Ayurveda, the national medicine. Even though English medicine has attained high esteem and received the support of the government, both (Unani and English medicine) are foreign medicines. Therefore, I propose to deal with Ayurveda which is known as the national medicine.

Even in this bad time, some people who are keeping something in mind are creating a fight regarding Ayurvedam-Ayulvedam, on the basis of differences in *ra* and *la*, though the meaning of both terms is the same. When Ayurveda, the wisdom discipline to promote longevity of life, belongs to everyone, how is it possible to claim that this is mine and that is yours. Just as dried ginger is often said to be Gingerberis, Ginger, Gingembre, Ingwer, Gengero, Rigoma de Jengembre in many languages in many ways, dried ginger remains the same in its quality and other aspects, there is no doubt that even though the medical system is often said to be English medicine, Unani, Ayurvedam, or Ayulvedam, the medical system which alleviates diseases of patients remains the same. Just as the mirror and knife work best based on the skill of the handler, the medical system also works best based on the influence, independence (*cuvātīṇam*), valour (*vēram*), character, and perseverance of the physician, otherwise, it does not belong to anyone. No one could claim it. There is no benefit in fighting and breaking up among themselves. Intellectuals never hastily say an opinion that since Ayurveda is in Sanskrit, it belongs to Aryans, so it is inferior, and since Ayulvedam (Siddha medicine) is in Tamil, it belongs to Dravidians, so it is superior, or vice-versa.

Ayurveda which originated in ancient times has been commented on and explained in many ways by many teachers and has been modified according to the period. It can be seen that Caraka and then Śrī Dhanvantari, Suśruta and then Caraka, Vāgbhaṭa and then above two of them and Śārṅgadhara and then Vāgbhaṭa have improved it in many ways and written their books. Wild herbs only have been mentioned in the drug catalogue. They have been told by ancient teachers, because these herbs were sufficient to treat diseases that occurred to people in those days. After that, since humans also have changed their habits over time, their diseases have become so severe, so according to the circumstances medical experts of that time researched, and as a result of that they found that deadly diseases could be eliminated by deadly drugs, just like diamonds cut diamonds, so they found first mercury and arsenic and later metals and minerals for treating

those deadly diseases. They decided that though these were poisonous substances, many diseases could be cured by injecting them into the human body without any fear if properly purified. Those who have found and given these drugs for the well being of this world are named Perfected (*siddha*). They are eighteen by number. They are experts in alchemy. Without using mercury, the superiority of their research could be understood from their having clearly and effectively told about its purity, hostile drugs (*catturu*), allied drugs (*mitturu*), fatal conditions, the remedy to it, and quantity. Those who are hurting the people of this country by saying that Ayurveda is not a science, a medical system which belongs to the period of Adam and Eve, not useful at the modern time, asking support for it is ridiculous, spending money for its development never results in any benefits, and saying more such things should consider this.

Just as our religion is practised by us independently, our medicine should be accepted without any doubt. Otherwise, if you ask astrologers to practice it or not, they would say that since Ayurveda is going to be affected by the retrograde motion of Venus, it is no good to the world, so put all its scriptures into a box and leave it in the Ganges. Yoga, wisdom, alchemy, and medicine were mentioned in the medical system that was taught by the Siddhas. That is the Siddha medical system. Mercury is more or less present in all the drugs. Although many electuaries (*lēkiyam*), tinctures (*pāvaṇa tirāvakam*), ointments (*pūccū maruntukaḷ*), compound drugs (*kalavaikaḷ*), wines (*matuvakaikaḷ*), tablets (*pillaikaḷ*), decoctions (*kaṣāyam*), nutrition drinks (*sattukaḷ*), powders (*cūraṇam*), and others which were mentioned in 1914 have been removed from the British pharmacopeia, and electuaries (*lēkiyam*), powders (*cūraṇam*), pills (*vaṭakam*), oils (*eṇṇei*), and others which were described by ancient teachers and rare herbs have been removed from the Siddha medical system, calcined red oxides (*centūram*), calcined metal (*pasmam*), and consolidated drugs (*kaṭṭukaḷ*) that are high-potency and low-dosage and easily available herbs have been added instead. It is a well-established conclusion that both Ayurvedam and Ayulvedam are the same, and there is no difference between ancient Ayurveda and the present Siddha medicine known as Ayulvedam. It is obvious that it has been advanced up to the level of curing the diseases that need surgery by herbal drugs. Unless both are the same as said above, there is no possibility of diagnostic techniques, drug preparatory methods, and technical terms to be identical (*paripāsai*), such as the roots of eight plants (*aṣṭamūlam*²), the group of eight special drugs (*aṣṭavarkkam*³), the roots of five

² The roots of eight plants: dried ginger, Indian sarasaparilla, koray root, galangal, black pepper, Ceylon leadwort, beetle-killer, and climbing nettle.

³ The group of eight special drugs: dried ginger, black pepper, long pepper, black cumin, cumin, asafetida, bishop's weed, and rock salt.

plants (*pañcamūlam*⁴), *lākupañcamūlam* roots of ten plants (*tacamūlam*⁵), the five characteristics of officinal drugs (*pañcakōlam*⁶), the three species of acrids (*tirikaṭuku*⁷), the three kinds of myrobalans (*tiripālai*⁸), the three myrobalans (*tirikaṇṭam*), the three kinds of aromatic drugs (*tiripattiri*⁹), and others. They are celebrated by calling Siddha medicine which is divided into demonic, human, and divine, divine medical systems and its methods of curing diseases by administering drugs made up of mixtures of mercury and arsenic divine drugs. Thus, I am going to state my opinion after confirming that Ayurvedam is the alteration of Ayurveda. I conclude here that if I discuss which comes first among them, it becomes like the story of whether the egg or the hen comes first.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

Even though it has been said that all the diseases are caused by karma and that supernatural and natural and alchemical pills, mantras and drugs are necessary to

⁴ The roots of five plants: dried ginger, black pepper plant, small galangal, large galangal, and knot plant.

⁵ The roots of ten plants: prickly nightshade, little brinjal, small species of jasmine, large species of jasmine, small caltrop tribulus terrestris, bael tree, large of kumiḷ, cleodendron phlomis, trumper flower, and mimosa flexuosa.

⁶ The five officinal drugs: dried ginger, long pepper, long pepper root, black pepper (stem), and Ceylon lead wort (plumbago root).

⁷ The three species of stimulants or acrids: dried ginger, black pepper, and long pepper.

⁸ The three kinds of myrobalans: chebulic myrobalan, belleric myrobalan, and Indian gooseberry or emblic myrobalan.

⁹ The three kinds of aromatic drugs: Clove leaf, mace or pulp of nutmeg, and East Indian plum.

cure them, medical science has certainly confirmed that all diseases are caused by the derangement of the three humours due to changes in seasons, foods, air, drinks, sleeping patterns, sexual patterns, and others. We are witnessing that due to changes in season and air, it [i.e. the derangement of the three humours] causes colds, fevers, headaches, tuberculosis, coughs, and some other diseases; due to alteration of food, it causes stomach aches, indigestion (*mantam*), diarrhoea, vomiting, cholera, headaches, rheumatism, and other diseases; due to changes in water, it causes coughs, diarrhoea, vomiting, dysentery, cholera, fevers, malaria, psoriasis, venereal boils, guinea worm disease, elephantiasis, and other diseases; due to not getting proper sleep, it causes dizziness, insanity, mental disorders, combined [disease, i.e. disease caused by a vitiation of all three humours] (*janni*), and others diseases; and due to improper sexual intercourse, it causes venereal diseases, gonorrhoea, syphilis, cancer, vesical calculus, venereal swelling, leprosy, and other diseases. Through whatever changes happen in whatever ways, they first affect the body by aggravating wind, bile, and phlegm that are the protectors of the body nominated by god, and create the diseases based on affected humours. If the engine of a train has to be functioning well, the driver, air, fire, and water are important. Likewise, if our body has to be functioning well, like “With self-denial take the well-selected meal; So shall thy frame no sudden sickness feel,”¹⁰ it is necessary that good food that is known as a driver, wind (*vata*) that is known as air, bile (*pitta*) that is known as fire, and phlegm (*kapha*) that is known as water should be good. Thus, Ayurveda’s principle is that variation in dietary regimen and derangements in the three humours (*tridoṣa*) are the causes of the diseases.

(b)

Ayurveda says that all kinds of diseases that can occur in humans can be divided into three main categories and their subcategories. Those are (1) neurological disorders, (2) diseases of respiratory organs, and (3) diseases of digestive organs. These diseases are respectively called wind-, bile-, and phlegm-diseases in the technical terms of our medicine. Other diseases that are caused by wind, bile, and phlegm separately or joined by any two humours are known as paired diseases (*tonta*) or joined by three humours together are known as combined [disease] (*janni*). Indigestion that is caused in the digestive organs stops the food, which leads the body to become hot, and that heat moves up to the cranium and affects the brain, and then it transforms into nerve disorders, and then, without sleep, it

¹⁰ Thiruvalluvar, *Thirukkural*, transl. G. U. Pope. (Madras: South India Saiva Siddhantha Works Publishing Society, 1982).

becomes combined disease (*jan̄ni*), finally ending up in phlegm and leading to death. These derangements are called vitiated wind, bile, and phlegm in Ayurveda. It should be known that when a single humour is deranged and causes a disease, it is called single vitiation (*dōṣa*); when two humours are deranged together and cause diseases, it is called paired vitiation (*tonta dōṣa*), i.e., when any two humours, such as nerve and digestive organs or nerve and respiratory organs or digestive organs and respiratory organs, are deranged together and cause diseases related to this; and when three humours together are deranged, nerve and digestive organs and respiratory organs, with other diseases, it would end in combined [disease] (*jan̄ni*).

Its superiority would be understood by praising wind as the “king” (*rājan*) among the three humours. It does not derange easily, but if it is, it is not cured easily. This humour wind causes eighty wind-diseases and many more paired diseases. In the way the pole star helps sailors when they sail at night in the ocean, likewise it helps those physicians who are confused about diagnosis. The location of wind in the human body is from the foot to the pelvis. Normally, it protects the body by doing its work correctly and stimulating other humours to do their respective work perfectly as well. Even though the humour bile is easily deranged by slight variation and alteration of food, it can be cured easily. It produces digestive power by melting the blood through giving heat to the body. The quality of bile is known by analysing urine and stool. It has the stomach as its location. If it deranges on its own, it causes forty types of diseases, and if it pairs with other humours, it causes many more diseases. It protects the body by its natural power and with the support of wind. Phlegm protects the body from decaying because of the heat that is produced by bile. It usually gets more support from other humours. Even though it has the head as its main location, along with protecting the body from the endocrine system, if any foreign elements enter into the body, it keeps with it and ejects it. If it deranges on its own, it causes twenty types of diseases, and if it pairs with other humours, it causes many more cold diseases.

We, as physicians, identify derangements of the three humours wind, bile, and phlegm, by diagnosing the pulse of the patients. Through the sign of pulse, which reflects good and bad conditions of the heart, physicians understand well the conditions of the three humours. However, the practice of reading the pulse in diagnosis has been followed in all the medical systems, including English medicine. It is a wonder how pulse diagnosis has come into unscientific medicine and how others have captured this technique. Though English physicians are using a stethoscope to know the condition of the heart, they understand the condition of diseases by reading the pulse. It has been estimated that the pulse of a newborn has 140 beats, 120-130 beats in infancy, 100 beats in childhood, 90 beats in

adolescence, 70-75 beats in adulthood, 70 beats in old age, 79 beats at the time of standing, 75 beats at the time of sitting, 69 beats at the time of sleeping, 69 beats at the time of lying down, 75-80 beats for a healthy man and woman, an equal pulse at the time of standing, sitting, and lying down during the pregnancy.

Furthermore, when touching the pulse by hand, if the force of the vein is slow, it is a fierce pulse (*tēvira nāṭi*), if the vein is filled with blood, it is a complete (*pōraṇa*) vein, if the blood runs less in vein, it is dried pulse (*cuṣka nāṭi*), and also indicates many more things like this. It is said that the pulse is fast in acute diseases (*tēṣāṇṇya rōkā*), slow in anaemia (*ratta ṣiṇam*), beats with a time gap in heart diseases, and if the body heat increases one degree in fever, the pulse increases by 10 beats. However, once Ayurvedic physicians touch the hand of the patient, they will find whether it is the excessive wind, bile, or pairs of wind-bile, wind-phlegm, bile-wind, bile-phlegm, phlegm-wind, phlegm-bile, or a combination of all three (*jaṇṇi*). They will start to treat diseases after evaluating the five aspects of diagnosis, such as aetiology (*kāraṇam*), premonitory symptoms (*pūrva-rūpa*), symptoms (*rūpam*), factors which can aggravate or suppress the disease (*pōkku*), and pathogenesis (*sānti*). Thus, English physicians say that the nervous system is united, but question how the three principles of wind, bile, and phlegm apply. They think these principles have emerged in Ayurveda because Ayurvedic physicians do not have knowledge of anatomy and they also ridicule them as quacks due to their method of diagnosing diseases based on reading the pulse. Our Ayurveda never said that there are only three channels in the hand. It is stated that “out of seventy-two thousand channels, ten channels are the main ones, of which three are the most important, but only one is permanent” and¹¹

“தாதுமுறைகேள் தனித்தருகிசந்தோடு
ஓகறுகாயியம் உந்திகெடுமார்பு
காது கெடுமூக்கு கண்டங் காம் புருவம்
போதுரு உச்சி புகழ்பத்தம் பார்த்திடே” என்றபடி

it has been said that though there is only one nerve, the derangements of three humours (*tridoṣa*) could be understood to occur in ten locations. But, if asked how the three humours are differentiated in one vein, the answer is that just as a musician creates various sorts of sounds by placing his finger in different places of one vein of the veena, likewise Ayurvedic physicians also find (the different humours). That is why there is a rule in Ayurveda that an Ayurvedic physician should first know the characteristics of the pulse, and if he does, he should have long experience. As he knows the characteristics of the pulse, once he sees the

¹¹ This quotation refers to the different kinds of pulse, comparing the vessels to an elephant trunk, flower stalk, etc.

patient, he takes his hand sympathetically and finds the diseases based on reading the pulse. But others pretend as if they do not see the patient who comes to meet them, after some time asking him with a majestic voice "What happened to you? Where is the pain?" Based on the answer of the patient, they send him away, having written down something on a sheet, changing it many times. And it is usual to keep the modern name of the disease after the cure. Others know that both English medicine and Ayurveda, however, are not perfect until treated by humans, and also that deaths occur in both systems. Therefore, how is it possible that one is a science and the other is not. They advise that if a patient who was treated by an English physician died, that "the treatment was very successful, but unfortunately, the patient has died." Likewise, if a patient who had been treated by an Ayurvedic physician died due to circumstances, they propagate that "this is metallic poisoning or vegetable poisoning." No matter how far they defame us selfishly, they do not know that just as the East will be there as long as the West, Ayurveda will remain as long as English medicine. Besides, based on¹²

**“காடியார் மூன்றோர் சொன்ன கற்குறி குணங்களாகும்
காடிய விழிவினாலும், தின்ற காக்குறியினாலும்
வாடிய மேனியாலும், மலமொடு கீரினாலும்
குடிய வியாதிதன்னைச் சுருதவறித்துச்சொல்வே”**

Ayurvedic physicians do not just rely on the reading of pulse in diagnosing diseases, but they also need to examine pulse, eyes, tongue, body, stool, urine, sound, nose, sleeping patterns, and digestion patterns to become experts. In English medicine, the human body is divided into (1) sanguine, (2) phlegmatic, (3) bilious, and (4) nervous, likewise, it is to be noted that Ayurveda also mentions that "generally it is one hundred years, to all of which the first 33 years and 4 months which is the young age belong to phlegm (*śleṣma*), the second 33 years and 4 months which is the middle age belong to bile (*pitta*), and the remaining 33 years and 4 months belong to wind (*vata*)."¹³

**“காலையில் வாதகாடி கடினையில் பத்ததாகும்
பாலையாம் சித்தகாடி பருச்சி பத்ததாகும்
மாலையாம் சிலேஷ்மகாடி மதிப்புடன் பத்ததாகும்
வாலையாம் மனோன்மணி வருத்தமே நொருத்தாகும்”**

¹² The stanza teaches what should be taken into consideration during diagnosis: "good signs which were taught by the ancestors who know the pulse" (i.e., qualities of the pulse?), eyes, tongue, diminished body, urine, and faeces.

¹³ The stanza states that in the morning the pulse of the wind [pipe] is ten [beats?] per 1 *kaṭikai* (i.e., a unit of time), during the "peak of a day" (noon?), the pulse of the bile [pipe] is 10/1 *kaṭikai*, and in the evening the pulse of phlegm is approximately 10/1 *kaṭikai*.

Based on the above, naturally, the wind-, bile-, and phlegm-pulses of a healthy person would beat in 1, $\frac{1}{2}$, and $\frac{1}{4}$ *māttirais* respectively. Based on the above, wind is dominant from the morning from 6:00 to 10:00 AM, bile from 10:00 AM to 2:00 PM, and phlegm from 2:00 PM to 6:00 PM. The latter would function a little longer than the stipulated time (*māttirai*). If so, it should not be taken as derangement. If any thing happens in contrast to this rule, that is a sign of disease.

If wind, which is first among the three humours, naturally becomes aggravated on its own, body pain, rheumatism, inability to stand upright if bowed, numbness (*timirum*), intestinal flutter, indigestion, gastric constipation, contraction of *apāṇa* wind, sour taste in the tongue, diarrhoea, semen loss, and other diseases occur as a symptom of it. If bile alone is aggravated, burning sensations in the body, dryness, shivering, cephalgia, dry tongue, bitter taste in the mouth, disgust for food (*arōcakam*), thirst, vomiting, hiccups, dizziness, deafness, fatigue (*ayarvu*), burning sensations in the stomach, heartburn, dyspepsia, ague, chronic fever, dropsy, jaundice, giddiness, gonorrhoea, and other diseases occur. If phlegm alone is aggravated, dryness in the body, thinning, anaemia, shivering due to cold, difficulties in food intake, hiccups, cough, dying breath, exhaustion, sweating, tuberculosis, asthma, ailment in ribs, haemoptysis, excessive salivation, urinary incontinence, and other diseases occur.

PAIRED DISEASES (*TONTA DŌṢAṆKAL*)

All Ayurvedic physicians know well that:

If the humours of wind and bile are both aggravated, deadly diseases such as dropsy, jaundice, ascites (*makōtaram*), and a kind of dropsy (*nīrāmpal*) occur along with the diseases that occurred due to the aggravation of wind and bile separately.

If the humours wind and phlegm are both aggravated, headaches, numbness, tympanites, delirium, giddiness, dropsy with anaemia (*cōpai*), dropsy, fainting, and other diseases occur along with the diseases that occurred due to the aggravation of wind and phlegm separately.

If the humours bile and wind are both aggravated, deadly diseases such as body pain, burning sensations (*erivantam*), dryness of tongue, diseases of nose (*pīṇacam*), haemorrhoids, fistulae, epilepsy, inguinal bubo (*araiyāppu*), and other diseases occur, along with the diseases that occurred due to the aggravation of bile and wind separately.

If the humours bile and phlegm are both aggravated, tympanites, babbling, stomach pains, nape pains, and others would occur along with the diseases that occurred due to the aggravation of bile and phlegm separately.

If phlegm and wind are both aggravated, excessive discharge of phlegm, thirst, headaches, apoplexy, and others occur along with the diseases that occurred due to the aggravation of phlegm and wind separately.

If phlegm and bile are both aggravated, headache, deafness, sweet taste in tongue, delirium, babbling, and other diseases occur along with the diseases that occurred due to the aggravation of phlegm and bile separately.

WATER-HAMMER PULSE (*JANNIPĀTA NĀTI*)¹⁴

If wind, bile, and phlegm, which are protection forces of body, are all aggravated at the same time, it is a habit to call this combined [disease] (*janni*). This condition is a dangerous one. According to English medicine, at this time, the pulsebeat will be quicker, fuller, and stronger and range from 130 to 160, or it will be the more subtle level called a sinking pulse, which cannot be sensed by hand. In this condition, a patient will have signs such as tossing restlessly, loss of consciousness, babbling, excessive sweating, eyes becoming dim, sinking of the eyes, swinging hands and feet without control, blackening of tongue and teeth, bumps in the tongue, open mouth, dying breath, clumsy face, and phlegm in the chest and others. If such signs are found, sometimes it is possible but often impossible [to treat]. It is the duty of Ayurvedic physicians to first balance the humour or humours which have been aggravated most severely in paired diseases and combined diseases and then look after the others. Based on the condition of diseases, they are divided into possible, difficult, and impossible [to treat] in Ayurveda. Although ancient Ayurvedic physicians have said that drugs can be administered as long as the sensory organs are sensitive, Siddhas have also stated that physicians should leave patients once they have seen the signs of incurability. Due to mercy on the people of the world, Siddhas have described signs that indicate the possible recovery from illness in some impossible conditions by administering drugs; signs that indicate that recovery from illness is not possible, so that [the physician] should leave patients entirely, and some signs that indicate death will occur very soon.

¹⁴ A pulse found in cases of delirium. It is first found to be quicker, fuller, and stronger, and then gradually sinks and ends in collapse. Here, the rapid pulse is compared to the fast walking of a fuel-carrier, and the slow one to the movements of a millipede.

SIGNS OF POSSIBLE RECOVERY FROM ILLNESS IN IMPOSSIBLE
CONDITION (*ACĀTTIYATTIL CĀTTIYAK KURIKAL*)

If a patient who does not have impairment in his hands and legs, can stretch and fold, does not have humours in his tongue, is not sweating, can breathe through the nostril and does not have phlegm in his throat, he will not die. If a patient who does not have disturbances in his sleep, is healthy, feels light, has well-functioning sensory organs, and the senses of hearing, seeing, smelling, talking, and tasting are functioning without any impairments, he will not die. "If true, the three humours are in a tranquil state, incomparable wind is spread through the body, and bile is in the stomach, drugs can be administered." It is to be noted that if the condition is as described above, Ayurveda physicians have the authority to administer the drugs.

ABSOLUTELY IMPOSSIBLE SIGNS¹⁵

- (1) மூட்டியே மூவருமே மூடமாறும், மூதண்ட ஐக்கியுட மூச்சுமாரும்,
மூட்டியே மூவருமே மூடுகின்றும், மூத்தோறும் ஐக்கியுட புதைமயர
[அம்,
கோட்டியே வாதமது குளிர்த்துதின்றும், குளாயிலை மாணத்தின் உதாரமும்,
வாட்டியே வாதமது மூங்கிதின்றும், மறிப்படா மாணமெனது மறிக்கையேமே.
- (2) காவமே வாதமது மெயித்திதின்றும், கதிச்சாயும் பொழுதிருந்த மாணமாரும்,
பாவமே கெப்சித்தம் மெயித்திதின்றும், பாதுகயுதயத் தனிவே மாணமாரும்,
மாணமே ஐயமது மெயித்திதின்றும் மாணாயிலை வந்தோய் தித்தபோரும்,
கவமாய் இப்படியே வகுத்தகன்றும், குறிப்பறித்த உதவர்கள் பெரியோ
[சாமே.
- (3) கண்ணும் பந்துத் தாண்டுகூத்த, கருது மூச்சு வாய்திறத்த,
கண்ணும் வயிற்றில் சேத்தமமு மோடி மிகவே தாண்டுகூத்தம்,
பண்ணுமூத்த பாயாது, பண்பாய் கவாசம் மேல்வாங்கி,
மண்ணும் கிண்ணும் தாண்டிய மாண மாவாய் கண்டகே.
- (4) இடை தொடை மாச்சிந்திழே பெறிப்பட பதறி யோடின,
முடிபிட விக்கு மாயின், மூவரி லொருவ ரோடின,
படாவே தாக மிஞ்சிப் பஞ்சிடுவ கண்ணும் வாயும்,
அடாயித் குளக்கள் கண்டாவறித்துகொள் மாணமென்றே.
- (5) எடுக்கும் படுக்கு மெழுத்திருக்கும், மினைத்தே மூச்சு தனைவாங்கும்,
தொடுக்கும் தொடுத்த விழிவினாடு மலா கிழிக்கும் வழிபார்க்கும்,
தொருக்கும் தொடுத்த சேத்தமமுத் தொண்டை தனைவு மடைபடுத்தும்,
மடுத்த வருவ திடுகண்டா வறிவிச் மாணம் திச்சையமே.
- (6) கவிபேய் மூடமும் கிண்டி, உடம்பெய்வாய் காய்பு தோன்றி,
பாசிபேய் கண்பஞ் சிட்டுப் பாத்திருள் மூடுமாயில்,
பேகாவதண்டி பெரி, தித்தது தித்ததமாயில்,
கவினி யறிவச் சொன்னோம் கவாடுகொள் மாண மென்றே.

