NEGOTIATING THE IDEA OF A HEALTHY BODY: KERALA, 1900 - 1970

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by

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Certificate

This is to certify that this thesis entitled **NEGOTIATING THE IDEA OF A HEALTHY BODY: KERALA, 1900–1970** is a bonafide record of genuine research done by **BINO P JOSE** under my supervision and guidance. No part of the thesis has been submitted before for the award of any degree.

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Declaration

I hereby declare that the work presented in the thesis entitled **NEGOTIATING THE IDEA OF A HEALTHY BODY: KERALA, 1900–1970** is based on the original work done by me under the guidance of Dr Burton Cleetus and Dr K S Madhavan and has not been included in any other thesis submitted previously for the award of any degree. The contents of the thesis are undergone plagiarism check using 'iThenticate' software at C.H.M.K. Library, University of Calicut, and the similarity index found within the permissible limit. I also declare that the thesis is free from AI generated contents.

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Bino P Jose

In memory of
my father P J Jose, who taught me to think,
work and love

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CHAPTER I
INTRODUCTION

"Why should we blindly believe in hearsays and be proud of our ancient medicine and the *vaidyas,* when Europeans pursue scientific methods that benefit people?"[1] observed P V Krishna Varier, an Ayurvedic practitioner of Kerala in the early decades of the twentieth century. He identified 'scientific method of enquiry' as the cardinal feature of modern western medicine and underlined the need to revisit the fundamentals of indigenous medical system. By the beginning of the twentieth century western medicine was gaining ground and was posing serious challenges to indigenous medical practices in Kerala.

The observations were published in *Dhanwanthari,* the first journal for Ayurveda started by P S Varier and P V Krishna Varier. They also founded the *Keraleeya Aryavaidyasamajam*[2] and the *Ayurveda Samajam, the* association for Ayurvedic practitioners as a platform to deliberate on Ayurveda. Varier also founded the *Ayurveda Patashala* (Ayurveda school). The establishment of this organisation was designed to institutionalise Ayurveda towards making it a 'scientific' discipline. However inherent in these discussions is the concern on what is health and what constitutes a healthy body in twentieth-century Kerala.

The notion of health beyond the ideas of ailments and cure, encompasses wider socio-cultural, religious and historical contexts. Thus, the notion of health in different societies are not necessarily the same and people

1. P V Krishna Varier, "Sarppavishatthinu oru puthiya Chikithsa", *Dhanwanthari* (Mal.), Book 3, No 1, August 1906, p. 14.
2. Aryavaidyan P K Varier, *Dhanwanthari Masika Prabandhasoochi*(Mal.), Kottackal: Publication Division, Vaidyaratnam P S Varier's Aryavaidyashala, May 2011, p.7.

across the world have generated novel and distinct ways of dealing with ailments and cure. However , with the rise of science as a mode of enquiry, the advent of euro-centric modernity, the rise of clinical practice, organised medical education and more specifically with the emergence of the germ theory of disease causation in the closing decades of the nineteenth century, what came to be identified as western medicine or allopathic medicine, backed by Eropean colonialism western medicine came to acquire a hegemonic dominance over therapeutic practices within Europe and in non-European world.

While colonialism, as a system of economic exploitation and political dominance of European nation states over non-European societies, a large number of scholars have tried to separate science as a form of enquiry and medicine as one of its cardinal offshoots as offering a means towards addressing their health needs, increasing life expectancy and having a direct impact on population growth in across the world. Thus, even when colonialism was subjected to criticism, medicine and science was seen as the domain of truth and rationality, which was universal and had to necessarily transgress regional identities and cultures and epistemic boundaries.

Such an uncritical reading of western medicine was challenged after the path breaking works of Georges Canguilhem and Michel Foucault, which attempted to engage with the rise of western medicine created an alliance between modern medical practice, new ways of seeing or gaze and the creation of a new vocabulary of knowledge that produced new spaces of power within European societies in in the nineteenth century.

Foucault in "The Birth of the Clinic: An Archaeology of Medical Perception" argues that before the emergence of the modern medical domain, knowledge about the body was speculative. That knowledge was constituted based on what could be felt rather than what was seen. With the aid of

microscopes and technical aides, physicians were able to see beneath the skin which opened up a whole new possibility of material knowledge which was seen and spoken about through an alliance of worlds and language.

With this epistemic shift, the human body and diseases came to be perceived in novel ways. Diseases were spread within the body of the patient. The diseases had to be ‘seen’ to be understood, underlying the emergence of a new notion of the human body , which was termed ‘modern’, ‘rational’, ‘western’ and ‘scientific’.

However, the change from speculative knowledge to a rational understanding of the human body was not simply a shift in the way of knowing. The shift was based on the ‘new way of seeing’, which Foucault calls the ‘medical gaze’. Beyond the claims of objectivity and rationality, an alliance of objects, words and language emerged to make the shift possible.

A play of new language came into being based on new classifications of diseases, which could be understood only by a new specialist, the new physicians, who could understand and speak the new language. The patients were now silenced and were now not able to speak about their own body and diseases, thereby ensuring that the Doctors acquired power over the body of the patient and as an extension, over the society in general.

However, the impact of western medicine and its institutional structures over the bodies and lives of people in non-European contexts has not been adequately addressed. Given the prevalence of non-western, culturally bounded indigenous medicinal practices, the reluctance to engage with western healthcare practices due to religious and social prejudices and the rise of nationalist or religious revivalist movements have often undercut the influence of western medical and social institutions in African, Asian and Latin American contexts.

Kerala, a region in the south western part of the Indian subcontinent, became of the regions which were subjected to a greater degree of social modernisation, with its affinity to European modernisation, primarily due to the influence of western Christian missionaries. By the beginning of the twentieth century, the new conceptualisation of the body came to be familiarised by the impact of British rule in India. The practitioners of traditional medicine, especially those of Ayurveda, had to negotiate the pressing question, as Foucault describes; "at the beginning of the nineteenth century, doctors described what for centuries had remained below the threshold of the visible and the expressible… it meant the relation between the visible and the invisible… A new alliance was forged between words and things enabling one to see and to say."[3] Practitioners of Ayurveda had to negotiate with the new language of medicine, new centres of power and the realignment of power that was taking place through the language of modern medicine- a concern that became the central focus of this study- negotiation of the idea of a healthy body in Kerala.

The negotiation took place among several parties, each holding their notions, interests and concerns. The very idea of health is a concern for the state, the princes, western medicine and its practitioners, the traditional medical practitioners like the Ayurveda *vaidyas* and many others. It was not specific to Ayurveda, but the practitioners of Ayurveda had a very deep concern about it. The shifts that were taking place in the idea of a healthy body and the very negotiation on the same had very important direct bearings on them. The shift in state power with colonial rule came to be well established with the advent of the western medicine that had left the practitioners of Ayurveda with promising new options on the one hand and challenges to their very existence on the other. The knowledge, tools and

[3] Foucault, The Birth of the Clinic: An Archaeology of Medical Perception, 1963, P.

ideas provided by the western medicine provided both these possibilities and challenges. Hence, they formed the major discussant in the negotiation.

The very idea of health is a fluid one. It essentially meant mental and physical wellbeing. However, people are not generally conscious about their health. Becoming conscious about health also means becoming aware about the body. In a society, first the elite become conscious about health and body; the affluent only could look after their bodily health. It was in the colonial period that such an affluent class who could afford to look after their body emerged in Kerala. How to avoid being sick and how to remain healthy became a major concern for them.

The idea of a healthy body emerged through conversations. Various parties engage in the negotiation of the idea of a healthy body and the anxieties, concerns and interests kept the negotiation going. In conversation with the western medicine, anxiety about its collapse and cleanliness emerged. New understandings about health and body and about what helps maintain a healthy body added to these concerns.

The state was concerned about health and that concern was institutional. For people, health is ever part of their negotiation. Every negotiation is influenced by its context; health is an idea influenced by the context of its negotiation. Colonialism and nationalism formed parts of the context of the negotiation of the idea of a healthy body in colonial Kerala. Both the ideologies and their institutions influenced and shaped the negotiation. Thus, the idea of a healthy body is not permanent, it is contextual. To get to the idea of a healthy body, the context of the negotiation on it needs to be investigated. *Dhanwanthari,* the first medical journal published in Malayalam formed a significant platform for negotiating the idea of a healthy body in Kerala in the early decades of the twentieth century. Being the only medical journal in Malayalam during the period, it forms the

most significant source for the study of the negotiation of the idea of a healthy body during the period. The researcher has searched the relevant archival documents and they are helpful as sources; but the primary focus is *Dhanwanthari.*

The discussions in *Dhanwanthari* were influenced by the interests and contexts of the discussants. Most of the discussants were practitioners of Ayurveda. Expert doctors of modern medicine were not rare to participate in the discussions. There was little women representation among the authors who contributed articles to the journal. However, the health of women and the female body were important topics of discussion. As the discussants were men, the female body was deliberated on with focus on, knowingly or unknowingly, the male interests. The needs of women were discussed from the point of view of men. This resulted in the presentation of a romanticised version of the female body, its needs and functions. Even the modern medical understandings of the female body were brought in to discuss and establish the romanticised version. 'Purity' was another major focus in most of the discussions. Purity of male and female bodies was sought to be maintained through restrictions in food, through rituals and through observance of the methods advocated by various medical systems.

The present region of Kerala comprises the erstwhile Malabar under the Madras presidency of the Colonial state and the former princely states of Kochi and Travancore. These regions witnessed significant modernisation and transition in the domain of health and education as they were subjected to western influence in the form of missionary intervention backed by the political authority that influenced a vigorous social reform movement.

Ayurveda is based on the theory of the three humors *Vaatha, Pittha and Kapha,* or the *Tridosha,* the seven *dhatus* and the *gunas*. By the turn of the twentieth century the term Ayurveda became a generic term to define all

medical traditions and practices of the subcontinent. However, the medical practices of the subcontinent included the classical Ayurvedic texts, the *Charaka Samhita*, *Susruta Samhita* and the *Ashtangahrdhaya*.

It is widely believed that Vagbhata, the author of *Ashtangahridayam* came to Kerala and taught Ayurveda to eight persons from eight Brahmin households who later became famous as *Ashtavaidyas*. The major branches of Ayurveda as enunciated in the *Ashtangahridayam* includes *Kaya Chikithsa* (diagnosis and treatment of diseases), *Shakalya Thanthram* (diagnosis and treatment of diseases of ears nose and eyes), *Agadathanthram* (treating the bites of snake, dog and scorpion), *Bhoothavidya* (Treatment of mental illness), *Kumarabhruthyam* (treating children), *Rasayanathanthram* (energising treatment) and *Vajeekaranathanthram* (treatment for rejuvenation of minerals). However, by the latter decades of the nineteenth and in the early decades of the twentieth century, there were only a few Brahmin families practising Ayurveda in Kerala. At the same time, local medical traditions thrived among members of different communities.

Ayurveda in Malabar, a region in the north of Kerala, was profoundly influenced by the initiatives of P S Varier. He learned Ayurveda under Kuttanchery Vasudevan Mooss and was also trained in western medicine under Dr V Varghese and started practising in both streams.[4] He started *Kottakkal Aryavaidyashala* in 1902, organised *Aryavaidya Samajam* and published the '*Dhanwanthari'*. The journal was meant to initiate a discourse on modern science and to develop mutual understanding between western and indigenous healthcare practices. One of the main concerns of those involved in the process of revival and institutionalisation of Ayurveda was the idea of a healthy body. Identifying the elements that constitute a healthy body, defining

4. Gita Krishnankutty, *A Life of Healing: A Biography of Vaidya Ratnam P S Varier*, Penguin India, 2001, p.76.

a healthy body, identifying the elements that affect the health of a body, features of a healthy body, the difference between male and female bodies, curing bodies affected by diseases, causes of diseases, dealing with communicable diseases and the wellness of the body were some of the concerns of negotiations. These concerns could be summed up as 'negotiating the idea of a healthy body'.

The physicians who initiated the journal were Ayurveda practitioners. "The new discourse on science, modernity and medicine placed Ayurveda as the representative of the entire corpus of indigenous medical knowledge and healthcare practices."[5]

The meeting of the different systems of medical knowledge under the British led the indigenous medical practitioners to engage with the basic epistemic premises of both streams of thought and too often conclude that the conventional wisdom as enunciated in the classical Ayurvedic texts needs to be revisited. "'Enquiring' into the scientific value of indigenous medicine as it is represented through Ayurveda, the proponents of western medicine argued that the theory of the *tri-dosha* failed to satisfy the fundamental paradigms of science."[6] As a response, proponents of Ayurvedic reform believed that the "reconstitution of indigenous medical tradition into the broad framework of Ayurveda necessitated that an institutionalised indigenous medical system had to differentiate itself from such local health care practices that did not identify with the larger tradition."[7] There was an emerging consensus among physicians of ancient medicine that science was universal and that medicine

5. Burton Cleetus, "Subaltern Medicine and Social Mobility: The experience of the Ezhava in Kerala", *Indian Anthropologist*, Vol. 37, No. 1, Special issue on the Ethnography of Healing Jan-June 2007, pp. 147-172, p.153.
6. Ibid, p. 154.
7. Ibid, p. 156.

or any form of knowledge had to be in accordance with the framework familiarised by western medicine and science.

According to the classical Sanskrit medical texts, a healthy body was based on a balance between the *Tridosha* or the three humors, *Kapham, Pittam and Vaatam*. Human Body is constituted of the *Panchamahabhootha*, five constituent parts and seven body substances called *Dhatu*. Western medicine familiarised an understanding of the human body which was based on the material and objective. This was in contrast to native medical systems, which viewed the human body as part of the universe, a whole of materials, soul and mind.[8] It had mystical elements and the approach was largely religious with different castes and communities having healing practices, which had a certain sense of autonomy.

Indigenous medical practitioners felt that the British state in India promoted western medicine at the cost of indigenous medicine. The prevailing view among the officials of the state and its medical proponents was that indigenous medicine was unscientific and mythological, which was also reflected in the larger characteristic feature of the society and religion of the colony in general.[9] This atmosphere of a complicated dialogue was based on the difference in perception of the human body and its health by different medical knowledge systems.

As western medicine popularised the use of medical equipment in the diagnosis of diseases and methods of treatment, this opened up a huge possibility for indigenous medical practitioners. For example, Thermometer and antipyrine upheld caste norms as it avoided physical touch between the physician and the patient. It also replaced the notion of 'feeling' bodily heat

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8. David Arnold, "Western Medicine in an Indian Environment", *Science, Technology and Medicine in Colonial India*, Cambridge: Cambridge University Press, 2000, pp. 57- 91.
9. Madhuri Sharma, "Introduction", *Indigenous and Western Medicine in Colonial India*, Foundation Books, 2011, pp. 1 - 15.

with quantifiable temperature. Nevertheless, for the proponents of indigenous medicine the magical elements of native medicine could neither be disowned nor be upheld. They could not be disowned because it was grounded within the religious traditions of the subcontinent. Yet they could not be accepted because indigenous medical knowledge failed to pass the test of modern science. Proponents of reform tried to overcome the challenges by re-interpreting traditional medicine in the light of the new knowledge.

The recognition that traditional medicines needed modernization was expressed in many ways. The idea was to organise Ayurvedic education after the model of western medical education. Prior to the spread of modern medicine and the modernization of Ayurveda, the *Vaidyan,* ie, the Physician, had a prominent role in the process of diagnosis. The role of *Vaidyan* was important in the local health care practices. With institutionalisation Ayurveda underwent considerable changes that simultaneously represented the traditional knowledge and a stream of medicine that follows the parameters of modern scientific medicine. "It was this that gained prominence under the overarching principle of colonial modernity and the reorganisation of the indigenous tradition in the name of Ayurveda. Those who were branded as quacks in the new context found it difficult to articulate their methods of treatment, identification of the disease and the nature of cure."[10]

Different sections and groups in the society also got involved in the negotiation of the idea of a healthy body. The *Ezhavas,* a numerically dominant community that did not enjoy high status in the caste society, claimed that they had contributed to Ayurveda considerably. A section of the social elites and some practitioners of Ayurveda who belonged to the *Ezhava* community raised two claims: that the relationship between *Ezhavas* and

[10] Burton Cleetus, "Subaltern Medicine and Social Mobility: The experience of the Ezhava in Kerala", *Indian Anthropologist*, Vol. 37, No. 1, Special issue on the Ethnography of Healing (Jan-June 2007), p.160.

Ayurveda started thousands of years ago and that it was a result of their connection with Buddhism. The *Ezhavas* were trying to establish the autonomy of their community within the Hindu social structure and this was sought to be achieved through tracing the link back to Buddhism on the one hand and by claiming authority over Ayurveda that cared for the health of the body on the other hand. This claim was effective especially because Ayurveda was practised mainly by the upper castes. Uppottu Kannan, a high-ranking officer with the Government of Madras, "collected a large number of medicinal plants from various parts of the province, established a medicinal garden and also published the first commentary of Bhaskara on *Ashtangahridaya* in Malayalam.[11]

N Kunjuraman Vaidyan's career in Ayurveda is another example. His education in Ayurveda was in the modern system. He passed the degree of *Ayurveda Bhooshanam* from Madras Ayurveda College. Then he worked with Calcutta Kaviraj Pharmacy and with Bombay High Caste Hindu Hospital. Then he turned to foster Ayurveda by using the school and hospital systems and publishing. "In 1915 he started an Ayurveda hospital at Kollam and a journal named *Ayurveda* was also published from Kollam. He also started an Ayurveda high school and a Sanskrit school.[12] P. M Govindan Vaidyan also followed the method of publishing a journal to popularise Ayurveda and its acceptability as a science. He "published a journal known as *Vaidyamanjari*, and also translated *Ashtangahridaya* into Malayalam."[13] The process of using the modern methods of education and publishing was thrown open in Kerala by the colonial influence. This opened opportunities for the new class of social elites that developed mainly in the cities. The administrative and political opportunities thus opened were used by them for social upliftment by

[11] Who is Who in SNDP, 1956: 24-25
[12] Ibid, pp. 43-44
[13] Ibid, p. 111

acquiring dominance over knowledge forms that gathered acceptance in the new situation. They also had the opportunity "to acquire the dominant forms of knowledge - either western or the indigenous ones that were re-constituted as a result of the influx of western ideas."[14]

The negotiation of the idea of a healthy body took place in the context of the modernization that was taking place under colonial domination. The *Ezhava* community was highly receptive to the changes that were part of modernization. This reflected in the acceptance of the changes that were part of the modernization of Ayurveda as a result of the contact with western medicine and its modalities. The acceptance of the changes in medicine went hand in hand with the acceptance of the changes in economy and society. "The nature of interaction under colonial dominance ensured that as a social group desirous of an increased social mobility, the *Ezhava* became willing subjects of negating their own health care practices and ways of living by accepting the dominant standards of the high castes."[15]

On 10th November 1865, opening the Civil Hospital Thiruvananthapuram for the public, the Travancore king Ayilyam Tirunal Rama Varma said: "My desire is to extend the treatment facilities to every section of the society. And that is the duty of the government too."[16] Tradition and modernity were blended in an interesting way in Travancore. In the case of medicine, the Travancore rulers were very particular about extending western medical institutions as they recognised it as a justification for the modern state system to continue. At the same time, the roots of the Travancore power came from tradition and the rejuvenation of the indigenous

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14 Burton Cleetus, *Subaltern Medicine and Social Mobility: The experience of the Ezhava in Kerala,* Indian Anthropologist, Vol. 37, No. 1, Special issue on the Ethnography of Healing (Jan-June 2007), pp.163-164

15 Ibid, p. 161.

16 P Vinayachandran, *Kerala Chikilsa Charithram*, Kottayam: Current Books, 2001, p. 27.

medical traditions at the state initiative coupled with the promotion of the western medicine. "Travancore state's bondage with tradition and the concepts of 'modernity' ensured that the state made interventions in rejuvenating the indigenous medical system. Institutions of Ayurvedic medicines were organised and promoted along with the support and encouragement given to the promotion of western medical institutions."[17]

Period of Study

The period of study is from 1900 to 1970. The period is chosen because it was during this period that the negotiation of the idea of a healthy body was carried on in Kerala against the background of the dialogue between Ayurveda and western medicine, emerging nationalism, process of social reform and development of modernity in general. It is understood to be the period of transformation of Ayurveda in dialogue with modern medicine introduced by the colonial government. 1900 is marked by the commencement of the publication of Dhanwanthari by the *Kottakkal Arya Vaidyashala*. The journal facilitated debates and dialogues between the traditional medical ideas of the land, especially Ayurveda, with the ideas of modern western medical science. The dialogue went on for more than two decades, debating and discussing the idea of health and healthy bodies. Negotiating the idea of a healthy body was carried on in multiple ways. This negotiation went on through published media and other means until the Indian medical knowledge system of Ayurveda went global by 1970.

"Ayurveda was first introduced to Europe and North America in the late 1970s and early 1980s"[18] The introduction of Ayurveda to Europe and

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[17] Burton Cleetus, *Subaltern Medicine and Social Mobility: The experience of the Ezhava in Kerala, Indian Anthropologist*, Vol. 37, No. 1, Special issue on the Ethnography of Healing (Jan-June 2007), p. 161.

[18] Dagmar Wujastyk and Frederick M Smith, *Modern and Global Ayurveda: Pluralism and Paradigms*, Albany: State University of New York Press, 2008, p. 1.

North America means its translation into a medical knowledge system that communicated well with the western world in the language of modern science. This also marks the time when Ayurveda was also able to communicate to the global audience in the language and modalities of modern science. This means that the knowledge system and its ideas had reached a juncture in its transformation by the time. The decade of the 1970s also marked the beginning of a second lineage in the transformation of Ayurveda. A globally popularised and acculturated Ayurveda emerged. By that time, its philosophical and spiritual aspects also had changed. Dagmar Wujastyk and Frederick M. Smith notes that, in a way, the reinterpretation of Ayurveda by the time was sufficient to characterise it as 'New Age Ayurveda'. They quote that the defined characters of this new Ayurveda are "1. attributing a remote age to Ayurveda and making it the source of other medical systems. 2. linking Ayurveda closely to Indian spirituality, especially Yoga. 3. making Ayurveda the basis of mind-body medicine. 4. claiming the "scientific" basis of Ayurveda and its intrinsic safety as a healing modality."[19]

The beginning of the twentieth century also witnessed the publication of journals, books and newspapers. National politics and social reform were topics of heated debate in India during the early decades of the twentieth century. The swadeshi movement and the movement against the partition of Bengal in the early years of the last century did not create much political change in Kerala. But the idea of Swadeshi was very much relevant to the practitioners of indigenous medical systems. A revival of the Indian medical systems was sought for. However, in Kerala, social reform and modernity were already felt. Sree Narayana Dharma Paripalana Yogam was founded in 1903, Ayyankali organised Sadhujana Paripalana Sangham in 1907, Yogakshema Sabha came up in 1908, Kochi Pulaya Mahasabha was

[19] Ibid, p. 2.

established in 1913 and Nair Bhruthya Janasangham, the early form of Nair Service Society, was formed in 1914. They were all organisations that stood for social reform and they followed modern modalities of organisation and activity.

The process got momentum in the following decades and Kerala began to negotiate modernity in different terrains. The national movement was also gathering momentum from the early years of the twentieth century. Thus, the negotiation of the idea of a healthy body took place against the background of the process of nation building and anti-colonial movement along with the social reform movements. Even though freedom was won in 1947, the processes of nation building and social reform went on to mature in the 1970s. The transformation of Ayurveda and the negotiation of the idea of a healthy body thus reached a stage of development by the 1970s.

Area of Study

Kerala during the period of study was part of the Malabar region, which was under direct colonial administration and the princely states of Travancore and Kochi. Western medicine in Travancore region was promoted by the native rulers. Kochi followed the example. Western medicine was introduced and promoted by the missionaries and the colonial administration in Malabar.

The upper castes initially found western medicine polluting and kept away from it but later they began to accept it. The traditional medical systems of the land continued, especially in the rural areas. The native medical systems negotiated with the state-backed western medicine.

Thus, by the beginning of the twentieth century, Ayurveda continued to be the popular medical system, even when western medicine was making inroads, particularly into the urban centres of the state, often with state

patronage. Homoeopathy and *Siddhavaidyam* and several other healing practices engaged with each other to understand the similarities and differences. The practitioners of Ayurveda were especially open for a dialogue with the other medical systems in general and with the western medicine in particular. It is in this context that the negotiation of the idea of a healthy body took place in Kerala.

Research Problem

The study attempts to explore the dynamisms involved in the negotiation of the idea of a healthy body in Kerala during the period of study. This negotiation took place in the background of several social, political and economic dynamisms of the period. The colonial government and the native states introduced modern medical science in Kerala. There were basic differences between the way western medical science studied the human body and the way indigenous medicine did. The modalities of developing understanding of the human body also differed. The contact made it necessary for indigenous medical practitioners to revisit their own traditional ideas regarding the human body and its health. How did indigenous medicine revisit the idea of the human body in the light of the western medical science in Kerala?

Health was the prime concern of the medical systems, yet what constitutes health and the ways of maintaining it differed. This makes it necessary for the medical systems to negotiate bodies as socially and culturally constituted entities. They had to go beyond curing practices and to explore different ways to keep the body healthy. The idea of a healthy body could not be negotiated in merely 'objective' medical terms as the human body became the site of competing socio-political ideologies.

Objectives of Research

The introduction of western medicine by the colonial state introduced a new perception of the human body in Kerala. This created a crisis within indigenous medical traditions which led them to negotiate with western medical knowledge. The 'empirical approach' to the human body in the western medical system was different from the 'integral approach' in the indigenous medical systems. The study is intended to identify and analyse the dynamisms involved in the perception of the human body during the period of study.

The idea of a healthy body is a social and cultural construction and when that construct within a society comes into negotiation with another set of ideas, negotiation takes place and revisiting the current ideas becomes imperative. Such revisiting of the idea of a healthy body during the period of study in Kerala is sought to be explored in this research.

The idea of a healthy body also meant healthy living and care of the body. Dress, food, and hygiene environment and sanitation figured in the concerns of healthy living. The fear of the spread of contagious diseases was a source of major concern for the physicians of indigenous medicine. The emergence of the idea of the 'Indian body', was integral to colonial concerns, however by the twentieth century the idea of the 'Hindu body' emerged. The emergence of the state also underlined that physical wellness met state interests. The study explores the various dimensions in which this negotiation took place in Kerala during the period of study. It also seeks to develop an understanding regarding the socio-political extensions of the negotiation of the idea of a healthy body.

Review of Literature

The emergence of new ways of looking at the History and medicine or medical history particularly from the closing decades of the last century is indebted primarily to the works of Michel Foucault. His *The Birth of the Clinic: An Archaeology of Medical Perception*, *Discipline and Punish: The Birth of the Prison* and *Archaeology of Knowledge,* provide a theoretical framework to explain the interplay of power and knowledge in the functioning of modern medicine. Foucault explains how, in modern societies, the human body becomes the site of the articulation of power, social, cultural and political. However, in order to understand the introduction of medicine in non-European contexts, one needs to be understood in the social fears of the loss of self and vitality under colonialism.

David Arnold engages with the development of western medicine colonial contexts in the late nineteenth and early twentieth centuries[20]. He explains how the colonial state used medicine as an important medium of control. The book gives a comprehensive picture of the history of the development of western medicine in India.

Projit Mukharji through the story of the *Daktari* medicine in Bengal tries to explain the ways in which western medicine came to be repositioned in India in accordance with the concerns of indigenous medicine.[21] The term *datkari* was a derivation from the English word 'doctor'. The book investigates how the western medical system became a Bengali medical system through a long process of engagement with the multitude of medical systems of the land. It also explores how the print media and government records could be used as historiographic sources to trace this process.

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[20] David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India,*

[21] Projit Bihari Mukharji, *Nationalizing the Body; The Medical Market, Print and Daktari Medicine,*

David Hardiman explains how the medical missions to the African countries influenced the western medical imagination[22]. Missionaries laboured to save both the body and the soul of the natives of Africa. Physical illness was understood as a reflection of the 'sin-sick soul'. Thus, the treatment of the body included treatment of both the body and the mind. Christian conviction, imperial mission, and science were the three ingredients of the medical missions to Africa. The relation between science and Christian proselytization, the mutual help between medical missions and the colonial plantation and such activities and gradual development of professionalism among the medical mission doctors. The work throws light on the intentions and strategies of western medicine in getting involved with the subjects of their colonies. The amalgam of science and religion in the context of colonialism and its complexities are clear in this work. The book, however, approaches the questions it raises mainly from the point of view of the Medical Missions of the dominating countries and using their sources and tools.

Londa Schiebinger's 'Plants and Empire: Colonial Bioprospecting in the Atlantic World'[23] tells the story of native resistance to colonial exploitation and cruelty by resorting to the secret traditional medical knowledge. It also explains how the colonial knowledge system held racial and gender orientations and agendas within it. The theme of the book is the use of peacock flowers by African slave women in America for abortion. It was motivated by the desire to resist the colonial masters' cruelty by limiting or avoiding child birth. The book is revealing as far as the modes of use of traditional medical knowledge by colonised people are concerned.

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22. David Hardiman, *Healing Bodies, Saving Souls: Medical Missions in Asia and Africa*, New York: Editions Rodopi B V Amsterdam, 2006, p.
23. Londa Schiebinger, *Plants and Empire: Colonial Bioprospecting in the Atlantic World*, Massachusetts: Harvard University Press - Cambridge, Massachusetts and London, 2007, p.

The story of diaspora and globalisation of Ayurveda is told by Dagmar Wujastyk and Frederick M. Smith and others in a book edited by the first two, 'Modern and Global Ayurveda Pluralism and Paradigms'. The book examines how Ayurveda got standardised by the intervention of the Government of India. In the process of this standardisation, the medical system got disembodied from its natural home culture and environment. "Ayurveda was first introduced to Europe and North America in the late 1970s and early 1980s, a period during which its formal regulatory structures and standards of education were being established and consolidated in India on a national level."[24] Once the medical system got globalised, it had to face challenges of not being at home environmentally to the newly introduced areas. The book correlates the globalisation of Ayurveda with the maturing of the political process in India and the divorce of Ayurveda with the *Siddhavaidya* medical system.

Mahone, Sloan., and Megan Vaughan[25] provides a history of psychiatry in the countries of Asia, Africa and America where it developed under colonial authority. The main focus of the text is to analyse the power relationship that shaped psychiatry in the colonies. The book discusses how gender, race and power relations alienated the native people in their own lands which had an adverse effect on the mental health of the people. The analysis shows historians of colonialism and of psychiatry to come together and discuss the possibility of implementing medical concepts.

Waltraud Ernst[26] discusses the history of psychiatry under colonialism. Indian experience of the development of psychiatry under colonialism is

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[24]. Dagmar Wujastyk and Frederick M Smith, *Op. Cit.*, p.9.

[25]. Sloan Mahone and Megan Vaughan(ed.), *Psychiatry and Empire*, London: Palgrave Macmillan, 2007, p.

[26]. Waltraud Ernst, *Mad Tales from the Raj Colonial Psychiatry in South Asia*, 1800 - 58, London: Anthem Press, 2010, p. 136

explored in the study. The major advancement in this study is that the history of psychiatry is not understood as the development results from colonialism alone. It is analysed in the larger context of the life and mindset formation of the people experiencing the historical process. Thus, the complexity of multiple factors and their interplay in the historical process could be addressed more effectively.

Alison Bashford discusses the historical relationship between public health and governance during the nineteenth and twentieth centuries.[27] It is in the form of a case study of the British colonies in Australasia. The book focuses on the Imperial Vaccination Acts and the Contagious Diseases Acts of the nineteenth century and the antibiotics and mass immunisation programmes in Australia after the Second World War. The author analysed the vaccination programmes using the Foucauldian concepts that the states develop 'self-surveillance' and then 'disciplining of the subjects' through bodily restrictions and control in the context of quarantines and 'new public health' measures. The author developed the study of imperial public health measures into a critical study of imperialism, colonialism and public health. He concluded by making a note on the connection between public health on the one hand and nation, race and colonisation on the other.