¹⁵ 1) Signs of the error of all 3 humours: stupidity, delirium, mental darkness. Sign of the surge of all 3 humours, signs of coming death judging from the state of the wind.
2) Predictions of death/curability based on the weakness of the particular humours.
3) Signs of coming death.
4) Signs of coming death judging from the state of bile.
5) Signs of certain coming death.
6) Signs of coming death.

As mentioned above, our forefathers have described the signs indicative of possible recovery from illness (*cāttiyak kurikaḥ*) and signs indicative of impossible recovery from illness (*acāttiyak kurikaḥ*) in Ayurveda. Further, it is to be noted that ten types of plight will appear in the body of the patient at the time of death, that is, (1) corpse odour in his body, (2) babbling, (3) paranoia, (4) dying breath, (5) viewing, (6) coolness in the body, (7) more desire for food, (8) blurriness of the eyes, (9) paleness in the body, and (10) the soul leaving from the body.

Further, according to the principles of Ayurveda, there are ten types of diagnostic techniques, of which pulse diagnostic is used much by Ayurvedic physicians, as has been explained above. Apart from that, if I try to write about other diagnostic techniques that concern the eyes, tongue, body, stool, urine, sound, nose, sleep, and digestion, I am afraid that it will become too elaborate, so I stop here as that is enough. I kindly say that if the members of the committee are willing to know the details of other aspects and also provide enough time, I am ready to write.

(c)

Yes, there is no doubt. There is no doubt that if there are drugs that are made by Ayurvedic physicians based on science and administered by them, so many deadly diseases would fly like lint is flying in the air. So many English physicians who are genuine, impartial, and conscientious are the witness for the fact that so many ailments that were abandoned because they could not be cured by the English medicine have been cured by Ayurvedic drugs. Once upon a time, there was a competition between a renowned medicine by Mst. Santal Falva et. Bachu and “*Kōksarāti Cūraṇam*” that was made based on Ayurvedic principles. After seeing the influenza, a great fever that has affected our country in the year 1916, I prepared “*Cutarsaṇa Cūraṇam*” that is usually given for all the fevers and circulated it to all freely, through which countless people were healed. I am saying that I have cured influenza within a single day by having prescribed the above-mentioned drug to 18 members of the family of Rai Bahadur Srinivasa Rao, a teacher of shorthand in Police Training School in Vellore, who had suffered from the above-mentioned disease and was not cured even after having consumed the drugs in the hospital for seven and eight days. We, the Ayurvedic physicians, have succeeded in the treatment of diseases that were left by English physicians as impossible to cure. Despite the fact that Suśruta has explained much about surgery, that “*Teraiyar*” was named after removing the Indian toad (*tērai*) from the skull, and that we are capable of practising surgery, we have been prohibited prejudicially to practice it and only English physicians were given permission to practise it.

Because of this, we are inferior in surgery. Apart from that we are not inferior to English physicians in medicine. Even though our Ayurveda is in the national language, no value is given to national language now and those experts of language or science who have good character and are not pompous are called traditionalists. The pseudo geniuses who are experts in the above-mentioned science, are saying that “like salt, like that, like a crane, like a hen.” Our elders who have the knowledge of the past, present, and future (*tirikāla nāṇikaḥ*) have discovered Ayurvedic drugs that are cheap, (...), and are suitable to seasonal changes of this nation as well as the religion, etiquette, and bodily conditions of the people of this country. Nowadays, a drug that is discovered by a renowned English physician and celebrated disappears without a trace in the next year. By contrast, the benefits that have been offered by Ayurvedic drugs when discovered thousands of years ago, are still offered and are used by all today. There is no doubt that *cutta pairavam*, *cōṛṇaṇṭa pairavam*, *pirmāṇṇanta pairavam*, *vinōta piravam*, *dacavita akṇi kumāra racam*, *vaṅkēsvara racam*, *carvajittu racam*, *mēkakulāntaka racam*, *kuṇṇmakuṭāram*, *vātarāṭcasa racam*, *rājamirukāṇka racam*, *makārājamirukāṇka racam*, *rājakaṇṭēsvara racam*, *rājarājēsvaram*, *vacantakucumākaram*, *māka vacanta kucumākaram*, *laṅkēsvaraṇ*, *tāḷakēsvaram*, *pūpati*, *cintūra pūṣaṇam*, *cintāmaṇi*, *cūṭāmaṇi*, *laṭcāmaṇi*, *pūtapairavam*, and so many other drugs will remain the same forever. It is certain that if anything is wrong in that [i.e. the formulation], it is the mistake of the producer, not of Ayurveda. Many drugs in English medicine have the ingredient of alcohol that is counter to Hindu etiquette. Alcohol is helpful only in a cold region and hostile in a hot region, like our country, and our civilization and our etiquette. There is a reproach that Ayurvedic drugs are deadly, that Ayurvedic physicians have harmed patients by prescribing more and more such drugs, and that if they prescribe a drug for a headache, a stomach ache will also develop along with the headache. I do not know how far this is fair. In English medicine, when a tumour was in the stomach, it was decided to conduct an operation for the well-being of a patient, and when conducting the operation with good intentions, he died. What shall we say about the fact that a patient died due to the operation? Ayurvedic physicians use all the drugs, like arsenic, dried-ginger, pepper, and long pepper only after the process of purification (*cutti*). Except for the study of stone and soil in English medicine, there is no meaning to the word “*cutti*”, is there?

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

Yes. I have been running a dispensary in the name of “Vellore Ayurveda Dispensary” in Vellore for 15 years. My ideology is to alleviate the diseases of the patients. This is what I have decided to do for the rest of my life. The patients usually come from Vellore, in and around Vellore, and even also from other regions. I have allocated a separate place for the stay of those patients who come from other regions. I have cured complicated cases for which I have thousands of testimonials. The award of “*vaittiya ācīriyar*” was conferred to me in April 1921 at the Ayurvedic conference held at Tirunelveli. I will stop with this as it would be boasting if I write more.

(b)

At present, the number of Ayurvedic colleges and hospitals in our country is like a drop in the ocean. Would one or two Ayurvedic hospitals which are here and there be enough to treat 33 crore poor people who are struggling due to hunger and many ailments, when even English medicine is insufficient? Further, as Ayurvedic physicians neither have other incomes nor get any financial aid from the government, they serve by getting very minimal fees from poor people. Those who can afford it are receiving medical service, others who cannot afford it are dying from illness. It is a responsibility to think about whether a hospital with three or four persons is sufficient to treat local and outside patients at Vellore, which comprises sixty or seventy thousand people. The eminence of Ayurveda would be obvious, if we knew which [patients] are treated by whom, outside of

the hospital. Thus, to develop Ayurveda, it is the responsibility of the government to establish Ayurvedic colleges in all regions of our state. Students should be taught [Ayurveda] in their respective languages, such as the languages of Andhra, the Tamil region, Kerala, the Kannada region, and in Sanskrit and be sent to various places for treating people. It is obvious that no one who knows this truth would deny it.

(c)

All people like Ayurveda, except for high-profile and modern men. To tell the truth, there is talk that nowadays hospitals do not care about the poor and that they are not treated appropriately, so they hate to go there. Further, the same drug is being prescribed for any disease in the hospital. At the same time, the elite are taken care of well, so that they are getting good salaries, and the hospital also receives 8 ana per month, yet there is no response if poor people visit. Thus, the necessity has emerged to support Ayurveda and Ayurvedic physicians that are most wanted by all. Four Ayurvedic hospitals in the four corners of every city with a minimum of two Ayurvedic physicians should be arranged to serve the public in need of medical aid day and night. There is no fear that it would cost much money. There is no doubt that it will have many benefits if the government acknowledges those local Ayurvedic physicians as “authentic physicians” and encourages them, like conferring L.M.P. degrees to those who are low-grade graduates in the English medicine, conferring the degree of L.A.M.P. to them, and allocating a small yearly or monthly grant to them. People in the village would take their medical treatment at their preferred place. Physicians also would submit all data of their patients monthly or three-monthly. Due to absurd criticisms of Ayurveda, unless the government acknowledges them publicly, this is impossible. Ayurvedic physicians also will not be enthusiastic. Arrangements should be made that along with providing medical facilities to villagers by establishing Ayurvedic hospitals in the centre of a cluster of four or five villages and appointing a physician, the principles of hygiene and health care should be taught to villagers by that physician at leisure times. Along with giving a good reward for this activity, it should be arranged to make the village authorities and others obey his advice and help him. By doing this, people of the country would benefit along with eradicating many of the worst diseases. The Village Administrative Officer of Eri Pudur of Vaniyambadi, 14 miles away from Vellore, could know from whom his sick villagers are getting treatment in Vellore.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*
- (3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a) (1)

If it is logistically not possible, at present, to establish Ayurvedic colleges and impart medical training to the students, students could be placed under first-rate Ayurvedic physicians. However, those physicians should have at least a minimum knowledge of modern science and medical training.

(2)

Yes. Like “what is learned is merely a handful of sand, and what is left is the rest of the world,” there are innumerable texts. Each text follows an earlier one together with updated knowledge. Physicians should not consider themselves an expert in the field by just having read a small text called *Rattina Curukkam*. Since they must always conduct scientific research, they should aim at discovering new things. Thus, it is fair that they have to access those places. It is to be noted that at present, if submitting us under the uncompromising practitioners of English medicine, like, “If we look at it as a prostitute, it would be a prostitute, if we look at it as a hen, it would be a hen, if we look at it as intellect, it would be intellect, if we look at it as a dog, it would be a dog,” we also would scream “Oh god! Save us from our friends,” because at present the knowledge gap between West and East is too deep. It is impossible until both groups of physicians in the spirit of

fraternity and cooperation unanimously acknowledge the values of the others' systems as scientific and consider themselves the servants of the people as well.

(3) (a)

Yes. It could be done after finding methods and arranging necessary logistics. At present, in our state, students could be taught in Chennai Ayurveda College and given practical training in the Andhra pharmaceutical industry. Whatever attempts are made, the imparting language of the system should be in the mother tongue of the students.

(b)

The people of the country would benefit if the government selects existing physicians and supports and felicitates them and lets them run the institutions. There are highly skilled physicians in various places. It is the duty of the government to make them work for the benefit of the country.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

It is ridiculous to think that Ayurveda and English medicine will become one if the government establishes and runs Ayurvedic colleges and pharmaceutical industries in a modern way throughout the country. This theory is like "When the beard is burning, one asks the fire to ignite one's cigar." I do not know how it can succeed when our community, language, and science are questioned. Once I mention our medical system, they ask with surprise if there is such a medical system.

First of all, quit asking these sorts of questions and acknowledge that there is something called the Hindu community and it has its religion, language, science, and a good ancient civilization like others. If the system is embraced with the good intention to help the world, there is no doubt that along with the joining of both systems, our system would be a step in advance from English medicine. It seems that there is something called the Western medical system instead of English medicine. Of these, except for the herbs which are unknown to us and grow in the European continent and other regions, everything else is in our pharmacopoeia. Like “punching our own eyes with our own finger,” after the inclusion of our drugs into the British pharmacopoeia, they insist that we should not handle them in accordance with the medical law. According to the British pharmacopoeia, a carminative mixture that is a hunger-stimulating mixture is prepared by mixing *navaraṣaramatu*, *evaricipāvaṇa acid*, *sarjaṣāram*, *nux vomica acid* (*ēṭṭikkoṭṭai*), chloroform, and peppermint water. Our hunger-stimulating tablet (*tēpaṇakāri*) is prepared with mercury, country aconite (*nāpi*), sulphur, sison ammi (*ōmam*), three species of stimulants (*tiripālai*), *sarjaṣāram*, *yavāsāram*, *plumbago rosea* (*cittiramūlam*), rock salt (*intuppu*), cumin seed (*cērakam*), *aṭṭuppu*, three species of stimulants (*tirikaṭuku*), *nux vomica* (*ēṭṭikkoṭṭai*), and others. Thus, *nux vomica* (*ēṭṭikkoṭṭai*), which is common in their pharmacopoeia and our pharmacopoeia, should not be purchased by anyone without a license. According to our pharmacopoeia, we are not going to touch anything other than single drugs, such as sison ammi (*ōmam*), long pepper (*tippili*), green chiretta (*nilavēmpu*), anise seed (*sōmpu*), and *sukku* (dried ginger) which stimulate hunger, and compound drugs such as *cūraṇam*, pills (*vaṭakam*), and electuaries (*lēkiyam*) that are made from a mixture of them. In spite of that, they mention that those who do not know English drugs are using those drugs and spoiling the health by administering excess drugs. It seems that they are doing this for their selfish motives. There is no doubt that the Hindu nation, though it is not as big a continent as the aforementioned, is a big nation comprised of 33 crore people. This great continent has its religion, language, wisdom, culture, and science, has it not? Should not such a great nation have its religion, language, wisdom, civilization and science? Are the people of this nation foolish since ancient times? If they want to follow a religion, should they follow a foreign religion only? If they want to speak, should they speak in a foreign language only? If they want to study science, should they study foreign science only? If they want to attain high esteem, should they follow a foreign lifestyle only? I do not know on what basis the term “educated” refers only to those who have studied English, “cultured” refers only to those dressed according to the Western style, “healthy food” refers only to non-vegetarian foods, and “drinks” refers only to liquors. When every nation has its

religion, language, wisdom, science, and civilization, what would be the reasons for this nation to have only borrowed things? When there are four Vedas, Upavedas, six sciences and sixty-four arts in our country and there is real evidence for them, where did they disappear to? In which ocean have they sunken? The architects should come from a foreign country to construct the buildings, and physicians should also come from a foreign country to teach medical science. Experts in equine studies (*asva*), veterinary science (*kō*), botany (*pū*), mathematics (*kaṇita*), music (*saṅkita*), dance (*paratam*), astronomy (*kakōḷa cāstra*), and other subjects should come only from the outside. It has become a myth to say that we had our science and scientists. Our people are sceptical about whatever comes from this country. Why do they doubt all the aspects of this country, like Vedas, science, Puranas, and arts? Foreigners did not speak about these topics, that might be the reason. God only knows the rest of it. Above all doubts, there is complete scepticism about our medical system, because they have blind faith that English drugs, although not a cure, will never produces side effects. Only those who consumed them know the side effects of consuming quinine, pot iodide, and calomel. Even our people claim that Ayurvedic physicians are spoiling the health of the patients by administering drugs prepared without proper methods, knowing the condition of the body and the age of patients, differences between males and females, and hostile (*catturu*) or allied (*mitturu*) drugs. Who is responsible for this state of our physicians and science? Like “Every ass loves his bray,” why should our people not praise and develop it? Do other nationals not do that? It seems like the affection for foreign things has not left us yet. Alas, India! what was the status that you had previously? What is the current status that you have attained? Well thought out. Like that, though the ocean has many precious things in it and is ready to give to one who wishes to jump into it, instead of diving and collecting those precious things, the one who stands on the shore drinks its water and says that it is too salty. Instead of rejoicing by immersing themselves in the rare ocean of Ayurveda and learning its precious aspects, the English doctors and others say that it is evil, and that blood, urine, and stool are used as drugs in it, and they are ridiculing it as a hopeless science. As long as they have these sorts of impressions, it is impossible that Ayurveda and English medicine unite and grow together over time. If English doctors feel that Ayurveda is the science of a great nation, has been revered by the people, used to cure their diseases since ancient times, should not be neglected by our influence and power, and be given its proper place and respect, both medical systems would unite and progress over time, just as any place can be reached without any problem when two bulls are yoked in a carriage; otherwise, if one is a bull and the other is a buffalo, it is very difficult to reach a place, because the two would drag the carriage into two different directions.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

(a)

Yes. It is necessary that Ayurvedic physicians know physics, chemistry, biology, anatomy, physiology, pathology, and bacteriology. Is it not a proverb that “Who reads many things becomes intellectual”? It seems that there were such sciences in our country. Unlike current Ayurvedic physicians, if they learn physics and other modern sciences along with Ayurveda, it will help them to know which substances are available in which products, which products are created by the accumulation of what sort of elements, various types of diseases and how they emerge, what the remedy to those diseases is, and more subjects, along with eliminating the blame that is being currently imposed on them. It seems right to admit that those who know all these things are physicians in excellence.

Let us say that ancient Ayurvedic physicians knew all these subjects. Because they declared that certain drugs have certain qualities, that they are prescribed for certain diseases, that they should be given at a particular level, that they become more potent if administered together with certain substances, and less potent if administered with other substances, that drugs should not be taken after certain times, etc. Do all these statements come from people without research? Those who have emerged from such great traditions have missed them in the time being. Even though they are not able to learn those sciences at the same time, it would be good to learn some aspects of them. Unless the group of Ayurvedic physicians

unanimously decides the degrees and awards that should be given to them, I could not be the only one to comment on that.

(b)

It is enough to know the national language. The period of study might be two to four years.

(c)

All these sciences should be [taught] in the national language. If they are taught in a foreign language, they would not get value and taste. Further, they would not be developed. Ayurvedic physicians and people of the country should follow the example of the Japanese who study foreign subjects and adapt them according to their needs. It is not the characteristic of good intellectuals to admit wrong by their admiration and to dismiss the good because it belongs to others. Foreigners might have amazing qualities. One should learn them, and teach these subjects to those who do not know them or help others learn. The mother tongue is suitable for this. If one reads all these sciences in one's mother tongue, does one have any other privilege?

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

(a)

It is fair to be so. Due to our bad time, our Ayurveda is trapped, at present, in the hands of non-literate people. Even though we owe our gratitude to them for having protected Ayurveda from extinction from the world and also for having saved it from all sorts of criticism, it must be accepted that they cause many evils. It is necessary to unite them and allow them to practice their profession under certain

conditions and with caution. It is certain that by doing so, they would benefit, and the public would respect them as well. At present, Ayurvedic physicians are divided without unity. They also could become united by these activities. However, the law should not be enacted that they should not practice medicine unless forming a suitable registration board and register, because these Ayurvedic physicians serve many lakhs of villagers day and night who do not even know English medicine and hospitals. So, if this sort of law was enacted, they would be affected. It is to be noted here that though the number of Ayurvedic physicians is small, the public with its higher number would be affected. As something is better than nothing, is it not better to have something in place?

(b)

Ayurvedic physicians who are literate and Ayurveda which is an exceptional science are humiliated by these arrangements. When English physicians are incapable of doing risky things, questions regarding the formation of a registration board and the Medical Registration Act for indigenous physicians would only be raised due to their influence and selfishness. The laws and registration of English medicine are meant to show the people of the world that they are the only doctors and their practices are the only real medical system, while at the same time indicating that others are not proper doctors and their practices are not the real medical systems. It is my experience that one who was not interested in going to the hospital was cured of diarrhoea by my treatment, and to rejoin work he had received a medical certificate from me, which was rejected by his superior, while some other officials accepted those medical certificates. The Government of Mysore accepts the medical certificates of Ayurvedic physicians. But our government does not accept us. Once one has given Rs. 5, 10, or 15 to indigenous physicians, even a healthy person gets diseases that are not in the world. Why not let one be healed by whatever medical system he pleases? Are you saying that Ayurvedic physicians are behaving in an unethical way? Is it a principle to accept that English doctors do not behave like that? It would never be fair to leave them as the dictators of medicine. It can be done in England and America because there is only one medical system. Our nation has our national medicine, has it not? Like there are small kings in a country where there are emperors, they must allow us to walk in the land where they walk, to earn ten if they earn a thousand, to do small things if they do great things, to issue a medical certificate to little people if they issue a medical certificate to great people. Like impeding the development of the country by exploiting resources, preventing the development of physicians of this nation through marginalizing us in the medical sphere is painful.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

There is no doubt that the cost of the drugs which are manufactured based on the Ayurvedic system is cheaper than the drugs of Western medicine. We are witnessing that dried ginger grown in our country is bought at the cost of 2 ana, transformed into a new form after crossing the sea, packed in a beautiful box, wrapped by multicolour papers, and again coming back with a new name and sold at Rs. 4 or 5. No matter how many times it crosses the ocean, how many types of boxes it is packed in, how many types of coloured papers it is wrapped in, whatever names it gets, our dried ginger remains the same. Thus, it loses its strength and vigour due to crossing the oceans multiple times. What does it cost to cross the ocean? What is the profit of the company that makes a drug? What is the profit of the shopkeeper who sells it to us? What is the doctor's discount that summons it to patients? Who bears all these costs? Poor patients bear the cost, do they not? Likewise, we can give comments for each drug. However, our Ayurvedic drugs are not like that. There is no need to cross the ocean for those drugs. All the drugs which are mentioned in the Ayurvedic pharmacopoeia (*vākaṭam*) are said to be manufactured with herbs. There is no defect of science, except for the only defect that we do not know them well. There is a pharmacopoeia (*carakku vaippu*)¹⁶ for substances like mercury and arsenic and for preparing them, is there not? Our scientists have stated that there are 32 natural poisonous substances (*piravi pāṣāṇakaḷ*), and when they are not available, there are 32 artificial poisonous substances (*vaippu pāṣāṇakaḷ*). Herbs are available in the backyards of our houses. We suffer as we neglect them. Further, all know that the price of foreign drugs increases and decreases according to demand. It is my experience that during the influenza epidemic period, the prices of Antiphilologistine, Liq. Peptonoids, Manola, Essence of Chicken, and others were sold at 15 to 20 times higher than their original price. Intellectuals think that all this is a ploy to drain our wealth and to increase their wealth. It is a shame for us to depend on foreign countries for synthetic materials when we have abundant natural products. *Cutarsaṇa* tablets for fever that could be given to 50 patients could be manufactured very easily. It would cure all sorts of stomach ache immediately. Likewise, *cutarsaṇa lavaṇam* could be prepared very easily. Once a drug is consumed, all sorts of indigestion, diarrhoea, and belching on account of indigestion (*puliyepam*) would be cured.

¹⁶ That branch of science not only describes the drugs but also gives directions in regard to their preparation together with their uses and manner of application.

Cutarsaṇa pōjaṇakuṭāri tablets could be produced at 1 ana. *Karpūrāti* tablets that could cure all sorts of diarrhoea could be produced at 1 ana. Likewise, there are so many billions of drugs in our Ayurvedic system. Unless the doctor cheats the people for making money from drug preparation, there is really no fraud in our drugs. By saying that if you take a bottle of a drug which costs Rs. 5 you would get these sorts of remedies, after buying it eagerly, if one could say that if you want to get rid of the disease you should consume six to nine bottles of drugs, and if doing so, particular diseases would be cured within one hour or one day or one week or one year or one era, that drug is good, is it not? If we decide to produce our Ayurvedic drugs in large batches by establishing many big medical manufacturing industries like the Andhra Ayurveda pharmaceutical industry or the Zandu pharmaceutical industry, people would be able to get *citta makarattuvajam* for Rs. 1 or 2 that are currently being sold at Rs. 30 or 35. May the Lord bless this to happen.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

The causes of the decay of the indigenous systems of medicine are lack of government support and competition from Western medicine. Whatever it might be, indigenous medicine would not have attained this status if it had received the support of the government. As Ayurveda is genuine and receives the grace of the Lord, Ayurveda is prospering on one side even though it is declining on another side due to competition with Western medicine. Needless to say that its roots have descended into the underworld (into the deep – *atala*, *cutala*, *pātāḷa*) and it will not even be removed by heavy rain and wind. It is nothing but that the criticism of Ayurveda is like “Just live, others die.” Is it possible to know without research that a weak man (*iḷaittavaṇ*) should eat iron-rich food, one who is anemic (*veḷuttavaṇ*) should eat false daisy (*karicalankaṇṇi*), that green chireta (*nilavēmpu*) cures fever, that dried ginger stimulates hunger, that balloon vine deters wind (*vata*), and that a species of coconut (*matupalam*) is an emetic agent? How is it possible to know the quality of the substances without research? If one says that the substance *sukraṇi* is found in dried ginger after squeezing it and adding some other substances to it, it is science, otherwise not. We practise our medicine by following the footsteps of the sages Danvantari, Caragar, Susrutar, Vagbatar, Sa-rangadarar, Agastiyar, Pulastiyar, Theraiyar, Pullipani, Dhaksinamoorti,

Veeramamunivar, Bogar, Nandi, Dharmasowmiyar, Konganar, Sattaimunivar, Ramadevar, Matchaminivar, Kamalamunivar, Romarishi, Karuvurar, Korakkar, Idaikkattar, Sundaranandar, Pampatti Siddhar, Agapei Siddhar, Ettracittar, and others just like practitioners of Western medicine practise their medicine by following the methods of Drs. Wood, Gross, Smith, Makenzie, Grey, Leopland, Hadson, Ashmad, Clemens, Frampton, Readvan, Dobell, Baylis, Read, Hooper, and others. Is this a disgrace? There is no doubt that we have attained this bad situation because we are ashamed to touch, read, and act upon the sciences that our ancestors created for us. If we would like to revitalize our medicine that declined from the greatest tradition into the worst stage, (1) we first have to make the government accept it. (2) Physicians should be selected, encouraged, and rewarded. (3) Hospitals should be established in big cities and villages. (4) Colleges for the four Dravidian languages in the four places and one for Sanskrit should be established in the Madras Presidency, and suitable teachers should be appointed to train the students. (5) Arrangements should be made for suitable persons to teach Ayurveda and hygiene and healthcare practices to the villagers in the villages. (6) Medical treatises that are written in languages other than that of the Presidency should be translated into languages of the Presidency. (7) A chemical laboratory and a herbal garden should be established in Madras, in which Ayurvedic drugs should be produced in large quantities. A library that includes Ayurvedic texts and treatises written in other languages should be established.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

Ayurveda could not be advanced by the local boards, the universities, and private agencies unless the government extends its support for developing Ayurveda in this time of abhorrence of Ayurveda. Ayurveda would not advance even after ten centuries if it is handed over to local boards without government support. They will be biased against supporting these institutions. We witness the struggles which are faced by Chennai Ayurveda College and Cavala Cannan Chetiyar's Free Ayurvedic Dispensary and the refusal of sponsorship of Chennai Corporation

to these institutions. Such actions badly affect the development of the systems. Even if these courses were started in universities, no one would study these medical systems due to the lack of knowledge about its future status and lack of respect of students. Who could forget the hardships faced by Calcutta National Medical College due to the lack of government support despite experts teaching Western medicine. Hospitals run by private agencies may perform well for a while and then decline because of caste and religious quarrels. This would ruin the charity given to the poor. Thus, the first task is to make the public desire their national medicine. Then, like Western medicine, indigenous medical systems should be taught in universities. It could be handed over to local boards and private agencies after the emergence of enough medical practitioners in the country and a good impression about it had developed. Anybody could run these institutions when they have advanced well. I humbly request that until it has advanced, it is the duty of the benevolent government to take responsibility for the indigenous medicines.