Biswamoy Pati and Mark Harrison analysed various aspects of the social history of health and medicine in Colonial India.[28] The book gives a summary of the evolution of the British attitude towards Indian medical systems. When the British came into contact with the Indian medical practitioners and familiarised themselves with the Indian medical systems like Ayurveda, they were either of appreciation or were tolerant about the systems.

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27. Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health*, New York: Palgrave Macmillan, 2004, p. 187

28. Biswamoy Pati and Harrison Mark, *The Social History of Health and Medicine in Colonial India*, New York: Routledge, 2009, p. 89

This continued till about 1800. This was mainly for two reasons. Firstly, the Western and the Indian Ayurveda had certain common features. Secondly, Western medicine, then, had no advantage over the Indian system of Ayurveda in the treatment of communicable diseases. Later, the interested British started a deep study of Ayurveda. This inspired the Orientalists. This inspiration was shared by the nationalists and they studied the Sanskrit texts of Ayurveda. However, in Colonial India, Ayurveda received only a second position in comparison with the Western Medicine which was considered superior and was promoted by the Imperial government. Still later, the system of Ayurveda and its theory were neglected and its medicine and possibility were utilised for their antiquarian interests and the simple herbal remedies it offered. The book thus focuses on the formation of Ayurvedic medicine in dialogue with colonialism and nationalism simultaneously. Maduri Sharma's chapter in this book inquired into the process of commercialization of medicine in India under colonial rule and the way advertisements in English and Hindi media reflected the complexities included in the process and plurality of medicine in India during the period.

Ashwini Tambe presents an analysis of the process of law making on prostitution in Bombay in colonial India and tries to draw parallels in recent India.[29] Her analysis shows that law making on prostitution was not an activity exclusively on prostitution and bodies of the prostitutes. The process had wider implications including the whole polity of colonial Bombay. Identifying a space in the city for marking as a district for sex trafficking and to institute legal registration and mandatory health check for sex workers who would be confined to the area was the suggestion repeatedly raised ever since the last decades of the 1800s up to the recent years. Tambe explains how the police enjoyed but succeeded little in enforcing laws in this regard. The sex

[29]. Ashwini Tambe, *Codes of Misconduct Regulating Prostitution in Late Colonial Bombay*, Minneapolis: University of Minnesota Press, 2009, p. 209

workers were reluctant to succumb to the legal constraints. The efforts of law making and enforcing included debates and deliberations that reflected the characteristics of the colonial period and its continuity.

Jayeeta Sharma analysed the working of science, ideology and economy in the making of tea plantations in Assam.[30] The analysis also throws light on how science is used in the shaping of landscape and resources in colonies. Concerns of the British colonial authority like race and extractive capitalism are reflected in the implementation of science in the colony as established by the study.

Kavita Sivaramakrishnan studied the discourses and negotiations on public health in the Punjabi media during the period of study.[31] She identified that the discourses in general served the colonial interest of validating the colonial rule in Punjab. Use of vernacular language for the discourses on public health was carefully selected and it had important bearings on the impact of the discourse. Western medicine promised progress through a rationalised and modern system of medicine. The Punjabi middle class accepted the ideologies involved in the propagation of western medicine when ideas were translated into the vernacular. At the same time, Ayurveda was attempting a revival which was closely related to the national revival. The national discourse on ayurveda in Punjab during the time was a historicised discourse focusing on the context of its origin and the pluralistic characters and positions. A discourse of 'Hindu Science' was constructed and the Orientalist ideas were coupled with the ideas of Indian scientists like J C Bose and P C Ray to historicise Indian science and to consolidate it. The debate on

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30. Jayeeta Sharma, "British Science, Chinese Skill and Assam tea: Making Empire's Garden", *The Indian Economic and Social History Review*, 43, 4 New Delhi: SAGE Publications, 2006

31. Kavita Sivaramakrishnan, "Constructing Boundaries, Contesting Identities: The Politics of Ayurveda in Punjab (1930-40)", *Studies in History*, 2006, 22, 253, New Delhi: SAGE Publications, 2006, p.254

the scientific nature of memorising the shloka and the method of knowledge preservation in Sanskrit and in Indian tradition brought Sanskrit and Hindi into the discourse. The study is revealing regarding the negotiation of science and progress of modernity in a colonial society.

The coming of the Portuguese to India's South West coast and their interaction with the knowledge systems that existed opened a way for the European re-evaluation of the pharmaceutical knowledge. Richard Grove analysed this process in his article 'Indigenous Knowledge and the Significance of South-West India for Portuguese and Dutch Constructions of Tropical Nature'[32]. The global exchange of plants and knowledge about the pharmaceutical significance of plants had an impact on European intellectual traditions and their medical knowledge. They explored Indian knowledge systems in this regard along with the plants and other resources of the new geographical areas of their enquiry. This led to a re-evaluation of Graeco-Roman and Arabic understandings in the field of pharmacology. Plants were transferred overseas and following the European model of raising renaissance botanical gardens for study and business purposes were developed in India. Attempts to extend European materia medica were made and travellers were asked to collect relevant indigenous medical knowledge from the distant lands they travelled. Thus, the first major European book on Asian botany was compiled by Garcia da Orta, a Portuguese physician who lived in Goa. It was a compilation of descriptions on plants in the East and India. The book, *Coloquios dos simples e drogas he cousas medicinais da India*, was published in Goa in 1563. It was translated into Latin in four years. Botanical gardens

[32]. Richard Grove, "Indigenous Knowledge and the Significance of South-West India for Portuguese and Dutch Constructions of Tropical Nature", *Modern Asian Studies*, Vol. 30, No. 1, Cambridge: Cambridge University Press, February 1996, pp. 121-143.

were established in Europe and in India. *Hortus Indicus Malabaricus*[33], was a personal project undertaken by Hendrik van Reede Tot Drakenstein. "Far from imposing European systems of classification and perception on South Asia, the invention of printing and the collation of regional botanical knowledge actually provided an opportunity for the diffusion of indigenous South Asian methodologies of classification throughout the European world rather than vice versa", observed Grove[34]. The article shows how the colonial intellectual interaction shaped botanical knowledge in Europe and India and how it affected the medical knowledge and economy in a general way.

Vysakh A S, in his Ph D thesis titled 'Re-imagining Indigenous Medical Traditions in Travancore'[35] traces the medical traditions of Travancore. According to him, Ayurveda was the most significant of all medical traditions of Kerala. It was brought to South India and to Kerala particularly, by the Buddhist monks. Many treatment traditions like *Visha Vaidyam*, *Vasuri Chikilsa*, *Marma Chikilsa*, specialised *Yogas*, herbal medicines and folk treatment traditions existed in the land before the advent of Ayurveda. He gives a detailed study of the Ayurvedic traditions of Kerala and other areas of India. Then he goes on to analyse the history of the lesser-known medical traditions of Travancore region and India in general. He concludes that no medical tradition of Kerala or India can claim originality or seclusion from all other streams. According to him, there are certain general pan Indian features for medical practices of the land that have emerged during the course of the long centuries of evolution. The pre-Buddhist medical traditions of Travancore got integrated into the medical knowledge the

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33. Hendrik Adrian Van Reede Tot Drakenstein (1636-1691), *Hortus Indicus Malabaricus, Continens Regioni Malabarici Apud Indos celeberrimi Omnis Generis Plantas Rariores*, in 12 Volumes, Published in Amsterdam from 1678 to 1693
34. Richard Grove, *Op. Cit.*, pp. 121-143.
35. A S Vysakh, "Re-imagining Indigenous Medical Traditions in Travancore", Ph D Thesis, Thiruvananthapuram: University of Kerala, 2014, p. 254.

Buddhists brought about and later that got integrated to Brahminic medical traditions when the brahmins dominated the region. The processes of mix and integration continued to take place and no tradition is original now. But he adds that "A meticulous search into certain medical practices and uncontaminated pharmacology reveals the presence of an original system that once prevailed in Kerala. Folk medicine, tribal medicine, single medical panaceas and Kerala special treatments (such *as dhara, kizhi, pizhichil, talam*, use of certain animal products – *verukin puzhu* (semen of civet cat) etc.) do indicate a more or less disciplined and developed Kerala medical tradition."[36]

Chapterisation

Chapter 1 **'**Perceiving Human Body: The Twentieth Century Dynamisms' engages with the intellectual atmosphere in which the negotiation of the idea of a healthy body took place in Kerala from 1900 to 1970. It studies the role of the Ayurvedic practitioners' engagement with western medicine. Self-assessment and developing new understandings about the human body led to re-interpretations of the traditional notions and concepts. 'Being scientific' became an unquestioned criterion. 'What was scientific' was arbitrary, as far as this negotiation is considered. While the notion of 'being science' was accepted and traditional concepts were revisited and reinterpreted, the need to preserve the 'Indian Knowledge System' was also recognized. The chapter also investigates how these competing ideas paved the way for modernization of Ayurveda and its idea of a healthy body while maintaining its originality.

The second chapter, titled 'Revisiting the Understanding of the Human Body' presents the ideas of Ayurveda regarding a healthy human body. The practitioners of Ayurveda, having been open to the knowledge of western

[36]. Ibid, p. 255

medicine, looked at its own perceptions about the human body. Subjected to the challenges posed by western medicine, practitioners of Ayurveda tried to defend the authenticity of Ayurveda. Thus the female body, puberty and menstruation became a major source of concern for the practitioners of indigenous medicine. The chapter probes into this process of accommodation and reinterpretation of the idea of the human body.

The third chapter, 'negotiating the idea of a Healthy Body' analyses the negotiation of the idea of a healthy body in the context of modernity within twentieth century contexts. The chapter details how the idea about the dress best suitable for the health of the human body became a matter of concern, in an era when new practices came to being. Women's issues formed another area of negotiation as it constituted an area of concern among the western and the eastern medical systems.

Chapter four titled The Socio-Political Extensions of the Negotiation, analyses the extension of the negotiation of the idea of a healthy body to the socio-political realms. One of the major advantages of western medicine over the local medical systems was the possibility of vaccination and other methods to fight communicable diseases. This was an area where the state intervened, directly bringing practitioners of western medicine and indigenous medicine directly within the discourse on medical interventions of the state. Caste and the notion of purity associated with food, touch and power were all directly related to the human body. The traditional concepts were revisited by the medical practitioners. As the period of study was initially that of the anti-colonial movement and then of the years in which the incipient nation state was developing its identity and institutions, the idea of 'the national body' developed as an extension of the body individual and that of the community. Social reform movements of the time also needed to further extend the discussions as the politics and society of the time had bearings on the idea of

a healthy body. Physical wellness of the individuals in the society was a concern of the state and that also extended the negotiation. The chapter presents an analysis of all these different realms to which the negotiation of the idea of a healthy was extended.

The last chapter presents the conclusions made on the basis of the analysis of the data collected. It also explains the findings of the study. The chapter sums up the main aspects and features of the negotiation of the idea of a healthy body in Kerala during the period from 1900 to 1970.

Research Methodology

The primary sources, including *Dhanwanthari*, archival materials, and newspapers from the relevant period, provided a wealth of invaluable information. Articles, advertisements and news that negotiated various aspects of the idea of a healthy body were identified and analysed. As the topic is part of the history of ideas, the focus of the study was the evolution of ideas. The idea of a healthy body was understood as an idea that is continuously rethought, renegotiated and evolved. It is medical but part of the intellectual, social and political constructions.

The idea of a healthy body extends beyond the therapeutic to encapsulate the social, cultural and political body during the period of study. The native states of Travancore and Kochi and the colonial government were involved in the negotiation as the healthy body was politically negotiated. The emerging national politics in the first half and the maturing nationality during the second half of the period of study also had bearings on the negotiation of the idea. Thus, these political forces were observed to identify their bearings on the negotiation.

Social reform was primarily concerned with the negotiation of the idea of a healthy body. Thus, the study surveyed the purity and health notions that underwent reform in Kerala during the period of study.

A survey of the studies on the changes and evolution of the idea of a healthy body under colonial regimes in different parts of the world has been undertaken as a part of this study. That survey of literature provided insight into the psychological, political and social implications of the changes in the idea of a healthy body in a colony. It also gave several intellectual tools for the analysis of the changes under scrutiny. Works of David Arnold and Projit Bihari Mukherjee gave two important aspects of the negotiation of the idea of a healthy body in a colony; 'colonising' and 'nationalising' the body respectively. The transformation of native medical systems in a colony receiving modalities and mechanisms of operation and ideas and by revisiting their own medical perceptions as a result of the contact with western medicine is a theoretical paradigm of explaining the evolution of ideas as it is developed by Burton Cleetus in his thesis. These models were used for the analytical operations in this study.

The idea of a healthy body was also negotiated by the public and the market. This negotiation reflected itself in the newspaper articles and advertisements. Such materials were surveyed and assessed using the above said paradigm so that inferences regarding the negotiations could be made. The archival material, especially that of the Health, Medical and General sections also were analysed to understand the government's ideas and contributions in this regard.

CHAPTER 2

PERCEIVING HUMAN BODY: THE TWENTIETH CENTURY DYNAMISMS

By the beginning of the twentieth century, western medicine was gaining acceptance at least amongst a dominant section of the society as a scientific and universal therapeutic practice. They attempted to reflect on the bodily health of the people within the indigenous society in the light of western medicine. This negotiation took place in the complex socio-political context of Kerala during the period. Colonial state, princely rulers, religious-social and caste reform movements were part of this search for an ideal physical and moral healthy body. For the indigenous medical treatment traditions, the human body was a result of a combination of the *Vata, Pitta* and *Kapha* (wind, bile and phlegm respectively), the *Tridosha*. Any illness was a result of the loss of the balance of these three doshas. Western Medicine defined health and illness in terms of cells, tissues and organisms. These organisms could be seen using microscopes and treatment of illness could be designed accordingly. "Under such a situation the theory of the indigenous medicine was scaled down and the role of supernatural forces was overlooked."[1]

Underlining the need to bring out a journal to discuss bodies, aetiology and cure, the publishers of *Dhanwanthari* argued;

> "We are determined to bring out a magazine with the title "*Dhanwanthari*" because we recognize that there can be different logics and methods regarding the proper maintenance of the body and

[1] Burton Cleetus, "Subaltern Medicine and Social Mobility: The experience of the Ezhava in Kerala", *Indian Anthropologist,* Vol. 37, No. 1, Special issue on the Ethnography of Healing (Jan-June 2007), pp. 147-172, p.156.

because at least a magazine is inevitable to bring out these different ideas to discussion."[2].

The statement clearly brought out two important aspects of the intellectual dynamisms in Kerala around the beginning of the twentieth century: the recognition by the traditional medical practitioners of Kerala that there can be different logics and methods regarding the proper maintenance of the body and that there was a need to engage with these ideas. This recognition and discussion took place in the particular intellectual scenario shaped by colonial intervention and its impacts on traditional society and polity. As Arnold remarks that even, "After one hundred and fifty years of British rule, Western medicine was still struggling to establish itself among the people of India."[3] Yet the epistemic premises familiarised by western medicine was gaining ground among the educated elite, who sought to revisit the basic foundations of indigenous medical practice.

Indigenous medical practitioners recognised the prevalence of diverse therapeutic practices. Channazhi Kumaran Moossad wrote in Dhanwanthari, "Curing methods of the sort (medical treatment traditions) are seen diverse at least by some degrees among the different countries, castes, religions and methods, but it is doubtful whether there are any people on earth devoid of any medical treatment method of its own."[4] He argued that there were at least four grounds on which the curing methods were diverse. They were political, caste, religious and epistemic. Yet the reform movement within which Moosad and others were part of, as Kumar argues, were looking for "fresh

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2 "Swantham Prasthavana", *Dhanwanthari*, Book 1, No: 1, 1894, p. 1.

3 Arnold, David., *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India*, University of California Press, 1993, p. 3.

4 Channazhi Kumaran Moossad, "Vishavaidyam, Avatharika", *Dhanwanthari*, Book 1, Number 1, 1894, p. 9.

opportunities and acquiring new knowledge. Syncretism, not revivalism, was their agenda."[5]

At the same time, as Kumar further argues, the introduction of western medicine was a political activity designed to establish the hegemony of western knowledge over the colonised. "The colonisers did not constitute a 'fundamental group', nor did they create a 'civil' society. The direction was definitely there but the consent came only when a particular 'direction' was found 'really useful."[6] Thus, the attempts for syncretism on the part of the Indian medical practitioners met the intention of uniformity on the part of the western medical practice introduced by the colonial regime and this generated discussions in multiple directions.

Within the indigenous society, it was widely believed that diseases are caused by mysterious spirits (*bhoothabadha*). This was challenged with the arrival of western medicine, which argued that diseases were caused by the small organisms called germs. This explanation was backed by new technological innovations that enabled physicians and clinicians to have a closer look at the internal organs of the body. This challenged conventional wisdom that sustained the medical traditions of the indigenous societies.

For the indigenous medical practitioners accepting western medical ideas meant repudiating the ideas so far held as true, which also meant undermining the authenticity of traditional medicine. There was a strong belief among Hindus and Mohammediyas that *Vishoochika*/ Cholera was the result of *bhoothabaadhai* or the influence of evil spirits. Even when this came to be challenged by the turn of the twentieth century certain sections of the society were of the opinion that the forefathers were not completely wrong in

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5 Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly*, Vol. 32, No. 4 (Jan. 25-31, 1997), p. 166.

6 Ibid, p. 19.

their assumptions because it was usual in the past to imagine that diseases were caused by the influence of evil spirits. Anyone would really wonder that the Hindu forefathers could find out that cholera was not simply the result of indigestion but the result of some unknown factors.[7]

The idea that certain diseases were caused by the influence of evil spirits was defended by many people for a long time. This was not aimed at challenging the empirical evidence provided by modern western medicine, rather to build a narrative that validated their status within the indigenous society. As "Indigenous practitioners attempted to address new forms of medical reason and 'truth claims' that validated indigenous scientific basis of their learning and its claim to status and authority."[8] This exercise required deliberations and negotiations only to be concluded that "It is now well known across the world that there are germs and many other very small things that are visible only through the varieties of microscopes. I happily state on this occasion that the germs causing cholera also have been found among these small organisms."[9]

The story of *Rahu* that explains the solar and lunar eclipses from the perspective of Indian mythology represents physical phenomena from a religious perspective. In the twentieth century, these myths were challenged, yet the practitioners of indigenous medicine sought to defend it by arguing that rain at the time of eclipse apparently aggravated the poisonous impact of eclipse. He further argues that water has both curing and deadly impacts and that the traditional stories and myths stand good even when they are seemingly disproved by modern science.

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7 "Vishoochika", *Dhanwanthari*, Book 1, Number 1, 1894, p. 4.

8 Kavita Sivaramakrishnan, "Constructing Boundaries, Contesting Identities: The Politics of Ayurved in Punjab (1930–40)", *Studies in History* 2006; 22; 253, Sage Publications, http://sih.sagepub.com/ cgi/content/abstract/22/2/253 T, p. 256.

9 "Vishoochika", *Dhanwanthari*, Book 1, Number 1, 1894, p. 5.

The writer proceeds to argue that the religious practices and customs of the Hindus are all scientific some way or the other. One needs to look at the meanings hidden deep inside to understand their scientific nature. He gives the example of the custom of fasting on the eleventh day (*Ekadashi*). It not only brings God's boons but it can help cure the problem of indigestion.

In an article written on the treatment of poison, Kodungalloor Kunjikkuttan Thampuran, argued that Ayurvedic physicians often failed to properly understand even some of the very basic concepts from our tradition. He argued that eclipses occur because the Sun and the Moon are swallowed by the Rahu (He can be in the shape of a snake as he has magical powers) because they caused his beheading. If one told people that the reality was not so and that Lunar eclipse was caused by the shadow of the Earth covering the Moon and the Solar eclipse resulted when the Moon hindered the view of the Sun, it was not only that they would not agree to that, they would also regard the ones who explained as atheists or as haters of the puranas. What was amazing was that even those meritorious people who determined the solar and lunar eclipses by calculating the height of the moon and the shade of the Earth became angry when they were told that the eclipses were not the swallowing of the Sun and the Moon by *Rahu*.

Presenting the issue, Thampuran proceeded to provide an explanation. The forefathers had concluded on the basis of their experience that snake bites were fatal in areas where the rays of the Moon were covered by the shadow of the Earth and where the Sun rays were covered by the Moon. If we think about the causes of this phenomenon, we have no option other than to conclude the working of natural phenomena. That the olden people assumed that the impact would be greater if it rained during eclipse and the bad effects would be over if it rained after the eclipse, should be understood on the basis of the theory that the two impacts of water, the poisonous and the medicinal

impacts, may radiate in the world and that would increase or decrease the effect of the poison. The denial of food and the imposition of impurity in the time of eclipse were intended to prevent damage to the body from the mixing of the poisons with the *tridosha*. Thampuran observed that it must be said that the observance of *Ekadashi* in every half of the lunar month was helpful in maintaining the body as well as it brings boons from God because it helps solve indigestion. "As it is seen in this case, when we study closely, we see that all the fasts and customs regarding cleanliness prescribed for the Hindus, are good for the wellness of the body as well as for the attainment of the eternal bliss, as they solve the problems of poison and the like."[10]

Deliberation on the appropriateness of the new medical system for the health of the body was more concrete when the question of accepting western medicine into the traditional system came up. The situation was empirical. The question of the use of quinine for curing communicable disease was an example. The failure or at least the lack of any considerable success of the medicines offered by the traditional medicine to treat the disease cholera was evident. So was the efficacy of quinine in the treatment of cholera.

The writer strongly argues that quinine is useful and that it should be used by the local medical practitioners. The writer emphasises that the pros and cons and the side effects and dosage are to be properly understood by those who administer quinine. The article goes to the extent of admitting that quinine is more effective than medicines used by the local medical practitioners. The article considers quinine more effective than traditional medicines based on poisons.

An editorial published in Dhanwanthari on Cholera[11] observed that no other western medicine was as famous among the local population as quinine

[10] Kodungallur Kunjikuttan Thampuran, "Visham", *Dhanwanthari*, Book, No 5, p. 92.

[11] "Vishoochika", *Dhanwanthari*, Book 1, Number 1, 1894, pp. 6-10

and local medical practitioners were using this medicine either secretly or openly. The author felt it was necessary to talk a little about the pros and cons of this medicine, the article noted.

No medicine equal to Quinine has been discovered so far in order to treat such severe fevers. Still, some fevers that could not be controlled by administering Quinine were cured by the pills of the local medical practitioners. This was the result of the poison they added in the pills. Even before the discovery of Quinine, most of the local medical practitioners used to treat such fevers with such poisons. Even though the power of poison was still very important, Quinine had won over it.

"Thus, because the use of quinine is an additional benefit to the local medical practitioners, it will be a magical medicine for us if they properly learn the details about it like the nature, dosage and the antidotes."[12]

The details of administering medicine were also studied and sought to be familiarised. The case of Antipyrine was an example. The uses, effects, side effects and dosage was discussed in detail. Antipyrin is an English medicine used to give pain relief and to control body temperature. Diseases may be different, but often, body temperature is an indicator. The possibility of monitoring temperature with objectivity was a major advantage. It was now being introduced in the land by western medicine. In the face of something objective, measurable and empirical, the possibility of upholding the supremacy of traditional knowledge about the human body was not possible. "Almost literally, Ayurveda relinquishes its claim to a correct knowledge of the body. On certain other occasions, it relinquishes it in favour of modern

[12] "Vishoochika", *Dhanwanthari,* Book 1, Number 1, 1894, pp. 7-8.

medicine. Ayurveda remains content with claims to efficacy of its constructed theories."[13]

Local medical practitioners were generally of the idea that the English doctors always use Quinine to control all types of fevers. Quinine was of course an important medicine for that. However, there were other medicines which were equally important or even more useful than Quinine, Antipyrin was one among them. Its main effect was to lower body temperature. But it did not affect the body temperature of the healthy. On the contrary, as the level of body temperature was higher, the effect of this medicine was more too. This medicine was seen providing immediate relief for the treatment of many of the diseases of which fever was an important symptom.

Thus, whenever the body temperature exceeded, it was using these medicines that the same was brought under control. Even though it was common that the body temperature rose again after it was controlled by administering this medicine, it was also observed that the body temperature did not go up after two or three times of administering the medicine. "Thus, it is very useful to the local medical practitioners also to understand the usage of this medicine."[14]

Perceiving Modern Medical Techniques and Quantification

Modern medicine offers technological solutions to the understanding of the human body. This was achieved by generalising certain aspects of the body. Generalisation was achieved by identifying aspects that could be seen as universal. This meant that modern medical technology approached the human body as a universal category. Generalisation and identification of universal categories helped quantification. Understanding the human body

[13] Das, Anirban, "Medical Knowledge of the Body: Colonial Encounters" in *RETHINKING MARXISM* Volume 13, Number 2 (Summer 2001), p.127.

[14] "Antipyrin" *Dhanwanthari,* Book 1, Volume 2, p. 25.

temperature was an example. When the thermometer was introduced, it functioned on the basis of the generalisation regarding human body temperature. "…once you are taught the anatomy of the body, it becomes impossible not to think validly in terms of the anatomical structure of the body."[15] Because human Anatomy made both universalisation and generalisation possible. Similarly, it required the universalized category of the human body. On the basis of these two, quantification was possible. All these were summarised to numbers and the numbers became easily identified with the use of the simple device thermometer. This possibility and this device could not be overlooked by traditional medicine. Understanding technological advances and quantification in Modern medicine and then attempting to use the two in the traditional medicine was seen as essential by the traditional medical practitioners.

As the local medical practitioners had nothing other than their own eyes and hands to identify the body temperature of the patients, it was common that they misunderstood the same and the fever affected the head, the article observed. As the English doctors had got a device to know the level of body temperature, thermometer, it was usual that they became anxious as the body temperature goes up. They attempted to keep the body temperature under control. They have also determined that the body temperature could not be controlled if it went beyond a particular identified level.[16]

The traditional *vaidyas* of Kerala knew the significance of bodily temperature as an indicator of health. Just by feeling by hand, they used to reach conclusions regarding bodily temperature. When the thermometer was introduced by western medicine, the traditional practitioners found it a new possibility. There was no lag in accepting the new device. There was a

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15 Anirban Das, "Medical Knowledge of the Body: Colonial Encounters", *Rethinking Marxism*, Volume 13, Number 2 (Summer 2001), p.127.

16 "Antipyrin" *Dhanwanthari,* Book 1, Volume 2, p. 26.

complete article published in *Dhanwanthari* dedicated to explaining the advantages of thermometer and arguing for the use of thermometer in treatment. It described simple scientific experiments that showed that the use of a thermometer is objective, accurate and advantageous. This acceptance was done as a result of the recognition of the objectivity it could ensure. Arguing for the use of a thermometer, the writer tried to prove that the naked hand of the doctor does not always give the correct feeling of the temperature and that fever cannot always be measured by hands.

The article suggested an experiment to test the need of temperature. It asked to suppose vessels A, B, and C were filled with cold, medium and hot water respectively. One has to dip her/his two hands simultaneously in vessels A and B for some time and then take the hands and dip them together in vessel B. The person would then feel the hand that was dipped in cold water hot and that dipped in hot water cold now. This way the scientists prove that the knowledge gained by touch is not always correct, the article concluded.[17]

The writer strongly advocated the use of thermometer helped the upkeep of the practice of untouchability. If the doctor and the patient belong to two different castes that are not supposed to touch each other, then the use of the thermometer would help treatment without touching the body. The article said that the advancements achieved in the treatment of many important diseases after the discovery of thermometers were not few. We could know the accuracy of fever temperature even if the doctor was sitting at a distance. “Beyond that, I believe that everyone would consider it a great luck that we have a machine that would give the exact measurement of the body temperature much accurately than that is obtained by physical touch, that too at a time when it is impossible for the doctor to touch the body of the

[17] “Ushnamaapanayanthram” *Dhanwanthari*, Book 1, No 5, p. 87.

patient because the two belong to two different castes that banned physical touch for the observance of caste purity."[18]

The explanation that the use of thermometer helps the observance of caste and untouchability had three dimensions in the article. Firstly, it strongly recommended the possibility of quantification of the human body temperature that was an indicator of its wellness, secondly, it tried to show that the traditional social structure was not affected by the use of this new device. Thirdly, it tried to avoid the possible opposition of the local medical practitioners to the use of the foreign medical device. "Methodologically one is uncomfortable with the idea of science 'penetrating' (sic) the fabric of social life."[19] The acceptance of anything from the new medical system that was getting familiarised, i.e., western medical system, was looked upon with suspicion. But at the same time, there was a willingness to accept that which was verified and identified safe and not affecting the traditional.

"Medical knowledge of the body in the colonised spaces also gets affected by the supposed objectivity and universality of the scientific conception of the body"[20]observes Anirban Das. According to him, modern medical science and Anatomy had a discourse of the human body that was universally applicable. But the knowledge of physiology in Ayurveda and the other local medical systems were often contextual. This difference in epistemology marked a fundamental difference between western medicine and traditional medicine. When the encounter between the western and the local medical systems took place, the exchanges between the two were

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18 "Ushnamaapanayanthram" *Dhanwanthari* Book 1, No 5, p 89

19 Biswamoy Pati, Review: Under the Magic Spell of the Hindu Middle Class..., Reviewed work(s): Another Reason: Science and the Imagination of Modern India by Gyan Prakash, in ***Social Scientist***, Vol. 29, No. 7/8 (Jul. - Aug., 2001), P. 84.

20 Anirban Das, "Medical Knowledge of the Body: Colonial Encounters", *Rethinking Marxism*, Volume 13, Number 2 (Summer 2001), p. 112.

disproportional and the reason could be traced in the difference between the universal and the contextual."

Coming into contact with western medicine and the ways it operated, traditional medical practitioners looked back into their own system and found many areas which needed correction. The modern methods of standardisation, preserving, and spreading medical knowledge was one such area. Writing on the treatment of Ayurvedic ways of treatment of poisonous bites, Channazhi Kumaran Moosad stated that even though traditional medical practitioners had not yet experienced the efforts of the European scholars to prevent death due to poisonous bites, he was well convinced from his examination of the ancient texts that the forefathers had made much efforts in that regard. "It is a pity that this science (curing poisonous bites) may be completely lost as many of such texts have already been lost forever and because people are not ready to show or teach the remaining texts to others."[21]

The focus of Moosad's attention was the need to identify the ancient Ayurvedic texts and to preserve them. He explained that the Ayurvedic texts were not collected or registered. They were scattered in the ancient *tharavadus* and the like. Many texts were lost in the course of time due to the want of proper care. Nobody knew how many texts were there. Thus, the identification, registration and maintenance of the books that contained ancient knowledge after the western model was the need of the hour. Moosad was also confident that there was much knowledge in ancient medicine that was worth spreading to other parts of the world. He also cautioned that the traditional medical knowledge would grow only if shared. He pointed out that the sharing of medical knowledge was not taking place in Ayurveda because those who possessed knowledge were reluctant to do that.

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[21] Channazhi KumaranMoossad, "Vishavaidyam - Avatharika" *Dhanwanthari*, Book 1, No 1, p. 9.

Another area where the modern system of medicine was sought to be imitated was that of registering medical inventions in the name of the inventors. Officially recording and registering inventions in the name of the inventor was a modern method. Modern medicines were so registered in the name of the inventors but the practice was almost completely absent in the traditional medical system. George Basalla[22] presented a three-staged model to explain the spread of western medicine to colonies. "Three overlapping phases or stages... During "phase 1" the non-scientific society or nation provides a source for European science. "Phase 2" is marked by a period of colonial science, and "phase 3" completes the process of transplantation with a struggle to achieve an independent scientific tradition (or culture)."[23] The model can be broadly followed in the case of organising the medical system in Kerala. The registration of medical inventions in the name of inventors was such a development. The essay by P S Varier, titled *Siddhoushadham* argued that the western practice was advisable.

P S Varier wrote that the name of the inventor of each English medicine was known across the world. Everyone benefited the fruits of their contemplation and blessed them. "Who knows these *Siddhoushadha* people (inventors of the fruitful traditional medicines)? Who benefits from them? Maybe, one or two, who are very much interested may benefit… Gradually, these medicines are losing our knowledge and memory. Actually, no one knows these medicines now."[24]

What the author demanded is not simply to follow the western model. He argued in favour of the modern method of standardisation and registration

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22 George Basalla, Assistant Professor of History, University of Texas, Austin.

23 George Basalla, "The Spread of Western Science: A three-stage model describes the introduction of modern science into any non-European nation", *Science,* VOL. 15, 5 MAY 1967, p. 611.

24 P S Varier, "Siddhoushadham", *Dhanwanthari,* Book 2. Number 11., p. 208.

of medicines and medical streams of the land. This could be done following the model of western medical system. Every medicine invented or known should be registered so that none may be lost. Here, the emphasis is on preservation of valuable knowledge. But preservation was not all that was needed for the modernization of the traditional medical practices. There were certain elements in the traditional medicines that were to be removed. This is what happened when Channazhi Kumaran Moosad wrote a long series of articles on the treatment of poisonous bites. The argument was coupled with the "…classical counter hegemonic argument… whatever new sophistication the West dangles before us as the latest necessity for any socially or scientifically mature society, ancient India has already produced it."[25]

The author, Channazhi Kumaran Moosad, discusses traditional medical knowledge regarding the treatment of poisonous bites. He intended to discuss only the scientific medical side of traditional medicine in this regard, he claimed in the beginning of the article itself. However, he was particular about his lack of readiness to repudiate the magical practices or even to look at them in the light of western medical knowledge. To him, these elements were all proved to be authentic.

Moosad explained that the science of treating poisonous bites was divided into two: 1. *Vishavidya*, 2. *Vishavaidyam*. Of these, *Vishavidya* included the magical chants for making the snake that bit the person come back and take the poison back, transfer the poison in person to another organism, inflict poison on a person not poisoned, increase the quantity of poison in a person, eradicate poison, remove poison etc. *Vishavaidyam* depends mainly on medicines alone. He said "he referred to *Vishavaidyam* alone because the magical chants were not effective when not advised by the

[25] Lawrence Cohen, "The Epistemological Carnival: Meditations on Disciplinary Intentionality and Ayurveda", in Don Bates(ed.), *Knowledge and the Scholarly Medical Traditions*, McGrill University: Cambridge University Press, p. 331.

guru and because the *Vishavaidyam* based on medicines alone is sufficient enough to treat the poisonous bites."[26] The stance of Moosad on *Vishavidya* was clearly not scientific in the eyes of western modernity.

Moosad stated that he was not going to discuss whether it is magic or not but, for him, the reason the reason for not discussing *Vishavidya* and to concentrate completely on *Vishavaidyam* as he tried to uphold the counter hegemony of Indian medicine and tried to avoid a discussion on its unscientific aspect.

The writer, in the second chapter of his article on treatment of the poisonous bites, *"Doothadilakshanam"*, gave a detailed account of the "science" of the interpretation of the signs seen in the person who comes to the *vishavaidyan* to inform about snake bite. The writer seems to be aware of the fact that this sort of "science" is no science at all as far as modern science is concerned. Still, he was not able to restrict himself from dedicating a complete chapter explaining this in the traditional knowledge about the treatment of snake bites. He, notably, started with a statement that he was aware of the unacceptability of what he was about to write as far as the modern knowledge system was considered, but he was also providing a justification and moved on to give all details about the *doothadilakshanam* (the messenger and other omens).

Moosad explained the rationale to explore the omens. He wrote, "that an analysis of the omens at the time of the medical practitioner being informed about the snake bite and the day in which that information is passed to give some knowledge about the possibility and impossibility (of curing), even though modern people do not have any faith in the "science" of omens and signs, as it is impossible to value the deep knowledge of the ancient

[26] Channazhi Kumaran Moossad, "Vishavaidyam - Avatharika", *Dhanwanthari*, Book 1. No. 1., pp. 9 -10.

scholars in this regard as this can never be avoided to state due to the evidences provided by experience."[27] That evidence required for science was upheld by Moosad. But, he was convinced that experience itself was sufficient evidence. Moreover, it was clearly stated that the wisdom of the ancient gurus could not go wrong.

The writer was trying to introduce the essentials of traditional knowledge about the treatment of poisonous bites. He was trying to establish the necessity to preserve the knowledge and to share it. He even kept the *Vishavidya* part away without holding a discussion on it and concentrating only on the *Vishavaidyam*. However, accepting the need to resort to these modern approaches to knowledge, he was not able to speak about the traditional knowledge without referring to some of the most unacceptable concepts as far as the modern science of medicine was considered. The traditional knowledge about the impact of snake bite was sought to be reread. Here, the point to start was *Sarplakshanam*, ie, categorization of snakes on the basis of the amount and gravity of their bites. Categorization was common to the traditional knowledge about which the writer was speaking and the modern sciences including modern medicine, but the categories were not so. Here, the author referred to the traditional idea of classifying snakes; but the classification was basically done in resemblance with that of the *varna* categorization of humans. The classification brought out a scheme of dividing the venomous snakes into four categories, but the categories were adopted from the *varna* system. While the categorization itself was modern, the categories themselves stood quite different.

Kashyapa, the great sage, had eight great *nagas* (snakes) born in his wife *Kadru*: *Anathan* and *Gulikan* as parts of the God of Fire (*Agni*) who were

[27] Channazhi Kumaran Moossad, "Vishavaidyam 2 - Doothadilakshanam"(the messenger and other omens), *Dhanwanthari,* Book 1. No. 2., p. 27.

Brahmins; *Vasuki* and *Shamkhapalan* as parts of God *Indra* who were *Kshatriyas*; *Thakshakan* and *Mahapadman* as parts of the God of Air (*Vayu*) who were *Vaishyas*; and, *Padman* and *Karkodakan* as parts of the God of Water bodies (*Varuna*) who were *Sudras*. Of these, "the Brahmin snakes each had a thousand hoods and a circle shaped sign on each hood; the Kshatriya snakes each had eight hundred hoods and the sign of ploughing animals on the hoods; Vaishya snakes each had five hundred hoods and the sign of umbrella; and, Sudra snakes had three hundred hoods each and the sign of swastika lotus on their hoods."[28] The snakes that are now visible to us can be divided into four categories: *1. Moorkhan* (Cobra*), 2. Mandali (*Viper*), 3. Rajilam and 4. Venthiran.*

The development and acceptance of new medicine should be evidence based, this was the point of the writer P S Varier when he argued that new medicine should be developed and tested scientifically. It would be useful to the whole world, if new pure medicines were invented and tested. English doctors did know the method to invent new medicine, but they had not been able to develop medicines without side effects for most of the diseases. This system was totally unknown to local medical practitioners and thus it was no wonder that they did not attempt to invent new medicine at all. But the English doctors follow an excellent method for this and thus it was necessary to discuss that method, Varier opined.[29]

When the state later removed the social disabilities, the perceptual change reflected in it.[30] The author emphasised the method to test and accept medicine. Here, essentially, the recommendation was to follow the modern

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[28] Channazhi Kumaran Moossad, "Vishavaidyam - Sarpalakshanam", *Dhanwanthari*, Book 1. No. 1., p. 10.

[29] "Oushadhaparishodhana (Testing Medicine)", *Dhanwanthari*, Book 2. Number 1., p. 11.

[30] Regional Archives Ernakulam, File No. T24-163, The Travancore–Cochin Removal of Social Disabilities Act, 1953

western medical methods and the writer intended to discuss the same in detail. But he pointed out that the Local Medical System has a better knowledge of medicine. He also points out that the western medicine was not free from side effects. "From within the womb of the Renaissance therefore emerged revivalism as an alternative, which became particularly powerful and influential in the event of modernity's failure to find a solution for the cultural crisis engendered by colonialism."[31]

The scientific method recommended for testing new medicine and to accept new treatment patterns as it was in the western medicine was discussed in detail. It was exactly the basic scientific method of 'Observation, hypothesis, experiment, generalisation and testing. The author detailed to his readers how the western medical system functioned in case of testing before accepting any medicine.

If the nature and treatment of a disease were not known well, then, it would be closely observed and understood. It would be studied by dissecting the body. With this, some logical connections in the case of the disease could be identified. If such a hypothesis was formed, the doctor would treat a few patients on the basis of that understanding. Then the doctor would compare the result of this treatment with the result of the already existing treatment pattern. If the latter method was found yielding bad results, it would be repudiated and vice versa. If the doctor came to the conclusion that the new method was better, then it would be reported to the expert doctors and would be advertised in the newspapers. The author strongly recommended the same steps or method to be followed in Ayurveda.

[31] K N Panikkar, "Colonialism, Culture and Revivalism", *Social Scientist,* Vol. 31, No. 1/2. (Jan. - Feb., 2003), p. 5.

Defending Traditional Medicine

The acceptance of western medical system meant that traditional medicine came to be criticised. Western medical practitioners maintained that the two medical systems were too distinct and different. However, Ayurvedic physicians were keen to argue that the different medical systems of the world were all essentially the same.

Dr M I Philip who served in the Dharma Rajya without joining government service has written and published an article under the title 'Three Years of Service in Dharmarajya' in Indian Medical Record… According to him, traditional medicine and Allopathy were totally different and the traditional medicine was to be repudiated completely. He argued, "I feel that, even though there are certain differences in the medical practices of different places and ages, they are essentially one and cannot be separated."[32]

He used metaphors to substantiate his point that traditional medicine could not be questioned or repudiated easily. The antiquity of traditional medicine was shown as a reason for its validity. However, the possibility of shortcomings in traditional medicine was accepted by the writer. He writes "The glory of traditional medicine and practitioners in the society which was attested by experience was as huge as a great tree and the hope to cut it down with a small pen-knife was simply childish. None should doubt that, by saying this, I mean to claim that there is no defect in the traditional medicine, or that all traditional medical practitioners are great or that the English medicine is to be repudiated. There is no object or branch of knowledge in the world which is completely free of defects."[33]

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[32] C Komu Menon, "Reply to an Article Written by an English Doctor" *Dhanwanthari,* Book 2. No. 7., p. 134.

[33] Ibid, p. 135.

He proceeded to explore the strengths and weaknesses of traditional medicine against those of English medicine. The English doctors were better in the use of surgery devices and the traditional medical practitioners were better in administering medicine.[34]

The difference between the two systems did not discourage the writer from arguing that the English medical system was not any better in anatomical knowledge of the human body. He further writes. that though some might argue that as English doctors dissect the human body and observe the organs inside, they had a better knowledge of human body and that they were better in examining the human body and that the local medical practitioners do not have that knowledge and thus they did not have the expertise of examining human body when compared to the English doctors. He argued that the local medical practitioners have the ability to examine the human body by studying the symptoms and with that they equaled the English doctors. In a way, this argument made it clear that the traditional medical practitioners clearly understood that the area where they faced the major challenge of English medicine was that of the anatomical understanding of the human body and the methods used to analyse the human body.

By arguing that the various medical systems of the different areas of the world were essentially one, a sort of integration of the possibilities of different medical systems was advocated. However, the stance for integration did not completely do away with comparison. There were areas other than that of the anatomy of the human body where western medical system was evidently more advanced than the traditional medicine. This was to be explained without compromising on the efficacy of traditional medicine. The treatment of syphilis was such an area. “English doctors had put much more effort than the traditional medical practitioners and achieved more than the

[34] Ibid.

latter regarding syphilis. Firstly, this disease originated in the west. Thus, they could come to know about it and analyse it before the traditional *Vaidyas*. Secondly, because their government was extending all possible promotions to it, English medicine was advancing day by day. Still, neither the English, nor the Portuguese doctors have so far been able to understand this disease completely.[35]

The advancement achieved by English medicine was agreed upon but the argument that it was due to governmental support came from a larger background. "This danger to India's medical tradition, coupled with frustration over failure to get unequivocal governmental support for preserving Ayurveda, has turned a large segment of the Ayurvedic movement completely away from the goal of integration, though not from the goal of institutional modernization."[36]

Panthalam Krishna Varier directly addressed the issue of comparison between different streams of medicine. The question 'which stream of medicine is better' was irrelevant, he argued. There were different streams of medicine such as Arya Vaidyam, Chinthamani, Unani, Allopathy, Homoeopathy, Hydropathy, Electropathy, and Specific. It is yet to be judged which is better.

There were several instances in which people treat a disease with one stream of medicine and fail and then succeed with another treatment stream. In such a case people may ridicule the first stream. But it was a fact that, there would be many who get cured of the same disease by treatment using the same stream of medicine which failed for the other person. He said he didn't

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35 "Firangarogam(Syphilis)", *Dhanwanthari*, Book 2. Vol 10., p. 196.

36 Ralph C Croizier, "Medicine, Modernization, and Cultural Crisis in China and India", *Comparative Studies in Society and History*, Vol. 12, No. 3, Jul., 1970, Cambridge University Press, p. 285.

understand why practitioners of different streams of medicine accused each other.

All streams of medicine had been, at least some times, proved adverse in effect by their practitioners. “Thus, there is no other choice, but to say that all streams of medicine are good. It is only a fact that fools have used even those sciences which are useful for anything to bring about harm and even to kill people.”[37]

The Model of Western Medical System

With the introduction of western medicine in Kerala, it was seen that the traditional system had organisational problems. “The split between traditionalists and modernizers (or, more accurately, between those who thought traditional medicine should be modernised and those who did not), which Langford calls as the proponents of the shuddha and mishra movement within Ayurveda, meant that most of the 'Ayurvedic revival movement’ in India remained in private hand…”[38] Panthalam Krishna Varier argued that the problem faced by Ayurveda at the times he wrote the article, i.e., the years of the twentieth century, was the lack of proper training of the practitioners. As far as English medicine was concerned, one could practise only after successfully undergoing this training. Traditional medicine did not have an organised and institutional system for training indigenous medical practitioners. The medical education system in the Allopathy stream was a reflection of the modern organisation of education and state control. There was a well-defined system in place and every aspect of it was objectively defined so that the system assured certain base lines of quality and result. As

[37] Panthalam KrishnaVarier, “Medicine”, *Dhanwanthari* Book 3. Vol 2., p. 30.

[38] Ralph C Croizier, “Medicine, Modernization, and Cultural Crisis in China and India”, Comparative Studies in Society and History, Vol. 12, No. 3 (Jul., 1970), Cambridge University Press, p. 283.

the traditional medicine then lacked these qualities, there were issues that were highlighted by the author.

As Langford recognized, the proponents of Ayurveda in the twentieth century often repeated that Ayurveda lost its glory and its scientific nature during the colonial period when it became just like magical practices. They actually called for a return of Ayurveda to its classical glory. "More importantly, Chatterjee traces the contingency of such histories, discussing how the construction of an Indian classical past followed by a mediaeval decline echoes European historiographic projects."[39] However, the same concept of corruption in Ayurveda and other traditional systems and the need to return to the original pure form of the medical systems can be seen to have been subscribed by the traditional medical practitioners of Kerala as well.

Krishna Varier, even while strongly arguing for systematisation of the Ayurvedic education after the western model, was reluctant to accept that traditional medicine lacked systematic nature from the beginning. He looked back at the history of Ayurveda as he interpreted it and argued that one became "a good 'Vaidyan' only after successfully going through the process of pleasing his great guru through serving him, understand the mysteries of science from him by residing with him, knowing the nature of the medicines including their names and shapes by walking in the forests, getting accustomed with the differences in the application of the medicines by experiencing medication and treatment and then by getting approval from the guru. This would take about thirty-six years, the knowledgeable old people say. This is the history of the Arya Vaidya system."[40] But there was corruption that crept into the system over long years, he argued. There were some fraudulent traditional medical practitioners who did not have any such

[39] Jean M Langford, "Medical Mimesis: Healing Signs of a Cosmopolitan - Quack", *American Ethnologist,* University of Washington, 1997, p.39

[40] Panthalam KrishnaVarier, "Medicine", Dhanwanthari, Book 3. Vol 2., p. 32.

difficulties to undergo. Many of them dressed themselves as *Vaidyans* or *Nattuvaidyans* just because they had no other livelihood. Their knowledge of science was obviously very poor. Often their knowledge of science came from visiting a bookshop. Krishna Varier saw the same problem persisting in the other traditional medical systems of the land as well. The *Chinthamani* stream of *vaidyam* was an example. In that stream also, there were people who practised without proper training and education.

There was originally a system in place for the education of the traditional medicine *Chinthamani vaidyam*. There were several Tamilian practitioners of the medical system who were properly trained in it. It was known that they needed to first understand the science, and then get expertise in medication, pulse and treatment and give '*Dakshina*' to the guru and then get his consent before they start practice on their own. This was known as '*Adukkuchheppuvaankal*'. On the occasion of the completion of studies by the student, the teacher gave him a box. There were several cells in the box and all the important medicines were arranged in those cells. The cell was a symbol of the declaration of the guru that the disciple had become capable by all means to become a *Vaidya*. Even if a person got skilled in *Chinthamani* medicine and treatment and only yet to receive the *Adukkuchheppu* and a patient approaches him for treatment, the person was expected to tell that "*Naan Adukkuchheppu vaankalai*"[41] and to take the patient to the *guru* for treatment.

But there were frauds in *Chinthamani Vaidyam* as well. They did not have any difficulty treating patients just with a book, a medicine box or an *Adukkuchheppu* of somebody else. However, these *Chinthamanis* did not do as much harm as the earlier mentioned *Naattuvaidyas*. They did not have to make medicines, they had it all with them. Varier pointed out an example for

[41] The Tamil equivalent for "I am not yet certified to have completed the course of study."

this. A *Chinthamani Vaidya* of this type who was a neighbour of his administered about ten grains of the medicine, that was very dangerous even when administered in a very little quantity, to the eighteen years old wife of him so that her acute fever could be cured soon. That poor girl was then cured of all illnesses and all possible illnesses of life. "If a Vaidya does such foolishness in his own case, what would he not do in the cases of the others.", Krishna Varier wondered.

According to Panthalam Krishnavarier, even Allopathy was not free of such fraudulent practitioners. While giving examples of fraud in the Allopathy practice, the author also criticised some of the basic features and notions of the stream. If the Allopathy doctors got a patient, they would give some medicine. Then they would advise the patient to come again after three days. If no result was found after three days, they would administer some other medicine. If the patient survived till all the medicines are not over and if, by God's grace, some medicine given be of some use, it is also possible that the patient be cured.

This stream of medicine does not need any concern for side effects or place; they get medicine free of cost and the moment they demand; no *pathyam* is required; whether it is fever or malnutrition, milk can be used lavishly. People think that this stream of medicine has many such advantages. Doctors opine that foreign medicine is stronger and thus none of it should be used without taking milk. "I do not forget that an English doctor recently said that "If pregnant ladies drink a lot of milk, the baby would be overweight." …. There are many doctors who consider it their duty to conduct surgery for each and every disease."[42]

[42] Panthalam KrishnaVarier, "Medicine", *Dhanwanthari*, Book 3. Vol 2. p. 34.

Krishna Varier claimed that he was criticising those features of Allopathy which was different from the traditional Arya Vaidyam. The trial-and-error method, the use of medicines prepared and kept ready in advance, and surgery were the key aspects where he found issues. A similar criticism was offered against homoeopathy as well. He concluded his essay by referring to the recently incarnated divine doctors of the stream called homoeopathy. They had only one visible medicine to offer for all diseases, he observed. Their treatment was never ineffective. The measurement was very easy. Any disease could be cured. "A scholar well versed in that science has said that it is a unique feature of homoeopathy that if a healthy individual took Homeo medicine for any particular disease, that individual would get affected by that disease."[43]

In their system, only one medicine was sufficient for any disease of an organ of the body. Any disease of the head; only the same pill. For any type of fever; only one type of pill. For all diseases of the face; only one pill. Thus, a total of about thirty pills. All treatment was over with that. The final statement of Varier in the article was that he had been trying to explain the issue of the fraud doctors of all streams of medicine.

So, the emphasis was neither on Allopathy, nor on *Arya Vaidyam* or Homoeopathy but on the intervention of the modern state system for ensuring proper practice and system of education for all medical practitioners. According to Panthalam Krishna Varier, no stream was free of fraud. It was not the stream but the fraud that was to be dealt with. Still the difference in his approach to Allopathy, Homoeopathy and *Chinthamani Vaidyam* was evident. His criticism of the Homoeopathy system amounted to the ridicule and repudiation of the system. However, regarding the other two mentioned

[43] Panthalam KrishnaVarier, "Medicine", Dhanwanthari, Book 3. Vol 2. p. 36.

above, he clearly maintained that it was not the system but the corrupt practices of individuals that caused trouble.

However, as Deepak Kumar points out, the practitioners of western medicine never took such criticisms seriously. He assumed that they were too sure of their competence and superiority. They continued to ridicule the traditional medical systems of the colony. He quoted a professor of physiology at Lucknow to observe that "the financing of Unani and Ayurvedic institutes by Government in the hope of finding some soul of goodness in them is precisely on a par with the same government financing archery clubs to find out the possibilities of the bow and arrow in modern warfare."[44]

The claim that Ayurveda had a system of proper education and training of doctors naturally progressed to address the question whether the Ayurvedic understanding of the human body was comparable to that of the western medicine. The treatment of smallpox was an example. It was based on the understanding of western medicine regarding the nature of the human body and its response to the small organisms or germs that caused the disease. Vaccination was a possibility presented by the western medicine and was backed by the colonial government. This helped in the establishment of the colonisation of the human body in the colony as well. All concerned then faced the question whether the vaccination of smallpox was solely a possibility of the western medicine. A request was made to *Dhanwanthari* that the claim regarding the claim that there was a vaccine available in the Arya *Vaidyam* to prevent smallpox might be examined.

The article observed that some people then claim that the uniquely effective smallpox vaccine invented by Mr Jenner was already known in

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[44] Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly*, Vol. 32. No. 4 (Jan. 25-31, 1997), p.170.

Aryavaidyam. There was a controversy in the 'Madras Mail' regarding that claim. He expressed his curiosity to know the reality of this. "Thus, if any of the readers of this journal may please publish the relevant portions in any text of *Aryavaidyam* if you have ever come across any such a part."[45]

The question was soon answered by Vaidyan P P Kammaaran Nambiar. The *'Govasoori prayogam'*[46], invented by Jenner and compulsorily implemented by the government as it was found effective in protecting against smallpox, was, he said, he strongly believed, originally an *Arya Vaidya* knowledge. Apart from their sciences, their practice of keeping all those who were not infected from the vicinity of the ones who were infected and appointing only survivors of the disease to look after the infected proved that they had understood the factors that smallpox was communicable and that the survivors of the discipline were not infected.

Kammaran Vaidyan argued that there were evidences that, in the past, great *Arya Vaidya gurus* like Dhanwanthari knew that the artificially cultivated smallpox would be mild and that it could be used for prevention of its communication and that they did invent *'govasoori prayogam'* and explained the same in their texts.

Kammaran Vaidyan quoted from *Masoorikaashabdaadhikaranam* of *Shabdakalpadrumam* the two verses[47] from the *Shaakteya* text of *Dhanwanthari*, the First and the Lord Siva of *Arya Vaidyam* of which he explained the meaning and claimed that the smallpox vaccine credited to Jenner was actually an Ayurvedic knowledge millennia back.

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45 "Pathra samvaadam (Newspaper Debate)", *Dhanwanthari*, Book 3. No 3. p. 58-59.

46 smallpox Vaccination

47 "*Dhenusoonyamasoorikaa naaraanancha masoorika*
Thajjalam baahumoolaachha shasthraanthena griheethavaan
Baahumoole cha shaasthraani raktholpatthikaraanicha
Thajjalam rakthamilitham sfodakajwarasambhavam"

The smallpox in the cow-breast was similar to the smallpox in humans. If that secretion was taken in a medical tool and injected on the base of the hand, it would get into the blood and fever and smallpox. The verse was quoted in the '*Aayurveda vijnjaanam'* too, he wrote. He agreed he had seen nothing more than that in ancient Indian medical texts. However, he said he had no opinion that Mr Jenner did not deserve respect. "Because he has worked a lot on it. He is respectable for that. However, as the knowledge is already mentioned in the Hindu Science Texts, we can only consider that Mr Jenner came to know about it and not that he invented it."[48]

Just like the discussion and claim on the invention of smallpox vaccine another discussion on the effective use of mercury as medicine was held in the Dhanwanthari. The author of the article discussing the question which stream was able to use mercury more effectively began by stating that Mercury was a magic medicine and that it could cure numerous diseases. He stated that mercury was referred to in *Arya Vaidyam* as the semen of Lord Siva for its wonderful effects. He also argued that, even though all streams of medicine try to make use of Mercury, no other stream was as effective in it as Ayurveda.

Ever since the introduction of Mercury, all streams of medicine, including *Arya vaidyam*, had changed a lot. This was because a proper use of mercury would cure any disease. Till date, *Arya vaidyam* was unrivalled as regarding the understanding about the qualities and effects of mercury. Only a qualified Ayurveda doctor could treat ten crores of diseases without causing any side effects. This was due to their ability to use the tool in various forms;

[48] Vaidyan P P Kammaaran Nambiar, "Pathrasamvaadam - Govasoori Prayogam (An Explanation), *Dhanwanthari*, Book 3. No 4., p.78.

the care they took in purifying and processing mercury; the *pathyam*[49] they observed while taking mercury as medicine.[50]

Knowledge of the human body was to be shared and authenticated in a medical system. The ayurvedic knowledge about the human body was authenticated by the 'sacred texts' and 'ancient gurus.' The encounter with western medicine which followed a totally different method for authentication made a reorganisation of the medical system and its education imperative. As a result, "…attempts at professionalisation were vigorously pursued even for Ayurveda, as a system. Standardisation and institutionalisation of the Ayurvedic knowledge and practices were being done through the authorization of certain texts as canonical and their concomitant translation into the vernaculars and English. The processes also included the setting up of modern pedagogical and legitimising institutions like colleges, hospitals, and Ayurvedic medical councils."[51]

Authenticating medical or anatomical knowledge about the human body was already there in traditional medicine as well. This was done by claiming approval from two sources, sacred texts and ancient gurus. The challenge paused by modern science of medicine was different. Standardisation and institutionalisation were inevitable in the context of the growth of colonial medicine in the land. This was the logic of the colonial state and modernity. "The spread and continuity of indigenous systems of medicines, namely, *ayurveda, siddha* and *unani*, have thrown up a lot of concerns as well: how to incorporate these systems into a centralised health infrastructure; their expansion through the pharmaceutical industry for herbal

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49 'Avoidance of specific food items that are not fit for the body for want of compatibility with the medicine for a stipulated duration'

50 P K KrishnaVarier, "Rasasindooram", *Dhanwanthari*, Book 3 No 8 P 37

51 Anirban Das, "Medical Knowledge of the Body: Colonial Encounters", Rethinking Marxism, Volume 13. Number 2., Summer 2001, p. 125.

products, massage centres and spas; the relations and negotiations between the practitioners of different coexisting systems of medicine; the position of psycho-social and spiritual dimensions of cure and care in contemporary forms of indigenous systems of medicine and the debate on notions of efficacy in multiple, coherent systems of medicine."[52] Thus, the Ayurvedic revival attempted by the newly formed associations of Ayurvedic practitioners included the foundation of new hospitals and even medical colleges for Ayurvedic education after the western medical system.

The advertisement of the foundation of an Ayurveda Medical College and invitation of applications for admission to the college in the beginning of the twentieth century emphasised confidence in the effectiveness and glory of Ayurveda and clearly mentioned the objectives of the Medical College. The note expressed deep confidence in the unrivalled position of Ayurveda for human health and argues for its revival. It also gave an overview of the curriculum to be followed in the college. Knowledge in Sanskrit was mentioned as necessary for the study of Ayurveda, but its knowledge was not mandatory for admission. Those students who had no knowledge of Sanskrit would be taught the same on payment of special fees for the same.

P Venkiteeshwara Shastrikal, Government Doctor at Karamana Hindu Medical College wrote that Kerala had an excellent tradition of Hindu Medical practice. But it received a setback as Keralites omitted it and English medicine was popularised. However, by that time, many people were trying to revive it and thus there was hope that its past glory would be revived.

The glory and effectiveness of Hindu medical science could never be completely described. There were numerous examples to the fact that there was no other stream of medicine that was as suitable as Ayurveda to the

[52] V Sujatha and Leena Abraham, "Medicine, State and Society, in Indian Systems of Medicine", Economic & Political Weekly - EPW, April 18, 2009 vol. xliv. no 16., p. 35.

physique and food habits of Keralaites and as effective as Ayurveda. "Thus, the decline of Ayurveda is the decline of our body itself."[53]

Shastrikal continued to explain that it was in the context described above that they were determined to establish an Ayurveda Medical College (*Hindu Vaidyashala*), a treatment Centre called *'Ayurvediyaushadhashaala'* along with it and a library titled *"Aarogyaanweshinee*" for general use on the conviction that "such an effort would please all those who wished to see the revival of the science and with the objective that the students of Ayurveda should not, in future, face the kind of difficulties that we faced in studying Ayurveda and in acquiring experience in it."[54]

The basic emphasis was on the purpose of the revival of the science of Ayurveda. The founders of the Medical College clearly understood that modern education and a medical college was necessary for Ayurveda to regain its past glory. "Growing demand for Indianisation of the medical services signified two things, first, internalisation of the western medical system, and second, initiation of a counter-hegemonic process within the system."[55] Thus, the proposed medical college, curriculum and its structure would be modern. It had a prescribed set of texts to constitute syllabus, had a defined time structure, had a manager and other administrative details. All these were modelled after allopathy medical education. At the same time, the medium of instruction and the content of education were all Sanskrit and traditional. "The coming together of law, science, and different practices of medicine in this case is challenging to decipher in terms of its potential effects on India's ayurvedic medical system, and ayurvedic medical practitioners

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53 P Venkiteeshwara Shasthrikal, Government Doctor, Karamana Hindu Medical College Publisher, *Dhanwanthari*, Book 3. No 11., p. 118.

54 Ibid.

55 Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly*, Vol. 32. No 4., Jan.25-31, 1997, pp. 168.

have very divergent positions about how to protect their knowledge from misappropriation—ranging from organised resistance to deliberate inaction—and disagree over whether the new laws present a threat."[56] To fight a modern stream of knowledge about the human body, and to revive the traditional, it was clearly understood that there was no other goal, but to accept the modern structures of institutions and knowledge bodies and then to remodel the traditional into the modern; not in spirit or content, but in form and structure. No reform, but only revival was sought.

Kapil raj argues that "Although colonial institutions grew out of preexisting administrations of indigenous regimes and inherited much of their workforces, they were transformed by the new situation through mechanisms of accommodation and negotiation, producing novel forms of knowledge, and were not simply linear offshoots of past practices and traditions."[57] Just like the colonial institutions, the medical education system in Kerala during the colonial period also grew through a process of 'accommodation and negotiation' of the knowledge of the human body in Ayurveda in western medicine. K Keralavarmma Shasthrikal, Manager, Hindu Medical College, Karamana, Thiruvananthapuram, located as the new Hindu Medical College established near the *Karamana Naattuvaidyashaala*, made a note about what the students should study in the medical college. He was doubtless that the students of that Medical College should study the *Aryavaidya* texts like *Ashtangahridayam, Charakam, Sushrutham, Ashtaangasamgraham, Maadhavanidaanam, Shaarnggadharam, Bhaishajyarathnaavali, Rasarathnaakaram* and the history of *Aryavaidyam* from 08.00 am to 11.00

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[56] Murphy Halliburton, "Resistance or Inaction? Protecting Ayurvedic Medical Knowledge and Problems of Agency, in AMERICAN ETHNOLOGIST, ISSN 0094-0496, Vol. 38. No. 1. pp. 86–101, p. 86.