M. R. Ry. Vaidyapathi S. Palvannam
Mudaliyar Avargal

Translated from the Tamil by D. V. KANAGARATHINAM

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

The medical system which I have been practising is Siddha Tamil medicine.

Question 2

(a) *What is the theory or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

The causation of disease is: lack of vital force (*amirtacakti*), greediness (*ācāimikuti*), heat, cold, water, air, fear, incompatible food (*apakkuva uṇavu*), anger, earthly pleasures (*cirrinpam*), sorrow (*tuyaram*), excessive food intake (*ūṇ*

mikutaḷ), insufficient food intake (*ūṇ kuṛaitaḷ*), and increasing of egotism (*akankāra mikuti*). These are the main factors for that.

(b)

Diagnosis of disease: The diseases are diagnosed through examining the

- (1) pulse (*nāṭi*)
- (2) six sorts of taste (*aṟuvakaicuvai*)
- (3) face (*mukam*)
- (4) colour of stool (*malattiṇ nīram*)
- (5) urine (*nēriṇ kuṛi*)
- (6) colour of the eyes (*kaṇkaḷiṇ nīram*)
- (7) colour of the tongue (*nākkīṇ nīram*)
- (8) condition of the body (*carira nilai*)
- (9) colour of teeth (*paṛkaḷiṇ nīram*)
- (10) colour of lips (*utaṭṭiṇ nīram*)
- (11) sound of speech (*pēccoli*)
- (12) body (*tēkam*)
- (13) consciousness (*mei*)

Many other parameters can be used to diagnose a disease. I have appended the testimonials that have been given to me as I have cured them. I have sent a medical catalogue (*maruntu Jāptā*) as well.

(c)

Indigenous medical systems are more useful than other systems. A stillborn child could be expelled from the uterus by a half-*ana* drug mentioned in the Tamil medical system. Diseases like leprosy (*kuṭṭam*), leprosy with mutilation of the limbs (*kuṛainōvu*), dyspepsia (*kuṇmam*), and diabetes (*nēriḷivu*) that are considered very difficult to cure can be cured entirely within 20 days by administering mercury (*raca*), sulphur (*kantaka*), arsenic (*pāṣāṇa*), calcined metal and calcined red oxide/mercury sulfide (*centūram*). Fever caused by excessive phlegm (*kapha*) can be cured by administering red oxide of mercury (*liṅka centūram*) in 10 dosages. Very small amounts of drugs with fresh herbs (*paccilai*) can easily detoxify toxic bites like snake bites and dog bites. Bleeding from the rectum can be stopped within two days by administering a drug made up of sesame (*eḷḷu*) and butter (*veṇṇēi*). Tuberculosis (*koṭiya kṣayam*) and rat bites can be cured by administering

red oxide orpiment (*tālaka centūram*) a single time. Cholera (*ūḷi*) can be cured by administering a drug which is suitable for it. Fistulas (*mōlamuḷai*) and piles (*powttiram*) can be eliminated entirely by administering a powder of fresh herbs (*paccilai cūraṇam*). Chronic and severe diseases that are not to be cured without surgery can be cured by administering drugs which are prescribed to cure hydrocele (*aṇṭa rōkam*) eleven times. Ailments related to wind (*vata*) could be eradicated by administering calcined mercury (*raca paspam*) 10 times. Many such diseases could be cured at little cost. The cost of all these drugs which are administered to cure the diseases mentioned above is between half a rupee to Rs. 3, whereas it does not seem that other systems would provide these services at this little cost. Thus, this proves that these drugs are efficient and cheap.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

I have established a hospital that is named “Guka Vaittiyacālai” and have been offering Tamil medicine to the patients at minimal cost or free of charge. Apart from that, I have not joined any other institutions. I do not know whether such institutions have been established.

(b)

(1) Many traditional physicians teach science to students and in turn allow them to treat patients.

(2) Even though they are eligible places to learn medicine, they could not be run to the fullest extent. Unless separate institutions are established and teach the subjects properly, it would not advance.

(c)

There are no proper arrangements to practise and learn indigenous medicines. So, to rectify that lack:

- (1) write and publish textbooks gradually;
- (2) establish many medical schools;
- (3) have the subjects taught by suitable teachers;
- (4) conduct examinations yearly once or twice and confer merit certificates on those who qualify in the exams;
- (5) send them to various places to practise medicine;
- (6) publish a weekly medical magazine in the Tamil language;
- (7) confer prizes on those who discover a new cure and bring it into practice;
- (8) collect the existing manuscripts at present and establish libraries to preserve them;
- (9) make arrangements to participate with other medical professionals;
- (10) make arrangements to send them to various places to learn different medical methods;
- (11) establish medical gardens which include herbs, vines, and trees;
- (12) establish pharmaceutical industries at various places and distribute drugs which are manufactured at those industries to different places;
- (13) set up pharmaceutical equipment;
- (14) set up medical shops at every place;
- (15) appoint physicians in those medical shops to treat the patients; and others.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*
- (3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

It is essential to provide medical training on indigenous lines.

(1) It is essential to place the students under the personal guidance of teachers of excellence.

(2) It is essential for teachers and students to have access to well-appointed hospitals, laboratories, libraries, and museums.

(3) I think that it is also essential to provide sufficient leisure to teachers to pursue independent investigations in their own subjects.

I have known that these ideals have been practised in Bengal Presidency.

(b)

Though these ideals seem to be too high at present, they would certainly be worked out in the immediate present.

(1) It is sufficient to teach indigenous medical systems and bring them into practice.

(2) I think that it is an important work to direct indigenous physicians to advance their education and salary and also to write their textbooks in the modern way.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern

scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

There is no such thing as modern science. Everything already exists. It seems to be a modern method due to unknowing the already existent one. There is no doubt that foreign medical professionals study indigenous medical systems that are providing good (treatments), make specific changes in that, and claim the systems as their own and practise them. There is no doubt that it is essential to exclude things that are not useful in the respective time. Indigenous medicines are superior to foreign medicines. Foreign drugs are not effective, but indigenous drugs are effective. Preparatory methods and quality standards of both systems are different. Publishing unified aspects of the two medical systems periodically are the steps to fulfil such an ideal of achieving a unified system of medicine, for which it is essential to know both the systems.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I agree that the curriculum of studies of indigenous medicine should include subjects as mentioned above and other subjects like that as well.

The proposed curriculum for students of indigenous medicine is:

FIRST YEAR

- (1) Introduction to Indian medical texts – Part 1
- (2) Physiology – Part 1
- (3) Botany – Part 1
- (4) Pharmacopoeia – Part 1
- (5) Materia medica – Part 1
- (6) Purification techniques – Part 1
- (7) Basic principles of food and properties – Part 1
- (8) Characteristic features of physician and patient
- (9) Sphygmology – Part 1

SECOND YEAR

- (1) Physiology – Part 2
- (2) Botany – Part 2
- (3) Pharmacopoeia – Part 2
- (4) Materia medica – Part 2
- (5) Purification techniques – Part 2
- (6) Pathology
- (7) Pharmacology
- (8) Sphygmology – Part 2
- (9) Lessons about equipment for medical preparation and methods for making them

THIRD YEAR

- (1) Book on names and characteristics of diseases
- (2) Book on characteristics and details of adjuvant or auxiliary drugs (*aṇupāṇam*)
- (3) Book on diagnostic techniques (*rōka nitāṇam*)
- (4) Lessons about preparation methods of drugs based on practical experience and skill (*kaipākam*) and as per rules outlined in Indian medical science (*ceipākam*), dietary regimen (*pattiyamurai*), and hostile (*catturu*) and allied drugs (*mitturu*).

- (5) Preparation methods of tablets (*māttirai*), tonics (*racāyaṇam*)¹, medicinal wax (*meḷuku*), cleaning drugs (*tērral maruntu*), mistura² (*kuḷampu*), oil (*eṇṇei*), oil (*tailam*), ointment for the eye (*kalinkam*), nasal instillation (*naciyaṁ*), black magical paint (*mai*), pungent liquid³ (*ceya nēr*), liquid obtained by distillation (*pukainēr*), distilled spirituous liquor (*tē nēr*), pit oil (*kuḷittailam*), oil extracted by a variety of calcination methods (*pūpuṭat-tailam*), medicated oil gathered from the drops falling from a burning wick (*cuṭar tailam*)⁴, calcined red oxides/mercury sulfide (*centūram*), calcined metal and slaked lime (*cuṇṇam*), and consolidating methods (*kaṭṭiṇam*) as well as preparation methods of the mercurial bead (*racamaṇi*).
- (6) Book about the details of drugs and administering methods, the intensity or the relative degree of heat required for calcining medicine (*erippu tiṭṭam*), the process of calcination (*eruttiṭṭam*)⁵, the process of preparing medicine that gives tone to the system (*niṛaittiṭṭam*), and calcining methods (*nērrumāṇam*).
- (7) Anatomy
- (8) Surgery
- (9) Toxicology

FOURTH YEAR

- (1) Practical training under the guidance of experts
- (2) Discovering new methods in medicine
- (3) Writing medical books
- (4) Preaching pride of indigenous medicines
- (5) Propagating these methods to various countries

¹ Medicine or tonic which gives strength, prevents, or removes the effects of age, increases the vigour of the healthy person and cures the ailments of sick. T. V. Sambasivam Pillai, *Siddha Medical Dictionary* (Chennai: Dept. of Indian Medicine and Homeopathy, 2006), vol. V, p. 798

² It is a type of drug; the liquid preparation consists of one or more drugs dissolved in water or diffused in a thick fluid. Pillai, *Siddha Medical Dictionary*, vol. II, p. 1041

³ Pungent liquid prepared by exposing to night dew a mixture of powdered lime and sal-ammoniac. Pillai, *Siddha Medical Dictionary*, vol. IV, p. 519.

⁴ Medicated oil gathered from the drops falling from a burning wick that is soaked in oil. The wick is made of a cloth smeared with a paste of medicine, which chiefly consists of mercury and sulphur. Pillai, *Siddha Medical Dictionary*, vol. IV, p. 175

⁵ It is a process of calcination in which the vessel containing the medicine is kept inside a pile of cow-dung cakes and then burnt. Pillai, *Siddha Medical Dictionary*, vol. I, p. 1428.

(a)

Those who qualify in the first year could be awarded M.B. (*maruttuva pāviyaṇ*).

Those who qualify in the second year could be awarded M.A. (*maruttuva āciriyaṇ*).

Those who qualify in the third year could be awarded M.P. (*maruttuvapati*).

Those who qualify in the fourth year could be awarded M.B.P. (*maruttuvappūpati*).

(b)

Students who wish to learn our medical system should have skills of reading, understanding, and writing knowledge of our national language along with English. They should be at least 16 years of age, healthy, and free of laziness. They should study the syllabus mentioned above for four years.

(c)

It is good to teach in the respective national language. Those who know English could be taught in both languages.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

I do not feel that extending medical registration to indigenous physicians is necessary now. If that law is extended, it will follow that those who do not register should not practise. Due to that, it will become impossible to get medical facilities in the villages. They will only be available in towns.

(a) (b)

It is certain that the villagers would suffer from this activity. Thus, I feel that it would be good to extend that law after increasing the number of physicians based on the new arrangements.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

The medical expenses of Ayurvedic system are far lower than that of the allopathic system.

REASONS

If we approach the allopathic physicians for a fever, they prescribe drugs for one or two months with a charge of 2 *ana* per dosage and send an enormous amount as a bill to us. Further, they charge a minimum of Rs. 2 per visit. They receive gifts after treatment. By contrast, fever and other similar diseases could be eradicated by administering drugs for a minimum of three times and maximum of eighteen times in the indigenous medical systems.

I have never seen such wonderful treatments as mentioned in Tamil medicine anywhere else.

The preparation methods of the mercurial bead (*racamaṇi*) and rejuvenating methods (*kaṛpa muraikaḷ*), and methods for practising yoga (*yōka appiyācam*), methods of improving the longevity of life (*āyulaḷ viruttiṇṇum muraikaḷ*), and methods of attaining wisdom (*ñṇam aṭaiyum muraikaḷ*) and realization (*citti*) by reciting mantras have been explained in detail.

It is said that in this country there are mercurial wells in the foothills of some mountains: Caturakiri, Pothigai, Tirikūṭam, Nampimalai, Cañcēvimalai, Marutuvāḷmalai, Kurumalai,⁶ and others in the Southern part of the country. Siddhas

⁶ **Caturakiri** is a pilgrimage site located near Srivilliputhur, in the state of Tamil Nadu in South India. The hills are a part of the Western Ghats. It is also known as *siddharkaḷ pōmi* (the land of the Siddhars); **Pothigai** is located within Kalakkad Mundanthurai Tiger Reserve, Tirunelvely District of Tamil Nadu. It is in the Southern part of the Western Ghats of South India. Ancient tradition holds the mountains of Pothigai to be where the sage Agastya provided the first grammar for the Tamil language; **Tirikūṭa (Tirikooda malai)** hill is located in Kuttralam, Tirunelvely District of Tamil Nadu, India. Tirikooda Rasappa

would reside in the caves of these mountains. There are very many fresh herbs in these mountains. These herbs are much better than the herbs on the seashore. As herbs have life, they should not be wasted by being plucked unnecessarily. They should be plucked as prescribed in the texts.

It is certain that *Phyllanthus reticulatus* (*karunelli*), *Justicia gendarussa* (*karunocci*), luminous grass (*jōtippul*), luminous tree (*jōtivirukcam*), and quintessence salt (*karunīli*) are in the mountains. There is no doubt that a two-*ana* drug could cure the fever caused by *kapha* and apoplexy (*jānni*). To do so, only red calcined powder of cinnabar (*liṅka centūram*) is sufficient. One *palam*⁷ cinnabar (*liṅkam*) is 8 *ana*. If calcined red oxide/mercury sulfide (*centūram*) is prepared by converting that after the purification process, it could be distributed even a maximum of 11 times to 24 patients based on one time per one *mañcāṭi*⁸. The cost of drug per each patient is 4 *paise*. A further 2 more *paise* could be added for preparation as well. So, the cost of a drug is 6 *paise*. There is no necessity to examine the patient directly if the physician knows the signs of the diseases; he could send the drugs from where he is. I note that there are many more drugs at a cheap rate to eradicate diseases in the indigenous medical systems. So, I will stop here as I am afraid that it will become too elaborate if I give examples.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

The causes of the decay of the indigenous systems of medicine are:

Kavirayar composed the songs entitled *Kurṛāla Kuravañci* which explain about the prosperity of the hill; **Nampimalai (Nambi Hills)** is also located in Kalakkad, Tirunelvely District of Tamil Nadu; **Cañcēvimalai (Sanjeevi hill)** is located at Rajapalayam, a township in Tamil Nadu. It is believed that fragments which fell from the Cañcēvimalai while being carried by Lord Hanuman created Caturakiri; **Maruttuvāḷmalai (Marundhuvazh Malai)**, meaning “the abode of medicinal herbs,” forms the part and the southernmost tip of the Western Ghats of Agasteeswaram taluk of Kanyakumari district. According to tradition, the Maruttuvāḷmalai is a fragment of the Cañcēvimalai (Sanjeevi hill), a piece of which fell down here, and it was carried by Hanuman from Mahendragiri to Lanka for healing the fatal wounds of Lakshmana, the brother of Rama, the epic hero. **Kurumalai** is located in Kayathar, Tuticorin District of Tamil Nadu.

⁷ A standard weight of Tamil region.

⁸ A standard weight of Tamil region.

- (1) researching philosophy and doctrine instead of medicine being practised by learned scholars, and medicine being practised by less-knowledgeable people with the help of books;
 - (2) keeping treatises in difficult verses and not publishing them in prose form;
 - (3) not sharing one's own knowledge with others;
 - (4) spreading the scriptures and sciences of this country to other countries;
 - (5) spreading the foreign medicine, sciences, and methods of cultivating them;
 - (6) use of foreign medicines instead of indigenous medicine by these country-men;
 - (7) neglecting indigenous physicians and not providing any monetary benefit to them;
 - (8) envisaging that treatment by graduates would give an advantage;
 - (9) no easy and proper outlet for getting indigenous drugs;
 - (10) no proper way, method, or facilities for teaching the indigenous medical systems;
 - (11) lack of government support;
- and many more causes like these.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

(a)

The government should recognise indigenous systems of medicine and foster them by sanctioning financial aid.

(b)

I think that indigenous systems of medicines could be fostered by grants from the government and the local boards by means of preparing medical texts with the help of able men, opening medical schools, training students, conducting

examinations, granting degrees, appointing graduated students in the institutions, founding libraries, developing herbal gardens, and publishing weekly magazines.

(c)

By recognizing and allowing the starting of indigenous medical courses in universities.

(d)

Besides, indigenous systems of medicines might have been advanced by individual members and private enterprises by way of financial grants and promotion.

TAMIL MEDICINE

1. Tamil medicine (*tamiḷ maruttuvam*) and Tamil *vaiṭṭiyam* are the same. There will be diseases as long as people exist. That which cures the disease is called medicine. The one who heals the disorders is called a physician. The texts which comprise the details of drugs to cure diseases, pathology, and preparatory methods of drugs are called medical texts. The one who is affected by the disease is called a patient.

MEDICAL TEXTS

2. Those texts which were given by God to cure the diseases of living beings are called the first medical texts. After that, sages and eighteen Siddhas have written many more medical texts in the Tamil language in the form of poems. Those texts are called Siddha texts. Siddhas have immortal life with arch-wisdom. Many glossaries (*nikaṇṭu*)⁹ have been written to give the meanings of words and technical terms mentioned in the texts written by Siddhas. Many pharmacological texts also have been written. There are many texts which comprise the details of purifying techniques, preparation methods of pungent liquids (*ceya nēr*), distilled acids, calcined metals (*pasmam*), calcined red oxide/mercury sulfide (*centūram*),

⁹ Any book containing words arranged in order with their several meanings explained briefly in verses. *Vaiṭṭiya nikaṇṭu*: A glossary which communicates information on entire subjects or branch of a subject in medicine arranged in verses, a medical vocabulary of plants and drugs compiled in intelligible verses. Pillai, *Siddha Medical Dictionary*, vol. IV, p. 1748.

melting metals (*lōkaṇkaḷ urukkuvataṛku*), calcined sulphate of zinc (*cattu*), universal drugs¹⁰ (*kuru maruntu*), and others.

3. These texts are not texts translated from Sanskrit (*vaṭamoḷi*) by the eighteen Siddhas. There is not a single book of this name in that language, which itself is proof. Books on botany, physiology, physics, chemistry, and so many others are part of Siddha texts, written in many verses. Since they were not written separately, they had to say that there are no such books. Some dare to say that there are no texts on physiology in the Tamil language. How is it possible to practice medicine without a text on physiology? So such a text must exist. Though such a text is not available at present, the concepts of that text have been written in some other texts. Those texts will come out very soon.

4. It does not mean that the concepts of Ayurveda described in one language were not used in other languages. It is certain that the concepts of Sanskrit and Tamil languages have been used interchangeably. However, the preparation methods of drugs mentioned in Sanskrit and Siddha medicine are different.

5. Certainly we can say that there are no drugs in any other medical systems like the drugs in the Tamil Siddha medicine to cure leprosy (*kuṭṭam*), leprosy with mutilation of limbs (*kurainōvu*), diabetes (*nēriḷivu*), carbuncles (*piḷavai*), dyspepsia (*kuṇmam*), tuberculosis (*kṣayam*), dropsy (*pāṇṭu*), the fleshy excrescence protruding outwards in the rectum caused by piles (*mūla muḷai*), and many other diseases. The drugs of Tamil medicine are as strong as a mad elephant (*matayāṇai*), whereas the drugs of other systems are as weak as a deer (*pulvāi*). Calcined metals (*pasmam*), slaked lime (*cuṇṇam*), and calcined red oxides/mercury sulfide (*centūram*) have not been prescribed by any other medical systems than Tamil medicine. These never lose their potency even after years of preparation. Taking other drugs fifty times is equivalent to taking this medicine five times. There are no side effects to either patient or physician by prescribing and taking this. *Bōpati centūram*, a specific *centūram* which is a compound of nine types of calcined red oxides/mercury sulfide (*centūram*), is mentioned in Tamil medicine. It would save a patient who is about to die.

6. I cannot say with certainty that new methods which have not been mentioned in this medical system have been discovered in modern medicine. I clearly understood this by having read the texts of this system extensively. It is no fault of the text if we have not read it.

7. At present, Tamil physicians prepare and dispense the drugs which are known to them through generations; other than that there is nothing. There are countless preparation and administering methods. There are also numerous

¹⁰ It is a reputed medicine of high potency capable of radically curing all ailments. Pillai, *Siddha Medical Dictionary*, vol. II, p. 1001.

diseases. What could one do through claiming as a physician to have imperfect knowledge and a small business? Where are the possibilities for him to enrich himself by learning? Who would help him? His knowledge would appear and disappear within himself.

8. Medical systems emerged in many countries based on climatic conditions. It is only the drugs of the respective countries that can cure their respective people instantly. Other medical systems might cure after some time. It is essential for the respective countries to advance their respective medicine. Instead, marginalizing the medical system without understanding its potential is not worthy. What aspect is lacking in this indigenous system of medicine? 4,448 diseases, 1,008 types of fresh herbs (*paccilai*), 25 types of salts (*uppu*), 120 types of secondary minerals (*uparacam*), 64 types of arsenic (*pāṣāṇam*), 11 types of metals (*lōkam*), 9 types of gems (*rattiṇam*), 108 types of rejuvenation drugs (*karṣam*), 110 types of pungent liquids (*ceya nēr*), 64 types of acids (*tirāvakam*), 14 types of strong slaked lime (*kurucuṇṇam*), 2,000 types of adjuvants or auxiliary drugs (*aṇupāṇam*), 25 types of euphorbia genus (*kaḷḷi*), and 1,200 types of alchemical methods (*racavāta muraikaḷ*) have been explained extensively in the Siddha texts.

Apart from that, medicines such as decoctions (*kaṣāyam*), oil (*eṇṇei*), ghee (*nei*), lint (*tiri*), fumigation (*pukai*), pastry (*kaḷi*), steaming (*piṭṭu*), ointments (*pūccu*), inserting caustic lint (*kāramvaittal*), surgery (*cattiramiṭal*), errhines (*naciyamiṭal*), medicinal powders (*cūraṇam*), medicinal oils extracted from astringent drugs (*tuvaṇṇei*), bandaging with flour (*mā vaittuk kaṭṭal*), powdered medicines obtained by pounding drugs and filtering them (*iṭi poṭi kaḷiṅkam*), nasal instillations (*ākkirāṇam*, *naciyam*), plastering (*tīrrutal*), mistura (*kuḷampu*), butters (*veṇṇei*), medicated oil (*tailam*), electuaries (*lēkiyam*), pills (*uṇṭai*), tonics (*racāyaṇam*), magical paint (*mai*) and wax (*meḷuku*) and preparatory methods of these and making methods of calcined powders of nine gems have been explained in great detail.