[57] Kapil Raj, "Colonial Encounters and the Forging of New Knowledge and National Identities: Great Britain and India, 1760-1850", *Osiris, 2nd Series, Vol. 15, Nature and Empire: Science and the Colonial Enterprise*, 2000, pp.119-134.

am and they should get accustomed with Ayurvedic Medicine and Treatment during the other hours of the day and from 04.00 pm to 06.00 pm especially."[58]

Be Open; Remain Original

"The revival (of traditional medicine) was inspired by the prospects of creating a 'national system of medicine' that would eliminate the traditional accretions of Indian medicine to discover a pristine wisdom that could observe the methods and findings of modern medicine."[59] The discussion on Ayurveda reform progressed and scholars contributed to it. In the fourth issue of the discussion, the author argued that in order to reform Ayurveda, the doctors in the stream should enrich themselves first. This was possible only by accepting new knowledge from the modern streams of medicine. The readiness of the traditional practitioners to accept western medical knowledge, especially the western knowledge about the human body and its anatomy was clear and openly pronounced. The quality of doctors was also emphasised. That the Ayurvedic doctors should be properly qualified was a major point highlighted as a need of the hour.

Vaidyan P P Kumaran Nambiar made a note on the importance of the individual doctor in the efficacy of the medicine used. Even if medicine and other elements were of high quality, the treatment would not be effective in case the *Vaidyan* was not up to the mark; and even if the medicine was not so good, treatment may succeed with a good doctor and thus, *Vaidyam* was the most significant among the four elements of treatment. "Now, *Arya Vaidyam*

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58 K Keralavarmma Shasthrikal, What the Students Should Study in the Medical College, *Dhanwanthari* Book 3. No 11. p. 120.

59 Leslie C M, "The Rhetoric of the Ayurvedic Revival in Modern India", *Man,* Vol. 63, Royal Anthropological Institute of Great Britain and Ireland, May, 1963 pp. 72-73.

has problems due to the shortage of well qualified *Vaidyas.*"[60] The readiness to integrate ideas from western medicines into traditional medicine for the revival of the latter continued along with other tendencies even after independence. This was well reflected in the Chopra Committee Report of 1948[61] as well. "…It is possible to delineate three main arguments (in the Chopra Committee Report). They are: (1) those of integration in teaching/education of traditional medical systems; (2) those of standardisation and rationalisation of research and production parameters, primarily to serve modern needs of commercial production and (3) those of hastening specialisation in the traditional medical systems, with an emphasis on learning the techniques involved in that, from the biomedical system."[62]

Arnold argues that "…It (Western Medicine) had broken out of its earlier enclavism to become one of the most confident expressions of British political and cultural hegemony in India. While the practitioners of Western medicine remained a distinct minority among the half-million medical practitioners listed in the census returns, the Western system of medicine had come by 1900 to enjoy a formidable degree of authority over British India, within the councils of government, and over the lives of its 300 million subjects."[63] By 1900, allopathy had established its hegemony and thus, the traditional practitioners had to accept the hegemony in Kerala too. Allopathy could not be totally discarded or written off as useless as it was promoted by the Government and because it was bearing results. This included the advancements made by Allopathy in the fields of developing vaccines and in

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60 Vaidyan P P Kumaran Nambiar, "Reforming Arya Vaidyam(Part 4)", *Dhanwanthari*, Book 4. No 1., pp. 87-88.

61 R N Chopra, Report of the Committee on Indigenous Systems of Medicine, New Delhi: Ministry of Health, Government of India, 1948

62 Madhulika Banerjee, "Public Policy and Ayurveda: Modernising a Great Tradition", *Economic and Political Weekly*, Vol. 37, No. 12., Mar. 23-29, 2002, p. 1137.

63 David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India*, University of California Press, 1993, p. 34.

the advanced studies in anatomy and physiology. Allopathy had even attacked the very base of several aspects of age-old Indian ways of living. For instance, the Cholera epidemic of the nineteenth century was recognized as to have spread as a result of the Kumbh Mela in north India. Initially there were only a few cases, but soon several thousands fell victims to the epidemic and the death toll rose to tens of thousands. The epidemic was recognized to have spread along the Kumbh Mela pilgrim trails. "The attack on cholera was also an assault on Hinduism, one which was all the more authoritative for its invocation of medical science."[64]

In this situation, Allopathy was to be accepted. Still, the practical acceptance extended to Allopathy could not be something parallel to accepting it as a medical system better than Ayurveda. Thus, an argument developed that western medicine or ayurveda was actually an outgrowth of the Hindu medicine. This theory simultaneously accepted allopathy as a stream of medicine on the one hand and at the same time discarded all its possibilities to outsmart the Hindu medicine. "One way in which Indians were able to reproduce their own values was through a spiritual-cum-religious approach."[65] This observation about the education system of India in general can be seen applicable to the argument about Ayurveda's supremacy over western medicine.

An article published in *Dhanwanthari* argued that it could be easily understood from the ancient records of the English that they received medical knowledge from the Ancient Egyptians. The respective records also reveal that the Egyptians received medical knowledge from the Palestinians, that the Palestinians received it from the Arabs and the Arabs received it from the

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64 David Arnold, "Cholera and Colonialism in British India", *Past and Present*, No. 113 (Nov. 1986), Oxford University Press, p. 141.

65 Hayden J A Bellenoit, Missionary Education and Empire in Late Colonial India, 1860–1920, London: Pickering and Chatto, 2007, p. 96.

Hindus. Some records of the Arabs show that a great king of the Arabs called *Hadur Al Rashid* became very kind about his children, subjects and soldiers who were suffering from injuries or diseases and wanted to get them cured and thus brought three Hindu *Vaidyans* to his country. *Salihaan* was the most famous among these three *vaidyans*. It is seen that he translated the important Ayurvedic texts *Charakam* and *Sushrutham* to Arabic language while he was living in the Arabian king's palace.[66]

The author continued to argue that Saalihan became very famous in Arabia and in the neighbouring countries and thus, on request, he had to visit many of the neighbouring countries with the permission of the king of Arabia. Finally, he passed away due to fever while he was in Egypt. Before death, he had finished translation of the above said Ayurveda texts. He is said to be buried in Arabia and after his death, several other Hindu *Vaidyans* were brought to Arabia. It is seen that at the time of death, he had two disciples in Egypt and four students in Arabia… A great *Vaidyan* called *Sudurin* who was a disciple of *Saalihan* in Egypt was the one who gave Hindu medical knowledge to the English in Egypt. "It can be deduced from the Egyptian, Arabic and Palestinian sources without much difficulty that the English received medical knowledge from the Hindus in this way."[67]

Vaidyan P Shankarappillai argued that production and distribution of medicine must be treated as a modern business. There had been several inhibitions against making medicine a business. It was thought to be an activity of sanctity and the traditional method of localised production of medicine at the time of need was the usual practice. *Vaidyans* would collect the necessary raw materials and ingredients and would manufacture when and where the need arose. Shankara Pillai pointed out the deficiencies of this

66 "How the Westerners Got the Knowledge of Medicine", Dhanwanthari, Book 7, No 11, pp. 127-128

67 Ibid, p. 129.

traditional practice. He argued that the traditional method caused the delay in the availability of medicine at the hour of need.

"This article is all about ready-made traditional medicine. If we consider the fact that we have bought medicine for price, it becomes established that medicine is a commercial article. …People of other countries have started the commercial production of medicine… We should also enter into the new trades and occupations that are suitable to our country."[68]

The practice of keeping medicines ready has been learnt by the traditional medical practitioners of Kerala and India, like several other parts of the world, from the example of western medicine. Shankara Pillai saw that method beneficial and advantageous. According to him, that would save many lives as the medicine needed would then be made readily available when and where it is in need.

In the course of time various kinds of diseases had multiplied by hundreds and new varieties of diseases, usual diseases, communicable diseases and other types of diseases spread due to the changed ways of life and the lack of cleanliness. As diseases increase the demand for medicine also increases. common people who were engaged in the fight for their life would find it very difficult to find time and energy to manufacture medicine, especially at a time when their dear ones were struggling for life. Beyond that, diseases occur at unexpected hours and to expect the medicines that are really located in forests, hills, seas and in other continents to be available in a place of comfort is not going to be realised. Another issue was that it was not rare that poor people were deceived by low quality or no quality medicine in the present system where there was no authentication for medicine.[69]

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[68] P Shankarappillai Vaidyan, "Commerce of Medicine (Read out in the Ochira Agricultural Industry Exhibition)", in Dhanwanthari, Book 9. No 12., p. 136.

[69] Ibid, p. 137.

Beyond the benefit to the patients, the modernisation of medicine into a modern formal business would have purely material benefits too. That would be beneficial to the economy as well as to the state. The author brought in detailed accounts regarding how the formal business production of medicine would be possible in Kerala and how it was going to save a considerable amount of money to the state. The government expenditure in importing medicine could be reduced. He also surveyed the possibilities of the medicine manufacturing industry in Kerala and assumed that the industry could be developed in Kerala and could be run profitably. All the necessary factors like land, buildings, capital, work force, knowhow, demand, raw materials and experts were available sufficiently in Kerala.

Vaidyan P Shankarappillai added some more points to the argument in favour of standardisation and authentication. He noted that in the olden days when people were largely illiterate it was common in all countries to manufacture medicine without any system for regulation. But the advanced countries had already put an end to that unscientific practice and had initiated scientific regulations as the rulers and people became aware. In the European countries, many companies had started the manufacturing of medicines. Medical history proves that prior to the decline of the classical age, there was commercial production of medicines in India. "When the bad times of India came to an end and the best times of India started (when the British royal family started ruling India) English medicine and literature were introduced in India and we advanced to this stage. This has been a great boon to India."[70]

The analysis made by the author included the financial side, the moral aspects, the material elements included, the concerns of the state, the needs of the patients, the possibilities and the technical aspects of the production of

[70] Vaidyan P Shankarappillai, Commerce of Medicine (Read out in the Ochira Agricultural Industry Exhibition), in Dhanwanthari, Book 9, No 12, Pp 138

medicine in the modern industrial fashion. The article was all about industrialization and formalisation of an activity that was going on for a long time in an unorganised, informal and traditional fashion.

Shankara Pillai added that the government had made a few Malayalis pass English medicine courses. There were enough doctors who studied English medicine on their own too. It would have been a great boon to the country, had one of these doctors studied and qualified in the manufacturing of English medicine. Had an English medicine manufacturing industry been developed in this land, the three lakhs of Rupees spent by the government and the one lakh of Rupees spent by the private parties for importing English medicine into the country would have remained in India itself. India could also export medicine and make profit. It would also have generated employment opportunities.[71]

There would be ample facilities for the development of any industry, agriculture or trade, if there is sufficient industrial facilities and capital. As all these things are available here, it can be seen that the manufacturing industry would bring us benefits, fame and profits. "In short, the industry would be a fleet of steps to both material and spiritual wellbeing."[72]

The western perspective of Indian medicine was segregation. "The spectacular growth of medical knowledge spurred and justified a development in race relations that was soon regarded as retrogressive."[73] The reason for the spread of Malaria and cholera and communicable diseases was mainly attributed to indigenous culture and ways of living including the religious festivals and celebrations in which tens of thousands of people came together, bathed together and so on. Thus, the segregation of Europeans and their

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71 Ibid, p. 138.

72 Ibid, p. 139.

73 John W Cell, "Anglo-Indian Medical Theory and the Origins of Segregation in West Africa", *The American Historical Review*, Vol. 91. No. 2., April 1986, p. 304.

residences with the people of Kerala, India and elsewhere in the colonies. Thus, from the western side, segregation was advised and attempted more and more while from the part of the practitioners of indigenous medicines, integration was advised and practised increasingly. Land was acquired to build segregation facilities in government hospitals.[74]

Even though the western medical system was accepted to a great extent and even the practitioners of traditional medicine like P S Varier were ready to accept western medical knowledge, this was not without difficulties and suspicions. The practice of hospitalisation, for instance, disturbed the caste sentiments of the natives as it necessitated case taboos between people of different caste origins. However, "…the continuing overlap between Indian and western medicine, the paucity of European doctors, the lack of an agreed therapy among western practitioners and the absence of any determination to unwelcome treatments on the Indian population there is little evidence of this kind of suspicion…"[75]

P S Varier wrote a detailed editorial on the commencement of the Ayurvedic Medical College. He explained all the details like the syllabus, the approach to other medical systems, raising the fund that was necessary, the fee structure, the scholarships to be given, the support and recognition from the government and the ways and care to be taken regarding how Ayurveda could be developed to the full potential. Varier was open to knowledge of *Ayurveda* that can be had from the other places, and also to knowledge from the other streams of medicine, especially from the western medicine. He was very cautious about depending on other streams of medicine for knowledge in

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[74] State Central Archives Thiruvananthapuram, File No: 10763 (5), Acquisition of Land for Contagious Ward in Government Hospital Kanjirapally

[75] David Arnold, "Cholera and Colonialism", *Past and Present*, No. 113, Nov. 1986, p. 133.

areas where Ayurveda lagged behind. For example, Varier was clear that Ayurveda lacked sufficient knowledge in Physiology and Anatomy. The only way out was to adopt Western Medicine, i.e., Physiology and Anatomy. However, this adoption of knowledge should be done after clearly understanding what is there already in Ayurveda. Varier clearly states the purpose of the care in this regard as that Ayurveda could progress only if treatment could be done in accordance with the Ayurvedic protocol even when knowledge from the other streams be used as supporting or complementary to the Ayurvedic.

"With all these advantages and possibilities on one hand, our science (Ayurveda), in our area and also in other areas, is still lacking in Physiology and Anatomy. Thus, there is no way other than following the knowledge in English medicine now. Still, there is some care necessary. First, our *Shaareeram* (Physiology) should be learned well. Then the English style also should be learned and then we can rectify the problems with our science. If we study only English Anatomy and the like (and neglect the traditional knowledge), we will never be able to conduct the treatment in the traditional way."[76]

The major dynamisms that formed the context of the perception of the human body in the first three quarters of the twentieth century included the recognition that there were different streams of medicine in Kerala. A second context was that all agencies recognized the need to be 'scientific'. This led to the re-reading of the native perceptions of the human body with the purpose of defending traditional medicine as scientific in nature. The scientific nature thus claimed made it mandatory to identify the elements of traditional medicine that could contradict the argument and to explain them. This led to revivalism in traditional medicine which received a focus in Ayurveda.

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[76] "Editorial - Aryavaidya Medical College", *Dhanwanthari*, Book 14. No 6., p. 130.

CHAPTER 3

REVISITING THE UNDERSTANDING OF HUMAN BODY

The generally accepted notions about the human body held by the indigenous society and its medical practitioners were to be revisited in the light of the new knowledge presented by the western medicine. The new knowledge posed possibilities and challenges alike. Kumar writes that "Indigenous medical systems laboured under severe constraints. Rampant quackery had exposed them to ridicule even by their own people.[1] Thus the revisit was not a simple task. The revisit had many purposes to meet. It was inevitable for the survival of the indigenous medicine in the context in which many of the traditionally held ideas were questioned by the new knowledge. The way knowledge was established as true or correct in western medicine was obviously different from the same within indigenous medicine. The question of how far was an indigenous medical tradition and science was important. The challenge was met with enthusiasm. "The attributes of Ayurvedic learning were gradually recast in the political idiom of language-based alignments and the claims of a tradition of indigenous science in turn legitimised a unified, singular Hindu nation."[2] Ayurveda was, thus, reinterpreted to establish its significance as a science and, in fact, the science that gave birth to all other sciences. This was done by establishing Ayurveda as a science that was working for the wellness of the human body.

Mananthala Neelakantan Moosad sought to achieve this end by interpreting the history of Ayurveda. He started by arguing that it was not

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1 Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly*, Vol. 32. No. 4., (Jan. 25-31, 1997), p. 169.

2 Kavita Sivaramakrishnan, "Constructing Boundaries, Contesting Identities: The Politics of Ayurved in Punjab (1930–40)", *Studies in History*, 22: 253., Sage Publications, 2006, p.253.

only that the Aryans were not at all civilised, but also that they did not even know the art of writing when they came to India several *Chaturyugas* (Four-fold Ages) ago (when the Aryans came to North India from the northern part of the Himalayas, ie, Asia), the period which the English call the Stone Age. In such a situation, the Aryans were still called "civilised" for many reasons among which the first was Ayurveda. The basic necessities of humans, ie., hunger, thirst, cold, heat, sleep, delivery etc. were there from the very beginning of creation. No one would be ready to argue that these are results of new developments like railways and telegraph. The forefathers, who were wealthy by knowledge, began to search for ways to satiate hunger and thirst. They began by observing the process of digestion of meat of different animals and fruits and roots. They had to shift their residence to adjust with the changes in the temperature level. They began to invent remedies for the problems caused by climate change. "While working for the wellness of the body, they began to invent agriculture and hunting so as to procure food for the body."[3]

The historical explanation placed the development of Ayurveda as a natural one in response to the situations that existed during each period. But at the same time, the 'civilised' nature of the so-called Aryan people was emphasised. Thus, traditional medicine was a contribution of this race. The caste implications are also notable here.

PVK Varier published the translation of an article published in the Indian Medical Record, which was written originally by Danchibai H L Meter LMS with the title 'About the Twig that Stuck Inside' (*"Chullikkol Ullil Pettathu"*). The article was a description about the treatment and curing of a lady who had some growths in the urethra which caused her immense pain while urinating. She tried to cure it by putting a twig of Dody (*Orila*) plant

[3] Mananthala Neelakantan Moossad, "Ayurvedam", *Dhanwanthari* 1., p. 15.

inside as it was considered a local folk remedy. She was already suffering from the pain for the last nine years and with this attempt to put the twig inside, the problem became acute as a part of the twig broke and stuck inside. Now the author, a practitioner of English Medicine, was requested and after several attempts he conducted a surgery. He took out several growths from inside and the piece of twig that stuck inside the urethra. This he did by administering chloroform to the lady in considerable quantities three times.

The doctor considered it important to let people understand the futility of the folk practice of putting the twig inside and the efficacy of western medical remedies and thus he published the same. More interestingly, the publisher of *Dhanwanthari* considered it important to bring to light the danger of such practices and they published a translation of the same in *Dhanwanthari*. This clearly showed the readiness to move from local folk practices to a scientific practice. The original author described why he selected this incident for publication and *Dhanwanthari,* by republishing the same translation, shared the reason. "The number, size and weight of the growths, that the piece of twig stuck inside, the folk belief that wearing a twig of the Dody plant could cure the pain in urethra (like the faith that wearing something like that would make child delivery easy), the quickness of the relief felt after the removal of the growths, and, that the longtime of remaining under the impact of chloroform did not cause any problem are the reasons that encouraged me to publish this article."[4]

Putting a piece of twig into the urethra as a part of the effort to get the pain there cured was not backed by evidence. Neither was there a treatment like opening the itching part, identifying the real issue and then solving the same to get the problem solved. The method followed in traditional medicine

[4] H L Meter Danchibai LMS, "Indian Medical Records (Translated by PVK Varier), 'About the Twig that Stuck Inside' (*Chullikkol Ullil Pettathu*)", in *Dhanwanthari* 2., pp.37-38.

was different. The human body was considered to be a part of the universe and the difficulties or illnesses experienced in the body were thought to be overcome through practices that were advised by the ancient gurus and sacred texts. The gurus and the authors of the texts must have conducted tests and followed trial and error methods. But, in course of time, the advice began to be considered infallible. When the western medicine was introduced, it also introduced a new approach to medicine and treatment of illness. The new method familiarised was different from the traditional. But it was convincing and was soon accepted for its empirical nature. This necessitated looking back into the traditional medicine's understanding about the human body and then to accept necessary corrections.

"In the light of the history of assimilation, change and transformation, the term "hybrid" is often used in the post-colonial situation to depict cultural configurations. But the term hybrid has little heuristic value in delineating the components and conditions of a cultural combination and it is oblivious to social structural correlates of culture."[5] At the close of an article that listed a number of antidotes, the author added a suffix that he is not very sure about the correctness of all the antidotes he described. He also accepted that there was the need for further tests and experiments. This was a sharp deviation from the position that whatever was given by the ancient gurus and mentioned in the ancient texts were bound to be correct for the very reason that they were written there. Here, the need for experiments and tests was underlined which showed modern scientific ideas. The author of the article, with the name P M, mentioned that it was not that all that was said above was free from doubts. It was sure that it is easy for anyone to get some ideas and then to enquire further to see whether it was correct or wrong. "Thus, it is hoped

[5] V Sujatha & Leena Abraham, "Medicine, State and Society", *Economic & Political Weekly - EPW,* April 18, 2009, Vol xliv. No 16., p.36.

that the scholars will test the reliability of these antidotes and inform by publishing them here along with the other antidotes known to them."[6]

In the second issue of *Dhanwanthari*, there is an article titled "*Pathrasamvadam*" (Journal Debate) in which the author named *Vidyadharan* questioned some traditional ideas regarding assuming the sex of the child in the mother's womb. He quoted from the traditional texts and countered those ideas by raising questions on the basis of the scientific ideas. It is remarkable that, in conducting the debate, the writer presented his arguments by presenting modern medical concepts ipso facto. He argued that it was earlier believed by the English doctors earlier that if the sperms come from the right ovary (Just like the two ovaries of male seen outside, women also have two ovaries inside. They are not seen outside because they are located inside) of the male and female, the child would be a male child, and if it is from the left ovary, it would be a female child, because it is observed that for those who, for some reason or other, have only one ovary also have children of the sex contrary to the concept, the theory was not held by the doctors any more. "So, how can I accept the idea of the Gita that the boy child lies in the right portion and the girl child lies in the left portion?"[7]

The simple logical questions were not easy to be countered. What was possible was to accept the possibilities of the western medicine. This included the use and usages of western medicine by the practitioners of traditional medicine. Introducing an English medicine – Carbolic Acid – for the use of the local medical practitioners, the writer made a statement of comparison between the English and the local systems of medicine.

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6 P M, "Antidote", *Dhanwanthari*, Book 1. No 2., p.38.

7 Vidyadharan, "A Few of My Doubts - Journal Debate", *Dhanwanthari*, Book 1. No 2., p. 40.

Even though the local medical practitioners generally had confidence that they are better qualified than the English doctors, they would all agree that the English doctors were better in the treatment of the wounds, he assumed. But it seemed that nobody had bothered to enquire why they had this advantage. Actually, it was this medicine (Carbolic Acid), which had given them the advantage, he concluded."[8]

Often the strategy of negotiation with western medicine was to reinterpret the concepts of traditional medicine. This was an attempt to reinterpret traditional medical ideas in order to ensure that it didn't contradict the notions of English medicine.

"It is known that the English doctors consider the brain as the seat of intelligence. How do we balance this knowledge with concepts of *Aryavaidyasaasthram*?"[9] Raising the question, the article proceeded to establish that the concept did not contradict the traditional medical idea. Reinterpretation and the attempt to prove the correctness of the traditional notions was not the response to the challenge always. Some of the concepts could not be so established that there was no option but to repudiate them. The practitioners of traditional medicine themselves also attempted to identify areas and concepts of traditional medicine that looked problematic in the light of the western medical knowledge.

The Light of Logic and Modern Science

Dhanwanthari had published two articles on *Vishavaidyam* by two different authors, *Vishavaidyam* and *Visham*. These articles, while trying to refer to modern science, described some of the traditional medical practices like that of interpretation of omens and chanting of magical words. Then,

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8 Mr M G, "Carbolic Acid", *Dhanwanthari* 2., p. 48.

9 "Editors Notes", *Dhanwanthari* Book 2. No. 4., p. 81.

another writer questioned these claims. What is interesting was that the questioning was done in the language of logic. The idea that something was objective and acceptable only when it was empirical and thus scientific was used in the questions raised. Notably, the publishers had no hesitation in publishing both the articles on the treatment of poisonous bites and the questions raised in criticism.

The claims that *vishavaidyans* were able to cure poisonous bites simply using certain magical chants and by bringing the snake that bit the person and making it take back the poison was questioned. The person who raised the question argued that the second claim could be proved by the essayist only by showing the curing of a snake bite using magical chants. He also added that this experiment could not be conducted on a human being and challenged the essayist that he was ready to arrange everything needed if the *vaidyan* was ready to take up the challenge to conduct the experiment on an animal.

He requested the opponent to publish the following questions that came up in his mind and his friends while reading the two articles *Visham* and *Vishavaidyam* in the *Dhanwanthari* number 5. '*Vishavaidyam'* – The first question was "The very moment you are bitten by a snake, you should bite it back… If so, the poison passes on to it." On the basis of what principle does this flow of poison take place? Has the essayist or somebody else has ever seen this? "Visham" – "When a person is bitten by a snake, our *vishavaidyaas* use *pipeelikavisarjjanam* or some other magical chant and make the snake come back and take the poison back." Has anyone, the essayist or any reader, ever witnessed this beyond simply hearing about it?"[10] It is clear that the challenge was to empirically prove the claim made by the opponent.

[10] Mr M G, "Some Questions about Vishavaidyam", *Dhanwanthari,* Book 2. No.6., p.114.

Attempting to explain the good and bad practices related to sleep and to provide guidelines for healthy sleeping habits, Vadavannur Shankaranarayanan, practitioner of Ayurveda, tried to identify reasons or causes of sleep itself. In doing so, he questioned the traditional notions and tried to argue for a logically safer explanation. The forefathers who were in the habit of holding Gods responsible for everything that was not easily comprehensive had not left sleep also untouched. Some of them had discovered that sleep was '*Vishnu's maaya'*. It was reaching out to everyone and affecting them as per the orders of *Vishnu*. *Acharyas* like Sushrutha had said that sleep was the result of the spread of *'kapham'* in the nerves that carry *'chaithanya'*. The religious texts theorised that sleep was the emotion of the three qualities *Sathwa, Rajas* and *Thamo*. They say that those who sleep both day and night are dominated by *Thamo*, those who sleep any time are dominated by *Rajo* and those who sleep only at midnight are dominated by *Sathwa* quality. "Our heart is like an inverse lotus flower. We are awake when it's blooming and we sleep when it shrivels, some people say."[11]

The process of questioning traditional practices in order to strengthen it logically in the light of the western medicine went along with the revivalism that was going on in the larger realm. "This revival, drawing to its fold the educated elite ranging from religious reformers to practising scientists, entailed the "discovery" and valorisation of ancient Hindu texts as authentic and authoritative."[12] The revival movement was a complex endeavour as it had to face the challenge of western medicine that was rooted in empiricism. When it came to the anatomy of the human body, what was empirical had the possibility of easy recognition among people as well as among scholars. A revisit of the traditional knowledge system became essential now. The revisit

[11] Kollankode Vadavannur Shankaranarayanan, "Sleep", *Dhanwanthari* Book 4. No 1. p. 11.

[12] Gyan Prakash, "The Modern Nation's Return in the Archaic", *Critical Inquiry,* Vol. 23. No. 3., Front Lines/Border Posts, Spring, 1997, p. 545.

to the traditional knowledge system was also complex. It included an analysis of several aspects of the traditional knowledge system. The insufficiency of the vernacular language to contain the knowledge of anatomy was, for example, admitted by a scholar in the field.

An area of the knowledge of the human body where the traditional practitioners evidently found themselves much behind western medicine was that of Anatomy. The backwardness of Ayurveda and other traditional medicines in Anatomy was openly agreed upon and sometimes even lamented on by the traditional scholars. P K Krishna Varier, in his series of articles on modern medical science, said that there was no sufficient vocabulary in Malayalam to translate from English the findings and understandings of the modern medical understandings about the human nervous system. He tried to deal with the problem by translating words and by giving the English equivalents. The author openly admitted that the local medical practitioners knew little about the nervous system of the human body.

"This system is very significant in anatomy, difficult to understand and not known to most of the local medical practitioners. By nature, this system is difficult to explain. And if it is to be done in Malayalam, the difficulty would double. This is because there are no equivalents in Malayalam for the technical terms in English that talk about the nervous system."[13]

A debate was carried on in the journal *Dhanwanthari* on the question whether *Arya Vaidyam* was to be reformed or not. Vaidyan Kammaran Nambiar argued in the fourth issue of the debate that Ayurveda should undergo thorough reform. According to him, this was to be done with reference to Allopathy. He emphasised the significance of the knowledge of the body. Knowledge of the body was the base of the science of medicine and

[13] P Krishna Varier, "Madirashi, Snayavya Paddhathi, Nervous System", *Dhanwanthari, Book 4*, No 2, p. 38.

treatment. Nambiar was open to the advancements made by Allopathy. He went to the extent of criticising the very basic texts of Ayurveda. He argued that those books do not give a complete study of the human body and that without such knowledge, any stream of medical science would not be effective. He particularly argued for a two-fold improvement of Ayurveda education: one, within Ayurveda by combining the knowledge in different streams, and, two, by adding to Ayurveda knowledge the knowledge of modern medicine and science, especially, Chemistry and Anatomy.

According to Vaidyan P P Kammaran Nambiar, there was no doubt that the science of *Arya Vaidaym* was faultless. But, he said he was not ready to say that it was perfect. The science of medicine could be divided into three parts: the causes of the disease, the symptoms of the disease and the treatment of the disease. Anatomy was an important element of that. The ancient aryavaidya texts *Charakam*, *Sushrutham* and *Ashtaangahridayam* that were then in use were not seen to provide the students with a complete knowledge of Anatomy. Nambiar didn't think that those texts could provide any considerable knowledge regarding the internal organs, their functions and features. The knowledge in the ancient texts was not in complete agreement with modern science about body parts. The *Brihannighandurathnaakaram* and *Ayurvedavijnjaanam* composed by the early writers were faultless, but they were too short and concise. "Thus, anatomy of allopathy should be translated and added to the curriculum of ayurvedic medical education. Ayurveda Pharmacology also needs to be reformed… Essential chemistry should be added to this."[14] In the scenario that emerged after the introduction of Western Medicine, the teaching of any one of the texts *Charakam, Sushrutham* or *Ashtaangahridayam* was not sufficient as each of them spoke about some aspects of medical science in a skewed manner… In short, in

[14] Vaidyan P P Kammaran Nambiar, "Arya Vaidya Reform Part 4", *Dhanwanthari*, Book 4. No 4. p. 88.

order to get the gist of Ayurveda, one had to study too many texts, and in this study, most of the life-time would be spent. In order to overcome this difficulty, a complete medical education programme should be formed by focusing on any one particular stream like that of the *Bhaavaprakaasham* and by making it short of deficiencies and also by adding to it medical knowledge from other Ayurveda systems as well as from other branches of knowledge such as Anatomy and Chemistry. "There is nothing to be ashamed of in receiving knowledge from Allopathy to which Ayurveda is indebted to."[15]

The issues raised by the scholar and the suggestions he made can be summarised in a few points: Indigenous medical knowledge is short of certain aspects of anatomy and chemistry, which are very important aspects of western medicine. Anatomical explanations in the ancient texts were too short and concise. Hence anatomical knowledge in Allopathy should be translated and used. Traditional medicine should have a set of standardised texts. There is nothing wrong in being indebted to Allopathy

The knowledge of the internal organs of the human body was thus understood as a key aspect of medical knowledge. This revelation can be seen repeatedly articulated by several scholars of traditional medicine during the period. This did not mean that traditional medicines functioned so far without any understanding of the human body. In fact, it was the very concept of the human body in traditional medicine that was getting modified. As far as traditional medicine was concerned, the human body was a mixture of the *panchabhootha*. The balance and imbalance among these five elements were considered to be the root cause of wellness or disease. Treatments were aimed at the correction of these imbalances. In modern western medicine, the human body was understood as a system. This system had several sub-systems which included the organs that functioned in specific ways. Recognizing the

[15] Ibid.

significance of Anatomy was, in a way, recognizing the need to reconstitute the concept and understanding of the human body in traditional medicine.

"Among the Indian practitioners of western medicine there were a few who sincerely wanted to take advantage of the indigenous system and practices."[16] The encounter with the western medicine necessitated traditional medicine not only to accept certain aspects of medical knowledge such as anatomy, but also to totally restructure the system of medical knowledge of the human body and the education of that knowledge. Uniformity and institutionalisation of western medical education were found necessary at the time. Ayurvedic medical education was going on in the guru-shishya relation mode. "Political and historical studies document the standardisation of Ayurveda through the introduction, early in this century, of institutions such as medical colleges, professional associations, and hospitals, which have increasingly replaced apprenticeship and practice in noninstitutional settings."[17] This deliberation took place under the colonial hegemony that manifested in medicine, health and the understanding of the human body. The traditional knowledge about the human body was re-examined and it was sought to be remodelled after western medicine meant the manifestation of the hegemony that was being established. "The interactions between the knowledge of the body as constructed in modern medicine with one of its others (the construction of the body in Ayurveda) show the concept of the mimicry of overdetermination in operation."[18] Anirban Das explained his concept of 'the mimicry of overdetermination' as the retention of the hegemony of one discourse over the other while the process of translation of

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16 Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly, Vol. 32*. No. 4., Jan. 25-31, 1997, p.167.

17 Jean Langford, "Ayurvedic Interiors: Person, Space, and Episteme in Three Medical Practices", *Cultural Anthropology,* Vol. 10. No. 3, 1995, p. 330-331.

18 Anirban Das, "Medical Knowledge of the Body: Colonial Encounters", *Rethinking Marxism, Volume 13.* Number 2., Summer 2001, pp. 109-131, p. 116.

knowledge in one to the other is undertaken. This process is seen in the discussion on the reformation of Ayurveda in *Dhanwanthari*. Responding to the debate on reforming Ayurveda, P Krishna Varier LMS argued that the Ayurvedic education system should be totally reorganised after the English system. There should be institutions of Ayurveda Medical Education modelled after Allopathy Medical Colleges.

Krishna Varier argued that *Arya Vaidyam* had many advantages, but it was not acceptable in its present form. "I never consider it to have been born of non-human sources. If science is to advance, it should never stop studying and conducting new experiments. This is how Allopathy advances"[19], he observed. Ayurveda had not added anything new for a long time, but had only lost a considerable amount of its traditional knowledge. Many of the early superstitions also persisted in it. Thus, it was necessary to reform it by removing such elements.

Once it was decided to reform Ayurveda, we should think about how to do it. For that, firstly, Ayurvedic medical education should be reorganised after the model of Allopathy Medical Colleges. It should be made mandatory that Ayurveda doctors also face and pass qualifying examinations as it is in Allopathy and the Government should ensure that no one practises Ayurveda without being properly qualified, he suggested.[20]

The retention of hegemony of the knowledge of the body possessed by the powerful is visible in the attempt to reorganise the medical system as well. It is the traditional medical system that is sought to be reorganised. The model is that of the western medicine. At the same time the identity of traditional medicine is maintained. "P S Varier was deeply engaged in systematisation

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19 P Krishna Varier, "Reform Arya Vaidyam, Part 4", in *Dhanwanthari*, Book 4. No 4. pp. 91.

20 Ibid.

and dissemination of what may be called 'traditional knowledge in new light' and created institutions for this purpose."[21] A 'proper' combination of the western and the traditional systems of medicine was recognized as the need of the hour. "Accept the local medical system. It means reform in several fields. Most of it is attained by reforming *Vaidyas* (doctors). In order to reform doctors, first we should reform medical education. In short, if Allopathy and Ayurveda could be combined properly, the problems would all be solved."[22]

Defining the Other Medical Systems

The practitioners of western medicine, from the beginning of the colonial encounters with the eastern medicines, tried to understand the oriental medicines. "In freeing itself from its specifically European origins and coming to terms with its "tropical," "Asiatic," or "Oriental" context, western medicine in India was forced to interact not only with the diseases of the region but also with its medical ideas and practices."[23] Understanding oneself as one among the many in a group had deep impacts on self-conception. It could also restructure one's approach to the surroundings, to the others in the group and to the possibilities of change, improvement and adaptation. Ayurvedic practitioners of the early years of the twentieth century passed through such a period of transformation. They understood the need to look into other medical systems and their ideas regarding medicine and medical treatment and, more importantly, to the knowledge of the human body in those medical systems. *Dhnwanthari* was keen in publishing studies on the essential elements of different medical systems so that the *Aryavaidyans* and other interested parties may become open and be able to

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[21] Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly,* Vol. 32, No. 4., January 25-31, 1997, p. 168.

[22] Kodungallur Kunjikkuttan Thampuraan, "Reform Arya Vaidyam, Part 6", in *Dhanwanthari, Book 4*. No 6. p. 131.

[23] David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India,* University of California Press, 1993, pp. 43-44.

develop a holistic and scientific outlook about the improvement of *Aryavaidyam*. Thus, there were a series of articles published on each of the important medical systems. In one such effort, Dr Varier defined the major medical systems concisely so that the purpose could be served. He observed that it was difficult to count the medical systems of the world. Still, the medical systems famous in Kerala are the following.

Allopathy: This was an ordinary medical system which treated diseases with medicines and it was also known as 'Western Medicine' or 'English Medicine'.

Aryavaidyam or *Ayurvedam*: This was the medical system of India from time immemorial till date. There were internal divisions of it like '*Chinthamanivaidyam*'. The *Ashtavaidyas* of Malayalam and the others did not follow this system.

Unani Medicine: This was a system recognized by the *Muhammedan*s.

Homoeopathy: This is a special type of medical system which attempts to develop immunity in the human body by administering minute quantities of medicine and thereby generating miniature symptoms of the diseases.

Hydropathy: A treatment system that uses water for curing diseases.

Varnnachikithsa (Colour Treatment): Curing diseases by using different colours.[24]

An analysis of the medical systems of the world that were being practised in India and in Kerala by a great advocate and practitioner of Ayurveda was, interestingly, a matter of fact and with the stated objective of looking for possibilities of adoption of useful knowledge from those systems. "People's health-seeking behaviour was not determined by their cultural

[24] P K Varier, "Doctors", *Dhanwanthari*, Book 10. No 8., p. 87.

perception of a medical system, rather by the availability, accessibility and quality of medical care in any particular system in an area."[25] This could be the root of the medical pluralism and the attempt of the indigenous medical practitioners to learn and accept as much as possible from the other systems of knowledge. The challenge was to know more deeply and widely about the human body.

In the concluding remarks on a series of articles published in the *Dhanwanthari* on the ancient physiology, the author made the remark that he understood the ancient physiology at least partly by an effort that lasted for many years. He referred to the depth of the subject. "Ayurvedic doctors managed to promote Ayurveda partly on a nationalist platform by arguing its unique connection to Indian cultural identity."[26] Another aspect of what he tries to point out was the particular methodology followed in the presentation of ancient physiology, especially in the text *Rasarathnasamuchchayam.* The scholar categorically points out the declaration of professor Prafulla Rai that, what helped him to understand the principles contained in the *Rasarathnasamuchchayam* was thirty years of study of the modern western science of chemistry. The author pointed out five things necessary for understanding the principles in the ancient texts on Physiology: (a) sharp intelligence, (b) deep contemplation, (c) long and persistent effort, (4) knowledge of modern western science and (e) pride in being Indian.

The essayist noted that the attempt to explain ancient physiology was unending. It could not be completely discovered by a single individual or a single attempt. He quoted 'the great professor Prafulla Rai' whom he heard speaking on one occasion that he could understand the chemistry explained in

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[25] V Sujatha & Leena Abraham, "Medicine, State and Society", *Economic & Political Weekly EPW, April 18,* 2009 vol xliv no 16, p. 39.

[26] Jean Langford, "Ayurvedic Interiors: Person, Space, and Episteme in Three Medical Practices", *Cultural Anthropology,* Vol. 10. No. 3., August 1995, p. 334.

the *Rasarathnasamuchchayam* of the ancient gurus only after studying modern western chemistry for thirty years. The method of the science of the ancient gurus was so deep. The author said that he was convinced that it was so high that the modern people would not be able to guess. "Extraordinary intelligence and patient contemplation are required for its understanding. In addition to all this, the conviction that 'I am an Indian' is also needed for it."[27]

The observations of the author bring out the resemblance between the way the human body was perceived and the way the national body was perceived. Both were closely related. Under the colonial regime, the traditional knowledge system on physiology was revisited and understood in the light of the modern science of the west. The traditional knowledge system that was part of the national tradition could be understood only in the light of the science of the coloniser. At the same time, it required a deep sense of Indianness. This indicated the process of nation building in a colony. The awareness of the self and national body and its features are reinvented with reference to the knowledge system of the colonised while increasing the sense of pride and belongingness in the national identity. "It does not take much imagination to see that the reason for this lies in what European imperialism and third-world nationalisms have achieved together. The universalization of the nation-state as the most desirable form of political community."[28] Thus, understanding the knowledge about the body in negotiation with modern science became the process of understanding the national body as well.

Gandhiji was aware of the hegemony created by western medicine and the significance of linking a healthy individual body with the healthy national body. "Gandhi understood the connection between medical systems and

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[27] "Rereading Ancient Physiology - The Ancient Physiology (Last Part)", *Dhanwanthari*, Book 15. No 12., p. 276.

[28] Dipesh Chakrabarty, *Provincializing Europe Postcolonial Thought and Historical Difference,* Princeton University Press, Princeton, 2000, p.42.

political freedom in terms of a scientific discourse about subject bodies, and not just as a struggle for control of health care policy as such."[29] The health of the individual body was the prerequisite of the health of the national body. Health of the national body was also moral and thus, the individual body that was to make the national body healthy was to be moral. Thus, Gandhiji advised a chaste body as a healthy body. "While working toward reform on a national scale, Gandhi often delineated the problem of action in terms of a discrete microphysics of self-discipline required of those involved."[30]

Revisiting Human Body and its Processes; The Case of Menstruation

"The introduction of science in colonial India became en-snarled in the contradiction that the Indians who were represented as objects of scientific knowledge were also recruited as co-knowers of scientific knowledge"[31] Encountering modern medicine, by the close of the nineteenth century, Ayurveda found itself facing a major challenge. Modern medicine which followed a procedure that was different from that of Ayurveda, challenged not only a number of concepts and assumptions in Ayurveda, but also the epistemology of Ayurveda. The question was also about how to use the possibilities of modern science for the benefit of Ayurveda while keeping the fundamentals of the knowledge system unaffected. To deal with the challenge amounted to redefining Ayurveda and its approach to knowledge and imagination of the human body and the world. A debate in the Ayurvedic journal Dhanwanthari on the nature of menstruation shows how this process went on.

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[29] Joseph S Alter, "Gandhi's Body, Gandhi's Truth: Nonviolence and the Bio-moral Imperative of Public Health", *The Journal of Asian Studies,* Vol. 55. No. 2., May, 1996, p.309.

[30] Ibid, p.304.

[31] Jean Langford, "Ayurvedic Interiors: Person, Space, and Episteme in Three Medical Practices", *Cultural Anthropology,* Vol. 10. No. 3., August 1995, pp. 360-361.

By the beginning of the nineteenth century, the traditional Ayurvedic practitioners of Kerala were exposed to the challenges and possibilities of the western medicine. Backed with the colonial political mastery and modern approach, it posed a great challenge as an alternate medicine with immense possibilities. That shook the unquestioned authenticity of traditional medicine and its practitioners. At the same time, it opened many opportunities for learning. The very epistemological premises of western medicine were understood to be very different. "The anatomo-clinical method, the positivist representation of an objectivized reality, and the dualism of inside and outside are not rejected but rather subjected to a variety of sometimes calculated, sometimes casual manoeuvres that subvert, invert, and otherwise play with the modern episteme."[32]

To adjust with that required redefinition of the self, ie, the Ayurvedic knowledge system, and much of its knowledge. The Ayurvedic journal *Dhanwanthari* became a platform for such debates and discussions and a discussion on the nature of menstruation was an example. The debate began with a discussion on the traditional understanding of the physiological process and advanced to a deep deliberation of the epistemological aspects of Ayurveda and its redefinition. As David Arnold observes, "over the long period of British rule in India, the accumulation of medical knowledge about the body contributed to the political evolution and ideological articulation of the colonial system."[33] Simultaneously, the ideology of the colony was also being redefined in the process of this debate.

The debate between two Ayurvedic practitioners, Sreeman P M Govinda Pillai and Vaidyan Kammaran Nambiar, on the nature of menstruation, went on for more than a year since 1919 in various issues of the

[32] Ibid, p. 361.

[33] Arnold David, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India*, University of California Press, 1993, pp. 8-9.

Ayurveda journal *Dhanwanthari* published from Kottackal by P S Varier. Vaidyan P M Govinda Pillai started the debate by writing an article in *Dhanwanthari* raising certain basic questions on the nature and process of menstruation and trying to explain the same. He gave the two fundamental understandings of Ayurvedic texts on menstruation. "…As per the principles, it is the coming together of the menstruation (*aarthavam*) of female and semen (*shuklam*) of male that results in pregnancy (*garbham*)."[34] "It is the blood that is released through the vaginal opening of a woman for three days a month that is known as menstruation (*aartthavam*)."[35]

After giving the fundamental assumptions, he raises certain questions which were later debated in the following issues of the journal. "If the menstrual blood is causing pregnancy, why is it lost? Why is the blood that is causing pregnancy allowed to be lost by banning sex during the three days which are productive?" Then, if it is not this blood that is causing pregnancy, is there another *aartthavam*? If so, which is that *aartthavam*? Where is it? Is there any relationship between that *aartthavam* and the blood that is stored and released each month? If so, what is that relationship? What is the purpose of menstrual blood? Can we satisfy the students by simply stating that, "This is the mystery of creation!"[36]

The statement of the principles of *aarthavam* as per Ayurveda and the very practical and logical questions that arise out of the analysis of the given principles by Sreeman P M Govinda Pillai initiated a debate. The debate was carried on by checking the factualness and logical coherence of the assumptions in the light of the allopathic understandings on menstruation and pregnancy. The discussion on the nature and functions of menstruation

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[34] P M Govindan Vaidyan, "*Aartthavakaaryam* (The Case of Menstruation)", *Dhanwanthari,* Book 16. No 2., Kottackal, 1918, p.25.

[35] Ibid, p.26.

[36] Ibid.

progressed to an epistemological discussion on how to redefine Ayurveda and the role modern medicine may play in that process. "Cultural crisis and cultural nationalism infuse the native medicine movements ... This does not mean that those movements have been basically traditional, antimodernist, or anti-scientific. "[37]

The final question raised by Govinda Pillai was about the way knowledge was to be approached. Once he raised the basic questions about the nature and purpose of *aartthavam*, he tried to conceptualise the matter. He was convinced that a simple statement of the principles from the age-old Ayurvedic texts could not satisfy the quest of the students. Logical arguments and explanations beyond the statement of the 'authentic principles' were needed in order to develop an understanding on the question of physical properties and biological processes. This stance set and revealed the epistemological premises on which the ensuing debate would take place.

"The whole Ayurvedic revival and the *Shuddha* movement in particular seem deeply significant of the tension between cultural tradition and modernity in modern India-a tension obviously not yet resolved in the medical or in many other fields as well."[38] Govinda Pillai expressed the new consciousness that a simple statement like "This is the mystery of creation!" would not be considered by the young generation as an explanation for a logical question. He proceeded to present a logical explanation to the problem. "It's a part of the blood itself that is called *aartthavam*… So, it is definite that all elements present in the blood are present in *aartthavam* also… the blood that gets transformed into *aartthavam* flows from heart through the special nerve and gets stored in the uterus. There the essence of this blood

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37 Ralph C Croizier, "Medicine, Modernization, and Cultural Crisis in China and India", *Comparative Studies in Society and History*, Vol. 12, No. 3, Cambridge University Press, July 1970, p. 289.

38 Ibid, p.286

gets united to the seeds of women in the womb and the waste part of the blood gets separated from the essence and flows out. Thus, the meaning of the term *'aartthavam'* is contextual. It could mean a woman's seed or menstrual blood."[39]

The method of the writer here was just a logical argument. It is notable that the explanation provided was logical to an extent, but it lacked any evidence. The *Vaidyans* of the time were aware of the observations and tools for observations used in Allopathy, but none was used in this case to prove the argument raised. The assumption that the traditional notion is correct and that the ancient texts are infallible was the only principle on the basis of which the explanation provided could be proved. But Mr. Pillai did not stop by providing this explanation. He advanced to look into other problems connected with menstruation. What could be the cause of the loss of precious menstrual blood by women every month? He found the cause of the loss of menstrual blood in the misbehaviour of men and women.

"If men and women follow the scientific instructions regarding food, sleep and abstinence, women would have had menstruation only once in between delivery and next pregnancy. Women do not get pregnant and do menstruate every month because the semen and menstrual blood become unable to bear children due to the misbehaviours of the couple in matters of coitus. This causes them trouble and their children's health and longevity are affected. This maligns the whole world too."[40]

Govinda Pillai's explanation on the questions '*what is Aartthavam*' and '*why does it happen'* had the characteristics of logical argument, even though it was not an evidence-based argument. But, the question '*why do*

[39] P M Govindan Vaidyan, "*Aartthavakaaryam* (The Case of Menstruation)", *Dhanwanthari,* Book 16, No 2, Kottackal, 1918, p. 26.

[40] Ibid, p. 29.

women menstruate every month' was not answered on logical terms; it was simply done on the premises of traditional knowledge. He first assumed that the loss of '*aartthavam blood'* was a huge loss to the human body, and even for the society. Then he made the following assumption that the loss is a natural impact of the wrongs that are committed by the couple. This is the logic of religion. Here, Govinda Pillai was identifying a certain phenomenon as a great loss and then he assumed that it was a *punishment for sins committed*. He himself forgot that he had argued in the beginning of the article that mere statements were not sufficient to convince the young generations. The slip into the religious kind of argument in a debate on a physiological process of the human body was not accidental. "The initiatives of the colonial state to abolish Sati and child marriage and to prescribe a minimum age for the consummation of marriage, for instance, generated a debate about the authentic cultural practices of the Hindus in the past. Both sides, those opposed and supported these moves, invoked the same religious texts, reinforcing, even in opposition, a consciousness rooted in religion."[41] Revivalism naturally tended to follow and uphold the logic of religion and its infallibility. On the other hand, the argument in favour of modernization and reform also tended, mostly, if not always, to accept the logic of religion. In the case of modern western medicine, and thus, in the debates with the practitioners of western medicine, this shade of the logic employed was not possible. However, even in debates on the human body and its processes, when those who were involved in the debate were from the traditional knowledge system, the tendency was to slip to the language of religion.

Kammaran Nambiar offered a critique of the observations of Govinda Pillai in the issue No 5 of book 16 of Dhanwanthari. He started by accepting the claim that the knowledge initiated by the great mendicants cannot be

[41] K N Panikkar, "Colonialism, Culture and Revivalism", *Social Scientist*, Vol. 31. No. 1/2. , Jan. - Feb., 2003, p. 12.

incorrect. "Traditional knowledge can never be false."[42] But this agreement was followed by the cautioning that there are problems in determining what is the real traditional Indian knowledge and also in interpreting the verses of the ancient teachers of Ayurveda. Then, setting the premises of the debate, he summed up the current idea of the local traditional medical practitioners regarding menstruation, menstrual blood and the role of it in the processes of impregnation and pregnancy.

"Following is the idea generally held by many of the local medical practitioners regarding the nature of impregnation. The semen that enters the vagina of the woman that is clean on the third day after menstruation through coitus proceeds to the womb. There it mixes with blood and, like how milk becomes curd, gets transformed into living beings. Thereafter it grows by being nurtured by the blood that comes to the womb. It is the same menstrual blood that gets mixed with the semen, that nurtures the baby in the uterus and that becomes breastmilk after delivery."[43]

Nambiar begins criticism by observing that the knowledge of the local medical practitioners regarding menstruation and pregnancy was imaginary and not real. The mediaeval teachers of Ayurveda considered using the terms *'Aartthavam'* and *'Rajas'* in different shades of meaning. Then he observed that the real purpose of the natural process of menstruation was to clean the uterus and to keep it ready for impregnation. If the women did not get pregnant within a stipulated time, the settings of the womb become not suitable and thus nature repeats the process. Thus, menstruation is a natural bliss and the menstrual blood is the blood that is stored on the walls of the uterus in preparation for pregnancy. Pregnancy was the result of the mixing of

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42 P P Kammaran Nambiar, "Rajass", *Dhanwanthari,* Book 16. No 5., Kottackal, 1919, p. 103.

43 Ibid, p. 104.

man's *'shuklam*' with woman's *'rajas'*. Rajas are produced in the woman's ovary through the process just as sperm is produced in the testes of man.

"The criticism of indigenous traditions was not new; contrary to British beliefs, Hindu religious practices included lively traditions of critical thought. What was new, however, was the invocation of science's authority in the critique of religion and society."[44] Here, Nambiar gave the ideas of modern medicine regarding conception. Then he proceeded to explain how the ancient teachers of Ayurveda had given the same ideas in their texts. He quoted from Bhoja and other Ayurveda teachers of ancient and mediaeval times. Nambiar concluded the article by stating that "The meaning of the term *Aartthavam* and *Rajas* is the same; it means woman's seed. The article is written to show that Rajas and blood are different."[45]

Mr Nambiar accepted that the traditional medical practitioners were holding wrong ideas regarding the fundamental areas of physiology. At the same time, he maintained that the ideas held by the mediaeval teachers of Ayurveda could not go wrong. He explained that what happened was only a misinterpretation of the terms used. This was due to lack of proper understanding of the texts of the mediaeval teachers. So, for correction of ideas that were wrongly held by the traditional medical practitioners, correct understanding and interpretation of the authentic texts was needed. "The process of re-creating Ayurveda rested on the belief that everything that was superstitious entered Ayurveda in the Middle Ages and the national identity was to secularise Ayurveda. Hence the most important task of those engaged

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[44] Gyan Prakash, "The Modern Nation's Return in the Archaic", *Critical Inquiry,* Vol. 23. No. 3., Front Lines/Border Posts, Spring, 1997, p. 536.

[45] P P Kammaran Nambiar, '*Rajass*', Dhanwanthari, Book 16. No 5., Kottackal, 1919, p. 106.

in the process of re-structuring Ayurveda was to retrieve an imaginary past from the follies of the present."[46]

The self-declared 'unbiased doctor' wrote that he was full of appreciation for Nambiar that he had been able to quote extensively from the authentic Ayurvedic texts and to correlate it with the ideas of modern medical science. But he did doubt a little that that sort of attempt to correlate everything in the traditional science with the modern science would finally require a complete transformation of the traditional science itself. There could not be a difference in opinion that the sort of attempt to correlate would finally result in a ridiculous combination like a person completely clad in European attire and half-shaven, but bearing ear-rings and *kuduma* (to have hair on the back tied as a ponytail). "Is it not sufficient to maintain that the different sciences are different in their expression and work but the essential principles are all one and the same and that the impact of all these sciences are one and the same?"[47]

When the debate concentrated on the nature of menstruation and was carried on between the practitioners of Ayurveda, there were other issues that influenced the debate. "Modern Ayurvedists needed not only to overcome sectarian and regional differences in search of a uniform identity but were also confronted with new educational methods and technologies for diagnosis and research introduced to India by the British."[48] The 'Unbiased Doctor' sought to substantiate his argument with a few illustrations. There is a long-held belief in India that if learning is undertaken on the eighth day (*ashtami*),

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46 Burton Cleetus, "Subaltern Medicine and Social Mobility: The experience of the Ezhava in Kerala", *Indian Anthropologist*, Vol. 37. No. 1., (Special issue on the Ethnography of Healing), Jan-June 2007, p.157.

47 "An Unbiased Doctor; Rajass and Aarsha Knowledge", *Dhanwanthari,* Book 16. No 9., Kottackal, 1919, p. 209.

48 Frederick M Smith and Dagmar Wujastyk, "Introduction", in Dagmar Wujastyk and Frederick M. Smith (eds.), *Modern and Global Ayurveda Pluralism and Paradigms*, State University of New York Press, Albany, 2008, p. 9.

the teacher, the student or the knowledge transacted would suffer destruction. The belief causes immense fear in the minds of the students and they abstain from learning on the eighth day. But the real purpose of the advice to avoid learning on Ashtami is the observance of the principle that there should be a gap for rest for students in learning. He stopped the article by criticising Nambiar for taking the position that the principles of traditional medicine of India are one and the same with those of modern western medicine in essence.

The cross reference to western medicine's ideas and findings prepared the ground for the coming together of the ideas of traditional and western medicine. "The soil was being prepared for cross-fertilization, and the seed was a cross-breed."[49] In his article titled 'Rajas' published in the Dhanwanthari book 16, number 11, Vaidyan P P Kammaran Nambiar sought to reply to the 'unbiased doctor'. In this article, he concentrated completely on the 'unbiased doctor', leaving the original debate untouched. He repudiated the allegation of the 'unbiased doctor' that Mr Nambiar was trying to prove that the principles of modern medicine and Ayurveda are one and the same. But he tried to drive home the argument that the understanding of modern medicine and Ayurveda on menstruation are broadly the same. The only difference is in the scope and the way the idea is discussed in the two streams.

Kammaran Nambiar explained that he didn't think he had to tell the readers that the only difference between the ayurvedic and modern medical understandings about menstruation was that the former held that the union of the seed from the male with that from the female alone did not cause the birth of a child and that pregnancy occur only when the *karma*-filled, extremely small, only seen to yogis and soul-born 'root-cause' got entry into the semen-*rajas* blend and that the Hindu idea about pregnancy was deeper than that of

[49] Deepak Kumar, "The 'Culture' of Science and Colonial Culture, India 1820-1920", *The British Journal for the History of Science*, Vol. 29. No. 2., June, 1996, p. 198.

the modern medicine. Actually, this was the only difference between the Ayurvedic and western ideas about menstruation. There was no need to link them. "But, unlike the modern Physiology, that of the early teachers is not detailed, it is concise. They did not explain, maybe because of their fear about becoming too explicit. Those days, the responsibility to explain rested on the shoulders of the teachers."[50]

With this explanation on his position, Mr Nambiar turns to criticise the ideas put forward by the 'unbiased doctor'. He pointed out that the example given by the 'unbiased doctor' on how principles of Ayurveda are presented is implicit in the taboos and rituals. Using the logic of western science for interpreting the traditional medicine's notions was problematic as the two operated in two different contexts. "Although the Hindu scientific method resembled western reasoning, its theories and concepts were different and could not be made to correspond to western knowledge without violating their integrity."[51] The unbiased doctor had pointed out that the taboo on cow slaughter in Hindu religion was actually intended to avoid the killing of useful animals. He then paused the question whether the unbiased doctor was ready to sanction the killing and eating of cows and bullocks that have become useless due to age, infertility or laziness. The question is paused with such confidence that it is clear that Nambiar strongly believed that such a sanction was impossible. He finished his response by the blunt statement that the article of the 'unbiased doctor was a blunter'.

It was not the 'unbiased doctor', but the earlier opponent Sreeman P M Govindan Vaidyan, who came up with a reply to Nambiar. He began by categorically maintaining that he had not argued that menstrual blood and

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50 P P Kammaran Nambiar, "Rajass", *Dhanwanthari*, Book 16. No 11., Kottackal, 1919, pp. 242.

51 Gyan Prakash, *Another Reason: Science and the Imagination of Modern India*, Princeton: Princeton University Press, p. 65.

rajas are the same. “I wrote that article just to show that the female seed that causes pregnancy and the blood that flows out in menstruation are different.”[52]

Govindan Vaidyan quoted his own words from the previous article and proceeded to present the allopathic understanding of the process of impregnation in a nutshell. Presenting this, he raised the question whether this was known to Ayurveda teachers and challenged Nambiar to show reference. “What is special is that the male seed (sperm) in the semen has a particular shape, an oval head and a long tail; that it moves towards the ‘rajas’; that it unites with the ‘rajas’ there and then life sets in; and that then it returns to the uterus and start growing by fixing itself somewhere on the wall of the uterus. I would be thankful if you tell me which mendicant or great teacher of Ayurveda has revealed all these mysteries and where it was revealed.”[53]

Govindan Vaidyar further argued that the ancient great teachers of Ayurveda also had failed in understanding the difference between the female egg and menstrual blood. He quoted the great Ayurveda teacher Sushrutha for this. *“Rasadeva sthreeya raktham rajassajnjam pravartthathe – thadvarshaal dwaadashaarddooddhwam yaathi panchaashatha kshayam”* and *“evam maasena rasa shukleebhavathi sthreenaam chaartthavam.”* are the two quotes from Sushruthan that were pointed out by Govindan Vaidyan to prove that Sushrutha referred to female egg as *‘aartthavam’* and menstrual blood as ‘*Rajas’.* This was a major difference from the usual course of arguments that took place between Ayurveda practitioners. Questioning the perfection of the wisdom of the ancient gurus openly was uncommon. Usually, even while trying to show that some notions commonly held by Ayurvedic practitioners were wrong, the strategy followed was to mention that the ancient gurus knew

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[52] Sreeman P M Govindan Vaidyan, “Aartthavakaaryam (The Case of Menstruation)”, *Dhanwanthari,* Book 16. No 12., Kottackal, 1919, p. 266.

[53] Ibid, p. 267.

the thing correctly but the modern practitioners failed to interpret them correctly.

"By looking at the indigenous groups which interacted durably with Europeans, we shall also follow the manner in which these groups participated in the making of scientific knowledge, artefacts, and practices; how they appropriated and eventually deployed them strategically to renegotiate their positions in the emerging colonial regime."[54]

In book 17, number 6 of *Dhanwanthari*, P M Govindan *Vaidyan* wrote an article titled '*Aartthavakaaryavum Rajassum'* in an attempt to reply to the arguments raised by Kammaran Nambiar in the article discussed above. He took up the challenge Mr Nambiar had posed that the faults in the first article of Nambiar on menstruation should be shown and explained. In this article Govindan Vaidyar attempted to point out the errors in the arguments of Kammaran Nambiar. The first error he pointed out was that, "Govindan Vaidyar theorised in his article that the female seed which he terms as "*Aartthavasaaram*" is not distinct from blood in shape or quality except from function and that it was blood itself."[55]

Govindan Vaidyan further argued that the metaphor, used by Mr Kammaran Nambiar, of a great river confluence of the sea after getting split into a number of small streams to explain the flow of blood from the heart to the nerves in the body and then his argument that it is the blood thus reaching the uterus that turns into the female egg was a great error. He concluded the article by challenging the opponent to come up with more arguments and declared that he would reply to them too.

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[54] Kapil Raj, *Re-locating Modern Science Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900,* Palrave: Macmillan, p. 16.

[55] P M Govindan Vaidyan, "Aartthavakaaryavum Rajassum", *Dhanwanthari,* Book 17. No 6., Kottackal, 1920, p.123.

In the article *'Rajassalla'* published in *Dhanwanthari* Book 17, No 8, Pp 175, Govindan Vaidyan made a polemic attack on his opponent. He wrote that what was said by his opponent in his article was so minimal that it could be seen in the note books of the medical students of the allopathy stream. But simply quoting the ideas from allopathy was not of any use. What was needed was to understand the ideas. He then showed the example of the false interpretation of Ayurvedic texts by his opponent.

Traditional medicine operated on the logic of a different realm. Thus, the evaluation of the concepts in traditional medicine in comparison with the concepts of evidence based western medicine became problematic. "Traditional medicines and treatments are actively used for generations. Their evaluation therefore need not begin in state-of-the-art research laboratories but can be initiated from the clinical side."[56] The Ayurvedic text "*Garbhasya Nabhau maathshcha hridee naadee nibadhyathe*" was interpreted by Kammaaran Nambiar as that the navel of the foetus was connected to the heart of the mother through a food-pipe. He then proceeded to disprove this argument by asking what happens to this connection once the delivery was over. Govindan Vaidyan then advised his opponent, "It is quite unbecoming to comment on the strands of ideas from allopathy that is heard from somewhere and to make authentic opinions on them. What you people should do is to study and analyse the Ayurvedic texts sentence by sentence and then to expose the message built in it to the world."[57]

With this observation, Govindan Vaidyan declared his intention to decline from the debate. But he did two more things before the conclusion. Firstly, he quoted the objectionable parts from the text of his opponent.