Further, methods of extracting pit oil (*kuḷittailam*), refining metals (*pūppuṭam veikkumurai*), extracting mercury from vermilion (*vālaracam veikkumurai*), and extracting luminous oil (*cuṭar tailam*)¹¹ have been explained elaborately. Drugs and procedures have been described for wounds (*iraṇam*), incisions (*veṭṭuppuṇ*), stab wounds (*kuttuppuṇ*), weapon wounds (*āyuta puṇ*), burn injuries (*nerup-puṇ*), fractures and dislocations due to falling from trees and heights, and death due to falling into a well.

¹¹ Medicated oil gathered from the drops falling from a burning wick which is soaked in oil. The wick is made of a cloth smeared with a paste of medicine which chiefly consists of mercury and sulphur. Pillai, *Siddha Medical Dictionary*, vol. IV, p. 175.

Aetiology and diagnosis of diseases have been explained in the books. Many texts on the pulse (*nāṭi nōl*) have been written about the condition of the body and diseases. Pharmacopoeia, purifying methods, solidifying and condensation methods have been elucidated in great detail. Preparation methods of pungent liquid (*cenēr*), distilled spirituous liquor (*tē nēr*) and liquid obtained by distillation (*pukainēr*), the intensity or the relative degree of heat required for calcining medicine (*erippu tiṭṭam*), methods of refining metals (*puṭam veikkumuṟai*), crucible-making methods (*kukaittiṇucu*), blowing methods for calcining medicine (*ūttumuṟai*), equipment for making drugs (*maruntukaḷ ceiyavēṇṭiya yantiraṅkaḷ karuvikaḷum*), preparatory methods and time for making an all-healing drug (*kurumuṟai*), calcined red oxides/mercury sulfide (*centūram*) and calcined metals (*pasmam*), methods for producing good natural colour (*varṇa iṇam*), calcination methods (*nīrriṇam*), melting methods (*urukkiṇam*), solidifying methods (*kaṭṭiṇam*), methods for converting iron into copper (*ayattai cempākkum muṟai*), methods for extracting lead from orpiment (*tālakattiliruntu iṇam eṭukkum muṟai*), making iron lead sand (*ayccavaḷai*), and the method of making a basin out of magnetic iron (*kānta kiṇṇam*) have been explained excellently in this medical system. Making methods of wax-like substances in metals (*meḷukuṇṭai*), standard gold needles (*mārraṇi*), pungent medicines (*vāta kuṭōri*), methods to extract juices from herbaceous plants, methods of converting metals into a reducible mass (*kaḷaṅkumuṟai*), sprinkling of medicinal powder during the fusion of metals for making them brittle or otherwise rendering them into an alchemical compound (*kirācam*), and sublimation have been elucidated in great detail.

Furthermore, many drugs have been mentioned to treat dryness of uvula (*uḷnākkulartal*), stricture of the urethra (*cataikuṟimōṭal*), polyps (*mōkkuccatai vaḷartal*), incised wounds (*karuvikoṇṭu āṭiya puṇ*), cancers on top of the head (*uc-cipurru*), and wounds (*viḷuntapiuṇ*).

Moreover, many texts and drug-making methods have been written about in much detail about the development of the foetus (*karuvai vaḷarkkavum*), removing the uterus (*kerppak kōḷkaḷai nīkkavum*), performing a caesarean (*piracavattai curukkuc ceiyavum*), and expelling the stillborn child from the uterus (*vayirruṭ catta piḷlaiyaik karuviyātātē piṟakkac ceiyavum*) as well as about curing 96 types of eye diseases (*kaṇ viyātikaḷai tīrkkavum*), smallpox (*vaicūri*), and 48 types of carbuncle (*piḷavai*). The subjects such as cauterization (*cuṭutal*), couching (*kaṇṇil cūri koṇṭu kutti urittal*), bandaging the eyes after applying medicine (*upanayaṇam*), having a vapour-bath (*āvipiṭittal*), countering inflammation (*koti toṭal*), chanting mantras to effect a cure of disease (*pārvai pārtal*), bandaging with fresh herbs (*aṭaikaḷ veittuk kaṭṭaḷ*), fomentation (*ottaṭam pōṭutal*), pulling a tooth

(*vērvēṭṭi maruntu koṭuttal*), and administering drugs have been explained extensively.

Due to the high prevalence of venomous animals (*viṣa jantu*) in this country, antidote drugs (*viṣa tīrpatarkuṛiya maruntukaḷ*) and drugs to treat dog bites have been elucidated in detail. Natural products like the red seed of *Abrus precatorius* or jequirity bean (*kuṇṇi muttu*), *Adenantha* seed (*mañcāṭi*), rice and black gram (*uḷntu*) for weighing and measuring the drugs and measurements such as *paṇaviṭtai*, *virākaṇṭtai* have been given in the medical system.

Siddha texts mention abutilon (*veḷḷai tutti*), dry lotus (*kal tāmarai*), mountain tree (*rōma viruṭcam*), dog tree (*cuṇaṅkaṇ viruṭcam*), the black variety of plum-bago (*karuṅkoṭi vēli*), the red variety of Indian chick weed (*centirāi*), *Butea frondosa* (*veṇ puracu*), zinc sulfate (*veḷḷai kaṇṭar*), rejuvenating drugs (*cempalvi*), the red variety of square spurge (*ceṅkaḷḷi*), paulay (*pālai*), the black bitter variety of Indian spinach (*karuppuppacalai*), *Tinospora malabarica* (*porcīntil*), red blinding tree (*civantatillai*), *Albiflora* (*veḷḷaittūtuvaḷai*), the plantain tree yielding dark coloured fruits (*karutta vālai*), black eclipse plant (*karuppuk karicālai*), purple stramony (*karu ūmattai*), white iron weed (*veṇkarantai*), iron weed (*kallārai*), a plant said to grow in the Potikai mountain and on the shores of the river Tambaraparani (*mōvilaik kuruntu*), Coromandel ebony (*karuntumpai*), mountain herb (*veḷḷai kānti*), *Capparis horrida* (*ātaṇṭai*), and many other herbs for curing paired diseases and combined diseases [i.e., diseases caused by a disordered state of all three humours]. I will talk about the properties of these drugs in the book I am writing. There are many methods for extracting juice (*cāru*) from herbs (*mōlikaikaḷ*). There are methods for extracting juice from leaves (*taḷaikaḷ*) and for the liquefaction of juice (*cārukaḷai taṇṇīrākkutaḷ*). Salt (*uppu*) can be extracted from any herb, and these would be useful as well. Roots of many herbs convert drugs (*carakku*) into powder. One herb can convert gold (*taṅkam*) into lime (*cuṇṇāmpu*); another herb breaks silver (*veḷḷi*); another removes the black patina (*kaḷimpu*) on copper (*tāmiram*); another herb pulverizes zinc (*nākam*); another pulverizes lead (*īyam*); another herb consolidates liquid mercury (*racam*) and converts it into a substance like a butter (*veṇṇei*); another converts milk into white sugar (*cīṇi*); another herb changes water into ice (*paṇikkaṭṭi*); a herb can break carbuncles (*piḷavai*); another can cure an incised wound; another herb can bind broken bones; another enriches knowledge; another herb strengthens the body (*tēkattai palappaṭuttum*); another one removes grey hair (*naraiyaimāṛrum*); another one dissolves stone (*kallai-kulaikkum*). Despite herbs having these sort of peculiar qualities, there are no proper arrangements to learn about them; what can we do? Still, by writing about herbs, there would be expansion.

THE QUALITIES OF PHYSICIANS

- (1) Should read many more medical texts
- (2) Should learn under a guru
- (3) Siddha texts mention that one who has a superior quality, great fame, great knowledge, good artistic skill (*kalaipporuḷ vallāṇ*), honesty, and meritorious thinking; and who is soft-spoken, a calm person, well-spoken, and truthful; has the skill to understand signs and symptoms of diseases, has the skill to cure diseases, has the skill to eradicate diseases quickly, has the skill to diagnose pulse; is not disabled and a devotee; wears white clothes, etc. is a good physician. Further, if he treats those who have committed the five great sins, are evil, speak deceit, commit robbery and are cruel, their diseases would not be cured, but if he treats good people their diseases would be cured.

There is a scientific text about the quality of substances (*patārtan̄kaḷiṇ taṇmaikaḷ*). In that text, the quality and properties of the many substances like milk, water, and food have been explained in great detail.

Many kinds of subject can be found in Siddha texts. If I attempt to explain those subjects, it would be too much, so I will stop here.

Thus, at the level of my knowledge, I could not say that there are many more secrets in the other medical systems than the methods mentioned in Tamil Siddha medical texts. I humbly request you to allocate funds and make proper arrangements to examine the Siddha texts and find the truth through analysing each subject mentioned in them. I request you to forgive me if there are any mistakes found in my writings.

M. R. Ry. S. V. Vajapeyulu Avargal, H.L.M.S.

Translated from the Tamil by D. V. KANAGARATHINAM

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I will try to describe Siddha medicine (*citta vaittiyam*), named Tamil medicine (*vaittiyam*).

If an atheist (*nāstikaṇ*) asks for proof of the scientificity of Hindu science, answer him that it is simply medical science. Drugs based on this science which are prescribed to cure particular diseases should be understood through experiments. The truth of science is that diseases of the urinary system (*mēka rōkam*), like stabbing pains (*cūlai*), will be cured by administering oxide of mercury (*rasa pasmam*). This science should be accepted after establishing that sickness is healed by administering those drugs to a patient affected by stabbing pains (*cūlai*). Iatrochemistry (*rasāyana cāstiram*) is also like this. For example, this science's principles such as that metal can be calcined by the juice of herbs should be accepted after conducting experiments. Further, alchemy (*vātam*) is also similar to that. As it is a very precise science, it is difficult for everyone to become experts.

Its methods have been kept secret, too. It is only available to suitable persons. Further, the true principles of this science should be accepted after the determination of astronomy (*vāṇa cāstiram*) and sunrise (*utaya*) and sunset (*astamaṇam*), the motion of planets (*cāraṇkaḷ*), eclipses (*kirāṇam*), and dawn and the position of the stars by mathematics and confirmation of these things by experiments. Likewise, the true principles of excellent sciences such as astrology (*jōtiṭam*), *māntirīkam*¹, yoga, and wisdom (*ñāṇam*) should be understood.

Thus, the first source to prove the true principles of all kinds of excellent sciences of the Eastern country is the medical science. I will try to explain it.

¹ Art of exercising supernatural powers by means of mantras.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

In this method, it has been said that “excess matter” (*malam*) is a cause for disease. According to Western medicine, excess matter occurs in every cell of the body. The excess matter is expelled, often by some of the important organs. It is a principle of Western medicine that if any deficiency occurs in such a discharge, disease will occur. Thus, the principles of Western and Eastern countries are similar in this case.

According to this principle, disease-redressing mechanisms have been created. There is a method of washing the colon (*perunkuṭal*) by injecting water through the anus. There is a method of washing the stomach by injecting water into the stomach by a rubber hose put through the throat. Breathing exercises have been developed to alleviate respiratory disorders. The methods of expelling excess matter from the body have been created by increasing the functions of excretory organs such as kidneys, skin, and others. Easterners became expert in the techniques by practice and advanced these practices further. For example, in the Western method, water is injected into the colon (*perunkuṭal*) by a syringe which is used for enemas. However, those practitioners who are qualified in Eastern methods clean their bowels through pumping enough water into their intestine by means of sitting in water. I feel that Westerners would consider this impracticable. I have witnessed these practices; further, I have tested them as well. Yet, I have seen even more unrealizable practices than this carried out as well.

I have seen cleansing of the urinary bladder by pumping water into it through the urinary tract. Likewise, cleansing practices of stomach, nasal passage and above the eyes have been explained elaborately. Many people are practising them.

Breathing exercises are pre-eminent among these sorts of practice of Eastern countries. If Western physicians suggest breathing exercises for respiratory disorders, Easterners also suggest breathing exercise as a panacea (*sakala rōka nivāraṇam*) and a preventive technique for all diseases, and they have created treatises by systematically categorizing these into multiple practices. Easterners claim that by becoming expert in these practices, not only may one escape from falling ill, but also that it is possible to live without grey hair (*narai*) and wrinkling of the skin (*tirai*), to stay young and even to overcome death. “Hypnotism” (*vacīyam*), which is practised by some scientists in Western countries, and “hibernation” (*ceyalārīrutal*), which is practised by some animals, can be cited as an example and reference for their claims. I will stop here as this will become long-winded if I explain this subject in detail.

The principles of Easterners are evident in these methods. It is their principle that humans can remain young by cleansing “excess matter” (*malam*) and subtle channels (*nāṭi*). Practices which are suitable for cleaning excess matter (*malam*) and subtle channels (*nāṭi*) are mentioned clearly. They (the experts) have explained the above-mentioned practices elaborately and methodically after realizing that if excess matter (*malam*) was not properly disposed of by the respective organs, it would cause diseases.

The principles of Western medicine stand faultlessly in the light of modern scientific laws. As principles of Eastern countries are similar to those principles, these principles could also be accepted as faultless. Besides, in order to analyse a particular theory which comprises many kinds of content, each type of content of that theory should be inspected separately.

It should be analysed not only theoretically but practically as well. The first reason for doing this is to have faith that truths may be found in the ancient science as well. Even if one does not have faith, one has to at least consider things. The pessimism that scientific texts other than modern scientific texts do not hold truth is not applicable. If there is pessimism, this means it is rare to explain the results without prejudice and bias; instead, the results of the tests would be explained unilaterally and prejudicially. However, I do not feel like explaining principles currently described through discussion and experiments, as principles of both countries are analogous. The principles of Eastern countries would stand as strongly as the principles of Western countries in the light of modern scientific laws.

DIAGNOSTIC TECHNIQUES (*RŌKA NITĀNAM*)

Like Western medicine, the Siddha (*citta*) system has many techniques for diagnosing diseases, such as the examination of pulse (*nāṭippariṣai*) and signs of the face (*mukakkuri*), stool (*malakkuri*), urine (*nīrkkuri*), eyes (*vilikkuri*), tongue (*nāvukkuri*), and teeth (*tantakkuri*), of which pulse examination (*nāṭippariṣai*) is said to be distinct and important. The science about this is enormous. The sum of subtle channels (*nāṭi*) is also very high. It is said that, calculating each part of the body, a total of 72,000 subtle channels (*nāṭi*) are in the body. In this context, subtle channels means blood vessels, because the pulse (*nāṭi tuṭippu*) is determined by placing three fingers on the blood vessel that is near the wrist and observing the beating pattern. However, *cuṣamuṇai*² is said to be a part of these 72,000 and an important one among them. It is said that through this, there is the rising up of Kundalini (*kuṇṭeli*) from *mōlātāra*³ to *sahasrara*. This is practical and should be realized by practising. It is difficult to determine these subtle channels when dissecting the body. Further, it is doubtful whether they are blood vessels. These subtle channels are determined as pathways of the “electric current” (*ārrāl*) of the body by those such as High Court Judge (*uyar nītimaṇra nītipati*) Sir John Woodroffe and others who are experts in the field of Sanskrit tantra. Thus, the truth about this is to be known from the great practitioners. It is not possible to be known from books or by those who are amateurs or readers and sellers of the books.

Many treatises of pulse examination (*nāṭippariṣai*) must have perished. Because even though excess matter (*malam*) is said to be the cause of diseases, in experience the excess matter invigorates the wind (*vāta*), bile (*pitta*), and phlegm of the body. Invigoration can be diagnosed by pulse examination (*nāṭippariṣai*). It is said that the pulse should be diagnosed by placing three fingers on the patient’s wrist. It is said that the first finger, also known as index finger, the middle finger, and the third finger, known as ring finger, indicate wind, bile, and phlegm, respectively. Each pulse has its own rhythms. If they vary from their own rhythms, there are rules to determine diseases based on those variations. It is said that a healthy person takes 21,600 breaths per day. Every day, a healthy person breathes through the right nostril in the morning from 6:00 to 7:00 AM and through the left nostril from 7:00 to 8:00 AM, and this alternate flow changes every hour. Further, the breath will start through the right nostril on some days and through the left

² This is one of the ten nerves or arteries spreading through the human body and extending from the nerve centre at the sacral region up to that at the cerebral region.

³ This is one of the six so-called mystic centres. It is situated at the end of the vertebral column between rectum and genitals.

nostril on other days; these days are also mentioned. It is said that if the breath starts against these natural norms, this is also a sign of illness. It is possible to correct that change. Ten subtle channels have been said to be most important out of the 72,000 channels of the body.

NAMES OF TEN IMPORTANT CHANNELS (*TACA NĀṬIKAL*)

(1) *iṭakalai*, (2) *piṅkalai*, (3) *cuḷimuṇai*, (4) *atti*, (5) *ciṅkuvai*, (6) *kāntāri*, (7) *alampulalai*, (8) *puruṭaṇ*, 9) *kukuṇi*, and (10) *caṅkuṇi*. These are the ten channels.

If variations occur in these channels, that leads to diseases. Treatment of diseases should be done based on the practitioner's own expertise in the field. Ten winds (*vāyu*) are also mentioned.

NAMES OF TEN WINDS (*VĀYU*)

(1) *prāṇaṇ*, (2) *apāṇaṇ*, (3) *viyāṇaṇ*, (4) *utāṇaṇ*, (5) *camāṇaṇ*, (6) *kurmaṇ*, (7) *nākaṇ*, (8) *kirikaraṇ*, (9) *devatattaṇ*, and (10) *daṇaṇcayaṇ*. These are the ten winds.

*Apāṇaṇ*⁴ and *viyāṇaṇ*⁵, with *prāṇaṇ* which is located in the nether region, *camāṇaṇ*⁶ with *utāṇaṇ*⁷, then *kurmaṇ*⁸, favorable *nākaṇ*⁹, graceful *kirikaraṇ*¹⁰, *devatattaṇ*¹¹, and *daṇaṇcayaṇ*¹² are ten in total. *Prāṇaṇ* emerges in one of the mystic centres (*mūlam*) situated at the end of the vertebral column between rectum and genitals, reaches to the head (*ciracu*), and runs through the nostrils located under the eyes; it emerges as twelve, enters as eight, and saves as four.

Apāṇaṇ emanates from the region under the navel (*untī*) and is an agent of discharging faecal matter and urine; *viyāṇaṇ* is located in the shoulder and creates fatigue and appetite; *utāṇaṇ* converts chyle into blood and infuses it into a big artery (*peru nāṭi*); *camāṇaṇ* nourishes the body.

⁴ According to Pillai (Vol. 1: 309), *apāṇaṇ* is known as ventris crepitus.

⁵ According to Pillai (Vol. 5: 1136), *viyāṇaṇ* causes the circulation of the blood.

⁶ According to Pillai (Vol. 3: 1866), *camāṇaṇ* is the vital air causing digestion.

⁷ According to Pillai (Vol. 1: 1101), *utāṇaṇ* is the vital air causing speech.

⁸ According to Pillai (Vol. 2: 1108), *kurmaṇ* is the vital air causing the closing and opening the eyelids.

⁹ According to Pillai (Vol. 4: 1622), *nākaṇ* is the vital air which produces hiccups.

¹⁰ According to Pillai (Vol. 2: 830), *kirikaraṇ* is the vital air which discharges the function of sternutation.

¹¹ According to Pillai (Vol. 4: 1356), *devatattaṇ* is the vital air which produces yawning.

¹² According to Pillai (Vol. 4: 920-21), *daṇaṇcayaṇ* is the vital air responsible for inflammation of the body.

Kurmaṇ discharges the function of blinking the eyes; *nākaṇ* is responsible for causing yawning and hiccups; *kirikaraṇ* is responsible for the function of stretching and bending; *devatattaṇ* is responsible for talking while conscious; *daṇaṇca-yaṇ*, also known as *ōrmaṇ*, leaves the body by parting the structure of the skull.

PRINCIPLES AND METHODS OF TREATMENT

There is a small exercise to correct the breathing if it starts wrongly instead of through the indicated nostril. By this exercise, the bodily wind on the wrong path can be directed towards the right path. Likewise, winds which are inside and outside of the stomach could be corrected by exercises. These methods were mentioned for various exercises.

Keeping vital air as Śiva
How to unite with vital air, people do not know.
When they know how to unite with vital air
Iśa with vital air are in pleasure.

As mentioned earlier, according to Siddha (*citta*) texts, accumulation of excess matter (*malam*) is responsible for diseases. Due to this accumulation, wind, bile, and phlegm digress from their ideal levels. It is obvious that the pulse is the beating of blood vessels.

It is said that the state of the pulse should be examined by placing three fingers on the blood vessels. It is said that disease may be diagnosed after mastering pulse examination (*nāṭippariṣai*) by practice. Based on this principle, drugs are chosen. It is determined that the characteristic of medicine is to expel the excess matter (*malam*) that stays in each cell and to support each cell to achieve its normal state. Based on this principle, drugs are selected. Arsenic (*pāṣāṇam*) is not used in any medical system other than the Siddha (*citta*) medical system. *Upa pāṣāṇam*, calcined metal (*pasmam*), red metallic powder (*centūram*), and consolidated drugs (*kaṭṭu*) are made from arsenic and employed immeasurably. The unique characteristic of these arsenics (*pāṣāṇam*) is to bring abnormal cells to a normal state which is also the function of drugs named “alternative medicine” in allopathy. However, these sorts of drugs are of a soft nature in that medical system. In the Siddha (*citta*) system, these sorts of drugs, which are of a hard nature and are usually prescribed in small quantities, can cure diseases rapidly if diseases are diagnosed and drugs are administered properly.

Mercury (*irasam*), perchloride of mercury (*vīram*), impure subchloride of mercury (*pūram*), cinnabar (*liṅkam*), oxide of mercury (*rasa centūram*), mineral

poison (*maṇḍilai*), oxide of lead (*mirutāraciṅki*), white arsenic (*veḷḷai pāṣāṇam*), orpiment or yellow arsenic (*tāḷakam*), sulphur (*kentakam*), mica (*appirakam*), phosphorous, i.e., a kind of prepared arsenic (*timuṟukal pāṣāṇam*), yellow oxide of arsenic (*kauri pāṣāṇam*), and others are transmuted by herbs, medicinal preparation of lime and sal-ammoniac (*ceyanīr*) and salt (*uppu*) in many ways and used as drugs. These are hard drugs which have special “alternative actions.” They are excellent drugs that can do miraculous work in the hands of experienced physicians. No better drugs than these are available in any other medical system. These drugs cause changes and cure diseases suddenly and quickly, just as the Western methods of “serum therapy” and “vaccine therapy” using microorganisms and bacteriological products make positive changes in the body and cure diseases.

There is no doubt that the special treatments mentioned in this method are too numerous and there is no objection to that. Siddhas (*cittarkaḷ*) composed these texts many centuries ago. Before composing these texts, they should have had enough experience and experimentation, and it seems that they did. It has been primarily instructed to medical practitioners that treatment should be given by looking at the signs of the face (*mukakkurī*), stool (*malakkurī*), urine (*nīrkkurī*), eyes (*viḷikkurī*), tongue (*nāvukkurī*), teeth (*tantakkurī*), and pulse (*nāṭikkurī*) as well as the condition of the patient even when treating normal ailments of ordinary patients. Thus, practitioners have never administered drugs without diagnosing diseases by specialized techniques; they have treated patients only after diagnosing diseases by specialized experimental techniques. I would like to explain these subjects by one or two examples. We could select a drug and some administering methods mentioned in the Western system.

As an example, I will speak about white arsenic (*veḷḷai pāṣāṇam*). This is a hard drug. According to the Western method, some drugs have been made using this. Each one is a little different. They use it separately and use drugs which are made by mixing this with mercury and iodide of potassium as well. Some are calcined metals (*pasmam*) and others are fluid. Even though the general character of arsenic (*pāṣāṇam*) is one, its character differs based on additive agents like mercury (*rasam*). Likewise, the above-mentioned drugs also are a little different when additions are made to them in various ways. These differences make it possible to prescribe drugs according to variations in diseases, bodily types, seasons, and local practices and customs. There are many of the above-mentioned differences and making drugs to suit these differences is appropriate.

In regard to the drug preparation and administering methods of Easterners: For instance, [just as there are] drugs made by adding white arsenic (*veḷḷai pāṣāṇam*) to mercury (*rasam*) and potassium iodide in the Western method, [in the Eastern tradition] there are calcined metals (*pasmam*), acids, tablets, oils and

waxes (*meluku*) that are made by mixing cobra venom and musk (*nāpi*), mercury (*rasam*), sulphur (*kantakam*), orpiment or yellow arsenic (*tālakam*), and numerous other [compounds] made with arsenic. Let me give one more example: in the Eastern medical system, drugs which control and cure diseases rapidly, stringently, and with certainty are calcined metals (*pasmam*), red metallic powder (*centūram*), and oxide of calcium (*cuṇṇam*) made in that way.