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[56] Bode Marten and Unnikrishnan Payyappallimana, "Evidence Based Traditional Medicine: For Whom and to What End?", *E-journal of Indian Medicine,* Volume 6, Yokohama: United Nations University-Institute of Advanced Studies, 2013, p.1.

[57] P M Govindan Vaidyan, "Rajassalla", *Dhanwanthari,* Book 17. No 8., Kottackal, 1920 April, p.175.

Secondly, he summed up the key points he wanted to make. This he did by stating that, "Thus, it is clear that the female egg is not *Rajas* contrary to the idea of Nambiar and that Rajas is menstrual blood. Then, what is the name for a female egg? I feel that, if everyone agrees, it could be named *'Pushpam'* (=flower). Now, what remains is menstruation. I think the term '*Aartthavam'* will be suitable for the blood that performs the functions of menstruation, feeding the foetus and the formation of breastmilk in the female body. I have used the term *'Aartthavam'* in my article with this meaning only."[58]

The medical system also operated within a value system that justified the medical practice. Western medicine was so profound in impact and evidence based that it was not easy to repudiate its concepts. At least the 'true' Allopathy could not be repudiated. "Ayurvedic and Unani manufacturers explicitly and implicitly criticise signs of westernisation such as synthetic medicines and unwholesome lifestyles and 'Un-Indian practices' like unbridled individualism and representing sex as a commodity."[59]

P P Kammaran Nambiar replied to P M Govindan Vaidyar's arguments in Dhanwanthari book 17, number 11 in the article titled '*Rajassum Aartthavakaaryavum*'. His approach in the article was to highlight the inconsistencies in the articles of his opponent. He made references to Govindan Vaidyar's articles in Dhanwanthari. How Govindan Vaidyar defined 'Rajas' in the first article in the debate series was totally different from the meanings he attributed to the term later. He pointed out that Govindan Vaidyar had mentioned in the Karkkidakam 94 issue of Dhanwanthari that the ancient Gurus used the terms *rajas*, *raktham* (blood) or '*aartthavam*' (menstruation) to refer to the female egg and that no specific term was there for the same. But in the Meenam issue, he just used the term

[58] Ibid, p.178.

[59] Bode Maarten, "Taking Traditional Knowledge to the Market: The Commoditization of Indian Medicine", *Anthropology & Medicine,* Vol. 13. No 3., December 2006, p. 232.

'rajas'. Nambiar showed it as an example of the inconsistency in the arguments of his opponent. As a concluding remark, he said that a debate with a person not well-versed in physiology was not to be furthered.

Kammaran Nambiar put an end to the long-drawn-out debate by making a totally new suggestion. "Now, there is a doctor equally well-versed in English and Sanskrit teaching in the Thiruvananthapuram college. Listen to what he is teaching. Also discuss with the good Ayurveda teachers of that institution. Then you will get the true knowledge of Physiology. It is sin to just assume things without proper study and belittling the royal Ayurvedic College and its students. The authorities also should make sure to avoid such occurrences."[60]

This remark of Sree Kammaran Nambiar marked the end of the debate, with a comment by the Dhanwanthari editor stating that "Dhanwanthari will not leave space for this debate anymore."[61]

The debate revealed that the mode of debating knowledge had been undergoing a change. The mode of debating or approving knowledge in the traditional system was one in which ancient texts that were held infallible were quoted to prove the authenticity of a point. This method was changing as it was represented in the debate. The new method was the one in which proofs and evidence that stand the test of logic were needed in order to establish the veracity of knowledge. This shift or the very debate between the two methods brings about the light of the approach of modern science to questions that came up in the traditional value system as a result of its contact with the modern knowledge systems. However, the logic of religion could be seen persisting in the debate. Govinda Pillai was identifying the phenomenon of

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60 P P Kammaran Nambiar, "Rajassum Aartthavakaaryavum", *Dhanwanthari*, Book 17. No 11., Kottackal, 1920 July, p.245.

61 Ibid, p. 248.

menstruation as a great loss to the individual and the society and then he assumed that it was a punishment for sins committed. Another example for the application of the logic of religion to the debate is the stance and clear statement that the "Traditional knowledge can never be false." The debaters repeatedly maintained that the ideas held by the teachers of the past on Ayurveda could not go wrong. At the same time, the incompatibility of the Ayurvedic principles with modern medicine posed a challenge. The proponents of the infallibility of Ayurveda texts argued that the incompatibility was the result of the misinterpretation of the terms used. This was due to lack of proper understanding of the authentic texts of Ayurveda. So, what was needed for the correction of ideas that were wrongly held by the traditional medical practitioners, correct understanding and interpretation of the authentic texts was needed. Thus, the notion of authenticity of Ayurveda was protected by reinterpreting and relocating the texts so as to ensure compatibility with the knowledge in modern medicine.

Concerns Regarding Human Body

The first Malayalam medical journal, *Dhanwanthari,* was published as a result of the recognition of the significance of maintenance of a healthy human body. A healthy body was understood as the basis of many fortunes of life. In the very beginning of the first issue of the journal, the publisher made this clear. "It is extremely regrettable to say that there are no publications in Malayalam that exclusively deal with the proper maintenance of the body which is the inevitable basis of a variety of fames in our lives."[62] Significance of the body as far as the individual was concerned was openly admitted and proclaimed by an acclaimed scholar and practitioner of traditional medicine, Channazhi Kumaran Moozad while he wrote an introduction to a series of articles on anti-venom in Ayurveda argued that,"Definitely, for any organism

[62] P K Varier, "Swantham Prasthaavana", in *Dhanwanthari,* Book 1. No 1., p. 1.

on the face of Earth, nothing is as dear as its own body. Even though people love wealth, sons and wife until they are believed to be useful to their own body, this love does not last on the things or people that are seen harmful or useless to their bodies. But, about the body, for everyone, child, youth or old, healthy and patient, rich and poor, human and animal, there is full and everlasting love until death."[63]

The attempt to define the significance of the health of the body was taking place against the background of the state taking keen care about the birth and death of each individual citizen. Travancore and Cochin had separate Birth and Death Registration Acts from early times and were united and re-enacted in 1953.[64] As the significance of the body itself was recognized and defined, it was necessary to identify the aspects that were to be taken care of. The editor of *Dhanwanthri* announced this as "This includes the essential aspects like precautions to keep the healthy people free of diseases and for immediate recovery in case affected by any disease, taking care of the pregnant, care for infants, causes symptoms and treatment of diseases, sophisticated analysis of the quality of the medicine, the nature of the English medicine and medical equipment that are useful to the indigenous medical practitioners, the procedure of their use, human body etc."[65]

P K Varier wrote an article on the Science of Physical Wellness in Dhanwanthari. The writer observed that physical wellness was the best of all blessings. It was to be given due importance and attention as well. However, this bliss was to be sought and achieved better by the society than by individuals. The central argument in the article was that a society should

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63 Channazhi Kumaran Moosad, "Avatharika - Vishavaidyam", *Dhanwanthari,* Book 1. No 1., p. 9.

64 Regional Archives Ernakulam, File No. T15 942, The Travancore Cochin Registration of Birth and Death Act - 1953.

65 P K Varier, Swantham Prasthaavana, *Dhanwanthari,* Book 1. No 1., p. 1.

commonly nurture a culture that caters to a healthy lifestyle and the society should form ways and means for the upkeep of a healthy environment for the society to live in.

"Physical wellness is a blessing. Definitely, there is nothing more important than it for man in this world, because a person physically not well cannot possibly have any other desire. But many people are seen ignoring the wellness of the body either due to ignorance or due to carelessness… But they don't think that a defected approach causes trouble not only to them but also to their offspring, neighbours and to the entire country in course of time."[66]

This understanding of health as a community goal was taking place at a time when the colonial administration had already deemed the Indian environment and habitational areas of the people as unhealthy and causing diseases to the soldiers. David Arnold points out how this understanding led to the segregation of their military cantonments and prisons from the Indian society physically. "Many of the health problems of the army were seen either to be specific to the force and its European component alone, or best dealt with by transforming cantonments into sanitary "oases" and cutting them off, as much as possible, from the teeming pathogens outside the barrack gates."[67] The cantonment and the prison being the precise locations where the colonial state had direct control over the body of the colonised were thus segregated and designed to be different from the outside, in order to be healthy. Thus, the understanding of health and wellbeing of the individual human body as a result of the community health and a healthy environment was significant.

The understanding of the connection between the health of the individual body and of the environment had more expansions in the view of

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66 P K Varier, "Sareerasukhasasthram (The Science of Physical Wellness)", *Dhanwanthari,* Book 2. No 3., p. 36.

67 David Arnold, *Colonizing the Body State Medicine and Epidemic Disease in Nineteenth-Century India,* Berkeley: University of California Press, 1993, p. 114.

Varier. He connected it with the laws of nature and the need of the human body to be in tune with the laws of nature.

Wellness of the body was perceived as a result of being in tune with nature and the diseases were seen as punishment for the violation of the laws of nature. Nature was perceived as a supreme governor. There was no escape for anyone. To design an area from the surroundings as healthy and segregated in order to ensure cleanliness and health could not sound familiar or authentically a part of the traditional knowledge, but the understanding that the health of the individual body was subject to the laws of the nature could very well suit to the traditional knowledge system.

In his article on the wellness of the body, *Shareerasukhashaasthram*, P K Varier identified violation of daily routine as the reason for many people to get infected. "In any case, if the laws of the nature are violated, there is no escape from punishment at some point of time"[68] A person who violated the laws of the authorities may or may not be punished. But if the laws of nature were violated, there was no escape for anybody. Different types of violation of law caused different punishments to humans. Sometimes they are punished by death. Thus, thousands of diseases and deaths happen among us just because of lack of proper attention. This imagination of the human body as a natural part of nature and as very much responsive to the environment was a basically Ayurvedic concept. "The Ayurvedic model of the human body is the model of a cooker, which itself extracts essence from—and changes—the food taken in by the human being."[69] The human body itself was imagined as a part of the environment as Ayurveda is attested by scholars. Hindu medicine incorporated a clear ecological theme, he observed. In this tradition, there

[68] P K Varier, "Sareerasukhasasthram (The Science of Physical Wellness)", *Dhanwanthari* Book 2. No 3., p. 36.

[69] Andrew Bennan, "Asian traditions of knowledge: the disputed questions of science, nature and ecology", *Studies in History, Philosophy, Biology & Biomedical Sciences* 33, 2002, p. 571.

were two kinds of places, the land, and the body of the patient. Those places were connected by the circulation of three subtle and invisible 'humours'. "These humours supposedly circulated underground, in the water, in the air, in plants and animals, and in our bodies. These were the 'forces, powers which foment disorders, pathogenic principles between which the doctor must establish justice."[70]

Not only was the human body understood as a part of nature, but the human body was also recognized as a universal material category. In a land where everything had a religious colour and every aspect of social life was connected to caste, the declaration that the aim of the promotion of the traditional medicine was the wellbeing of everyone irrespective of caste and religion was an important one. The segregation of the human body as a category distinct from all social categories was also a notably modern position. "We who toil with the single concern that this magazine should be useful to everyone who is having a body irrespective of their religion or caste…"[71]

In his article *'Aayus'* (Longevity), the author Kunjan Varier first described the value of life and longevity and proceeds to explain that longevity is not just something awarded by fate alone, that it is to be consciously protected using knowledge and care on the same. Here, the approach is to counter the traditional idea of longevity being the award of fate with logical observations. This automatically turns to the advice that European innovations of protection of the human body are desirable.

It was an undisputed fact that longevity was something everyone aspired for. However, it must be given a thought that the noble longevity

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70 Ibid.

71 P K Varier, "Swantham Prasthaavana", *Dhanwanthari*, Book 1. No 1., p. 2.

experiences great changes by three factors; differences in time, differences in body and differences in activity. Now it was of no use to think about living for many thousands of years like those who were born in the *Krithayuga* or like the deities as it is impossible to bring about changes in the factors of time differences and body differences. But, as it was under the control of men, it was not improper to think a little about bringing changes in human activities and to extend longevity, he said.

It was not that even some reputed people opined that the day of death was fixed on the day of birth itself. Nothing different from fate does happen; thus longevity cannot be extended or shortened by human effort. Organisms die when their longevity and virtues deteriorate. But for those who do not rectify the undesirables may die even when their longevity or virtues are not deteriorated was the opinion of sage Vagbhatananda. Then, it was a fact known to all that in the towns, a large number of local people do die of snake bites and that none of the Europeans do die in that way. If deliberated a little on this, it could easily be understood that the difference between obeying the direction to wear footwear or boots as it was seen in the usage *"padathrano*" seen in the verse *"Sathapathrapadathrano vicharel"* of Vagbhtananda. Similarly, it was also known to all by experience that the Europeans are not easily infected by Ingrown nails (Onychocryptosis), cracked heels (feet fissures) or eye diseases because they wear boots or footwears. "In this context that it has become foolproof that even such a simple care could extend longevity considerably, I do declare without any doubt that, if we carefully study all the methods that would help the extension of longevity and observe them properly, we will, as long as the times and the body permits, live a hundred years."[72]

[72] Kunjan Varier, "Aayus", *Dhanwanthari,* Book 4. No 5., p. 57.

The writer dealt with the question whether one was able to do something to overcome fate. This had always been a question which could endlessly be debated. The question could never be settled as those who considered fate as something that no one could hinder or influence by action would argue that every course of events was determined by fate that could not be altered. Kunjan Varier addressed the issue with the example of how care and attention were essential for the healthy maintenance of human feet. Thus, he argued for conscious intervention and attention in health issues. "Several anthropologists have argued that Ayurveda has survived, despite the enormous competition from bio-medicine, precisely because it encodes deep-seated cultural experiences and values that extend beyond medical diagnosis and cure."[73] The practitioners are conscious about the upkeep of these traditional cultural experiences and values even while they try to accept modern concepts that could reform the approach of the knowledge system considerably.

Once the significance of the human body was recognized and the aspects of the human body that were to be given attention were deliberated, it was understood that the traditional medicines of India lacked sufficient knowledge about the human body. Even what was known was sufficiently empirical. Thus, attempts to make knowledge of the body sufficient and empirical were to be made. This could be easily had from the western medicine. The traditional medical practitioners had concerns in accepting western knowledge. "The western system was not an anathema to them and (they) were keen to borrow and internalise what was good and beneficial in the other systems without losing their own. Their works were culture-specific

[73] Jean Langford**,** "Ayurvedic Interiors: Person, Space, and Episteme in Three Medical Practices", *Cultural Anthropology,* Vol. 10. No. 3, August 1995, p. 355.

but not culture-blind."[74] A combination of the knowledge of the human body as enunciated by western medicine with what is already known in the traditional knowledge system of medicine was advocated and efforts were made to introduce such knowledge and possibilities to the practitioners of traditional medicine. Physiology, the study of the human body, was attached to significance and it was introduced in the Dhanwanthari magazine by a doctor from Madras Medical College.

PKV, in his article in *Dhanwanthari* defined Physiology as the science that describes the activities of all organs of the human body. In order to understand it properly, one has to understand the position and structure of all the organs in the body. One could not understand medical science properly without a proper understanding of Physiology. Only if we know the position, size and activities of each organ in a healthy body, can we understand the changes that happen to them when ill. It is in the ability in identifying such changes that the efficiency of accurate diagnosis lies, he observed. It is after proper diagnosis that the treatment could be started.[75]

The author of the article on *Vishavaidyam* tried to detail the *doothadilakshanam*, the "science" of the omens. This was presented as one of the major areas of *vishavaidyam*. The assumption was that the indigenous medical practitioner could assume the efficacy or possibility of the success of the treatment of the case by studying the omens, date on which the snake bite happened and its peculiarities, and by studying the body, dress and attitude of the one who delivered the message regarding snake bite. The so-called "science" of omens actually indicated no evidence-based conclusion, but only social segregation and gradation based on caste system. It was clear from the description that the good omens did suit upper caste men and the bad omens

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[74] Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly, Vol. 32.* No. 4, Jan. 25-31, 1997, p. 168.

[75] PKV, "Shareera Shasthram", *Dhanwanthari,* Book 1. No 1., p.1.

did suit lower caste people. This was happening in a situation in which The Colonial medicine also had first won the acceptance of the upper sections of the society and was trying to win that from the lower sections. "Apart from cultivating the higher sections of the Indian society, efforts were on, right from 1800, to win popular support."[76]

Channazhi Kumaran Moosad described the signs of the messenger who brought the news of the snake bite. The one who wears white dress and the one who wears white flowers, a neat person, one who speaks fluently, one who is pleasant and a person who is respectable for the practices of caste are all good omens. One who holds a weapon in hand, one who wears dress or flowers black or red in colour, one who holds coir or stick in hand, one who speaks in an interrupted manner or improperly, one who stands with legs or hands criss-crossed, one who cries, one who stands leaning over a wall or staff, one who is wearing a soaked dress, one whose hair is unbound, one who bites nail or press breast or touch anus, one who wipes eyes or making marks on ground with leg, handicapped persons, those who are separated from others, persons who are immersed in the site of women, one who speaks with a droopy face, those who come mounting over infamous animals like donkey and boys are all bad omens. He said he made this description because, "even though all the assumptions in the science of omens are not always proved correct, they are often seen correct."[77]

Doothalakshanam was followed by a detailed description of the 'science' of the interpretation of the other types of omens. This was done in the consecutive issue of the journal. Moosad, the writer, explored in detail the various types of omens and signs. The details of the inhalation or exhalation of the local medical practitioner himself, the month in which the incident took

[76] Deepak Kumar, *Op.Cit.*, p. 170.

[77] Channazhi Kumaran Moossad, "Vishavaidyam 2 - Doothadilakshanam (the messenger and other omens)" *Dhanwanthari*, Book 2. No. 2., p. 28.

place, the side in which the messenger stood, the place where s/he stood after giving the message, the order of the details that were given by the messenger, the facial expressions of the messenger, the way the messenger uttered the messages, the voice of the messenger, the words and sounds that the messenger uttered, the place at which the snake bit the patient, and the part of the body in which the snake bit were to be noticed by the practitioner at the very instant in which he got the information regarding the snake bite. He had to interpret it all and then reach conclusions regarding the type of snake that had bitten, the possibility of the efficacy of the treatment etc. Once that much was finished, he had to start for treatment. The *doothadilakshanam* was not simply based on superstition, it could be argued. Instead, it could be interpreted as proved by experience, and that is what is argued by the author of the article. This argument had a place in the knowledge system of his medical tradition. As Larson has pointed out, "one can argue that there was a natural affinity between the naturalistic philosophical systems and Ayurvedic medical practice which generated a mutually influential pattern of ongoing interaction."[78]

While starting for treatment, again the vaidyan had to notice the omens and interpret them. The omens to be considered at this occasion included the various sounds, animals, birds or humans that were seen or heard at that moment. There again, a tinge of the notions of casteism and the notions associated with the purity or impurity of the human body were clear. Things that were associated with the life and activities of Brahmins were interpreted as the good omens and vice versa in general. But of course, there are exceptions. For example, the site of a single Brahmin is considered a bad omen, whereas the site of two Brahmins is considered a good omen. But, such exceptions do not violate the conveniences of the Brahmins.

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[78] Gerald James Larson, "Ayurveda and the Hindu Philosophical Systems", *Philosophy East and West,* Vol 37., No 3., July 1987, p. 248.

Moosad also described the sounds and omens at the time of starting for the treatment because they gave ideas regarding the possibility or impossibility of curing. Good words, sound of lightning (thunder sound is not a good omen), elephant's voice, music, conch voice, voice of the musical instruments, recitation from the Vedas, voice of peacock, cuckoo, *chakoram*, and the voice of a crow that sits on a fruit tree on the right side are all good omens. Starting to sweep, getting a call from behind asking to go or not to go, voice that suggests cursing or threaten to kill, cough sound, sound of quarrelling, war of cats, the pot in which water is carried suddenly falls down and crumble, the words "dig a pit" and the site of a snake are all very bad omens. Similarly, ash, sesame, oil, skull, firewood, broken pot, salt, axe, raw meat (some opine that raw meat is a good omen), bone, things used for rituals associated with death, buffalo, owl, monkey and the other infamous animals, a single Brahmin, carpenter, metal worker, and the other artisans are all bad omens.

Virgin, king, elephant, liquor, cow fruits, prostitute, two Brahmins, gold, silver, milk, curd, ghee, rice, umbrella, flag, burning fire, white flower, drum and other such instruments and boy are good omens. A doctor should reach near the patient with a good knowledge of the good and bad signs by keeping all these in mind, he noted.[79]

Western medical practitioners of colonial India initially found that the epidemics spread in India in ways and methods considerably differed from those of Europe. The difference or the acuteness of the situation of India was explained by the concept of the absence of hygiene. The environment in these two countries were different and the unclean water and air of the land was thought to be the major reason behind the vulnerability of the Indians to such

[79] Channazhi Kumaran Moossad , "Vishavaidyam 3 - Doothadilakshanam (the messenger and other omens)" *Dhanwanthari*, Book 2. No 3., p. 52.

diseases. Even the spread of cholera was thought to have a similar situation. "Cholera in India was generally a disease of the urban poor."[80] The problem was sought to be overcome with the proper maintenance of the fresh air and fresh water. "It is the primary duty of anybody to ensure sufficient quantity of air, and fresh air for oneself and for fellow beings. This should be given more attention in the case of children."[81]

Evidently, the idea that fresh air is essential for a healthy body was soon subscribed by the native states of Kerala as well. For example, the Government of the native state of Cochin found it important for schools to have play grounds. The Cochin State government even advanced one third of the total expense for developing a playground for the Thirumal Devaswom High School at Mattanchery. The Government was so convinced that the playground was so important that it was done with a special order by the king as there was no budgetary provision for the same.[82]

Significance of the environment and cleanliness in the health of the body was understood in the light of modern English medicine and the same was tried to be propagated among the public. This was done using ideas and concepts from English medicine but, at the same time, criticising European practices. The significance of ensuring proper breathing was deliberated in connection with a discussion on the importance of the quality of the air for breathing. The whole idea was borrowed from English medicine and those ideas were accepted for the very reason that they were held by English medicine.

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80 David Arnold, "Cholera and Colonialism", *Past and Present in British India,* No. 113., 1986, p. 124.

81 K C Veerarayan Raja, "Swaasam", *Dhanwanthari,* Book 4. No 4., p. 77.

82 Regional Archives, Ernakulam, File No: B 52. 2. 7820/40, Special Order regarding Construction of Playgrounds.

"It was actually the missionaries who were instrumental in clothing the Dalits (who had a different notion of bodily practices and hygiene, as they were not allowed to wear proper clothes—or have the means to buy them). One of their universal themes had been cleanliness, which they wanted the (p.177) new Christians to accept, along with abandoning the practice of eating the flesh of dead animals. Missionaries supplied clean clothes to their adherents to participate in the congregational services, and to their great satisfaction the Dalits appeared as 'clean and new creations'."[83] But, K C Veerarayan Raja B A, a scholar of traditional medicine found western women's dressing pattern unscientific because they covered the upper part of the body with decorated dress which made breathing uneasy. The problem with the dressing style of the western women was explained, with what was left without mention more importantly hinted at the native women's dress. The native women during the time did not generally cover the upper part of their body. The discussion regarding whether women be given freedom to cover the upper part of their body or not was already held in Kerala and the decision was revolutionary. Now, the western science is used to argue that the Indian tradition was more "scientific".

Veerarayan Raja goes on to argue that "Now we may deliberate on the quality of the air. Air should be available in plenty and it should be of good quality. Air is not good when it is contaminated or not fresh."[84] Accepting the western notion on the need of pure air for a healthy body, the scholar proceeded to examine how the dressing style was "unscientific." K C Veerarayan Raja observed that it was not that people will not have any difficulty in easy breathing. But most of these difficulties are our own creation. Most important among them is the dress. It is women rather than

[83] P Sanal Mohan, "Prathyaksha Raksha Daiva Sabha and the Imagining of Equality in Twentieth-century Kerala", *Modernity of Slavery: Struggles against Caste Inequalities in Colonial Kerala,* Oxford University Press, 2015, p. 21.

[84] K C Veerarayan Raja, "Swaasam", *Dhanwanthari* Book 2. No. 5., p. 94.

men who suffer more from the difficulties caused by wrong dressing patterns. Some European women cover their body completely with a decorated dress. Then they are not able to move freely. Proper breathing is impossible without the movement of the body. That they cannot do. This brings them several diseases. “It is necessary that the body should not be tied tight to prevent easy breathing.”[85]

Discussing the interesting question, how the famous ‘Kerala Model of Development’ arose, Robin Jeffrey explained that the extended longevity, decreased child mortality and decreased birth rate were the key reasons that contributed to the increased Human Development Index (HDI) of Kerala. The historical developments that led to the achievements in these areas were identified by him. “The decline in the birth rate was therefore to be explained as the result of people's perception that death rates were falling - and death rates fell because of an extension of health services in the 1950s.6 Thus the crucial ingredient was the extension of medical facilities, particularly those that cared for mothers and babies, to ever-widening sections of the population.”[86] This was not the only reason, the author himself suggested and he stated that the second factor behind the decreased birth rate and advancements was “…education and the control of contagious diseases, like malaria and cholera through improved public health measures, had brought down the death rate.”[87]

The control of the contagious diseases was the result of a spread of the sense of necessity felt towards the cleanliness of the human body and the surroundings of its existence. Here is an Ayurvedic scholar arguing about the need for cleanliness. For Chenkulathu Komu Menon, it was doubtful whether

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85 Ibid, p. 96.

86 Robin Jeffrey, *Politics, Women and Well-Being How Kerala Became 'a Model'*, Melbourne: La Trobe Universityand New York: Palgrave Macmillan, 1992, p. 186.

87 Ibid, p. 187.

there was any other disease as cruel as plague. Everyone should take care to not be affected by this and to not spread it. Even though different medicines had been used to treat this disease, no medicine had been proved effective that far. "But the most effective remedy so far identified is cleanliness. The disease will ruin those who live in unclean areas and also those in their neighbourhood."[88]

How the wellness of the body was achieved and maintained was a question deliberated in several ways and under several contexts. The idea of the colonial masters in this regard was subject to several situations and experiences they encountered in the colony. One such idea thus evolved was that the native mentality and health and even the features of their body and its functioning were all the constructions of the climactic and environmental conditions. "A permissive and exotic space, the colonial realm served as a site for the exploration of forbidden human passions; those Europeans whose temperament could not withstand the intense pressures of heavy drinking, drug use, colonial violence, boredom, and intense heat served as symbols of the psychological menace of colonial space. By 1900 a convergence of factors overwhelmed these hypotheses that considered psychological difference to be a function of climate and culture rather than race."[89]

The genetic and racial elements that influence the health of the human body were yet to be understood properly. Such discourses received wide acceptance by the close of the twentieth century only. It was in the context of the early twentieth century colonial construction of the significant influence of surroundings in the health of the body that the traditional medical scholars

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88 Chenkulathu Komu Menon, "Plague or Agnirohini", *Dhanwnathari*, Book 3. No. 7., p. 118.

89 Richard C Keller, "Taking Science to the Colonies: Psychiatric Innovation in France and North Africa, in Psychiatry and Empire", Sloan Mahone and Megan Vaughan (eds.), *Cambridge Imperial and Post-Colonial Studies Series*, New York: Palgrave MacMillan, 2007, p. 28.

thought of the ways to prevent the spread of the contagious diseases and the ways to prevent the same. "There is no doubt that any serious illness can be reduced by the impact of the good surroundings and vice versa. It is proved by experience that in the case of mental illnesses, the external factors are more influential than the internal." [90]

In the context of the Swadeshi movement, an article published in the Dhanwanthari advised its readers that in order to solve the weaknesses of the nation, in order to strengthen national freedom, Indians needed to strengthen the individual Indian human body. The journal found reviving and strengthening Arya Vaidyam as the only way to strengthen the individual body. Significantly, the journal found that the Europeans were physically much stronger than the Indians. The author believed that the physical strength of the natives and the Europeans could be located through a comparison of their sexual abilities.

The author wrote that Indians were much inferior to the early Hindus in matters of physical strength and in matters of intelligence. Indians would not earn anything unless they became equals at least to the Europeans, if not up to the early Hindus, in matters of physical strength and intelligence. One could estimate our physical strength simply from the fact that three or four Hindus were needed to physically counter a single European. "If a European has sexual intercourse with a native female, unless advance precautions are taken, she would be devastated. A native male attempting to wed a European lady also would have the same fate."[91] If a native underwent a course of study along with a European, usually it is difficult for him to pass on par with the European. Even if he achieved that, usually he got sick soon. If an Indian student reads well, usually he catches eye diseases. It could be said beyond

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90 "*Deenakkar Kidakkkunna Muri* (The Room of the Patients)", *Dhanwanthari,* Book 2. No 5., p. 75.

91 "Duty of the Swadeshis", *Dhanwanthari,* Book 3. No 7., 12/02/1906, p. 1.

any doubt that all those problems were results of the failures people had got in their daily routine and in the flaws in the medical system that they followed.

The advice to the Swadeshis was based on the deep understanding of the physical, intellectual and sexual inferiority of the natives when compared to the Europeans. This notion of superiority and invincibility were cultivated by the colonial administration for achieving political and cultural hegemony. A counter hegemonic discourse that emerged in the early twentieth century essentially held the idea that the 'original' or the 'ancient' or the 'uncorrupted' Indian was stronger morally and physically. The medical discourse on the health of the human body was shaped by the counter hegemonic ideas that were rising. If hegemony of the colonial rulers was established by "colonising the body"[92], Counter hegemony was sought to be achieved through "nationalising the body"[93]. "It was only in the course of the Swadeshi Movement of 1905 that these activities linked up more overtly with clearly 'political' agendas."[94]

In a serialised article on the nature and form of the human body published in the Dhanwanthari, the author argued that the beauty of the human body was based on the proportions of the measurement of various body parts. Beauty was subjective and the idea of 'beauty' and 'the beautiful' was bound to differ from person to person. Thus, the question was to identify the objective bases of judging and assessing the beauty of an individual. From the eyes of the doctor/ medical practitioner, the first step was to keep away all the internal philosophical questions involved and to consider just the physical attributes of a person to evaluate beauty. And that was made mathematical so

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92 David Arnold, C*olonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India,* University of California Press, 1993, p. 286.

93 Projit Bihari Mukharji, *Nationalizing the Body: The Medical Market, Print and Daktari Medicine*, New York: Anthem Press, 2009, p.135.

94 Ibid.

that the statement of beauty measures became objective. This was nothing but quantification of beauty so that it became objective, negotiable and modern.

The essay noted that all works of nature, including the making of the human body, are works observing proportions. Whether the body remains fat or thin, stout or feeble, the total length of the body is always six times the length of foot. Any fault in this proportion results in a shortage of the perfection of beauty. The measure of the face, from the top of the forehead to the tip of the chin, should be one tenth of the total height of the body. Same is the length of the palm, from its joint to the tip of the middle finger. The measure between the upper end of the chest to the tip of the forehead is one seventh of the height of the body. The total length between the tips of the two middle fingers of a person is the same as his/her total height. If the total measure of the face, from where hairs begin to the tip of the chin, is divided into three, the first part ends at the eye-brows and the second at the nose.