If gold and silver metals are made into lightweight leaves (*rēkku*) which could fly in the air, the scientific treatise says that eating these leaves along with food, according to Eastern methods, can make the body strong. Accordingly, kings, nawabs, and lords of the Northern country consume gold leaves.

Western scientists also admit golden salt as a drug substance for strengthening the body and use it. There are a few salts mixed with gold for this. However, calcined powder of gold (*taṅka pasmam*), red medicinal powder made of gold (*taṅka centūram*), and oxide of calcium made of gold (*taṅka cuṇṇam*) are plentiful in the Eastern system. Drugs which are made by mixing gold (*taṅkam*) with arsenic (*pāṣāṇam*), mercury (*rasam*), and sulphur (*kantakam*) are also plentiful. Further, calcined powder of gold (*taṅka pasmam*) can be made in various ways. Gold is the heaviest among the metals.

If “hard iron” (*kaṭiṇamāṇa irumpu*) is left outdoors, it will react with the “oxygen” (*pirāṇavāyu*) in the air and rust; it is then named iron oxide (*irumputuru*). However, no matter how many days gold is left outside, “oxygen” (*pirāṇavāyu*) is powerless to react with it. If iron is dropped into water, it gets rusty quickly. Even if the same iron is dropped into acids like “strong sulphuric acid” (*ken-takattirāvakam*), it will change quickly, but these acids with their power to change iron are powerless for changing gold separately. Combined “strong nitric and strong hydrochloric acid” (*aṭar naiṭṭirik marṛum aṭar haiṭrōkuḷōrik amilam*) is powerful to create changes in gold. This gold is transmuted into calcined metals (*pasmam*) either by covering it with ground fresh leaves (*paṭcilai*) or by grinding gold leaves with juice of fresh leaves and converting them into tablets which are purified by fire (*puṭamiṭal*). The gold which is not changed by being dropped into strong “sulphuric and strong nitric acid” and purified by fire (*puṭamiṭal*) transmutes into calcined metals (*pasmam*) by losing its strength as soon as it is in contact with fresh green leaves (*paṭcilai*).

I do not know what kind of substance in the green leaf changes it like this. Much has been said about the separate characteristic of each calcined metal (*pasmam*) made by this method. There are plenty of green leaves that transmute gold into calcined metals (*pasmam*) in this way. Calcined metals (*pasmam*) which are calcined by green leaves (*paṭcilai*) have minute variations like drugs which are made by arsenic (*pāṣāṇam*). They [the experts] have mentioned the chosen

methods of using green leaves that give subtle differences in a variety of technical experiments and have explained the differences in calcined metals (*pasmam*), the symptoms of diseases, and drug-administering methods as well. Gold can be calcined (*nīrrutal*) alone. It can be calcined by mixing one, two, or three of the following substances, i.e., zinc (*nākam*), mercury (*rasam*), perchloride of mercury (*vīram*) and sulphur (*kantakam*), with gold in many ways. These calcined metals (*pasmam*) can be administered to treat various diseases based on the symptoms of the diseases. Calcined metals (*pasmam*) are either white in colour or grey.

Red metallic powder (*centūram*) is more potent than this. It is dark red or pure red like the flower of Indian coral tree. It is more potent than calcined metals (*pasmam*). Oxide of calcium (*cuṇṇam*) probably is white. If it is mixed with turmeric, just as limestone turns turmeric into red, similarly it also turns turmeric red. A single metal can be turned into a calcined metal (*pasmam*), red metallic powder (*centūram*), and calcium metal oxide (*cuṇṇam*) in many numbers of ways.

Drugs of the Siddha (*citta*) system more firmly and rapidly cure “diseases of the stomach” (*iraippa nōikaḷ*), indigestion (*ajīraṇam*), dyspepsia (*kuṇṇam*), and diarrhoea (*vayarruppōkku*) than the Western drugs. I do not have any records as a source to prove my claim. I know this based on my twenty years of experience. “Rheumatism” (*mēka vātam*) is cured more firmly and rapidly by this method than by the Western method. This system is superior to the Western system for treating “syphilitic chancre” (*liṅkapuṇ*), venereal diseases (*mēkam*), gonorrhoea (*veṭṭai*), gout (*cūlai*), inguinal bubo (*araiyāppu*), rheumatism (*vātacūlai*), and “syphilis in all stages” (*paraṅki rōkam*). All sorts of skin disease can be cured firmly by herbs of Eastern countries which are also superior to Western methods. Ailments which cannot be cured by Western methods and last for many years have been cured firmly and rapidly by fresh herbs.

Question 3

(a) Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?

(b) Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of

(1) adequacy of medical relief provided; and

(2) suitability as centres of medical education?

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

No.

(b)

(1), (2) I have never seen such kinds of special institution.

(c)

No experience.

It is my opinion that the following arrangements should be made to remove those shortcomings, since there are not enough arrangements.

MEDICAL RELIEF (*VAITTIYAM*)

Generally, those who are practising Siddha (*citta*) medicine are currently called Tamil physicians, including Brahmins and people of all castes. These physicians are present even where governmental, specialised Western medical hospitals and dispensaries (*maruntakaṅkaḷ*) are located, but they are not getting a salary commensurate with their job. However, they are satisfied with that low salary due to their methods, which are easy, and the cost of the drugs they use are cheap. They would have learnt the system through lineage (*paramparai*) or from a guru by staying with him at some time. They have not learned the system through modern medical colleges and hospitals. Nevertheless, the villagers are very comfortable because of the availability of one or two physicians in each village and the cheap cost of their treatment. This should not be changed. These facilities should be continued. What needs to be changed is their [i.e., the physicians'] education and practice: that is essential.

It is impossible to appoint one who has qualified with an "L.M.P."¹³ degree (*el.em.pi paṭṭam*) with theoretical and practical knowledge of the Siddha system in each village. If each village were appointed physicians who have appropriate theoretical and practical knowledge, they would practice medicine with the above-

¹³ L.M.P. means Licentiate Medical Practitioner.

mentioned low returns and facilities. To suit the methods of examinations, which I will speak about later, let us call them village doctors (*kirāma vaittiyaṛ*). The government or municipality or local board should produce village doctors (*kirāma vaittiyaṛ*) with enough theoretical and practical knowledge and appoint at least one person in each village.

As a next stage, similar to “L.M.P.”, persons who are well-versed in theory and practice as mentioned above should be produced. Just as sub-assistant surgeons (*utavi aṛuvai cikiccai nipuṇar*) are appointed in dispensaries (*maruntakaṇkaḷ*), these physicians also should be appointed as “sub-assistant surgeons” of the Siddha system (*citta maruttuva muraṇiyil utavi aṛuvai cikiccai nipuṇar*) in dispensaries (*maruntakaṇkaḷ*). Let us call them town doctors (*paṭṭaṇa vaittiyaṛ*). Even though it is not possible to appoint them in each dispensary, they would make their livelihood by their practice, at least if enough physicians are generated by providing general medical education. People also would be benefited by the ease [of access to treatment] and endowed with health. The position of these physicians would be higher than that of village doctors. Those diseases which cannot be cured or treated by village doctors (*kirāma vaittiyaṛ*) are to be treated by these physicians. If the period of theoretical and practical training for village doctors (*kirāma vaittiyaṛ*) is two years, one [further] year is sufficient for them.

As well as this, city doctors (*nakara vaittiyaṛ*) should have an equivalent position to an “assistant surgeon” (*utavi aṛuvai cikiccai nipuṇar*) and “district surgeon” (*māvaṭṭa aṛuvai cikiccai nipuṇar*). These doctors must have an university degree (*palkalaikkaḷaka paṭṭam*). The period of training for them should be four years. These physicians must be trained in the Siddha system through systematic training (*sāṣṭira muraippaṭi*) and must be able to transmute any metals into calcined metals (*pasmam*) and red metallic powder (*centūram*) easily and to treat any critical diseases. These physicians should be appointed in every district hospital.

Above them, there should be a higher-degree Siddha physician who is eligible to be appointed as “district surgeon” (*māvaṭṭa aṛuvai cikiccai nipuṇar*) and should have received the degree of “Bachelor of Indian Medicine (I.M.B.)” (*intiya maruttuvattil iḷaṇkalai*). Above this, there should be the degree of “Doctor of Indian Medicine” (I.M.D.) (*intiya maruttuvattil muṇaivar paṭṭam*). There is no exam for this course. University (*palkalaikkaḷakam*) officials should select and confer this degree on those who have reached a high position by their own practice, medical knowledge, and special skills in education after completion of “I.M.B degree.”

It is unnecessary to establish other dispensaries or hospitals for appointing those who have reached this position. It is enough to create facilities in dispensaries and hospitals to treat diseases by suitable methods with the respective drugs

and also to make sure that systems should be easily available to patients based on their preferences.

MEDICAL EDUCATION

The texts which were written on the Siddha system of medicine are unlimited. So, it may take many years to become an expert in the system. However, I will speak briefly about syllabi for the four courses which I have mentioned above: Anatomy (*uṭarkū sāstiram*), which is essential, and the basis of the medical tradition should be taught briefly in the first year of the two-year course of the first profession. Apart from anatomy (*uṭarkū sāstiram*), physiology (*tolīrkūru*) should also be taught. Next, materia medica (*patārttakūṇa cintāmaṇi*) should be taught briefly, such as important herbs, their unique character, distinguishing methods, and available places, along with their usages. Next, methods of preparing powder (*cūraṇam*), ghee (*kirutam*), medicated oil (*tailam*), and using these fresh herbs or mixing them with other drugs or methods of using these in the process of calcination should be taught briefly. Next, the scientific subjects of important salts (*uppu*), metals (*ulōkaṇkaḷ*), and arsenic (*pāṣāṇam*) used in the Siddha system should be taught.

It is an elaborate science. The contents of materia medica and practical techniques are very special. So, only important subjects should be selected and taught. For example, distinguishing methods of arsenics (*pāṣāṇam*), preparation methods of calcined metals (*pasmam*) and red metallic powder (*centūram*) out of arsenics, and drug production methods from salts (*uppu*) and calcined metals (*pasmam*) from metals should be taught.

Next, preparation methods of calcined metals (*pasmam*) and red metallic powder (*centūram*): their compounding and preparation methods of simple powders (*cūraṇam*), ghee (*kirutam*), and medicated oil (*tailam*) should be taught.

SECOND-YEAR SYLLABUS OF FIRST PROFESSIONAL DEGREE

Medical science and administering methods of drugs should be taught in particular. Siddhas (*cittarkaḷ*) have elaborately explained these subjects in the Siddha system, of which only simple methods should be selected and taught.

For example, diagnosing diseases with the help of diagnostic techniques: signs of face (*mukakkurī*), stool (*malakkurī*), urine (*nīrkkurī*), eyes (*vilikkurī*), tongue (*nāvukkurī*), teeth (*tantakkurī*), breath (*cuvācakkurī*), and pulse (*nāṭikkurī*), symptoms of diseases, and methods of administering drugs which are suitable for those diseases should be taught in this year especially. Moreover, apart

from theoretical classes, practical classes for diagnosing patients, administering drugs for diseases, prescribing dietary regimens, and others should also be taken.

Thus, so far anatomy (*uṭarkū sāṣṭiram*), physiology (*tolirkūru*), materia medica (*patārttakūṇa cintāmaṇi*), pathology (*viyāti sāstiram*) and administering methods of drugs would have been learned. Yet, preparation methods of calcined metals (*pasmam*), red metallic powder (*centūram*), and other special drugs should be taught carefully and methodically. In these methods, if even small mistakes happen, severe consequences would occur. If even small mistakes happen in the calcination process, no pure calcined metals (*pasmam*) would be obtained. If impure calcined metals (*pasmam*) are administered, then the worst effects occur.

Likewise, these practices should be kept in the final part of the first professional degree, because there is a chance of causing the worst effects due to mistakes in drug administration methods, selecting *aṇupāṇam*,¹⁴ and prescribing dietary regimens. If one qualifies in these exams, he should be conferred with a degree and allowed to practise.

FIRST-YEAR SYLLABUS OF SECOND PROFESSIONAL DEGREE

One who qualifies on this course should be equal to “L.M.P.” degree holders. One who wishes to study in this course should have completed his education at least up to “school final” (*paḷḷi iruti*) in the English medium. With this, the knowledge of the Tamil language also is essential. In this practice, methods of Western countries and contents of Eastern countries should be applied.

There is no difference between Western or Eastern countries in the case of anatomical science (*uṭarkū sāṣṭiram*). Thus, anatomy (*uṭarkū sāṣṭiram*) should be taught according to Western methods. Materia medica (*patārttakūṇa cintāmaṇi*) should also be taught according to Western materia medica (*patārttakūṇa cintāmaṇi*). Moreover, preparation methods of red metallic powder (*centūram*), which have been mentioned in the first profession, should be taught even more specifically. Besides this, practical classes in hospitals should be conducted. Further, plenty of texts on materia medica (*patārttakūṇa cintāmaṇi*) of the Siddha system explained in English language are available. Those books could be taught as textbooks. Other calcined metals (*pasmam*) and red metallic powder (*centūram*) should be taught in Tamil, but the medium should be English.

¹⁴ *Aṇupāṇam* is the fluid vehicle of medicine, a drink taken with or after medicine.

SECOND-YEAR SYLLABUS OF SECOND PROFESSIONAL DEGREE

Medical science should start in the second year. Here, as I already mentioned, texts should be the Siddha texts (*cittar nūl*) and methods should be the Western method. Practices should be broader than the first year. In particular, those texts about signs and symptoms of diseases based on Siddha texts (*citta nūl*) should, in the Western method, be kept as textbooks. Moreover, it is advisable to teach some aspects of Western medicine with the help of Western texts to gain special wisdom in medicine.

THIRD YEAR OF SECOND PROFESSIONAL DEGREE

Some special subjects should be taught in this year. Those texts which deal with special diseases like eye diseases (*kaṇ rōkam*) should be taught. Further, there are some particular drugs which are equivalent to those drugs said to be “specifics” in Western countries. For example, as the drug digitalis enters into the heart (*hiru-tayam*) and cures diseases, there are special drugs which can enter disease-affected organs separately and cure the diseases of those organs. Special characteristics and administering methods of these drugs and special calcination methods for attaining higher potency should be taught, i.e., the following drugs, such as stinking hellebore (*pītarōkiṇi*) for eye diseases (*kaṇ rōkaṇkaḷ*), asbestos (*kalnār*) for dental (*tanta*) problems, orpiment (yellow arsenic, *tāḷakam*) for respiratory disorders (*cuvāsācaya rōkaṇkaḷ*), zinc (*nākam*) for haemorrhoids (*mōla rōkaṇkaḷ*), and mercury (*rasam*) for serous fluid (*turnūr*). Arsenic is prescribed especially for deadly poisonous fevers. Apart from this, special methods of administering these drugs and the calcination process also exist. These things should be selected and taught.

The period of the course for a city doctor (*nakara vaittiyaṛ*) who is equivalent to “district surgeon” (*jilla sarjaṇ*) should be four years. Here, I will speak about teaching contents and exam patterns. Those who wish to study should have qualified in the “intermediate examination” (*iṭainilai tērvu*) in the English medium. The theory and practice of this course should combine both the Western and Eastern medical sciences. I say that the Siddha system should be taught by the Western method in the early profession, but in this course Western medical science should be taught. Eastern medical science should be taught in the Western method as well. I have mentioned four years for this course.

FIRST YEAR FOR THIRD PROFESSIONAL DEGREE "I.M.B."

In the first year, anatomy (*uṭarkūriyal*), physiology (*tolirkūru*), iatrochemistry (*racāyaṇa cāstiram*), and materia medica (*patārtakuṇam*) should be taught in the Western method along with hospital practice. Broader aspects of these subjects and microscopic experimental methods should be taught especially, instead of compelling the students to remember the detailed techniques of these subjects.

General principles of these subjects should be taught excellently, and special methods should be developed to teach experimental methods. Further, methods of research should be taught outstandingly.

SECOND YEAR OF THIRD PROFESSIONAL DEGREE "I.M.B." COURSE

In this year, the characteristic features of Siddha drugs should be taught through the Western method. After the special features of medicinal substances have been explained, the characteristic features of drugs which are made from those substances and the preparation methods of these drugs should be taught. For instance, if there is white arsenic (*veḷḷai pāṣāṇam*), first, the special character of it should be taught. Then, the methods of making the pills (*kuḷikai*) or tablets (*kaṭṭu*) should be taught along with administering procedures.

Further, methods of converting it [white arsenic] into calcined metals (*pasmam*) and the drug preparation methods of compounds of arsenics or herbs or cobra poisons should be taught. Also, extracting quinine (*koyiṇa*) from cinchona (*ciṇkōṇa*), strychnine (*sṭraikṇaiṇ*) from nux vomica (*eṭṭi*), and morphine (*mārpiṇ*) and codeine (*kōḷiṇ*) from opium (*apiṇ*) by Western methods, and the skill of finding and extracting substances from fresh herbs which are used to produce drugs should be developed. Further, gold should be converted into "salt" (*uppu*) by adding Aqua regia. Based on the Eastern method, that [gold] could be converted into "salt" (*uppu*) by adding the juice of various fresh leaves. The skill of finding the substances in fresh leaves, which are so easy to change like this, should be developed. If mercury (*rasam*), orpiment (*tālakam*), perchloride of mercury (*vīram*), subchloride of mercury (*pūram*), and white arsenic (*veḷḷai pāṣāṇam*) are put into fire, they would be sublimated, but by mixing them with the juice of some fresh leaves and by other methods, the sublimation process could be stopped even if they are put into fire. This method is called consolidation (*kaṭṭu*). Consolidated drugs never lose their unique characteristics and can be administered to treat diseases. Calcined metals (*pasmam*) and red metallic powder (*centūram*) and oxide of calcium (*cunṇam*) can be made by adding herbs to consolidated drugs. The substances in fresh leaves that make these changes should be studied.

Apart from the changes made by herbs, in the Siddha system, serums and flesh taken from animals are considered more powerful. In the same way as serums (*cīram*), vaccines (*taṭuppūci*), and extracts from organs [pancreas (*kaṇaiyam*) and thyroid gland (*tairāiṭu curappi*)] that are used in “organotherapy” (*ārkaṇō cikiccai*) are taught in the Western scientific method, many sorts of serums which are mentioned briefly and secretly in the Siddha system and their usages in the calcination process should be taught. Some drugs are made by mixing salts taken from serums and substances taken from metals. These preparation methods should also be taught.

THIRD-YEAR SYLLABUS OF THIRD PROFESSIONAL DEGREE

In this year, medical science and drug administration methods should be taught in the Western method. Hospital practice should be continued for the last two years, but special education should be given in the drug administration method. Along with enhancing the students’ skill in administering Siddha drugs, they should be trained to be experts in using both Western and Siddha drugs for each and every disease. Western diagnostic methods are so easy, so they should be taught very clearly and methodically. In the Siddha system, diagnostic techniques are very difficult and not easy to determine. So, Eastern methods should be taught after they have been reformed on the basis of Western methods.

Signs of pulse (*nāṭikkurī*) have been mentioned earlier, and they are very difficult among the signs of diseases. After learning pulse examination properly and unswervingly, if one diagnoses diseases and administers the drugs based on the examination of the pulse, that practice would be considered an advanced one. As pulse science is broad and also very technical and difficult, only one who is an expert and highly acclaimed can teach it in detail. Diseases can be diagnosed without pulse examination. But only one who is an expert in the field can do this. Many texts have been written on this science. Since experts who diagnose diseases based on pulse examinations are decreasing day by day and the technical terms (*paripāsai*) of this science have perished, there is no way to understand clearly those terms which are mentioned in the currently available texts. Unless Eastern pulse techniques are explained clearly according to scientific Western methods by those who are expert in the pulse techniques, this knowledge and the meaning of this science will become latent and ignored.

FOURTH-YEAR SYLLABUS OF THIRD PROFESSIONAL DEGREE

In this year, administering drugs which are prepared by the aforementioned methods and disease-diagnosing techniques should be taught.

Methods and diagnostic techniques of Western Medicine should be taught excellently by keeping Western medical texts as textbooks, and hospital practice should be improved as well. Further, diseases of minor organs, such as diseases of the eyes, ears, nose, and throat, and paediatrics should be taught to some extent as well as the Siddha method of administering drugs, including the practice of treating patients in hospitals by administering drugs which are prepared based on the methods taught in the third year after intensely observing the differences of bodily temperaments, climatic and ecological variations, suitability of food, and dietary regimens.

Through these practices and the expertise attained by the scientific enquiry that has been taught, knowledge should arise to practise medicine and to understand those things that are in the system by further research, after understanding the truths of the Siddha texts (*citta nūl*).

Discernment and the courage to do original investigative research (*mōla vicāraṇai ārāicci*) should be developed in this year. The texts of the Siddha system are infinite. Many truths are kept secret and esoteric in these texts. After understanding these things through intelligence and experience, arrangements should now be made to clearly decipher those things through experimentation. Many principles of Siddha texts (*citta nūl*) disagree with the principles of Western science. Whether these things are true or not should be discerned by various examinations and experiments. What is true and what is not true should be determined after conducting various experiments repeatedly with great care, technically sound and suitable equipment, and peace of mind as well as with consideration of the differences between the principles of Western and Eastern sciences.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained, or attainable, in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

(1) Placing the students under the personal guidance of first-rate teachers is necessary. Even though the language of the Siddha texts (*cittar nūl*) can be easily understood, some names of drugs, herbs, and various aspects are kept secret and would have to be obtained from a guru. Further, there are some techniques for making drugs whose techniques should be taught by the guru. Therefore, direct guidance of a guru is essential for learning the practical things that are mentioned in these texts.

(2) Yes. It is essential that it be so. It has already been said that hospital experience is necessary. It should be clearly understood from what I have said so far that laboratory (*āivakaṅkaḷ*) experience is essential. It should be understood that this is not possible without various products for making the calcination process as well as mercury (*kuru*), lime, and sal-ammoniac (*ceyanīr*).

Likewise, regions and gardens which comprise herbs, tubers, vines, and herbs and tubers growing in water are essential.

Apart from herbs growing in gardens, many more herbs and tubers growing in the coastal areas, riverines, hillocks, saline lands, wetlands, and mountaintop areas are also essential. Teachers who can select and display these herbs and tubers are also essential. It is essential that they take the students to these places and explain these herbs and others. Libraries for securely storing scientific treatises and for exhibitions are essential.

(3) It is not possible in a single lifetime to practise the complete methods and preparations of pungent liquids (*jeyanēr*) and the universal drug (*kuru*)¹⁵ and ammoniac drugs (*nērrumāṇam*) which are mentioned in texts written by one Siddha.

¹⁵ *Kuru* is called the universal drug, meaning it is considered a panacea for all the diseases. See T.V. Sambasivam Pillai, *Siddha Medical Dictionary* (Chennai: Dept. of Indian Medicine and Homeopathy, 2006), vol. II, p. 1001.

However, it is possible to learn certain important medical practices of some Siddhas for examination purposes. Thus, there is enough space in these systems for trials, experiments, and new investigations as well. Only time is needed; it is necessary to give sufficient time to teachers.

No. I do not feel that there are institutions that have the equipment that has been mentioned so far.

(b)

(1) I never think that this aim is impossible. It is obvious that this aim is a correct and essential one. However, there is a lack of sufficient equipment to achieve that aim. Therefore, I would say my aim is as follows: There are many physicians who are experts in Siddha texts but not familiar with Western medicine. Yet, they have mastery of Siddha texts (*cittar nūl*) and have become experts by experienced training. It is the ambition that those physicians who are intelligent and experienced and have skill to teach should be appointed as teachers in medical colleges to impart the theory and practice of the Siddha system to those students who wish to learn.

(2) Laboratories (*āivakaṅkaḷ*) which are small, low-cost, and comprise just a few instruments should be established in colleges. Facilities should be present in the hospital for treatment with Siddha medicine for those who wish for that. After these facilities have been created, education should be imparted to the students who wish to learn by appointing the above-mentioned skilled physicians as teachers at a minimum salary.

Question 5

Do you agree with the view of the Calcutta University Commission that

“There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

Integrating Western and indigenous medicines is neither impractical nor impossible. It should be the aim of a knowledgeable person to integrate them. As far as my knowledge is concerned, I would add some method to this process. Siddha medical scriptures are perishing day by day. Rare manuscripts collected by many physicians are being destroyed by termites and insects. So, at present, a library should be established by collecting rare manuscripts and texts.