Following is the ideal body proportions of a woman of five feet[95] and five *Amgulam*[96] height: She should weigh 138 *Raatthal*[97]. (Ten *Raatthals* (4.45 kg) of additional weight does not harm her beauty.) Her breast should measure 43 *Amgulam* (129 cm) and hip should be 24 *Amgulam* (72 cms). Her upper arm should be 13.5 *Amgulam* to 14 *Amgulam* (40.5 cm to 42 cm), wrist to elbow should be six *Amgulam* (18 cms), *Gulpasandhi* is to be six *Amgulam* (18 cms) and the measure round the leg should be 14 *Amgulam* (42 cms) and her thigh should measure 20 *Amgulam* (60 cms).[98]

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95 1 feet = 30.48 centimetre

96 Amgulam = finger. 1 Amgulam = 3 centimetres. Five feet + five *amgulam* = 152.4 + 15; ie, 167.4 cm

97 1 Raatthal = 445 Gram. 138 Raatthal = 61.410 kilogramme

98 "Perfect Nature and Form; their Features, Nature and Form", *Dhanwanthari,* Book 3. No 11., pp. 119-120.

Dhaanwanthari magazine published a series of articles discussing how long life could be ensured. In one of its chapters, the relationship between a healthy body and longevity was discussed.

The article quoted Hyufiland's observations on the basis of long life. They are, the digestive system should be good and healthy. Lungs and chest should be well-built. The signs of perfect lungs and chest are broad and full chest, ability to hold breath for a long time and the absence of cough. A heart that does not get easily disturbed is needed… Those who have higher heart pulse rate and for those who have accelerated heart rate for each disturbance of mind are not likely to live long. Should have enough stamina…should have enough immunity and rebuilding capacities.…persons with obesity are not seen living long…No organ should be tired…Organs should be medium, strong and steady.[99]

The Ayurvedic scholar quoted an Allopathic expert in order to explore the relationship between a healthy body and longevity. The explanation mainly focused on two aspects; first, the health of the organs of the body like the heart and lungs and second, the health of the mind of the person. The interpretation was empirical and material. The Ayurvedic concept was different. "Áyurveda emphasises promoting health, preventing disease, and enhancing longevity (rejuvenation or age reversal). By using rasáyana-(rejuvenation) promoting herbs and diet, good conduct, daily routine, and seasonal living longevity is developed."[100] No metaphysical element was brought in to explain the concept of longevity. The traditional Ayurvedic concepts like the *tridosha* and such elements that were not fully empirical were kept away and the view of an Allopathic doctor was completely accepted.

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[99] "Signs of Long Life in Everyone", in *Dhanwanthari,* Book 5. No 6., p. 112.

[100] Swami SadashivaTirtha, *The Ãyurveda Encyclopedia Natural Secrets to Healing, Prevention & Longevity*, New York: Ayurveda Holistic Center Press, 1998, p.35.

After examining the relationship between the health of the internal organs and longevity the relation between the body and its constitution with longevity was explained. For this also, an Allopathy doctor was quoted.

The article read that Sinclair had opined that, "People with austere nature and medium height are most likely to live long.". Over-height is a result of the overgrowth of some parts of the body; it may cause illness or tiredness. People with extra height generally have the tendency to bend or lean; this narrows the chest and hinders proper breathing. Short people do not have any difficulty sitting straight. It keeps them energetic and all their organs thus work perfectly. The only defect with short people is that they may become stout. This is dangerous to longevity. Having been born of healthy parents and being free from genetic diseases helps longevity. Longevity is understood to go hand in hand with the good nature of remaining happy and pleased. The short tempered and the disappointed cannot expect to live long. "Those who tire their enthusiasm and power by extra mental effort or hard study also are less likely to live long. In the list of about 1712 people who lived a hundred years, there is only one famous writer, Mr Fontine. He could not complete his hundredth year and it is said that he lived so long because of his calm nature and pleased personality."[101]

The writer deduced that those who lived long were those who worked hard and exercised a lot and walked a lot in the fresh air. The common people who worked in the fields and in the land do have the chance to live longer than the kings and the nobles. Military people also live long, provided they survive the risk of wars. "Áyurveda suggests that when persons have high self-worth or see the Divine within, they radiate true beauty. Thus, outer

[101] Factors Congenial to Increased Longevity, in *Dhanwanthari*, Book 5, No 6, p. 115-116

beauty is a reflection of inner beauty."[102] It is the abstract nature of the concepts of Ayurveda that were set aside to use the ideas like mathematical proportions and size of the body as indicators of better longevity.

The essay argued that there was a direct relationship between longevity and occupation. The best occupation, as far as longevity was concerned, was that of the ordinary cultivators. High risk and over exhaustion should be avoided in occupation. At the same time, moderate physical strain is good for health and longevity. This being the advice, the writer was asking people to take the middle path. Be it in the case of physical strain or exercise, or the height and size of the human body, what suited best for longevity and healthy life was medium. This is evident in the advice for a healthy long life.

The article's advice for those who wish to live long was the following. "Give up anything excessive, especially food."[103] Don't live to eat; but eat to live. Eat what builds your body and avoid what harms your body. It asked people to consider fresh air your best friend. Inhale the life-giving air as much as possible during the day, keep your windows open while you sleep at night. Do it even during winter. This is an important secret of long life.

It asked to remain clean physically and mentally. Cleanliness is second only to devotion to God. It is a fort built against diseases. Don't be irritated or sad. Learn to love work and hate being idle. Remain passionate about something. Regularly exercise in clean open air. Go to bed earlier and sleep enough. It was advised to beware of anger. Every time you get angry your longevity is getting reduced and sometimes when you get angry, it could even cost your life. The article also advised to have a purpose for life. Without that

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[102] Tirtha, Swami Sadashiva., The Ãyurveda Encyclopedia Natural Secrets to Healing, Prevention & Longevity, Ayurveda Holistic Center Press, New York, 1998, p. 557.

[103] Laws for Attaining Longevity, *Dhanwanthari*, Book 5. No 6., p. 116.

you die young. The advice also included the selection of a good wife, but this should be neither too early nor too late.

The advice for healthy life was followed by a long list of things that were to be avoided if one wanted to live long. Things that reduce life span were listed. Notably, this list included things that could affect 'mental, moral and physical well-being'. Life is seen as a totality of these three and 'others' which are not specified.

"*Charaka* comments that those who specialise in changing aspects of the organism with age *(vayah prakriti satmyajnana)* can formulate *rasayana* according to need."[104] The traditional concept of Ayurveda regarding longevity extension was related to rasayana, but Ayurvedic scholars also began to explore the Allopathic suggestions regarding longevity and accepted the significance of community aspects and cleanliness. "Just like the ever-dripping water drops ruin the rock that looks imperishable in the long run, the human body also gets weakened by the little violations of the proud rules of nature."[105] Summarised below is a list of what adversely affects our worldly life mentally, morally, physically and otherwise. All who want to live long should avoid a lot of things, the article advised. They included rotten food stuff, Addiction to women, disturbed conscience, Anger, brooding, mal air, over-exertion, early marriage, jealousy, ecstasy, Having the denied, exhaustion, sadness, revengefulness, laziness, lack of enthusiasm, over-medication, drunkenness, insufficient sleep, wrong timing, untimely supper, agony, over-eating, not chewing food, being in love affair, tobacco, lack of cleanliness, unhealthy weather, unhealthy occupation, unclean houses, congested rooms, anger, lack of sufficient exercise and mental tension.

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104 S Priyadarshini, J S Ashadevi, V Nagarjun and K S Prasanna, "Increase in Drosophila melanogaster longevity due to rasayana diet: Preliminary results", *Journal of Ayurveda & Integrative Medicine*, Vol 1, Issue 2, April 2010, p. 114.

105 "Materials that Reduce Life Span", *Dhanwanthari*, Book 5. No. 7. Chapter 120, p. 48.

The list of things that badly affect the human body and longevity was followed by the list of factors that increase longevity.

"As against the factors that adversely affect longevity which have already been mentioned, a list of other factors that improves longevity mentally, morally, physically and otherwise also was given in the article. These factors included a calm conscience, egalitarian outlook, contentedness, fidelity, pleasing personality, cleanliness, friendship, daily exercise, eating plants and food, proper sleep, Eight to nine hours of sleep, healthy climate, healthy occupation, will power, happiness, smile, moderate food and drinks, devotion and will to be born again, regular hobbies and balance of mind, healthy environment, chewing food well, avoiding alcohol, getting married, healthy food and well-ventilated bed room and rooms.[106]

There were 34 items in the list of things that were to be avoided in life for attaining better longevity. On the other hand, the materials and practices recommended for a healthy long life of the human body numbered twenty-five only. Taboos numbered more. It was the suggestions regarding food items and food habits that were given the most significant attention in the taboo list. On the other hand, certain attitudes and behaviours were given prominence in the list of things that were to be promoted for better longevity. "Expert practice of *rasayana* therapy is said to offer the following benefits: youthfulness, increased intelligence and creativity, improved functioning of all sense and motor organs, improved complexion, renewed vigour and vitality, better functioning of immune system, thereby bestowing resistance or faster recovery from illness, and freedom from fear of death and diseases. Its extreme form of *kutipraveshika* has also been described."[107] Even though

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106 "Longevity increasing Factors", in *Dhanwanthari*, Book 5. No. 7. Chapter 121, p. 49.

107 S Priyadarshini, J S Ashadevi, V Nagarjun, K S Prasanna, "Increase in Drosophila melanogaster longevity due to rasayana diet: Preliminary results", *Journal of Ayurveda & Integrative Medicine*, April 2010, Vol 1. Issue 2., p.115.

rasayana was expected to bring all these results, it was not one among the things represented for a longer life span. The next aspect of life that was explored for suggestions regarding longevity was sex.

Sexual Health; the Most Significant Aspect of Health

P S Varier wrote an article on *Dhaathupushti* in *Dhanwanthari.* He explained that *Dhaathupushti* really meant '*abundant presence of all minerals in the body'*, but people generally use the term in the sense '*abundance of the seventh mineral, Semen'*. Varier explained the significance ordinary people attach to sexual health. The foremost of all sensual pleasures is sexual pleasure, one can guess the amount of tension anyone would have, in case there is some trouble with this pleasure. "But the tension a womaniser would have in this situation is even beyond any guess. Then they would endlessly wait at the doors of the doctors and even that will not help."[108]

Sexual abilities were considered to be an indicator of good health and longevity. The indicators were all empirical and physiological. Yet, sexual health was explained as a divine boon. It was granted to men by God. It was the best of all comforts granted to men. But, at the same time, there were limitations to be observed for its continued enjoyment. Moral principles were to be strictly followed to ensure safe and healthy continuation of the enjoyment of sexual pleasures.

Varier explained that sex was a divine blessing for humans to enjoy. Thus, there should be some restrictions in its use. It was not given to do anything with it. Thoughtless spending would bring poverty to anyone in any case. The same was the effect in case of immoral spending. Improper timing also brings the same impact, no need to tell, he illustrated. "If one wants to keep the mineral wealth, do not start coitus before the ripe age. Even if done

[108] P S Varier, "Dhaathupushti (Sexual Health)", *Dhanwanthari,* Book 7. No 11., p. 128.

so, don't do it immorally. Also do not have an excessive amount of coitus even with your wife."[109]

"The tropical world thus exerted its own moral compulsion on would-be settlers. It demanded a therapy of moral hygiene every bit as rigorous as its medical counterpart."[110] The colonial settlers were trying to get along with the health challenges they faced in the new lands they were entering in different parts of the world. But the same ideas came to be a part of the thinking of the indigenous medical practitioners regarding the health of the individual body. Even when sexual ability and pleasures are shown as divine boons, the indicators of the same were to be empirical. Thus, P S Varier explained the principles of durable and safe sexual health. The first thing to note was that the advice was addressed to men and it took women and their sexual abilities and needs for granted. On the other hand, there were laws and principles that were to be observed by men. The principles pertaining to sexual health were to be followed as per nature, seasons and morality. The frequency of coitus recommended varied from season to season. The place where it could be done should have had certain features. And the food that helps upkeep sexual health was prescribed. Thus, sex was related to seasons and nature and the ambience was to be taken care of. Again, more space was dedicated to explain the moral principles associated to sex life. The recommendation that women should be in a reclining position while having coitus goes without explanation of the reason.

Varier explained the principles of sexual health in the article. He warned to not commence on coitus when people involved do not have good mental and physical health. Food items like milk, butter and meat that

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109 Ibid.

110 David N Livingstone, "Tropical Climate and Moral Hygiene: The Anatomy of a Victorian Debate", *The British Journal for the History of Science, Vol. 32.* No. 1., Cambridge University Press, March 1999, p. 104.

increase semen shall be eaten before and after, he advised. According to him, coitus was to be done only once a day during the cold seasons. It could be done once in three days during spring and autumn seasons and only once in fifteen days during monsoon and summer seasons. It should be done at night only. It was wrong to do it after overeating, when hungry or thirsty and when in need to urinate or defecate. The female should be in the reclining position for coitus. No coitus was advisable during the menstruation period. The couple should have the bond of love. Women also should be free of diseases. Coitus was bad during pregnancy and delivery. To shower semen anywhere other than the vagina of the wife was a serious sin. Sex was to be done only in a calm and neat place. It was dangerous to have coitus on bad days. However strong one was, not more than once a day was permissible. Taking a bath, having milk or things like that and sleeping soon after coitus were good according to him. If one follows this advice, there shall be no reason to worry, he wrote.

"Once it is found that one lacks sexual health, the first thing to do is to stop having coitus. Also stop doing anything that tires the body. Milk, wheat, buffalo milk, curd, egg and chicken are to be eaten."[111]

P K Varier wrote on obesity. The discussion turned to an effort to define what was the ideal shape of a body. It was notable that the doctor did not give any weight-height proportion or mathematical equation or objective measurement. But the balance of the body weight and the need to keep it moderate were emphasised. Difficulties faced by the obese were described and the reasons for obesity were enquired into. He accepted the relationship between the functioning of the pituitary glands and obesity as it was theorised

[111] P S Varier, "Dhaathupushti (Sexual Health)", *Dhanwanthari*, Book 7. No 11., p. 128.

by the western medicine. But he concentrated the discussion on the relationship between food habits and obesity.

P K Varier explained that what he meant by the term 'obesity' was the amount of excess body weight that causes absence or decrease of physical abilities. If a person was healthy, a thin body was alright. If the body was fit, a little stoutness was not a problem. But generally, stout people are less healthy. A body with flesh and fat enough to cover the bones was to be considered fit. Obesity was not a disease in itself, but it can cause several diseases. Obesity and overeating as a cause of it was discussed in the medical journal, but the government had to sometimes worry about the availability of sufficient food for its people as well.[112]

Varier further explained that some people think that those who eat a lot become obese. He asked to just watch when the obese and the thin sit together to eat and this idea would be disproved. Observe the poor and the daily wage labourers and one could see that eating a large quantity of food was needed for a stout body. One could not see a single fat person among them. Because only what one ate in excess of what was necessary to keep the body living gets stored as obesity. He also argued against the common misunderstanding that those who enjoy good fortune do eat a lot. They may eat more nutritious food. And they probably do not work at least one tenth of what the poor do. Then he invited the readers' attention to the thin people who eat a lot. They either use the nutrition they take in to exert work or their body is by nature bestowed with a strong pituitary and digestive system.

Drinking water could cause an increase in body weight. If one drank a lot of water soon after food, the acids that digest food gets less concentrated

[112] Regional Archives Ernakulam, File No. FD 4-1658/23, Shortage of Rice,1949.

and as a result, the digestive function gets slowed down. The food that is not properly digested contributes to obesity.[113]

Varier concluded that the primary reason for obesity was wrong food habits and then wrong lifestyle. Thus, he suggested two things to treat obesity, control food and do exercise.

The obese would always feel it difficult to do hard work, they would be inclined to sit or lay down somewhere. Undoubtedly, obesity harms the good looks of a person too. The heart of the obese is weak. To mention certain other difficulties of the obese is not a pleasant thing, he said. Then he asked the readers to guess them.

The best way to avoid becoming obese and to treat obesity once it was a reality was to control food. Never overeat. Eat food only at the right time every day. Avoid extra snacks. Avoid starchy food. Follow the command of our forefathers, he advised. "Minimise the intake of water and outgoing words." And do moderate exercise… don't sleep during the day… Excess mental pain could lower weight, but that is neither good nor advisable. I have learned from Ayurvedic Vaidyas that taking in honey with fresh water in the morning is useful."[114]

The intellectual dynamisms that made the context of the negotiation of the idea of a healthy body necessitated the native medical elite to revisit their understanding of the human body. They renegotiated the science of the human body in the light provided by the Western medicine. The traditional 'shastra' (science) could not be repudiated, but had to be reworked to face the challenges posed by Western Medicine and its findings. The debate on the nature of menstruation among different experts in various medical systems

[113] P K Varier, LMS, "Sthaulyam (Obesity)", *Dhanwanthari*, Book 10. No 11., p. 123.
[114] P K Varier, LMS, "Sthaulyam (Obesity) 2", *Dhanwanthari*, Book 10. No 12., p.129.

reflects how the new ‘objective findings’ were accommodated into traditional knowledge systems by reinterpreting the contrary traditional ideas. ‘Science’ was unquestionable, but at the same time, it was accommodated into an organic social system, which processed and remade the ideas and perceptions that suited its organic environment.

CHAPTER 4
NEGOTIATING THE IDEA OF A HEALTHY BODY

The negotiation among systems of medical knowledge had a focus on the idea of a healthy body. The idea of a healthy body was negotiated in a context in which things associated with the idea were political and cultural. The dressing style that suited best for the health of the body was an example. Different castes, religions and sexes had different ideas about the same during the time. They had to be evaluated and principles for the evaluation were to be developed. The same was the case with food. Caste and religion played a major role in determining the food culture of different sections of people. The idea of a healthy body and the question of what constitutes a healthy body were questions of significance. The female body was particularly studied to understand the complexities involved in the health of the female body. Cleanliness and the social aspect of the health of the body were also debated on.

Dress, Food and Body

Umayanallur N Gopala Pillai wrote in the journal Dhanwanthari in 1918 that dressing pattern was important. It should not be very tight on the body. There should be provision for air circulation between the body and the dress. The modern western dressing style was not at all advisable according to him. "Those who follow that, especially women, keep their body tightly wrapped in dress. Without understanding that they harm themselves, they celebrate it as beautiful."[1] The article on skin care included a reference about

[1] Umayanallur N Gopala Pillai, "Nammude Tholi(Our Skin)", *Dhanwanthari*, Book 15. No 12., p. 272.

whether the western model of dressing pattern was good or not. According to the author, it was not at all advisable. Two things were notable in this reference. Firstly, even though the study was about skin care, the reference was about the dressing pattern of women. The question raised was whether the western way of dressing was advisable. But the observation was exclusively on women's dress. Secondly, two reasons were shown to reject the western dressing style. One reason shown was that it was not suitable because it was not suitable to the climate of our land. In the climate of our land, air should freely pass between the body and the dress. But this is not possible if one wears western dress. The 'reason' pointed out, thus, did sound scientific.

The other reason given was that wearing tight dresses did not make one's appearance beautiful even though people thought so, though this was personal, subjective and unscientific. The prejudice against the western dress and the same in favour of what was deemed to be traditional was so deep rooted that any logical or simply imaginary points were brought forward to counter the former and to support the latter.

Dhanwanthari published an editor's note regarding the food habits of the Japanese. Why the Japanese food habit? The note itself made it clear that the Japanese achievement as a nation and in development was the reason why their food habit was discussed. The implication was the aspiration for development and modernization. That modernization was desirable was implied but the whole note did not contradict the traditional notion regarding what was the type of food that was apt for the body. Vegetarian food was no way a hindrance in the path of the modernization and progress of the nation. The recognition of the wellness of the body as the wellness of the nation led to the deliberation on the food apt for the building of a modern nation did lead to the acceptance of the modern nationhood and its connection with the health

of the body of the people. However, the traditional notion regarding the acceptable food habit was neither challenged nor altered. In other words, the traditional notions regarding the desirable eating habits were held correct and even suitable to the emerging and desired modern society.

"Japanese food is mostly vegetarian. Most of the people there are vegetarians. Thus, when we look into the fact that the Japanese avoid non vegetarian food almost completely, and that, yet they have been able to achieve in just one generation as much modernization as many other countries could achieve in two decades, it becomes clear that they are in no way inferior to the people with nonvegetarian food habits in case of their intellectual capacities."[2]

Vaidyan P Achyutha Varier contributed to the deliberation on good food. He pointed out that according to *Aryavaidyashasthram*, nonvegetarian food was good for health. *Vagbhatacharya* stated in the *Ashtangahridayam* that meat, especially the meat of the animals that eat other animals, was good for the health and muscles of the body. Then, meat is good for the treatment of diseases like tuberculosis.

Not only theory, our experience also supports this, Achyutha Varier observed. Because, if the physical strength of a member of a vegetarian upper caste and a member of a nonvegetarian food eating caste were compared, we know that the difference will be like that between a goat and an elephant.

Either due to the idea that meat was good for health or due to the interest in modernization, for some time, some upper caste people were in the habit of taking in meat and brandy. This was only increasing among them. The castes which used meat naturally were not leaving that habit too.

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[2] Editor's Notes, *Dhanwanthari,* Book 2. Vol 9., p. 170.

Achyutha Varier suggested that it was time to think about the pros and cons of eating meat because people were then increasingly eating meat.

Even though Achyutha Varier started by recognizing the acceptance of nonvegetarian food by Ayurveda gurus, he was critical about the quality of meat people usually got. People usually purchased meat from the butchers who sold them in the market. Only a few influential people could slaughter a goat or something to get meat for them. Even for them, if they needed meat daily, they would have to buy it from the market. No need to discuss the case of the ordinary people. "Thus, the quality of the meat depends on the quality of the mind of the butchers."[3]

The question regarding when and how to eat in order to maintain a healthy body was discussed by *Vaidyavishaaradan* P K Ramunni Menon in the *Dhanwanthri* Book 16, No 82. The principles of a healthy diet, according to him, could be divided into three heads. One, the frequency of eating. Two, the quantity of food for each meal and, three, the food items recommended. The principle of the frequency of food advisable was simple. One was expected to eat only twice a day. The two meals should be taken around nine and ten in the morning and in the evening.

> "*Saayam praathar manushyaanaam*
>
> *Bhojanam Vidhinirmmaanaam*."

According to this principle a person is expected to eat only twice a day. The two meals are to be taken in the morning and in the evening before 9.00."[4]

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[3] Vaidyan P AchyuthaVarier Cherpulassery, "Maamsabhakshanam (Non vegetarian Food)", *Dhanwanthari*, Book 2. Vol 12., p. 254.

[4] Vaidyavishaaradan P K Ramunni Menon, "Bhakshanavidhi (Food Rules)", *Dhanwanthari*, Book 16. No 4., pp. 82.

However, the time to eat was not to be fixed with reference to the clock alone. Hunger was more important. Hunger was referred to as 'fire in the stomach'. The fire in the stomach was needed to digest the food that was eaten. This fire needed to be kept blazing high and powerful. Eating excessive quantities, eating in small intervals and in increased frequency and eating in odd hours were identified as causing damage to the power of the fire in the stomach. Thus, these were to be avoided. In addition to the time limit of nine to ten in the morning and evening, one had to observe the fire in the stomach. One should eat only when the fire is blazing high. Regarding the quantity that was appropriate, the rule was that of only what was necessary. This meant only half the stomach. Individual differences in the case of the need of food to be taken in a meal was agreed upon and the author was of the opinion that the quantity of food needed for a meal could not be stated generalised in the form of weight.

Ramunni Menon examined what should be the quantity of food that was to be eaten in each of the two times when one ate a day. The law was that the bag into which the food reaches soon after it leaves the mouth is divided into four equal parts and that the first two parts are to be filled with food, the next with drinks and the remaining is to be left vacant for air. This meant that only three fourths of the stomach should be filled with food and drinks. This meant that the right quantity to eat was only half of what is needed to generate the feeling of satisfaction in case of hard food and just enough to generate the feeling of satisfaction in the case of light food. "This indicates that the right quantity of food to eat is not to be calculated by quantity, but to be calculated by the feeling of satisfaction that varies from individual to individual."[5]

[5] Vaidyavishaaradan P K RamunniMenon, "Bhakshanavidhi (Food Rules)", *Dhanwanthari,* Book 16. No 4., p. 84.

Food was not to be eaten at any time. The time for eating was not to be fixed simply at nine or ten. One should be hungry enough and the fire in the stomach should be burning sufficiently. There are also a few other things to be observed while eating.

Eat only after urination and defecation, Ramunni Menon advised. Heart should be clean. The three '*doshas*', especially '*vaayu*' should be correct in the body. There should be no acidity. Should be so hungry that the fire in the stomach should be burning. The body should be light and the sense organs like eyes should be clean. When all these were satisfied, it was time for eating. But there were other conditions to be satisfied. The person should have taken a bath. "Worship God and ancestors before entering the dining room and feed children, parents and guests before you eat and make sure that all your dependents including the birds and animals are fed before you eat. Sit in an isolated area with one or two beloved ones for eating. Ensure that the servants who cook and serve are all faithful and clean and not hungry."[6]

The things one has to observe while eating include personal hygiene, ethical concerns, caste concerns, concern for metabolism, religious concerns and family concerns. Food had been a major concern of the caste system as well. The purity notion of the caste was associated with the food habits and physical cleanliness. It was also connected with the distances and relations that were to be observed in the contacts with the other people. Evidently, eating food was seen as a cultural, social and religious activity and the health of the body is also seen as not just physical, but having religious, social, cultural and moral dimensions. Physical health was seen as an integral whole of all these aspects.

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6 Ibid, p. 86.

Umayanalloor Gopala Pillai wrote on the relationship between food and skin health. The food style is closely related to the health of the skin, he said. He had no doubt that the people living in the hot climate needed vegetarian food. In the cold and moderate climate, it is said that eating meat is a necessity. Those who eat meat regularly and do not eat vegetables have no right to wish for healthy skin. A mixed diet was not advisable. It is only a means to eat a lot.

Gopala Pillai cautioned that before explaining what to eat, he wanted to say that one should eat food every day at the same time and that eating should be done peacefully. Health depends on a law. Those who eat frequently cannot wish for good health. Untimely food could cause indigestion and pimples. Such people should be taking in excess quantities of food. The breakfast should be light. The food style of the Keralites was good. They were vegetarians and that was good. Gruel in the morning and meals at noon and evening was the diet of a common man of the land and that was a fairly good food habit. No coffee or cocoa was needed in addition to that. Milk is good for the body. It is a mix of many things the body needs, he opined. Ghee is also good, if used moderately, he wrote. Hen egg is good. But if used regularly, it could cause *pittham*. Drinking alcohol is very injurious to skin. An alcoholic cannot enjoy life or the beauty of the nature around. He would lose the clarity of his skin, the light of his mind and the pleasantness of his face, Gopala Pillai cautioned.[7]

The pattern of argument followed in the observations about the dress that was suitable to the healthy skin was followed in the observations about the food suitable to the health of the skin. The author remained completely convinced about vegetarian food. The advocacy for vegetarianism was

[7] Sreeman Umayanallur N Gopala Pillai, "Nammude Tholi (Our Skin)", *Dhanwanthari*, Book 15. No 12., p. 271.

supported by the argument that it was the tradition of India. However, the fact that lower sections of the caste hierarchy freely used non-vegetarian food was neglected. Also neglected was the fact that the so-called 'Indian tradition' was not monolithic but multiple. The culture and practices of the upper sections of the society were taken for that of the whole society.

As far as the norms that are suggested for the health of the skin were concerned, they did generally reflect the characteristics of caste purity. The purity notion inherent in the caste system was reflected in the 'science' of the health of skin. The tradition was regarded as scientific and advisable. The western, the foreign, was regarded as not desirable. Alcohol, non-vegetarian food and the western diet schedule were all regarded as undesirable. This was but presented as science, for proving which the concept of diet suitable to culture was brought in.

Sreeman K I Thariyan believed that the health of the body of a new born baby depended not simply on material factors. It was divinely set. "The laws of the lord of the world are unbreakable beyond the reach of the limitations of human intelligence."[8] He explained that these laws should be applicable in case of the birth of children beneficial to their homes and to the society in general. Unfortunately, those who do not respect these laws, children low in form and in behaviour are born, live and cause unbound sorrows. There are thousands of people born blind, deaf, dumb, fool, unfortunate, haughty, ill and with a short span of life who make the face of this beautiful earth ugly, he noted. If one thought, it could easily be understood that the cause of that tragedy was that many people broke the laws of coitus because they are haughty or ignorant.

[8] Sreeman K I Tharyan, "Utthamasanthathyulpaadanam (Giving birth to the Best Offspring)", *Dhanwanthari,* Book 17. No 3., p. 39.

According to K I Tharyan, health has three elements: freedom from diseases, proper functioning of the body and ability to perform all needed tasks and mental/ moral uprightness. All the three were integral and mutually related to each other.

"When each organ of the mind and body of the individual is able to perform its functions smoothly, that normal life can be called one bestowed with health. The human body is built in such a way that it can maintain itself without any special care for it."[9]

However, the ignorance of the one who looks after the body could cause it damage. Mr Tharyan used the example of a machine. If the one who operated the machine lacked proper knowledge about its functioning, and its maintenance, then the machine could be affected.

He imagined the human body as a wonderful self-protected machine. Our likes, dislikes, desires and contemplations are all inherited from our forefathers. They are mostly the results of their healthy or unhealthy practices too. Still, it is not omitted that a normally intelligent and well-educated child can distinguish what is good and what is bad for his body with reference to the tastes and such things, he observed.[10]

This indicated the concept that health was a natural virtue which was normally availed to everyone. It was understood that people did not need to make conscious efforts to maintain health, but only had to follow the natural course. The maintenance of the machine that was the human body was primarily done by the body itself. It was affected when ignorant people made false interventions in its course. Either one had to be truly knowledgeable and make the correct interventions, or simply do follow the natural course. An

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9 Sreeman K I Tharyan, "Health", *Dhanwanthari*, Book 16. No 2., Pp 33 – 37

10 Ibid.

example of the tastes was brought in. The likes and dislikes of tastes of a person indicates what was good and what was harmful to the body of that person. This is because something good and constructive for the body of one person may be quite harmful to the body of another person. The question of what disrupted or harmed the natural endowment of the health of the body of a person was also raised. It was either the result of harmful practices of the mind or body of a person or the result of such activities by the forefathers of that individual. Purity of mind was shown as the most significant determinant of the health of a person. Health had a moral dimension; a moral dimension that extended even to the previous generations.

Women Issues

Infertility was considered a serious reason for problems within the family. Women were often held responsible for infertility. Dhanwanthari addressed this issue directly and enquired through an editorial article whether holding women responsible for infertility right or not. Usually, when a couple does not have a child, the husband claims that it is because the wife is infertile, the article observed. Then it was cited that a doctor had recently opined that what actually happens is either the husband makes the wife infertile deliberately because he has some disease, or that the husband himself is infertile.[11]

P K Varier wrote a series of articles on Sterility. He began by arguing that infertility was not always the responsibility of the female. First, he disproved the argument that the women who have no offspring were actually being punished for the sins they committed in their previous lives. Varier explained the physical conditions that cause sterility and proved that the sterility was due to physical reasons and not due to moral or supernatural

[11] Editor's Notes, *Dhanwanthari,* Book 2. Vol 10., p. 215.

reasons. He also argued that the responsibility of the sterility could be either due to the physical conditions of the female, or the male or even due to an incompatibility between the couple.

P K Varier observed that usually the term *"Vandhya"* (the infertile) was used to refer to a woman who has never delivered a child. People believe that the sole responsibility for this sterility is on women. Some say that the cause of sterility is the sins committed in the previous births. Some others present a more specific reason for sterility that the woman must have either caused the killing of an infant or must have herself killed an infant after or before its birth in order to hide her immorality or for some other reasons in the previous birth.