It is hard to ascertain herbs based on the signs mentioned in the medical texts. In this context, the number of experienced persons, physicians (*vaittiyar*), and herb collectors (*mōlikai piṭuṅkupavarkaḷ*) with knowledge of herbs are decreasing day by day as well. Thus, the experiential knowledge of herbs of the above-mentioned persons should be imparted to those who are qualified in Western medicine, believers in indigenous medicines, and intelligent persons.

Some rare methods are available in South India and also in the Ayurveda of North India which are a part of Eastern medicine. It is necessary to learn these methods as well. For that, those who are qualified in Western medicine should be sent to popular Ayurvedic physicians in North India to learn these methods. Likewise, practitioners of Western medicine and some indigenous physicians of South India should produce jointly calcined metals (*pasmam*) and red metallic powder (*centūram*) of Eastern drugs based on Western methods. As per Western chemistry, herbs, calcined metals (*pasmam*), and red metallic powder (*centūram*) should be analysed by which their special qualities may be determined. Further, those drugs, once determined, should be administered to patients according to Western medical methods.

Further, if general reform and the secret practices of Eastern medicines as per the methods of Western medicine [were to take place], unlimited achievement would occur in medical education, medical systems, and treatment methods of deadly diseases. Yogis have even more excellent methods that are superior to those methods practised by physicians.

Thus, only those who become familiar with them and practise some of their worshipful methods know their supernatural powers and the greatness of the work that is being kept secret. So, those very few Western-educated persons who believe in secret powers should be selected and should be sent to Gosains (*kōcāvikaḷ*), yogis, and monks (*caṇṇiyaci*) to learn those supernatural methods. This seems to be impossible for those who have undergone Western education. However, there are some people among Western-educated groups who believe the

yogis. It is possible to bring those methods out through these Western-educated people.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

(a)

Yes, there should be training in iatrochemistry (*racāyaṇa sāstiram*) and biology (*jīva sāstiram*). In particular, special training should be given in iatrochemistry (*racāyaṇa sāstiram*). This training is not necessary for village doctors (*kirāma vaiṭṭiyar*) who are equivalent to L.M.P. practitioners. They should be competent based on their degrees, such as “Graduate”, “Master,” and “Doctorate.” It is necessary to teach anatomy (*uṭarkū sāstiram*), physiology (*avayavattoḷṛkūru sāstiram*), pathology (*rōkakkūru sāstiram*), bacteriology (*cirruyir sāstiram*), and surgery (*iraṇavaiṭṭiya sāstiram*). But only the theoretical aspects of them should be taught, not the practical. It is sufficient to teach pathology (*viyāṭikkūru*) and diagnostic techniques (*rōka nitāṇam*), and it is not necessary to teach administration methods of Western drugs. Further, anatomy (*uṭal kūru*), physiology (*toḷṛkūru*), pathology (*rōkakkūru*), and bacteriology (*cirruyir sāstiram*) should be taught in detail. Surgery (*iraṇavaiṭṭiya sāstiram*) should be taught separately, because surgery (*iraṇavaiṭṭiya sāstiram*) is not mentioned specifically in the Siddha texts. It is not known whether it was not written at all or written and later perished.

(b)

This has been already said.

(c)

Students who study in the village doctor (*kirāma vaittiyar*) course are to be taught in their respective languages such as Tamil, Telugu, and Kannada, which are the spoken languages of the Madras Presidency. Others who wish to study for the degrees of “Graduate”, “Master,” and “Doctorate” are to be taught in English.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

It is my opinion that registration for those physicians who qualify in the above-mentioned practices is unnecessary. It is not suitable to register them and bring them under the rules of registration.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

The cost of treatment of Siddha medicine is less than that of allopathic medicine. Western medical drugs are produced and sold by companies, but the cost of making compounds or tablets by combining various drugs is many times higher than the manufacturing cost. Further, the prescription (*maruntukkurippu*) charge is also many times higher [than that of Siddha medicine]. Thus, poor people are not able to enter hospitals and cannot afford such high prices. However, hospitals which are necessary to treat poor people and patients in general have not been

sufficiently established by the government and local boards, and so villagers approach the hospitals by walking five or ten miles if [treatment] is essential. Travelling charges to reach hospitals are also too high. It is my opinion based on the above reasons that at least one village doctor (*kirāma vaittiyaṛ*) is essential for a cluster of four or five villages. It is the first duty of the government and local boards to create village doctors (*kirāma vaittiyaṛ*) who practise Siddha medicine and can reach villagers quickly and easily, before creating graduates who practise modern medicine. Making drugs based on the Siddha system is a part of the duty of the Siddha physicians (*citta vaittiyaṛ*), so patients need not pay separate charges for that. Moreover, arsenic (*pāṣāṇam*), metals (*ulōkaṅkaḷ*), and salts (*uppu*) of the Siddha system are easily available in our country. These drugs are not like imported Western drugs, the prices of which are fixed according to the wishes of the company. Besides, arsenics (*pāṣāṇam*) and metals (*ulōkaṅkaḷ*) are made into drugs. It has been said that leaves and herbs are available in respective regions. Herbs which are growing in the backyards of village homes are used to make many metals (*ulōkaṅkaḷ*) and arsenic (*pāṣāṇam*) into drugs. I would say this confidently based on my experience.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

Siddha medicine is decaying day by day because it is not receiving the support of the government, and further the government establishes hospitals, institutes, and colleges for their own medicines, confers degrees, and gives jobs to those who qualify in the exams. Thus, if indigenous systems are to be revitalized, government support is essential. Unless the government takes the initiative to teach physicians (*vaittiyaṛ*) who belong to the above-mentioned various medical practices, appoint them in each village or one for each cluster of four or five villages, and make them treat patients from villages by the Siddha system, these systems will not be revitalized and advance further.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

(a) Government

The scriptures of indigenous systems of medicine are perishing rapidly. Even those who wish to publish them are not able to find some texts. People who possess medical scriptures are neither using them for their own purpose nor giving them to others for their benefit, and they are not even protecting those scriptures which are perishing.

- (1) Unless the government takes responsibility for collecting and preserving those texts, they will not be saved from destruction. Thus, I kindly request the government to collect and preserve them.
- (2) Likewise, experts of these systems also are disappearing. Many techniques and secrets of these systems are also disappearing along with them. Thus, apart from collecting those texts, in order to prevent methods and practices of those experts and texts from perishing, all the methods and practices should be compiled and students appointed to grasp that knowledge technically and quickly.
- (3) Courses in these systems should be started in the colleges.
- (4) Support should be provided to attract numerous students to learn these systems. In particular, stipends should be given to students while studying and after that job opportunities provided.

(b) Local board

It should create pools of village doctors (*kirāma vaittiyar*) to serve in villages belonging to their board. In particular, they should send the students to study medicine by providing stipends and appointing them in villages after completion of the course.

(c) Universities

The above-mentioned courses must be provided. Apart from those who qualify through exams, traditional physicians who serve the development of indigenous systems of medicine should be supported by receiving awards that should be given every year instead of the current practice, a couple of times in ten or fifteen years.

(d) Private agencies

Individuals, associations, and lords (*pirapukkaḷ*) can offer honorariums or confer medals by their name for public interest, or they can create endowments by their name or can support by donations. They can often offer scholarships to those students who become meritorious in the examination to do original research (*nūṭaṇa paricōṭaṇaikaḷ*) and postgraduate education (*mutukalai*). Like local boards, they can send the students to medical schools by offering scholarships. Associations can promote Siddha texts and physicians. There are numerous research associations in Western countries. Even the most important ones are innumerable.

All know about the glory, superiority, and greatness of the “Royal Society, British Association for the Advancement of Science, Royal College of Physicians, Royal College of Surgeons, Royal Chemical Society, Royal Zoological Society, Royal Geographical Society, Royal Microscopic Society, the Linnaean Society, Geological Society, and the Astronomical Society”¹⁶ which advance their respective sciences at every minute and by that advance this world. The glory of these associations is similar to the glory of the sun. It is the duty of our association to advance Siddha texts and systems by following the methods of those associations without deviation. The Siddha system would have the strength to shine in any country in a short span of time by following these methods along with the meditative, spiritual, and miraculous powers (*citti*) of Siddhas (*cittar*).

¹⁶ The names of all these institutions are written English in the original text.

USMAN REPORT, VOL. 2, PP. 410-411

Testimonies from the Presidency of Madras
written in Telugu

M. R. Ry. K. Veeraswamy Naidu Garu¹

Translated from the Telugu by ISA THOMPSON

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

About the division of Ayurveda.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory of theories stands the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

It is a principle of Ayurveda that only imbalances of the three humours², wind, bile, and phlegm³, are the causes of disease creation, and that imbalances of these

¹ An honorific, like sir.

² *Dōṣa*.

³ *Vāta*, *pitta*, and *ślēṣma*.

three humours happen due to adverse food habits. My opinion is that modern sciences also do not have much difference of opinion on this subject and that this principle fully stands up to their criticism.

(b)

The principal rule of Ayurveda is that one must diagnose the disease by means of tests of the eight places, namely pulse, urine, stool, tongue, sound, touch, sight, and body⁴; and by means of the five parts of diagnosis that are cause, early symptoms, form, suitable treatment, and cure⁵. Having recognized due to which imbalance in the three humours the disease occurred, by means of the disease test mentioned previously, along with doing the diagnosis, one must adopt the treatment methods according to the treatises (*śāstra*) in order to turn back that humour. It is my firm opinion that these local [methods] have greater benefits than the modern science treatment methods which importantly omit these very Ayurvedic treatment methods. Diseases are completely cured only because of these Ayurvedic treatment methods.

(c)

Yes. In my experience only these Ayurvedic medical treatments work well for diseases like typhoid fever, malaria, influenza, and asthma, which are being called difficult to treat in Western medical sciences and for which a cure is not found by means of those medical treatments. Western doctors give medicines for the diseases mentioned above and become hopeless; in the contexts where they gave up, I was able to cure many of these adopting Ayurvedic medical treatments.

Question 3

(a) *Are you connected directly with any institution, providing medical relief of medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

⁴ *Nāḍī, mūtram, malam, jihva, śabdāmu, sparśamu, drkku, and ākṛti.*

⁵ *Hēṭuvu, prāgrūpamu, rūpamu, upaśayamu, and samprāpti.*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

In the year 1896, I established a pharmacy and a hospital in Ambājīpēṭa village providing treatment according to Ayurvedic methods, with the name “Sarva Rōgasamhāraka Vaidyaśāla,”⁶ and I have remained as the director of it since then. I also established a hospital named “Nirupēda Cikitsālayamu”⁷ in the year 1921 in Ambājīpēṭa, providing medical aid according to these methods for free for poor people.

(b)

I think that at present with places being here and there and few in number, people do not have satisfactory use of them. My opinion is that we must increase the number of these places and establish these in at least four to five villages in every district (*tālūk*).

(c)

I do not think there is. I think that we will end this deficiency of not having experienced doctors and not having people who are experienced in treatment methods by passing exams by establishing the places mentioned above under the government in many states.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

⁶ Lit. “All disease destroying hospital.”

⁷ Lit. “Poor people treatment centre.”

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

I think so. In very big cities like Cennapuri⁸, Kalakatta⁹, and Kāśī there are a very few places like this, but I do not think that among these the ideal version mentioned above has been completely achieved.

(b)

My opinion is that the resolutions made by the All India Ayurvedic Ūnānī Symposium should be implemented in practice.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

⁸ Chennai.

⁹ Kolkata.

I agree. I suggest establishing some places managed by those who have scholarship in both of these local and Western medical methods. And students who are fully suitable in both medical methods should be made trainees.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

Yes. My opinion is also the same. Andhra Ayurveda Medical Assembly members in Tenāli prepared this kind of lesson plan. I also agree with that.

(a) (b) (c)

Also in this matter, the same assembly members mentioned above prepared exams in three grade levels called beginning, middle, and end with the name Andhra Ayurveda College Exams. I also accept certificates which are determined by those exams.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b) *any changes in, or additions to, the existing legislation on medical registration.*

My opinion is that medical registration is also necessary for native doctors. I think that we must assemble the names of experienced doctors and of doctors who have passed [exams] in a medical register, and that the same assembly members of the All India Ayurvedic Ūnānī Symposium should be assembled as a medical board to decide these people.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Treatments following indigenous medicine cost less. The important reasons for this are that it is easily possible to find medicines needed for indigenous medicine in this very country without high prices for the medicines used in indigenous methods. All the medicines that are used in treatments done according to allopathic medicine are prepared in foreign countries with manufacturing regulations connected with high prices. Importing medicines from this country and from other countries just to provide medicines here is the reason providing allopathic medicines here is more expensive.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

I think that the reason for the state of the indigenous medical system is a lack of support from the government as well as various doctors without experience or medical knowledge practising medicine. My opinion is that, in order to reintroduce indigenous medical systems, the government must encourage indigenous medicine and establish indigenous medical facilities in many places under the control of people skilled in that medical system; according to what was pointed out in the answer written to question 7, [it must] also have a medical registration

for indigenous doctors; and, according to what was said above, [it must] establish colleges to provide indigenous medical training widely in the country.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

(a)

By the government establishing indigenous medical facilities here and there in the country and giving them suitable grants every year;

(b)

Also by local boards widely establishing indigenous medical facilities just like the current English hospitals under their boards and favouring only indigenous medicines for diseases;

(c)

By universities encouraging indigenous medicine by newly arranging exams for Vidvān and Śirōmaṇi¹⁰ to encourage indigenous scholars and, agreeing with the decisions made by Andhra Ayurveda College, admitting in their universities and giving distinction to people who pass exams arranged by them;

(d)

And by private associations, with or without the help of the government or local boards, pervasively providing medical aid and establishing treatment centres for their poor people according to indigenous methods; and by encouraging students in villages to get indigenous medical education and sending them to the exams mentioned above;

¹⁰ Titles awarded to highly learned people.

I think that this indigenous medical system can have gradual improvement.

USMAN REPORT, VOL. 2, PP. 412-415

Testimonies from the Presidency of Madras
written in Malayalam

Honorable Brahmashri E. T. Divakaran Mooss

Translated from the Malayalam by M. K. MADAN KUMAR
and LISA ALLETTE BROOKS¹

Having seen the questions which have been sent by the Indigenous Medicines Secretary, Post Box 262 Madras, I am writing the reply below, to the extent that is possible.

But with the reply which I am writing, I do not think it is possible to explain every single percent of my opinion. For that, oral exposition is necessary. I have interacted with Western physicians (*pāścātya vaidyanmār*) and that [Western] medicine (*vaidyam*) in numerous ways, hence, I understand the numerous merits (*guṇaṅgaḷ*) of Western medicine (*pāścātya vaidyam*). I have tried to integrate the two doctrines (*śāstrasiddhāntaṅgaḷ*) on many occasions but have never seen integration in a satisfactory manner. The ultimate aim of Western medicine (*pāścātya vaidyam*) is to provide immediate relief for the suffering experienced by the patient. That is not the case for Ayurvedic medicine (*āyurvēda vaidyam*). The complete eradication of disease in the body of the patient (is the objective of Ayurveda), whereas Western medicine (*pāścātya vaidyam*) is predominantly focused on the temporary relief of symptoms. In this regard Ayurvedic medicine (*āyurvēda vaidyam*) is lagging a bit behind. However, if a disease (*rōgam*) is cured with long-term Ayurvedic medicine (*āyurvēda vaidyam*), at that time there are definitely no other related ailments (*dinam*) present in the body. If a disease (*rōgam*) cured by Western medicine (*pāścātya vaidyam*) co-exists with another disease (*rōgam*) in the body, relief for the co-existing one might not be seen. Not only that, another one might also arise. Concisely speaking, they have two different aims so the two are different. Hence, demanding more assistance of Western medicine (*pāścātya vaidyam*) will be an obstruction in the path of the development of Ayurveda.

¹ A first draft translation of this testimony was produced by Maneesh Mohanan.

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

Among the indigenous medical systems (*nāṭṭu vaidya kramaṅgaḷ*) I am going to explain the division of Ayurveda.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory of theories stand the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system?*

Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

Disease (*rōgam*) arises due to improper (*vyatyāsam*) food and regimen (*āhāravihāraṅgaḷ*). Food which possesses the (six) tastes of sweet, sour, etc. (*svādvam-lādirasaṅgaḷam*) and [twenty attributes] heavy, slow, etc. (*gurumandādi*), which is essential for the body, may not be received by the body at the proper time or may be deficient or excessive. That is “improper food” (*āhāra vyatyāsam*). [Activities such as] physical exertion, etc. (*āyāsādi*), which bring wellness (*sukhāva-haṅgaḷ*), if performed in excess, done inadequately, or done inappropriately, also the urges that should not be restrained (*vēgodiraṇa*) and the urges to be restrained (*dhāraṅgaḷ*), greed (*lōbha*), desire (*īrṣyā*), hate (*dveṣa*), competition (*māt-sarya*), passion (*rāgam*), fear (*bhaya*), grief (*śōka*), etc., if they are not restrained, along with sleep during the day (*diva svapna*), etc. – that is “improper regimens” (*vihāra vyatyāsaṅgaḷ*). Variations of hot, cold (*śīṭōṣṇa*), and monsoon season (*varṣākāla*) are other factors that can produce spontaneous changes in the body constitution (*prakṛtā*) that may cause disease (*rōgam*). Through the causes

mentioned above, the humours, afflicted tissues, and structures (*dōṣadūṣyādyavayavaṅgaḥ*) in the body undergo changes in their natural state (*svaprakṛti*), resulting in cessation of their functions or increase of their functions, which is known as disease (*rōgam*). There is no argument regarding this subject. This is the case not only according to the present framework (Ayurveda) but even if evaluated with any other principles of scientific investigation (*śāstrānvēṣaṇa pramāṇaḥ*).

(b)

“Aetiology of disease” (*rōga nidānam*) means the cause of the disease. That same thing is explained in section (2) (a). [That which] alleviates the change that has come about in the natural state (*svaprakṛti*) of the humours, afflicted tissues, and structures (*dōṣadūṣyādyavayavaṅgaḥ*) in the body [is treatment]. During the course of treatment (*cikitsa*), [if] one substance (*vyakti*) combines with a similar substance, it increases, but if it combines with an opposite, it decreases. This universal rule is the principle (*pramāṇam*) of treatment.

On the subject of Ayurvedic treatment, since the majority of the methods are non-aggressive to the bodily state, the effect of the treatment generally sustains most bodily states (*śarīra bhāvaṅgaḥ*). Hence, there is no reason for the body to experience any abnormality (*svābhāvikam allāṭṭhū*). Therefore, the desired effect will be produced in the body slowly, without creating further complications. When illnesses (*rōgaṅgaḥ*) such as fever (*pani*), phthisis (*kṣayam*), etc. are relieved by Ayurvedic treatment, the affected persons have no relapse of the same affliction (*śalyam*) thereafter. Examples (*dṛṣṭāntaṅgaḥ*) can be shown. Numbers are not available, so they cannot be shown.

(c)

In many circumstances, the Ayurvedic treatment method (*āyurvēda cikitsā kramam*) is better than the English treatment methods (*iṅglīṣū cikitsā kramam*). A person suffering from insomnia, in spite of all the treatments received from English physicians (*iṅglīṣū vaidanmār*), did not get a result, but he attained complete relief from the indigenous treatment method (*nāṭṭu cikitsā kramam*). Also “rheum fever” [spelled phonetically, rheumatic fever], “tym fever” [spelled phonetically, typhoid fever?], etc. have no medicines (*maruṇakaḥ*), this has been stated by some English physicians (*iṅglīṣū vaidanmār*), and it may be true. Ayurvedic medicine (*āyurvēda vaidyam*) has appropriate medicines (*maruṇakaḥ*) and treatment methods (*cikitsā kramaṅgaḥ*) for the same, which have been experienced and can be attested.

Question 3

(a) *Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?*

(b) *Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of*

(1) *adequacy of medical relief provided; and*

(2) *suitability as centres of medical education?*

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

I am a medical board member of the Keralan Ayurveda Trust (*kēraḷīya āyurvēda samājam*) which has established a hospital at Cheruṭurutti that gives treatment according to the indigenous system of medicine (*nāṭṭu sampradāyattil vaidyam*).

(b)

(1) I know that the services provided by this trust-owned hospital (*āspatri*) are insufficient. There is no doubt that this is due to lack of monetary funds.

(2) The arrangements for the purpose of providing medical education (*vaidya sambandhamāya paṭhippū*) have not been made there. For that, special government assistance is necessary. The above-mentioned establishment owned by Kerala Ayurveda Trust, upon receiving appropriate assistance, cooperation, and material support, in no time will undoubtedly be able to provide excellent medical service and medical education.

(c)

I do not think so. In order to rectify the lacunae, the government has to provide appropriate assistance and cooperation, along with proper regulations.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

(1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*

(2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*

(3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

Accordingly, for the indigenous system (*naṭṭū kramaparakāram*), the above-mentioned sub clauses one, two, and three are doubtless very important for excellent medical training. This optimal state has not yet been attained by any institute according to my knowledge. I do not think that any institute is going to attain such standards soon. Irrespective of this, if the government were to provide the above-mentioned assistance, then I do not think there would be any difficulty in attaining the same.

(b)

Nothing more than that.

(1) Therefore, at this time the final vision need not be considered.

(2) Right now, the recommendation that must be brought into action is that currently listed Ayurvedic institutions (*āyurvēdīya sthāpana[n]kaḷ*) should be taken over by the government. Also, establishing new ones by attracting and appointing publicly approved (*janasammatanmārāya*) Ayurvedic physicians (*āyurvēda vaidyanmār*), and using them to provide medical service and education. This is the reform which should be done.

Question 5

Do you agree with the view of the Calcutta University Commission that “There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western ‘systems’ of medicine will then disappear.”?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

I cannot support the Calcutta University Commission suggestion at all. I cannot approve it.

Western medicine (*pāścātya vaidyam*) is never seen to agree with Ayurvedic medicine (*āyurvēda vaidyam*). If you carefully observe in India the variation of cold and hot condition(s) (*śītōṣṇa sthiti*), differences of people’s diet (*āhāra*), lifestyles (*vihāraṅgaḷ*), and region (*dēśam*), based on that, the medical techniques (*vaidyavidya*) must be slightly modified and applied. As such, “cold land” (*śītabhūmi*) and “hot land” (*uṣṇabhūmi*) are the two extremely opposite factors upon which the wellness and illness (*sukhaduḥkhaṅgaḷ*) of the people of these lands are evaluated and determined, hence it is not a surprise that the two medical doctrines (*vaidyaśāstraṅgaḷ*) do not agree with each other. Those things that are wellness (*sukhaṅgaḷ*) in a cold land (*śītabhūmi*) may be illness (*duḥkhaṅgaḷ*) in a hot land (*uṣṇabhūmi*), and vice versa. The person experiencing illness (*duḥkham*) has to be directed towards wellness (*sukham*); doing so is considered the goal of medical doctrines (*vaidya śāstraṅgaḷ*). To determine today’s wellness (*sukham*) and today’s illness (*duḥkham*) is sometimes impossible, at those times is there not confusion regarding this information? Sometimes Western physicians (*pāścātya vaidyanmār*) say, “There is no disease” (*rōgam*). The patient (*rōgi*) says, “There is discomfort” (*sukhakēḍi*). Such things have often happened. Sometimes Western physicians (*pāścātya vaidyanmār*) say that the disease (*rōgam*) exists, and the patient (*rōgi*) denies it, that also happens. The opposite situation is also common. All of this indicates that the distinction between wellness (*sukham*) and illness (*duḥkham*) is not correct, is there any doubt about it? In the Malayalam-speaking region (*malayāḷattil*), people bathing in a pool of water once or twice daily is healthy (*sukham*), isn’t it? Would this be healthy (*sukham*) in England? Is setting

a fire in a bedroom right to do here, as in England? If these are considered individually, one is treatment for “illness due to heat” (*cūḍukkoṇḍuḷḷa sukhakkēḍḍi*) and the other is for “illness due to cold” (*taṇupukkoṇḍuḷḷa sukhakkēḍḍi*), is it not so? If these function in the opposite way (in the other context), what would be the outcome, wellness (*sukham*) or illness (*duḥkham*)? Once again, the two medical systems (*vaidya kramaṅgaḷ*) can never integrate in any manner, many evidentiary examples (*yukti*) can be provided for this. I can explain those only by oration.

The benefits of Ayurvedic medicine (*āyurvēda vaidyam*) will not be experienced in the integration of indigenous medicine (*nāṭṭū vaidyam*) and English medicine (*iṅgliṣū vaidyam*).

Those subjects like today’s natural science, etc. (*prakṛti śāstram*) are not included in the curriculum (of Ayurveda), they do not need to be studied separately while learning indigenous medicine (*nāṭṭū vaidyam*). Those sub-disciplines (*śāstrabhāgaṅgaḷ*) are already included in Ayurvedic treatises (*āyurvēda granthaṅgaḷ*). Those topics need to be taught strictly, and they need some modifications according to the times. Only that is needed.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

I do not agree with the statement above.

(a)

Educational programs should be implemented step by step, so those physicians (*vaidyanmār*) who come out of it will be categorized as advanced (*uttama*) and intermediate (*madhyama*). To bring awareness to the public regarding this categorization, a degree based on their educational stream is necessary. It was not possible to elaborate the topic here.

(b)

The basic qualification is proficiency in Sanskrit. For that, it may take approximately eight years from primary level.

(c)

Lessons need to be taught in Sanskrit and the local language also.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

With regards to medical registration, it is necessary for the Ayurvedic medical system (*āyurvēda vaidya kramaṅga*!).

(a)

There must be a registration board. The members of the board must be extremely experienced physicians (*prāptiyuḷla vaidyanmār*) of this time. The expertise of current physicians (*ippōḷatte vaidyanmār*) should be assessed only by their public acceptance.

(b)

Those modifications which have to be made must be [carried out] according to the above-mentioned recommendations.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

When comparing expenses, undergoing Ayurvedic treatment (*āyurvēda cikitsa*) is less expensive. The reasons for that are the low cost of medicines (*marunnukaḷ*) and instruments (*upakaraṇaṅgaḷ*). A person undergoing Ayurvedic medical treatment (*āyurvēda vaidya prakāram*) can procure medicines (*marunnukaḷ*) and instruments (*upakaraṇaṅgaḷ*) without expending much effort and expense.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

For questions (9) and (10), the answers are too much to write. For the time being, I apologize that I cannot do that with the required depth.

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Testimonies from the Presidency of Madras
written in Kanarese/Kannada

M. R. Ry. A. Subbaraya Pandit Avargal

Translated from the Kanarese (Kannada) by ANUSHA S. RAO
and SENTHALIR SIVALINGAM

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

According to Ayurvedic treatises (*śāstra*), there are two kinds of diseases (*vyādhi*). Accordingly, medicines (*auśadhi*) are of two kinds too. One of these is called “the strengthening” (*bṛṃhana*) and the other is called “the thinning” (*laṃghana*).¹ While the strengthening medicine (*bṛṃhanaauśadha*) nourishes (*puṣṭigoḷisu*) the body, the thinning medicine (*laṃghanauśadha*) slims down (*kṛśa māḍu*) the body. The thinning medicine is of two kinds: purificatory (*śōdhanauśadha*) and palliative medicine (*śamanauśadha*).

Medicines that expel the humours (*dōṣa*) from the body are called purificatory medicines (*śōdhanauśadha*). This purificatory medicine is further categorized into five kinds:

1. enema (*vasti*)
2. purgation (*virēcana*)
3. emesis (*vamana*)
4. purgation for the head (*śirōvirēcana*)
5. bloodletting (*raktamōkṣaṇa*)

The medicine that brings imbalanced humours (*vyatyāsavāgiruva dōṣa*) into equilibrium (*samasthiti*) without removing them from the body and without disturbing the balanced humours is called palliative medicine (*śamanauśadha*). This is further divided into seven types:

¹ See a parallel passage in *Aṣṭāṅgahrdayasaṃhitā, Sūtrasthāna* 14.1-9. When looking at this passage of the *Aṣṭāṅgahrdayasaṃhitā*, it is clear that A. Subbaraya Pandit Avargal used a perhaps modern commentary on this treatise.

- (1) Digestive medicine (*agnidīptiyanṇuṇṭumāḍu*); literally: that which kindles the flame of the fire [in the stomach]
- (2) Stomachic medicine (*ajīrṇadravavannu pākamāḍu*); that which assimilates the undigested fluid
- (3) Avoidance of food (*haśivannu taḍe*); that which obstructs hunger
- (4) Avoidance of drinking (*bāyārikeyannu taḍe*); that which obstructs thirst
- (5) Strenuous physical exercise (*dehāyāsakaravāda aṃgasādhane*)
- (6) Exposure to sunlight or heat, etc. (*bisilinalli saṃcāra māḍuvude(u?)*)
- (7) Exposure to breeze or wind, etc. (*gāliyalli saṃcāra māḍu*)

In the case of patients who are emaciated (*kṛśarāgīruva*) as a result of diseases, pungent substances (*tīkṣṇauśadha*), drinking alcohol (*madyapāna*), vices/addictions (*vyasana*), and sexual intercourse (*strīśahavāsa*), and in cases of pregnant women (*garbhīṇi*), women who have recently given birth (*bāṇanti*), children (*bālaka*), aged people (*vṛddha*), etc., the disease must be treated (*cikitsa māḍabēku*) while simultaneously providing nourishment (*puṣṭigoḷisu*) [through strengthening medicine]. Since medicine, food (*āhāra*), and activities (*vihāra*) can allay (*śamanagoḷisu*) disease, food and activities are sometimes regarded as medicine.

Question 2

- (a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stand the tests of modern scientific criticism.*
- (b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*
- (c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

(1) Some diseases are due to transgressions (*aparādha*) committed in the course of this lifetime. (2) Some diseases in this lifetime are the results of transgressions committed in the course of previous lifetimes. (3) Finally, other diseases are the result of both the above causes.

Among these, the first category, i.e., the transgressions committed by a person in this lifetime, are constituted by [actions concerning] a) time (*kāla*), b) sense objects (*indriya viṣaya*), and c) activities (*karma*), which are insufficient (*svalpa*), excessive (*atiyāda*), or aberrant (*akrama*) in some way.

The second category, i.e., diseases caused by transgressions committed in past lifetimes, can be allayed by donations (*dāna*), chanting (*japa*), sacrifices (*hōma*), worship of the gods (*dēvatārcane*) etc., which are meritorious deeds (*puṇya-karma*). The argument (*vāda*) that there are no past lifetimes is opposed to both reasoning (*nyāyaviruddha*) and scripture (*śāstraviruddha*). Since we can directly perceive the unproportionate distribution (*tāratamya*) of wealth (*aiśvarya*), intelligence (*buddhi*), and beauty (*saumḍarya*) etc. among various people, we can only conclude that these attributes are the result of merits (*puṇya*) and sins (*pāpa*) from past lifetimes. It is not possible for anyone to establish otherwise through reasoning (*nyāya*). The scriptures too (*vēdaśāstra*) tell us that the merits and transgressions of past lifetimes are responsible for this unequal distribution.

People of all civilizations (*janāṃga*) accept (*oppikoḷḷu*) that there is another body (*dēha*) that goes to heaven (*svarga*) or hell (*naraka*). Following this reasoning, even the Europeans (*yūropakhaṇḍadava*) have concluded that [the idea of] past lifetimes must be accepted. Therefore, it is abundantly clear that diseases are caused by wrongdoing (*pāpa*) from previous lifetimes and transgressions (*aparādha*) in this lifetime.

(b)

Air (*vāyu*), heat (*uṣṇa*), and cold (*śīta*), which are the causative elements (*kāraṇabhūta*) for the birth (*utpatti*) and maintenance (*sthiti*) of the body, are popularly known as wind (*vāta*), bile (*pitta*), and phlegm (*śleṣma*), and as the humours (*dōṣa*). If these are in equilibrium (*samasthiti*), the body is in a state of health (*ārogyasthiti*). When there is an imbalance in these, it naturally results in disease or death. Unhealthy food and activities exacerbate (*vṛddhigolisu*) the imbalances (*dōṣa*).

These imbalances impair (*keḍisu*) the body's constituent substances (*dhātus*) – nutrient fluid (*rasa*), blood (*rakta*), muscles (*māṃsa*), fatty tissue (*medassu*), marrow (*majja*), and semen (*śukra*) – either in part or entirety and cause disease. In all diseases, these imbalances cause pain and discomfort (*yātane*) in accordance with the proportion of the imbalance. These pains are regarded as symptoms of the specific disease.

In all associated diseases, air (*vāyu*) leads to pains, emaciation (*kārśya*), spasms (*śaḷata* (*seḷata?*)), a little acidity (*svalpavuḷi*), thirst (*bāyārike*), slightly

acidic (*vagaru (ogaru?)*) taste on the tongue, and causes nails (*nakha*), eyes (*netra*), urine (*mūtra*), and stools (*purīśa*) to turn black or reddish-black.

Bile (*pitta*) leads to burning, red colour, heat, sores or ulcers (*huṇṇu*), sweat, water oozing (*nīru suri*), festering of sores (*koḷeyuvudu*), emaciation (*kāṛṣya*), fainting spells (*mūrche*), madness (*huccu*), a pungent and sour taste on the tongue (*khāra mattu huḷi rasa*), and causes the nails and eyes to turn any colour except white (*śvēta*) and red (*aruṇa*).

Phlegm causes joint cramps (*kīlugaḷu hiḍidukoḷḷu*), hardening (*kaṭhīnatva*), itching (*nave*), acidity (*vūḷi (uḷi?)*), heaviness of the body (*maibhāra*), difficulty in passing urine, constipation (*malamūtragaḷa taḍe*), stickiness in the mouth (*bāyi aṇṭuvudu*), inertia (*pāṭavavillade irōṇa*) in the body and mind, irritability (*kṣōbhe*), indigestion (*ajīrṇa*), hypersomnia (*atinidre*), sweet (*madhura*) and saline (*lavaṇa*) taste on the tongue, turns the body, nails, and eyes white (*biḷīvarṇa*), and in severe cases, it causes death after prolonged suffering.

The symptoms of these imbalances (*dōṣa*) are found in all diseases. The relative proportions (*balābala*) of these imbalances in the humours must be identified through these symptoms (*lakṣaṇa*) and treated accordingly.

A patient must be tested (diagnosed) in accordance with his age-related strength (*vayōbala*), and his complexion (*varṇa*) through: 1. Observing the patient through the eyes; 2. Touching parts of the body (*avayava*) and observing the differences (*vyatyāsa*) caused by the disease; and 3. Questioning the patient to understand the pains, etc.

Diseases should be tested through: 1. causes (*nidāna*), 2. progression (*samprāpti*), 3. prodromal symptoms (*pūrvarūpa*), 4. symptoms (*lakṣaṇa*), 5. alleviation (*upaśaya*), i.e., that which is wholesome or unwholesome (*pathāpathya*).

- (1) Causes (*nidāna*) refers to foods and activities that cause the disease.
- (2) Progression (*samprāpti*) refers to the intensification (*prakōpa*) of the humours through the causes, when the humours accumulate in parts of the body termed “corruptible” (*dūṣya*) and cause disease.
- (3) Prodromal symptoms (*pūrvarūpa*) refers to the preliminary stage (*aṃkurāvasthe*) of the disease, where, despite pain in the body, it is not possible to diagnose the specific disease.
- (4) Manifestation (*rūpa*) refers to the defining characteristic (*lakṣaṇa*) of the disease. Once the disease has manifested, it is possible to diagnose (*inthā vyādhiyendu niścayisuvudu*) due to the imbalances in the body.
- (5) Alleviation (*upaśaya*) refers to treatment (*pathya*). When it is not possible to diagnose the specific disease (*inthā vyādhiyendu niṣkarṣe māduvudakke sādhyavillada samayadalli*), a specific treatment or medicine (*auśadhi*) may be administered (*prayōgisi*), and if it does not cure the disease, another

treatment may be adopted. Since specific treatments are associated with specific diseases, it is possible to discern (*niṣkarṣisabahuḍu*) the disease through the administration of treatment (*auṣadhaprayōga*).

The disease must be diagnosed and treated in accordance with the above mentioned five factors (*sāmagri*).

Substances that cause the disease to subside (*śamana*) are commonly known as treatment (*pathya* or *auṣadhi*). Treatment is divided into three categories: (1) medicine (*auṣadha*), (2) food (*āhāra*), and (3) activities (*vihāra*). Clean air, attire, etc. are categorized within lifestyle (*vihāra*).

The above medicines, etc. are categorized into six:

- (1) Medicine that performs the opposite function than that of the cause (*hētuvi-paryastauṣadha*)
- (2) Medicine that performs the opposite function than that of the disease (*vyādhi-viparyastauṣadha*)
- (3) Medicine that performs the opposite function than that of the cause and the disease (*hētuvyādhi ubhaya viparyastauṣadha*)
- (4) Medicine that, despite performing the same function as the cause, results in the alleviation (*śamana*) of the disease (*hētuviparyastārthakāri auṣadha*)
- (5) Medicine that, despite performing the same function as the disease, results in the alleviation (*śamana*) of the disease (*vyādhiviparyastārthakāri auṣadha*)
- (6) Medicine that, despite performing the same function as the cause and the disease, results in the alleviation of the disease (*hētuvyādhi ubhaya viparyastārthakāri auṣadha*)

(2) food (*āhāra*) and (3) lifestyle (*vihāra*) are also similarly categorized. Examples for these are presented in great detail in our scriptures (*grantha*).

(c)

There are thousands of instances of diseases such as fever arising from the impairment of all three humours (*sannipāta jvara*), wasting disease (*kṣayarōga*), anaemia (*pāṇḍu rōga*), digestive ulcers (*pariṇāmaśūle*), and other chronic (*dīrghakālādinda anusarikoṇḍu bandiruva*) diseases, which have been cured by Ayurvedic medicine despite not subsiding (*śamanavāgade*) through long treatment from foreign (*deśāntara*) doctors. Amongst medicines, Ayurvedic medicine is regarded as superior to foreign medicines. With regard to diseases where surgical intervention (*śastracikitse*) is necessary, surgery in foreign countries is the best option (*sarvōttama*).

Question 3

(a) Are you connected directly with any institution, providing medical relief or medical education, on indigenous lines?

(b) Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of

(1) adequacy of medical relief provided; and

(2) suitability as centres of medical education?

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.

(a)

I have been working as an assistant scholar (*paṇḍita*) in the Mysore Government Ayurveda College since the inauguration of the college fifteen years ago. I am now the headmaster of the college.

(b)

(1) Medical schools (*auśadha śāleḡaḡu*) (2) and even Ayurvedic schools (*pāṭha-śāleḡaḡu*) are not efficient (*samarpaka*). Each village should have at least one medical school. These should be located where grass (*ṭṛṇa*), firewood (*kāṣṭha*), and water (*jala*) are available in abundance (*samṛddhiyāgi*), with a mountain (*parvata*) nearby, in a healthy atmosphere (*ārogya bhūmi*). It would be best if there is a river (*nadi*) as well.

(c)

Currently, resources (*dravya sampattu*) are not easily available (*anukūlavāgi*) for medical schools and Ayurvedic schools. If the government provided (*vinīyōgis-idalli*) half of the resources (*dravya*) that it supplies to English hospitals [allopathic schools] and medical schools (*vaidyavidyāśāle*) to indigenous (*dēśīya*) hospitals and medical schools (*vaidyavidyāśāle*) instead, the latter would undoubtedly develop (*uttamavāda sthitige baruvudu*).

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries and museums;*
- (3) that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

In order for indigenous (*dēśīya*) medicine (*vaidya*) to develop (*atyuttama sthiti*):

- (1)** Intelligent (*mēdhāvi*) students (*vidyārthigaḷu*) should learn and practice (*vidyābhyāsa*) from doctors who are great scholars (*mahāpaṇḍita*).
- (2)** Facilities should be provided to teachers (*upādhyāya*) and students (*vidyārthi*) to work (*kelasa māḍu*) and supervise (*māḍisikoḷḷu*) in hospitals (*āspatre*), libraries (*pustakālaya*), physics schools (*bhautikaśāstra*), and demonstration halls (*pradarśanaśāle*).
- (3)** Teachers should be allotted time to research (*pariśīlane*) of the scriptures (*śāstra*). Currently, there are no good (*samarpakavāda*) medical schools anywhere.

(b)

Currently, if it is not feasible to arrange for indigenous medical facilities to be available throughout the country, hospitals and medical schools should be established in at least some places for those who have a heartfelt desire for indigenous medicine.

Question 5

Do you agree with the view of the Calcutta University Commission that “There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of western medicine the traditional knowledge which is of real value and will reject, as western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and western ‘systems’ of medicine will then disappear.”?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

Scholars from Kolkata are well-versed in both our medicine and Western (*pāścātya*) medicine (*śāstra*). Since Western medicine keeps changing, it is difficult to conclusively determine (*niścaya paṭṭiruvudilla*) how much of it is true (*nijāṃśa*). However, the diagnostic process (*parīkṣākrama*) in Western medicine is quite effective (*bahaḷa samarpaka*). Kolkata scholars, who are experts in both systems of medicine (*ubhayaśāstrapāraṃgata*) have concluded that, even by their [Western] diagnostic process, the theories and principles of our [medical] system (*śāstrasiddhānta*) are ultimately (*paryavasānadalli*) validated (*satya*). This conclusion is wholly justified (*sampūrṇavāgiyū nyāyavāgiruvudu*). Therefore, we must all wholeheartedly accept their conclusion (*tīrmāna*).

If a similar procedure is methodically (*kramavāgi*) followed with regard to research (*śōdhane*) in our system (*śāstrīya padārtha*) as the Westerners do with theirs, we will find the true (*satyada*) conclusion (*phalitāṃśa*) that the two [systems] are the same. Jaggery is sweet in every country, and pepper is spicy in all countries.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, as also a study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D., of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

The important principles (*mukhyāṁśagaḷu*) of Western physics, etc., along with surgery, at the very least (*svalpa maṭṭige*), should (*yuktavāgide*) be taught alongside the Ayurvedic system (*śāstra*).

(a)

In the Indian subcontinent, every region (*samastadēśa*) has treatises on medicine (*vaidya grantha*) in its vernacular (*āyāya dēśabhāṣe*) as well as plenty of texts translated (*bhāṣāntara māḍalpaṭṭa*) into the vernacular from Sanskrit. Those who have studied (*vyāsaṁga*) only the texts in the vernacular can be regarded as doctors (*vaidya*) of the first level (*taragati*). Doctors familiar with the English language who have studied the most important elements (*mukhyāṁśa*) of Western medicine, such as physics (*bhautikaśāstra*), etc., and who have studied Ayurvedic treatises in their vernacular may be regarded as doctors of the second level.

Those who have completely studied the Sanskrit treatises on medicine (*vaidyaśāstra grantha*) and who have studied the most important elements (*mukhyāṁśa*) of Western medicine in their vernacular may be regarded as doctors of the third level.

Those who have completely studied the Sanskrit treatises on medicine and who have great expertise (*adhika parikrama*) in Western treatises (*pāścātya śāstra*) that are in English may be regarded as doctors of the fourth level.

(b)

Students should know either (1) the vernacular (*svadēśabhāṣe*), (2) both the vernacular and English, (3) both the vernacular and Sanskrit, or (4) both English and Sanskrit. Students of the first and second levels as categorized previously should

be mandated to study for two years. Students of the third and fourth levels should study for four years.

(c)

Teachers should teach (*bōdhisu*) students in accordance with the student's capacity (*yōgyatānugūṇavāgi*) in their vernaculars and, where possible, in Sanskrit as well. I have enclosed the syllabus (*pāthyakrama*) of the Mysore Government Ayurveda College along with this.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

(a) *the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*

(b) *any changes in, or additions to, the existing legislation on medical registration.*

It is extremely important (*atyavaśyaka*) to include Hindu [Ayurvedic] doctors (*Hindu vaidya*) in the medical registration [registry]. If this step is not undertaken, it would be a waste of effort (*śrama vyarthavāgu*) to strive for the development (*abhiṣṛddhi*) of Hindu medicine.

(a)

At this point, an organization (*saṃgha*) should be established in the capital city (*rājadhāni*) by bringing together doctors who are compassionate (*dayālu*) and well-known (*prasiddha*). Doctors who desire government (*sarkāra*) recognitions (*bahumāna*) should be mandated to be tested by this organization and provided with qualification certificates (*yōgyatā patrike*) upon completion. In several villages, there are many doctors who have taken up medicine as a hereditary (*vaṃśapāramparyā*) occupation. Such doctors would know of at least a few excellent medicines (*auśadhi*). These medications (*auśadha*) should be collected (*saṃgrahisu*) and taught to other doctors as a service to the nation (*dēśakke upakāra*). There are several doctors in villages who have a reputation (*prasiddhi*) for curing (*guṇa māḍu*) diseases that are difficult to treat (*kaśṭasādhya*). Even if

the organization cannot administer examinations, such doctors in its vicinity and in neighbouring villages should certainly be added to the medical register (*ri-jisṭar*).

(b)

Currently, several English doctors who wrongly (*anyāyavāgi*) denigrate (*dūṣisutta*) Hindu medicine have become proponents against (*virōdhi*) Hindu medicine. Therefore, it is justified (*nyāyavāgiru*) to not give English doctors authority (*adhikāra*) with regard to Hindu doctors.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

In Hindu medicine (*śāstra*), several prescribed medicines are mixtures (*miśra-vāda*) containing gold (*suvarṇa*) and gems (*ratna*). The cost of these medicines would undoubtedly (*saṁśaya-villa*) be much higher (*heccu*) than that of English medicines.

However, the cost of common [indigenous] medicines is less than that of the [corresponding] foreign medicine (*dēśāntara auṣadha*). In the case of foreign medicine, the export duties (*bāḍige*) are generally (*prāyaśaḥ*) higher than the actual cost (*kṛaya*) of the medicines. Hence, we need to pay high prices (*heccu bele*) even for common (*sāmānya*) foreign medicines. At that price, we can manufacture (*māḍabahudu*) better (*uttama*) medicines (*auṣadhi*) here. There is no doubt that our common (*sāmānya*) medicines (*auṣadha*) cost much less than common medicines (*auṣadhi*) from foreign countries. If it is impossible to find the materials (*padārtha*) we need here, it is justified to buy them from foreign countries at their asking price.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for revival.

Earlier (*pūrva*), all Hindu kings only took (*sēvisu*) Ayurvedic medicines. Following (*anuserisu*) them, administrative officials (*adhikāra māḍuva*) and wealthy

people (*dhanika*) also took indigenous (*svadēśīya*) medicines. The laity in turn followed them and took our [Ayurvedic] medicine. Just as, in present times, foreign (*vidēśīya*) doctors are esteemed (*maryāde*) and wealthy (*dhanasamṛddhi*), indigenous doctors previously enjoyed great (*viśeṣa*) honour (*sanmāna*) and wealth (*dhanasamṛddhi*).

During the Mohammedans' rule (*rājyabhāra*), Mohammedan medicine began, alongside our doctors. Later, Hindu kings encouraged both systems of medicine. When the rule of the English began, English medicines (*auśadhi*) were popularized (*pracāra*). Initially, although Hindu kings did not accept (*svīkarisadē iddāgiyū*) English medicines, they were forced to (*avaśyakavāgiyū*) give English doctors more money (*haṇa*) and respect than Hindu doctors. After some time, a law (*kānūnu*) was passed (*pracāradalli bantū*), which mandated that all employees of the English government required permission (*anumati*) from English doctors to take medical (*vyādhiprayukta*) leave (*viśrānti*). As a result, this was equivalent to a restriction (*nirbandha*) on all government employees, requiring them to take English medicine (*auśadha*). All the government employees began taking English medicines. Then, all the wealthy people started following the government employees. Even those who could not attend court or office (*kōṛṭu-kacēri*) due to ill-health (*dehālasya*) had to obtain permission from English doctors, in order to avoid penalties (*śikṣe*). Therefore, everyone was bound by the authority of English doctors. Hence, indigenous doctors in all parts of the country were subjected to a servile (*hīna*) plight (*sthiti*). Most doctors gave up their hereditary (*kulakramavāgi banda*) knowledge (*vidye*) and took to other professions for survival (*jīvanōpāya*). Just as thieves live on here and there despite a large number of policemen, indigenous medicine still lives on here and there, despite the hard conditions (*śramakāla*).

Suppose there was a wealthy man, living comfortably in his beautiful bungalow, and thieves were to tie him up, rob him of everything he owned, starve him, and dump him in a forest. If a compassionate man were to then see him in that pitiable plight (*duravasthe*), he would first untie his bonds, then provide him with food, and then, once he [the victim] recovered, help him reach his own home. Similarly, good-hearted people (*puṇyātmaru*) should uplift indigenous medicine which is in a state of misfortune (*daurbhāgya deśeyalliruva*) by (1) untying it (*bandhanvannu biḍisi*), (2) breathing life (*jīvanavannu koṭṭu*) into it, and then (3) giving it an exalted (*uttama*) position (*sthāna*).

If the government could permit (*abhayavannu koṭṭalli*) government employees and others to consult indigenous doctors for medication (*auśadhavannu svīkarisabahudu*) when they are ill (*dehālasya* *vādalli*) and give these doctors the

authority to sanction (*appaṇe*) medical leave (*viśramisikoḷḷuvudakke*), indigenous medicine would be freed of its bonds.

In the whole country, if indigenous hospitals (*dēśīya vaidyaśāle*) are set up along with the medical stores that sell foreign medicines, and indigenous doctors are afforded a living (*jīvana*) and rewards (*puraskāra*), this could breathe life into indigenous medicine.

If kings (*cakrādhīpati*) take indigenous medicine and reward indigenous doctors, indigenous medicine will reach its [exalted] place.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

For the development of indigenous medicine, everybody should help (*sahāya*) in these ways:

(a)

Administrators (*rājyabhāravannu māḍuva*) should generously (*yathēṣṭavāgi*) utilize resources (*dravya*) and establish indigenous hospitals and medical schools. Government employees in the forest department (*araṇyadalli kelasamāḍuva*) should be instructed (*appaṇe māḍabeku*) to provide (*odagisikoḷḷuvante*) the raw materials (*mūlikegaḷu*) required by indigenous medical schools.

Since indigenous medical schools and hospitals are especially useful (*prayōjanakara*) to everyone, the government should, with special interest (*kutūhaldinda*), make efforts (*prayatna*) towards the development (*abhivṛddhi*) of indigenous medicine. These should then be communicated to the literate population through (*sarā..ī?*) newspapers.

The above-mentioned matters should be communicated to the illiterate (*ōdu baraha bāradiruva*) population by instructing heads at the village or district level (such as *paṭēlaru*, *shānubhōgaru*), and by ordering their supervising (*mēlpaṭṭa*) officers to ensure (*vicāra māḍuvante*) that they carry out this task wholeheartedly.

Recommendations (*shiphārsu*) should be made to all schools (*vidyānilaya*) and municipalities to organize (*ērpāḍu*) for the development of indigenous medicine.

(b)

Just as municipalities are helping and developing other [not indigenous] medical schools (*vaidyaśāle*) and other schools (*vidyāśāle*), they should also establish (*sthāpisi*) and develop (*abhivrddhigoḷisabeku*) indigenous medical schools. Since it would be difficult (*śramasādhya*) to enrol students into these schools, students should be given scholarships (*vidyārthivētana*). Indigenous doctors who are struggling (*bahu śrama paṭṭu*) to sustain in towns and cities (*paṭṭana*) should be suitably (*yōgyatānusāra*) compensated with materials (*dravya sahāya*) and rewarded (*puraskarisabeku*).

If medicinal herbs and plants (*vrkṣalatādi*) conducive to (*anukūlavāgiruva*) indigenous medicine are grown in gardens, nurseries, etc. (*vanōpavana*) in towns and cities (*paṭṭana*), it would lead to good health. Besides, this would specially benefit (*prayōjana*) hospitals (*vaidyaśāle*).

People consume coffee and snacks in restaurants (*bhakṣyaśāle*) in the city, which causes a deterioration (*nyūnate*) of health. In other places, people go hungry. Therefore, restaurants must be removed, and only dining halls (*bhōjana śāle*) should be retained. This would improve the health of towns and cities, and the spending (*kharcu*) on medicines would reduce. In recent times, youngsters have begun pilfering some money at home. Closing down restaurants would also teach them moral lessons (*nīti*), because it is rare for young children who are ethical to grow into unethical youth.

(c)

All educational institutions should have a department (*bhāga*) for indigenous medicines. They should also establish universities (*mahāpāṭhaśāle*) for advanced learning in indigenous medicine and provide scholarships (*vidyārthivētana*) for deserving students.

If the new (*navīna*) foreign method of preparation (*pākakrama*) of our medicines is more convenient (*saukarya*) than the one laid down in scripture (*śāstrīyakramakkintalū*), then adequate steps should be taken to teach the preparation of our medicine in the new method (*navīna pākakramadalli*).

In a province (*rājya*) like ours with many languages, the Sanskrit medical treatises (*vaidya śāstra*) are difficult to learn in one common language. Hence,

arrangements should be made to conduct examinations (*parīkṣe*) in both the vernaculars and in Sanskrit.

(d)

If we expect the government's help in developing the indigenous medicine, it is currently impossible to obtain their complete help. Because indigenous medicine is useful (*prayōjanakārī*) to the entire population, everyone should provide some [financial] resources to indigenous medicine despite hardships (*śramavādāgiyū*), just as they would for their own living (*annavastu*).

Wealthy people should establish indigenous (*dēśīya*) hospitals or medical schools, insofar as they are able.

Newspapers (*vartamāna patrike*) should publish information on Ayurvedic medicines and their benefits without expecting any profits (*pratiphala*) in return.

Businesspersons should sell (*vikrayisi*) indigenous medicines and provide assistance to doctors and other people without looking for profits (*svaprayojana*).

In all the parts of our province (*rājya*), this should be implemented without disturbing (*vaiṣamya*) the caste system (*jāti*), etc., which have been followed for a long time.

All beings have a right (*adhikāra*) to the gift of life according to scripture (*śāstra*). There is no gift (*dāna*) in the world or in the scriptures, that gives greater results (*phala*) than the gift of life (*prāṇadāna*). Therefore, everyone should develop (*abhiṣṭhigolisu*) our (*namma*) medicine. I pray to God that everyone achieves the greatest fame in this world and the greatest comforts (*saukarya*) in the other world (*paraloka*) by doing so.

(Sanskrit saying)

Any bit of good here belongs indeed to the guru, and not at all to me.

Any bit of bad here belongs to me alone, not indeed to the guru.

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Testimonies from the Presidency of Madras
written in Oriya

Honorable Kaviraja Kamakshi Prasad Sharma Mahasayo

Translated from the Oriya by DIBAKAMI KRUTARTHAN

Question 1

What is the division, or divisions, of the indigenous systems of medicine – Ayurveda, Unani, or Siddha – that you propose to deal with?

I am putting forward my views on the Ayurvedic treatment system.

Question 2

(a) *What is the theory, or theories, of causation of disease according to your system? Please favour the Committee with your views as to how far your theory or theories stands the tests of modern scientific criticism.*

(b) *What are the principles and methods of diagnosis and treatment followed in your system? Please favour the Committee with your views as to the general efficacy of treatment adopted in your system, supporting your statements by facts and figures wherever possible.*

(c) *Do you hold the view that indigenous systems of treatment are more efficacious in certain conditions than other systems? If you do, please adduce evidence in support of your statement.*

(a)

I will below give the main causes (*kāraṇa*) for diseases (*rogo*) according to the [principles of] Ayurveda. The first cause is the intake of harmful food (*aniyamīta āhāra vihāra*), like stale food, food without nutrition value, hard to digest etc., irregular life style (*mithyāhāra vihāra*) and habits (*abhyāsa*), like late night sleeping, which harms liver function (*pīnasa āghāta*) and results in pain and stiffness

in the body (*śarīra*) and joints [like rheumatism] and also many other bodily disorders. Ayurveda enumerates other causes for diseases:

प्रशङ्गात् रात्रि संस्पर्शान् निश्वासात् सहभोजनात्; एकाशर्या सनाचापि वस्त्र माल्यानुलेपनात्, कुष्ठंजरं चशोसंच नेत्राभिष्य यिये वच औपसर्गिक रोगं च संक्रामन्तिनरात्रं॥

For example: contact of bodies, inhaling and exhaling (*niśvāśa praśvāśa*) each other's breath, sleeping on the same bed, use of the same clothes, and application of ointments used by others may result in leprosy (*kuṣṭha rogo*) and fever (*jvara*) etc. It [Ayurveda] also mentions a few other mysterious causes, like malign forces (malevolent spirits - *bhūta, preta*), ill will (*abhiśāpa*), which also cause some inexplicable and sudden diseases (*āgantuka rogo*). Thus, according to Ayurveda, there are two main reasons that cause diseases, and firstly are bodily causes, like the consumption of harmful food. Modern science may not agree with some of these theories of Ayurveda, but contemporary allopathic doctors also agree that harmful food and viruses (*jibāṇu*), and organisms are causes for some diseases. The doctors (*vaidya*) advise the patients (*rogī*) on the importance of hygiene and cleanliness at home, the use of clean dress and beds, hygiene and nutritious food, the avoidance of multiple uses of things by a number of people etc. in the prevention of diseases. The allopathic doctors accept these principles which were delineated in Ayurveda centuries ago by the sages (*ṛṣi*). The other types of diseases mentioned in Ayurveda are caused by malign forces and ill will. If we go deep, we may find that modern medical science (*ādhunika vaigyanika*) may not totally agree with Ayurveda, and we also do not find in Ayurveda anything like allopathy's research and development into organisms, genes, and cells. This is due to the lack of research (*anuśandhāna*) and development (*vikāśa*) in Ayurveda, but with in-depth study and consultation (*parāmarśa*), the modern developments can be incorporated into Ayurveda as well.

Question 3

(a) Are you connected directly with any institution providing medical relief or medical education on indigenous lines?

(b) Do you consider that the existing institutions of indigenous systems are satisfactory from the standpoint of

(1) adequacy of medical relief provided; and

(2) suitability as centres of medical education?

If your answer is in the negative, please state in what respects you consider the existing arrangements deficient and how you propose to remedy them.

(c) *Do you consider that there exists at present sufficient provision for medical relief and medical education on indigenous lines? If your answer is in the negative, please state what measures you would propose to remedy the insufficiency.*

(a)

In my practical opinion, the “*Dhanvantarī Aūśadhālaya* (medicine store)” is a well-established organization (*anuṣṭāna*) working on principles (*siddhānta*) of Ayurvedic medicine. It presents medicines and treatment of patients in a systematic and organized manner according to the ancient Ayurvedic principles. A student of Ayurveda is given in-depth knowledge (*vidyā*) about the whole system (*praṇālī*) of Ayurvedic medicines, their dosage, and treatment patterns deploying ancient and modern techniques.

(b)

Concerning the field of Ayurveda, the availability of medicine as per requirement and for the provision of proper Ayurvedic educational training in Ayurveda: In my opinion, in the Madras (Tamil Nadu) region, there are only few and almost negligible facilities (*subidhā*) in the above two fields. The few facilities, wherever they are functioning, are not satisfactory. To strengthen the system in this region, Ayurveda schools (*vidyālaya*) and colleges (*mahāvīdyālaya*) should be established in the capital and in important cities distributed across progressive districts. These institutions (*samsthā*) should be equipped with Ayurvedic medicine dispensaries (*aūśadhālaya*) for giving hands-on knowledge and practical training to students. Medicines should be available in sufficient quantities. In the beginning, patients should be treated and medicines should be given free of cost. If work started this way, Ayurveda can be made more acceptable among people and established from the ground.

(c)

At present, some individuals and organizations are giving free Ayurvedic treatment, but there is an acute shortage of proper medicines, due to a lack of support from the government to the Ayurvedic systems and its education. As a result, the patients are not getting satisfactory results. If the government wants to

provide proper medicine, they should first establish a committee (*samiti*) of prominent Vaidyas¹ of ancient Ayurvedic medicine from different region across the state. Secondly, based on the recommendations of the committee, the government should short list some very effective medicines of high quality and reasonable cost (*upayukta guṇaprada aūśadha*). Next, the government should establish a good Ayurvedic dispensary with sufficient quantities of the selected medicines. The dispensaries should have well well-trained Vaidyas conversant with the recommendations of the Ayurveda committee of Ayurveda and put them into practice to systematically implement treatment. In the course of the treatment of patients, the Vaidyas play an important role in establishing and fine tuning the recommended Ayurvedic systems. In the course of time, some students interested in pursuing Ayurveda can systematically be given necessary knowledge and practical training through Ayurvedic schools and colleges across important cities, districts, and states. This will popularize the Ayurvedic system of medicines.

Question 4

Do you consider that the ideal medical training of indigenous systems of medicine requires

- (1) *that the students should be placed under the personal guidance of teachers of first-rate ability and of recognized standing in their subjects;*
- (2) *that the teachers and students alike should have access to well-appointed hospitals, laboratories, libraries, and museums;*
- (3) *that the teachers should have sufficient leisure to be able to pursue independent investigations in their own subjects?*

If you share this view as to the essentials of medical training, do you consider that this ideal is attained or attainable in the near future in any institution in this Presidency or elsewhere, where there is provision for medical training on indigenous lines?

If you consider that this ideal is too high for the present, what would you substitute in its stead, as the idea to be worked out in the immediate present?

(a)

The students of the Ayurveda should be educated and trained under the direct supervision of experienced and skilled Vaidyas. The direct supervision and close contact with the Vaidyas will develop character and moral strength of the students.

¹ Traditional doctors of Ayurveda.

Through this process of intimate contact and extensive discussion with the experienced Vaidyas, the students will get in-depth knowledge of ancient Ayurveda and the developing future Ayurvedic system, and the students will become good Vaidyas; hence it is important to keep students under the supervision of and in contact with Vaidyas.

(b)

The Vaidyas and students should have free access to Ayurvedic hospitals, dispensaries, libraries, and exhibitions established by the government. Students will come in direct contact with various patients and under the guidance of Vaidyas gain in-depth practical knowledge and experience in the field of various diseases, the nature of patients, the process of diagnosis, the provision of treatment in a friendly manner, and the distribution of necessary medicines. Hence it is very important to associate teachers and students with Ayurvedic hospitals. Association with dispensaries will expose the teachers and students to various oils, ghee, honey, roots, leaves etc. and various ashes (*bhaṣma*)² used in Ayurveda. It will give them the necessary knowledge and experience in dispensing medicines for the treatment of chronic illnesses. Free access to libraries will help the students and teachers and students and studying various Ayurvedic treatments, and critical discussions among them will provide them with thorough knowledge. Through various exhibitions, teachers and students will collectively be exposed to the various ingredients of Ayurvedic medicines³.

(c)

The Vaidyas and teachers should be given the freedom and facilities to carry out research on medicines in their field of speciality by providing them with the required facilities. The Vaidyas will be able to integrate modern scientific developments in the field of medicine with traditional Ayurveda. In my opinion, the present practice of traditional Ayurveda has limited scope and effectiveness due to its confinement to narrow boundaries. By active collaboration with modern developments in investigative research and continuous development, Ayurveda can overcome this deficiency and evolve into an effective and progressive system of good treatment.

² Ashes prepared from different minerals, roasted natural roots, leaves, and bark of plants or trees etc.

³ Medicinal ingredients from the forest like various roots, fruits, leaves, barks, stems, and medicinal plants.

For the faster development of Ayurvedic treatment and education, I conclude that (1) [it is necessary] to achieve the above ideas for faster implementation of ideas, and (2) to put into practice the above ideas as soon as possible.

Question 5

Do you agree with the view of the Calcutta University Commission that "There is an obvious and promising desire at the present moment among the numerous adherents of these (indigenous) systems for closer touch with modern scientific methods. In time, no doubt, they will be able to make available for the practitioners of Western medicine the traditional knowledge which is of real value and will reject, as Western medicine continually rejects, those theories which are mere survivals, and cannot stand the test of experiments. The distinction between Indian and Western 'systems' of medicine will then disappear."?

If you agree that a unified system of medicine as indicated in the above passage is the ideal to be aimed at, what steps would you suggest for the fulfilment of such an ideal?

The commissioner of the Bengal education department has suggested very important points on the above subjects. Contemporary Vaidyas are in close touch with modern allopathic treatment, and the regular pattern of allopathic treatment should be adopted in Ayurvedic treatment also. Allopathy is never stuck with a particular medicine or treatment process, and it is continuously reviewing, improving, refining, and incorporating necessary changes in a methodical way. Thus, if a particular medicine is found effective today, next year it may be found unsuitable based on side effects or various factors, and it is removed from the British Pharmacopeia. In this way, no medicine and treatment in allopathy is itself established as a panacea or as a final end, making it always progressive and continuously developing. By contrast, in Ayurveda, there is no free exchange of experiences (*abhījyātā*) or findings, and it is made into a rigid and blind system (*andha paramparā*). Due to this rigid system, research and development is missing, and this is one of the main weaknesses of Ayurveda. In this way, it is found that whatever the Vaidyas have stated, the same medicine, dosage, and treatment pattern is blindly followed for generations. It is also found that some medicines mentioned in ancient texts (*śāstra*) are now not as effective. The main reason for this is that some of the ingredients do not give the same results for the patients. Some of the medicines are harmful because those ingredients and proportions are not suitable for the particular ailment. These things should be examined and

necessary deletions should be made in Ayurvedic medicine. Efforts should be made to remove the blind and routine treatment. A committee should be constituted, consisting of experts in allopathy and Ayurveda with open minds and scientific and analytic thinking. The state government should provide necessary facilities to the committee for examining the effectiveness and ineffectiveness of Ayurvedic medicines. The committee will work towards the development of Ayurveda and recommend the effectiveness or ineffectiveness and the dosage of each medicine. The committee's recommendations should be incorporated into the Ayurvedic treatment. By incorporating or adapting the critical examinations, discussions, and development methods of allopathy in Ayurveda, the traditional system can be developed into a progressive (*pragatiśīla*) and effective method of treatment. The suggestions of the committee of Kolkata are extremely useful.

Question 6

Do you agree with the view that the curriculum of studies of indigenous medicine should include a study of modern scientific methods as illustrated by such subjects of study as modern physics, chemistry, and biology, and also study on modern lines of anatomy, physiology, pathology, bacteriology, and surgery in all its branches?

If you agree with the above view, in whole or in part, please favour the Committee with a précis of the course of studies you would propose, for students of indigenous medicine, with special reference to

(a) *the progressive standards you would propose, that is to say, standards corresponding, for example, to the existing allopathic qualifications of licentiate (L.M.P. of our allopathic medical schools), graduate, masterate, and doctorate (L.M.S., M.B., M.S., M.D. of our Universities).*

(b) *The preliminary qualification and periods of study for each of the standards proposed.*

(c) *The medium or media of instruction proposed.*

Ayurveda should incorporate the following subjects of allopathy: modern material science, chemistry, biology, anatomy, physiology, diagnostic techniques, organisms (viruses and infections), root causes of diseases and surgical treatment. In fact, the above fields were also part of the traditional Ayurvedic science.

Question 7

What are your views on the question of extending medical registration to indigenous systems of medicine? If you hold that such extension is necessary or desirable, please favour the Committee with your views regarding

- (a) the formation of a suitable Registration Board for admitting competent practitioners into the medical register,*
- (b) any changes in, or additions to, the existing legislation on medical registration.*

In support of the above, I feel that in the above fields, stress should not be laid only on modern allopathic developments but also on bringing out the forgotten aspects of Ayurveda and surgery (*śalyatantra*), treatment of ENT⁴ and the head (*śālakya tantra*), treatment of diseases caused by malign forces (*bhūtavidyā*), virility treatment (*bājikaraṇa tantra*), pediatrics, and toxicology (*agada tantra*) and incorporate them in the modern study of Ayurvedic medicine. Otherwise, modern Vaidyas may remain ignorant of these invaluable developments in past Ayurveda, and these developments may be ultimately lost or extinct. Hence, we should synthesise the time-tested traditional Ayurvedic developments and the developments of modern medicines or allopathy. I personally feel that it is necessary to develop the collaboration of treasures of traditional Ayurveda and present the scientific findings of allopathy and incorporate them into modern Ayurvedic medical study.

(a)

In allopathic medical education systems, degrees like L.M.P. and M.B. are awarded by recognized universities based on the successful performance of medical students. I suggest the introduction of similar degrees, like *Vaidyarāja*, *Ayurveda Śāstrī*, *Ayurveda Ācārya* etc. which indicate the student's theoretical and practical knowledge of Ayurveda. This will encourage students to pursue higher study in the field of Ayurveda, and people will recognize the expertise of doctors in a particular field. Further, these degrees will be a status symbol endowing dignity and self-respect in society. Hence, it is very necessary to introduce a systematic syllabus and examination pattern for students to universities, which will indicate their proficiency in Ayurveda.

⁴ ENT (ear, nose, and head).

(b)

It is essential that the students of Ayurveda have proficiency in the Sanskrit language. The students should be able to freely talk, discuss, express, read, and understand Sanskrit. This will help them in exploring the age-old books of Ayurveda, which are written in Sanskrit. The candidates with fluency in Sanskrit should be given preference for receiving admission in Ayurvedic institutions, universities, and colleges.

(c)

The Tamil Nadu (Madras) region is a cosmopolitan region, where people from different parts of India, speaking various dialects, live. Hence, I feel Ayurveda in this region should be taught in Sanskrit so that students from all over the country can come and study Ayurveda.

(d)

I propose the following syllabus for the students:

1st Year Name of the books

1. Study of body and the skeleton structure (*śarīra vidyā* and *asti paricaya*)
2. *Mādhava Nīdāna*
3. *Śārṅgadhara Samhitā* (middle section)
4. Physiological science (*Svāsthya Vijnāna*)
5. Materia medica (*Harītakyaḍi Nighanṭu*)
6. *Rasendra Sārasaṃgraha* (1st part)

2nd Year Books

1. *Pratyakṣa Śārīra* (study of the body, middle part)
2. *Vāgbhaṭṭa (Nidana Aṃśa)*
3. *Suśruta (Śālakya Tantra)*
4. *Vanaūśadhī Darpaṇa* by *Birajā Caran*
5. *Rasendra Sārasaṃgraha* (full)
6. *Śārṅgadhara Samhitā* (other two parts)

3rd Year Books

1. *Caraka (Nidāna and Cikitsā)*
2. *Pratyakṣa Sarita* (Full)

3. *Suśruta (Śālakya Tantra)*
4. *Śālakya Tantra and Agada Tantra of Suśruta*
5. *Svāsthya Vijnāna of Vāgbhaṭṭa*

4th Year Books

1. *Caraka (full) Suśruta (full)*
2. *Vāgbhaṭṭa (full)*
3. *Bhāva prakāśa (Cikitsā Aṅga, full)*
4. *Rasendra Cintāmaṇī (full)*

In addition, some aspects of modern medical science (*ādhunika cikitsā vijnāna*) should be added to the syllabus of Ayurveda.

Question 8

What is your opinion regarding the comparative cost of treatment, according to allopathic and indigenous systems? Please give reasons for your opinion.

Ayurvedic treatments will be less expensive in comparison to allopathic treatment. In allopathy, in addition to the treatment and preparation of medicine, a lot of paraphernalia are involved and some unessential equipment and processes are used which are costly. These things increase the cost of allopathic treatment. However, Ayurvedic treatments are simple and oriented towards the object. Hence, I believe Ayurvedic treatments will be cheaper.

Question 9

What, in your opinion, are the causes of decay of the indigenous systems of medicine? Kindly favour the Committee with your suggestions for their revival.

I am putting forward my opinion on the reasons for the decrease in the acceptance and popularity of Ayurveda among the people. First, the government does not pay any attention towards the study of Ayurveda and its treatment. Secondly, at district and *taluk* [block] levels, there is no authorized organization or person for giving attention to Ayurveda and its treatment. Thus, the Ayurvedic system is left in the lurch, and this is the main reason for its downfall. To reverse the trend and achieve an integral development for this treatment system, the right form of

government (at the state level), district (*jillā*) boards, township (*tāluk*) boards, and municipality boards (at the town level) should extend full support to the Ayurvedic system. Any medical system in any country cannot develop without the support right from the government to the town level. In the absence of encouragement and help, nowadays the Vaidyas have no effective medicines and the patients are not getting the desired relief, because without encouragement and support no system can progress. If we analyse this, we find that in developed countries a lot of money is spent on improvements in the medical system. In developed European countries, immense encouragement and huge support is given to the allopathic system. From the above analogy, I feel that similar support and encouragement should be given for developing Ayurveda. I am sure this will bring the vanishing Ayurvedic system back into light and also support its overall development.

Question 10

Please state your views as to how the indigenous systems of medicine can be fostered and promoted by

- (a) *the State,*
- (b) *the local boards,*
- (c) *the Universities,*
- (d) *private agencies (individuals or associations).*

(a)

My opinion for the development of Ayurveda is as follows: The State government should constitute a committee of Vaidyas for the development of Ayurveda. The committee will take necessary steps for popularizing Ayurveda and work for its research and development. Ayurvedic hospitals and dispensaries should be established along-side government-run allopathic hospitals. The government should take necessary steps for educating and training the quacks and certify them for the medical practice. There are many individuals practising their own created treatment system effectively, and the government should provide the necessary facilities and support those experts. This will help the development of Ayurveda.

(b)

The town and villages should be brought under local boards, which will be responsible for Ayurvedic dispensaries and should be staffed with the qualified Vaidyas.

(c)

The universities will manage the hospitals and dispensaries. In association with the Ayurvedic schools and colleges, they will provide necessary treatments and medicines to the patients.

(d)

Individuals engaged in charitable institutions should be involved in running Ayurvedic hospitals and dispensaries in villages. These steps will definitely bring a continuous development in Ayurvedic treatment.