P K Varier questioned this notion by pointing out the fact that people do forget that in any of these sins, there would be an equally responsible man. Not only that, often only women were asked to bathe in the sea or to do some other ritual as a repentance for the sins committed. He didn't object that these activities could be effective at least rarely. But he believed that it was only accidental. He didn't object that thoughts were effective. If somebody firmly believed that prayer in great temples, bathing in sea, or offerings could give them children, they could get the peace of mind from that belief and it could cure some of the very simple reasons for infertility. But mostly, such activities did not give any results, he observed.[12]

He continued to explain the actual causes of sterility. It could be the result of some blocks in the path through which the sperm should travel to meet the egg in the fallopian tube. It could also be resulted from the weakness or lack of sufficient count of the sperm from the male. Varier thus emphasised two points. One, sterility was a result of physical reasons and not supernatural

[12] P K Varier, "Sterility", *Dhanwanthari,* Book 14, No 9, p. 64.

or moral. Two, both the male and the female of the couple had equal possibility to have had the responsibility for sterility.

Narayan Nambi initiated a discussion on the role of kitchen and its cleanliness on the health of the members. He said he was speaking out of his personal experience of visiting several kitchens. As it was common among the families of Kerala, the responsibility of the kitchen was vested in the hands of women. "The women of the family under reference here seem to be a group of animals that have never heard of cleanliness. It is a matter of loss of pride for men to enter the kitchen. Thus, the power of the kitchen empire has gone to women completely."[13]

Deliberating on situations congenial to health and wellness of the body, Chirayinkeezhu P Govindappillai argued that the very way Indian houses were built did not suit the needs of the body. He emphasised the need for fresh air to the human body. The deliberation progressed to criticise the way Indian houses were built. The main problem was that Indian houses were ill-ventilated and there was no sunlight entering houses. Notably, the author was able to link these architectural characteristics of Indian houses not only with the requirements for the wellness of the body, but also with the social stigma within Indian society that kept women locked home. This could cause tuberculosis, he observed. Govinappillai also argued that such women who were kept locked at home and thus devoid of health should have not been given medicine to help them get pregnant. Children born to such women would not be healthy.

The identification of social stigma was linked to architectural features of the houses and wrong habits follow studies of the western models. The study scheme was simple: western houses were well-ventilated, Indian houses

[13] Nambi Narayanan, "Adukkala (Kitchen)", *Dhananthari,* Book 4. No 9., pp. 206-207

were ill-ventilated; westerners did regular exercise, Hindus rarely did exercise; western women were free to move out, Indian women were locked home; westerners were healthy, Indians were ill. To study healthy habits from the west, thus, included total reorganisation of the habits, re-examining of the social norms, and, even a correction of the house architecture. The European model of modernity could not be limited to certain aspects of life. It was linked: social reform, architectural restructuring and inculcation of healthy habits were all parts of the same.

Chirayinkeezhu Govindappillai noted that the primary necessity for the wellness of the body was clean air. He stated that the Indian houses were not as well-ventilated as the European houses. Ghee and sweets make flesh soft. Europeans are generally interested in exercises. Most of the Hindus never even think of exercise. "Isn't it true that the Hindu habit of keeping their women tied within the dark rooms of the houses causes them tuberculosis? That these women take medicine to get pregnant is not recommendable, sir."[14]

At a time when the society was getting modernised and the modern public space was opening up, the leaders of the society, mostly men, can be seen arguing for the women's right to public space and the advantages of their using that possibility. Even in 1958, the Kerala University Vice Chancellor Dr John Mathai could be seen speaking in the Trivandrum Women's College that higher education could add to the glory of womanhood by enabling her to perform her household and public duties better.[15] This argument was present all through the period of study with medical doctors also arguing the same way right from the beginning of the century and suggesting how the female body could be kept healthy for the effective disposal of domestic and public duties.

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[14] Chirayinkeezhu P Govindappillai, "Delivery Care", *Dhanwanthari*, Book 5. No 1., P 38-39.

[15] *Malayalarajyam Daily*, 14/01/1958.

“Women should get up early in the morning before men.” *Soothikaamritham*, an article published in the Dhanwanthari stated. The article proceeded to explain what the author thought about the duties of the women in house. Once got up, sitting on the bed, she should sing in praise of God in a sweet voice and get all others awake.

Then she should decide on the works of the day and their order

Get the bed dry and keep it in the proper place and get the servants also do the same

Do self-sanitation and get hot water for that

Clean house, *thinna* and then courtyard, *padippura* and finally way to home

Clean the kitchen with special care, use water mixed with cow-dung for that

Every seventh day, white wash or apply cow-dung water on *thinna* and walls

Get all home appliances clean

Put them all in proper places so that you can get them even in the dark

Brush teeth, wash face, hands and legs and apply *anjanam* on eyes

It’s for protection of eyes, without eyes, the world is lost

Apply oil on body and massage, use plenty of oil especially on ears head and legs

Do exercise in accordance with the strength of your body, gardening is best for women

Garden means the area where you grow vegetables, fruit trees, flowery plants and medicinal plants

Go round your garden, watch the sprouts and flowers and feel contented

The garden is healthy, pleasurable to senses and giving wellness to body

Put manure, give water and care for plants

Don't underestimate this, these plants are like kids born to women

Then be contented, thank God and take bath

Worship God the father of universe as per the advice of your teacher

Then, being pure at heart and body, start cooking, convinced that food is God

If there is no ceiling in the kitchen, use a sheet made of bamboo

There may be spiders, lizards and salamanders and such poisonous things.[16]

The article added that there were plenty of sterile women and women who gave birth to dead children. There were many reasons for that. But the most important reason was the misbehaviour during the menstrual periods. This behaviour caused not only infertility but also many serious diseases.

Menstruating women should observe many '*pathyams*' during the first three days, the article noted. Hindus consider these days as very impure. The Hindu law systems say that women during this period should be considered

[16] P M V, "Soothikaamritham (Daily Routine)", Dhanwanthari, Book 7. No 2., p. 25.

like '*Chandaalis*' and that their touch and look were to be avoided. Women should avoid physical relations during this period. Actually, these moral codes exactly follow the medical codes, the article certified.

Menstrual period was the period for impregnation. But the blood that comes out is a month old and during the first three days, it flows out so forcefully that it blocks the inward movement of the semen. That is why coitus is completely banned during this period. If coitus takes place during the period, either there would be no impregnation, or the child would be born handicapped.

The menstruating women should also avoid siesta, make up of eyes, crying, bathing, oil bath, nail clipping, running, laughing, speaking too much, listening to loud noise and hard work.

The 12 days that followed the first four days were suitable for impregnation. If the menstruating woman does not observe any one of these laws correctly, her children would have many problems. If the menstruating lady sleeps during day time, her child would always lack energy; if she apply black colour on her eyes for makeup, the child would be blind; if she bathe and clean her body with soap etc, the child would be melancholic always; if she takes oil bath, the child would have leprosy or skin diseases; if she clipped nail, child would have no nail; if she run, child would not be constant; if she laugh, the child would either lack any one of teeth, tongue or neck or would have some deficiency with any of these; if she is talkative, child also would be; if she hear loud noise, child would be deaf; if she work hard, child may have no mental health: this way, for every misbehaviour of the mother during her menstrual period, the child born in future would have to pay.[17]

[17] Athiyaarathu KrishnaNair, "Routine During the Menstrual Period", *Dhanwanthari*, Book 14. No 9., p. 212.

The traditional understanding of the nature and natural purpose of the process of menstruation were explained in the article. This was done as an explanation of the details of care that was to be taken for the observance of cleanliness of the body. Thus, cleanliness of the body was not simply external cleanliness. Cleanliness included care to be taken for the natural processes of the human body as well. And, cleanliness of the body and its processes, especially sexual processes, were necessary for the health of the next generation as well.

Cleanliness and Healthy Body

The article titled 'Barber's Knife' deliberated on the necessity to sterilise the barber's knife after use. The traditional barber of the days would have had to cut the hairs of the people of the area and he used the same knife of his to do the service for all. Whether people infected by the communicable diseases were included among those who he had served or not did not make any difference as far as his duty according to the customs was considered. The context of smallpox was new. The writer argued that cleanliness through sterilisation was necessary for the prevention of the communication of the disease. Another suggestion for cleanliness was that the individual customers of the barber should have had their own knives to be used for them. It was notable that the writer did not bother to think about a situation in which the barber became reluctant to extend his service to the patients. The customary responsibility had no exemptions; only some intelligent methods to overcome the problems caused by the system were enquired and suggestions were given for that. The patient's convenience and needs were addressed, but that concern was not seen in the case of the safety of the barber.

"…I remain for the time being, just by stating that washing the barber's knife in some medicinal water after use, or people keeping barber's

knives for themselves will be helpful in escaping from this fearful disease (smallpox).”[18]

Writing on the topic of cleanliness, a female writer, Bhageerathi Amma, raised the basic question, what was waste. That which is misplaced is waste, she defined. Mud on the human body is waste. Mud under a plant is not so, she distinguished. Once defining waste was done, it was easy to define cleanliness. She defined cleanliness as keeping all the skin in the body clean and added that it is a good way to health.

Thus, Bhageerathi Amma argued that taking a bath was good for the wellness of the body. Special care should be given to brushing teeth. It may be done twice or thrice a day. Some may think it a trouble. But it would avoid many troubles. Open parts of the body, like hands and face, were to be washed three or four times, she advised. It is not enough to keep the body clean. The house and surroundings also should be kept clean, she added. There shall be no trees very close to the house; it will prevent free flow of fresh air. Nothing rotten shall be littered near the house. The air from it is harmful, she cautioned.[19]

Talking about the various aspects of a healthy lifestyle, a series of articles in Dhanwanthari explained the need and pointed out models from various places, cultures and medicine streams. Here in this part of the article which explored various aspects of the cleanliness of the water sources, especially wells, the author showed how the English methods and systems in place for cleanliness maintenance were effective.

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[18] V Kittunni Vaidyan, “Kshourakkatthi (Barber’s Knife)”, *Dhanwanthari*, Book 2. Vol 10., p. 233.

[19] B Bhageerathi Amma, “Shuchithwam (Cleanliness)”, *Dhanwanthari*, Book 2. Vol 10, pp. 236 – 237.

P K Varier pointed out that the common belief that the water in a well that is not open to sun rays and rain is not good was not correct. It has been proved by experiments that this is not at all needed, he wrote. The English were very particular about covering their wells. When they dig a well and find plenty of water in it, they fix a tube in it and close the rest of the well with gravel. Thereafter they use water pumps to lift water from that well. The water in the closed well does not get contaminated by animals or other things that fall into it. Thus, the system is advisable for implementation in our country too, he recommended"[20]

The significance of cleanliness was already being emphasised by the state with the point of view of the Allopathy system. This is best reflected in the government orders regarding how the police officers should act in case of cholera. H P Esmonde White FRCSI, Surgeon Lieutenant Colonel and Durbar Physician emphasised on the cleanliness and disinfection precautions against the spread of cholera on 27th February 1897.[21] This instruction to police officers was taken from an order of the Bombay Government as it was mentioned in the order itself. Cleanliness for maintenance of the health of the individual and the society became an area where complete consensus could be reached in the negotiation among various schools of medicine on maintenance of a healthy body.

Beauty, Health and Longevity

In his series of articles titled *'Shareerasukhshaasthram'*, P K Varier enumerated the factors that he thought determined the wellness of the body. "The wellness of the body depends on several things. Most important among them are 1. The air we breathe, 2. The water we use, 3. Food, 4. Sleep, 5.

[20] P K Varier, "Shareera Sukha Shaasthram, Water (Continuation), Wells", *Dhanwanthari*, Book 3. No 4., p. 74.

[21] State Central Archives Thiruvananthapuram, File No: 1/344, Medical Department Files

Physical cleanliness, 6. Exercise, and 7. The house we live in."[22] Varier gave importance to cleanliness. Other than good sleep and exercise, he emphasised that clean air, water, food, house and physical cleanliness were the essentials of good health.

In the context of the deliberation on health, an editorial article in the *Dhanwanthari* wrote on diseases and on specialist doctors. The article argued that specialisation was good but a general understanding of the human body, diseases and medicine were necessary to prelude the study of specialisation for any particular area of medical treatment. The article presented the idea about diseases. "1. Each disease is the result of a deviation of a part of the body from its healthy position. Sometimes it is the result of the absence of its proper functioning…. 2. Any disease is the result of a deviation from the normal status of the three *doshams; Vaatham*, *Pittham* and *Kapham*…. 3. One disease can cause many others…. 7. Dangers can occur as a result of the treatment for diseases."[23]

The author emphasised the need for a holistic understanding of the human body. As per the definition, wellness of the body was the natural condition of the body and disease was deviation from the natural. If a doctor was to identify disease in an individual's body, the doctor should first know the natural condition of the body. Treatment for diseases without a proper understanding of the natural condition of the body could result in new diseases instead of cure for the first disease. This situation necessitated the need for a general understanding of the human body even by specialist doctors.

Once the need for holistic understanding of the human body by doctors was established and the problem of specialisation without that holistic

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22 V K Varier, "Shareerasukhasaasthram", *Dhanwanthari,* Book 2. Vol 3. p. 37.

23 "Prathyeka Vaidyanmaar (Specialist Doctors)", Dhanwanthari Book 2. Vol 7., p. 123.

knowledge was explained, the article went on to present Allopathy as a model which had a formal system that made a general understanding of the body mandatory for all doctors.

All the English doctors who are famous as Dentist, Ophthalmologist or Gynaecologist were all doctors who underwent specialist study after completing their basic medicine course. The government did not permit anyone to undergo specialist studies before completing the basic medicine course. Thus, there was no way other than admitting that our local medical practitioners also should turn to some specialist study only after finishing the basic *vaidyam* study.[24]

The local medical practitioners identified that wellness of the human body did not depend completely on medicine. The opening to the body care facilities available to the western societies was a force behind this understanding. Some of the traditional medical scholars found the newly introduced facilities as beneficial to the human body. An article recommending the usage of footwear published in the Dhanwanthari[25] strongly argued in favour of the usage of footwear. He observed that, even during his times, many of the old people held a false understanding that wearing footwear was the high stage of pride, that it was no way helpful to physical wellbeing or health, and that people did it when there is no proper status, qualification or the heads of the family to control. With that observation, he began to look into the *vaidyavidhi* (principle of the medical practitioners) in the case of footwears.

The discussion in the article was focused on the usefulness of footwear to the wellness of the human body. The article introduced footwear as a relatively new facility and hinted that the stigma against its use was

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[24] Ibid.

[25] "Cherippu (Footwear)", *Dhanwanthari,* Book 2. Vol 9., p. 147.

prejudiced. The article then proposed to look at the issue by referring to the ancient texts of Ayurveda.

"Saathapathra padathrano vicharel" (Walk only with umbrella and footwear) was the *vaidyavidhi*, the article quoted. This principle was given not to uphold a custom or pride. The great teacher who was destined to eradicate all the diseases in the world only gave the principle, the article emphasised. Even that was not just his imagination. He only brought to the attention of the people the united opinion of the 'great sages who were in close contact with God and had realised the divine knowledge. That showed the noble nature of the principle. "There was no mention in any of the *sastras* forbidding women, children or people of any status from wearing footwear. Thus, there is no way to deny the fact that the principle is to be followed by everyone, always, everywhere and in any state of life."[26]

The article proceeded to explain that the practice was common to the civilised parts of the globe. People of civilised nations generally consider footwear as a part of their dress itself and do always wear it. But the Malayala story was totally different. Due to a false sense that wearing footwear was a matter of pride or of ignoble nature, people avoided wearing it always. But it seemed that they permitted the use of boots. The idea that footwear needed to be removed while appearing before a great temple or before some great men was equally folly as the idea that the dhoti should be unfolded before them. Both were equally important to the care of the body, the author opined.

The author also pointed out the gender aspect of the use of footwear. The case of men was better than that of women. "The current situation makes us assume that the Hindu women wearing footwear have to face excommunication (*jaathibhrashtu*). Even though women do not need to walk

[26] Ibid.

as much as men, their feet are softer and more prone to pain and thus there is no doubt that they need to wear footwear in no way less than men do."[27] The article said that it was undoubted that the taboo on women wearing footwears was one among the curse women – especially the women of Kerala – had to face. That was a necessity for men and women alike, just as it was in the case of education. The article concluded by strongly recommending that all human beings across space, caste, and time should wear footwear if they needed to touch their feet on ground and that the elders, great men and Government should allow the same.

P K Varier wrote an essay[28] on whether the fan was acceptable or not. The article deliberated on the importance of fresh air and held that fresh air was essential to the wellness of the body. It also talked about the electrical fan that was only being introduced in India. He observed that, because the fan that worked with electricity always moved in a circular motion, it could make the air move. That type of fanning machine was already common among the average shops of Madras.

There could be many reasons for an Ayurvedic doctor of Kerala during the early twentieth century to discuss the benefits of a fan and recommending it. The fanning machine was capable of giving fresh air was the point the doctor highlighted. The colonial medicine and the colonial gaze in general had brought the entire mode of Indian living under scrutiny and had raised severe criticism against the lack of cleanliness in Indian living situations and practices.[29] In the context of that criticism, it was pertinent to use the possibilities for attaining whatever cleanliness that was possible. It could be safely argued that cleanliness and health of the environment was also inherent

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27 "Cherippu (Footwear)", *Dhanwanthari,* Book 2. Vol 9., p.149.

28 P K Varier, "Shareerasukhasasthram - Vaayu", *Dhanwanthari,* Book 2. Vol 9., p. 178.

29 Gyan Praksh, *Another Reason: Science and the Imagination of Modern India*, New Jersey: Princeton University Press, 1999, p. 144.

in Ayurveda.[30] *Dosa*s and *dhatu*s were considered not as objects but as processes. Secondly, the author of the article showed that the machine was already widely used in Chennai.

"We should remember that those who have beauty also have health. Because, health without beauty is possible but the reverse is impossible."[31] The importance of beauty, according to the Ayurvedic expert who wrote on the relationship between beauty and health, was that beauty was a signifier of health. He explained that beauty was important because among the things that help men lead an effective life, a pleasant face was next only to good conduct. But beauty was different from health in impact. Health was always desirable in impact, but beauty could bring about good or bad. Beauty could cause virtue or vice. It had caused virtue and vice to not only many people but also to many nations, he observed. The article went on analysing the elements of beauty and he tried to define beauty and its constituents.

Perfect beauty was so rare among ordinary men, the article observed. Beauty was hard to find in the real world, but could be seen painted in a picture by some artists only. Beauty was of two types. The first type was that which was seen in a person and the second was that which was made by joining the beautiful aspects of many persons together. The Greeks made the images of their gods and goddesses by combining the most beautiful parts of different men and women together.

To answer the question "What is beauty?", one may use the word 'agreement' or 'matching'.

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30 Jean Langford, "Ayurvedic Interiors: Person, Space, and Episteme in Three Medical Practices"**,** *Cultural Anthropology,* Vol. 10, No. 3 (Aug., 1995), p. 345.

31 "Soundaryarogyadeerghajeevithopaayangal (Effects and Benefits of Beauty)", *Dhanwanthari,* Book 3. Volume 8., p. 61.

The mutual agreement and matching of the beauty of the different parts of the face is considered the beauty of the face. Anatomist Waltan opined that the beauty of the face depended on a half of the face and that beauty increases or decreases in accordance with the size-agreement between the forehead and the nose.

Beauty and charm were different. Beauty is, as it is already told, the result of the fine combination of the different parts of the body. Charm is something that causes pleasure and attracts the eyes of others and it cannot be described. The beauty of the face is considered just the same way as we see a painting very beautiful even when an expert painter may see many deformities in it in his scrutiny. Even though the perfectly beautiful face needs some more things, usually, a face with pleasantness, energetic eyes and a fairly good nose is considered good. Pleasance can bring charm to an ordinary face. "Most faces have their beauty originating from the smile that even mendicants cannot resist. Other faces owe their beauty to the beauty of the hair or so."[32]

The beauty of the body is also defined as to include the cleanliness aspect in it. The advertisement appeared in the *Malayalarajyam* daily on 23.08.1961 claimed that the talcum powder advertised could help one remain free of sweat and sweet smelling all day.[33] The emphasis on the cleanliness aspect shall be understood in the context of women's entry into the public space. The picturisation in the advertisement can also be seen following the description of the female body in the article we have been discussing.

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[32] Ibid, p. 62.

[33] *Malayalarajyam,* 23/08/1961.

According to the article S*oundaryarogyadeerghajeevithopaayangal*[34], there were three distinct stages of beauty in the life of women. Each of those periods were important in their lives. The first stage is from birth to puberty. It is during this period that the face and the shape of the body gradually develop. The second stage starts with full blown youthhood and lasts until roughly the age of forty. In the beginning of this stage, her neck grows to full length, sound changes, eyes become sweet and the woman becomes very beautiful. The third stage is generally from the age of forty to sixty. The face and body become full blown during this period. The fat that develops in the body accumulates under the skin instead of spreading all over the body. Thus, the wrinkles on the skin disappear, skin gets renewed and the beauty of youth reappears. This is called youthhood returned. Once this stage is over, women lose their beauty altogether.

Some women are able to keep up their beauty for a long time. Some people opine that the beauty of women should last till the age of fifty. It is

[34] Ibid.

also doubtful whether women's beauty reaches climax before the age of thirty-five or forty. Helen of Troy comes on the stage only at forty. Aspasia was thirty-six when she married Pericles. In addition, she remained pretty for another thirty years. Cleopatra had passed thirty-two when she met Antony. Diani de Pores was thirty-six when she married Henry II. The king was just half her age. Still, his love for her was never less. Queen Ann of Austria was considered the prettiest of Europe when she was thirty-eight. Demaintinan married Lewis at the age of forty-three. Catherine of Russia ascended the throne that she held for the next thirty-three years at the age of thirty-three. Madam Mar and Madam Rikkamian were considered the prettiest at the age of forty-five and between thirty-five and forty-five respectively.

The article theorised that there were three stages of beauty in the life of a woman and illustrated the argument with several instances. All the examples cited were from European literature and history. 'Long neck', 'sweet voice', and 'full blown body' are some of the expressions the author used to describe the beauty of a woman. The writer believed that the beauty of a woman was 'lost altogether' once she passed the age of sixty. All these expressions show that the author considered the physical aspect of beauty mainly; to him, beauty meant beauty of the body. At the same time, the article was almost silent about the beauty of the male body.

By that time, the printing press had started bringing out advertisements on the beauty stuff. The advertisements included female figures in larger proportions. But male figures were also presented. Sometimes, families were represented. The target group of the advertisement received representation in the advertisement.

The advertisement appeared in '*Malayalarajyam*' on 07.09.1964[35] represented a family with three members, a young father, mother and their child. The advertisement was about *'Vaajeekaranasudha'*, an energizer that was, according to the advertisement, suitable to male and females of all age groups. Overall energy and health of body and organs, memory power, grasping power and good sleep are the effects of the medicine promised. The medicine was suitable to be used for post-delivery care. It promised to increase taste, hunger and digestion. The caption was "Can live without gold; but what if no health". The advertisement took it for an established principle that gold was too significant for life, if not inevitable. The woman pictured in the advertisement wore ornaments, but the man did not. The man is central and he holds the child. He is the support of the wife. The wife and the husband look at the child. The wife stands straight and puts her left hand on the husband's shoulder while her right hand rests on the thigh of the child signifying affection. The ideal family, a healthy family, presented thus had the

[35] '*Malayalarajyam,*' Malayalam daily, 07.09.1964

physical position of the three members hinting the focus on the child, the confidence of the mother and the importance of the father.

Radhakrishna Films gave an advertisement[36] in the *Malayalarajyam* on 19.08.1956, wishing happy *onam* to the Keralites during the festival season just before the formation of the state. The advertisement included a list of the films the company was bringing out during the *onam* season. There were eleven films: *Pennin Perumai, Mayamohini, Manohara, Naatyathara, Krishnavijayam, Aashai Anna, Ethir Paaraathathu, Nalla Thankaal, Anpu, Nalla Kaalam,* and *Janova*. The names could be translated 'Female's Fame', 'The magical Seductress', 'The Beautiful', 'The Dance Starlet', 'Krishna's Victory', 'Desire Brother', 'No Opposition Found', 'Good Sister', 'Love', 'Good Times' and ''Janova'. Out of the eleven films, six had a female body as focus and main theme of the film.

Wellness of the Body

In a series of articles on constipation and the control of it, there were some general outlooks expressed by the writer regarding the overall wellness of the human body. The article also made observations regarding the procedure to be followed in the treatment of diseases. The observation that there were specific causes for all illnesses reiterated the conviction in the cause-effect relationship and the treatment of the diseases by fighting the causes and not the symptoms. "Any doctor who intends to treat any disease is supposed to understand its causes first."[37] The article also underlined the approach of treating the human body as an integrated unit and not as distinct organs. Then the article proceeded to emphasise that the basis of health is a

[36] *Malayalarajyam* on 19.08.1956, p. 5.

[37] "Editorial Article - Wellness and Scientific Routine**;** Constipation", *Dhanwanthari*, Book 3. No 2., p. 21.

proper scientific routine and even provided the details of a model routine for an individual.

What the article sought to explain was applicable for all diseases, it claimed. But in the case of constipation especially, it was not advisable to medicate first. First the causes were to be eliminated and then the daily routine was to be corrected. For that, one should first get up early. This didn't mean that one should get up too early, that he did not get ample sleep or that he got his stomach upset by the cold morning wind. It was common for those who got up early in the morning to get a smooth defecation before the break of the day. Those who belated defecation for reasons of other engagements or for laziness should be soon returned from that. For such people and for those who have no fixed time for defecation should be corrected. Even if the need was not felt, they should attempt defecation in scheduled time.

There is a natural course and it is regular. The individual human body was to follow that rhythm through a routine that followed nature. This was the idea behind the conclusions and advice in the article. This was well connected with the notions of holistic approach to the issues faced by the human body and the imagination of the human body as an inseparable part of nature. As Maarten Bode and Unnikrishnan Payyappallimana observes, "TRM (traditional medicine) knowledge systems have unique pharmacological and medical perspectives. Their logics are mainly synthetic and phenomenological. In this sense they differ from the analytical and reductionist perspective of modern science and biomedicine."[38]

The idea of wellness of the human body as holistic included the moral aspects as well. The article on 'sleep' written by Shankaranarayanan,

[38] Marten Bode and Unnikrishnan Payyappallimana, "Evidence Based Traditional Medicine: For Whom and to What End?", *eJournal of Indian Medicine*, Volume 6. 1–20, 2013, p. 10.

Vadavannur Kollankode explained the idea that physical wellness was only a part or effect of the spiritual wellbeing and qualities. Many times while deliberating on wellness, 'detachment' and 'purity' or 'goodness' of the mind and behaviour were ideas that appeared repeatedly.

Shankaranarayanan explained that people don't understand that many of their illnesses were results of their lack of attention. If people should be able to enjoy the fruits of this human life, they had to follow the advice of their forefathers that "Food and behaviour should always be good; do nothing without proper contemplation; never be attached to anything: then you will be well."[39]

In an article written by P S Varier, *Kaivisham*[40] was presented as an illness and medicine was prescribed for the same. Numerous men and women of Kerala suffered from Kaivisham, there is no doubt, he wrote. "Whether Kaivisham got into a person's body accidentally or by his/her enemies, the impact is the same… If at least a little quantity of it got inside, no treatment would be effective until the last drop of it is taken out of the body…I was trying to invent a medicine for the same."[41]

The approach of Varier to *kaivisham* was neither accepting it as a black magic, nor discarding it as a superstition. According to the author, it was a

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[39] Vadavannur Shankaranarayanan Kollankode, "Sleep" *Dhanwanthari*, Book 4. No 1., p. 11.

[40] *Kaivisham* is a superstition traditionally held in Kerala by several people. The idea held is that there is a black magic practised by which people envious of somebody else or people who wish to get somebody addicted to them give some mysterious food items to the targeted person and can get him/her ruined or addicted to them. The impact of *Kaivsham* often manifests as mental imbalance (if the sorcery is done to ruin the target) or emotional or sexual addiction (if the sorcery is done to get the target addicted). The impact is considered grave and almost incurable. Only devotion, prayer and counter magical practices are expected to cure, and that too, very difficultly.

[41] P S Varier, "Kaivishaparhaaragulika (Kaivisham Remedy Pills)", *Dhanwanthari*, Book 6. No 11., p. 244.

reality with serious impact and it was common. At the same time, there was no mention that this was due to sorcery or that the remedy was counter magic. He considered it as if it was a physical, material issue and offered medicine for the same. This was how a traditionally rooted superstition was treated as if it was a material physical issue and as if there was no mysterious or supernatural element involved in it while not raising any argument or criticism about the superstition and simply accepting that *kaivisham* was creating a fatal impact in Kerala society.

Varier was not rejecting the traditional idea that the black magic of *kaivisham* was real and fatal. At the same time, he was trying to bring it to the purview of medicine. No black magic was needed to cure the impact of *kaivisham*, whether it was black magic or not. Thus, the wellness of the body, even against black magic, could be attained by medicine. The scope of medicine was thus extended to the possibility of guarding against black magic.

T Narayana Nambi translated and published an article on the ways to protect health. The article was taken from an English Medical Journal. "First, make physical work a regular habit. Do work and enjoy the same. The work one likes itself can be an enjoyment. This should not be too much. Working for eight hours a day is sufficient."[42] The article also had an integral approach to health. The idea that a healthy body requires plenty of physical exercise was later reflected in promoting playgrounds in schools. The state added immense significance to the play grounds and was even ready to acquire land

[42] T Narayana Nambi, "Aarogyarakshaamaargangal (Ways to Protect Health)" *Dhanwanthari,* Book 7. No 11. p. 127.

for the purpose and to extend financial aid and loans to help the school managements to develop playgrounds.[43]

The idea of a healthy body was not separated from the idea of a healthy mind and healthy attitude and character. In fact, more importance was given to the moral aspects than to the physical aspects of character and wellness. In order to remain healthy, one had to have healthy habits. Healthy habits included the habits of physical exercise, work habits and food habits. Healthy work habits included the desirable attitude to work. In other words, purity in mind and attitude were essential for physical health.

The mind should be alert and intelligence should be sharpened through regular use of it. Notably, studies in science subjects were expected to sharpen the mind and keep it alert. Regular updating of knowledge was expected to keep the mind and intelligence energetic and that would in turn energise the physique too. "Use your intelligence for some purpose. Never be lazy. Update your knowledge. Do study Mathematics, Biology of Geography or some other science. Never waste your life."[44]

The article held that as far as wellness of the body is considered, that was mainly a product of one's mindset or ideas held by one about his/ her own wellness. The principle held is "as one thinks, one would become." Thus, in order to remain healthy, one should hold the firm belief that he/she is perfectly healthy. The thoughts affect the physique and the thoughts are fruits of the physical processes. "Never talk about your diseases, don't even think

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43 Regional Archives Ernakulam, File No. B 52 2 7820/40, Acquisition of Land for a High School Play Ground, 1940.

44 T Narayana Nambi, "Aarogyarakshaamaargangal (Ways to Protect Health)" *Dhanwanthari*, Book 7. No 11., p. 127-128.

about them… think that you are cured. Convince yourself that you are healthy and devoid of all diseases."[45]

The mind and body are considered acting together and contribute towards the maintenance of health of the individual. The advertisement about 'Rejuvenating Tonic' appeared in the *Malayalarajyam* Daily on 26.10.1952 spoke about the tonic that would help keep all the diseases away[46]. This would be achieved by providing minerals and preventing loss of semen through urine or wet dreams. The basic idea was that general weakness of the body results in the loss of semen from the body which would finally cause diseases. Linking general health with sexual health and considering the ability to hold semen as a sign of health of the body is evident in the advertisement. This notion contains within it the notion that health has a moral aspect as well.


ധാതുമിത്രം
(Rejuvenating Tonic)
ധാതുക്കളെ വർദ്ധിപ്പെടുത്തി ആരോഗ്യത്തെ വർധിപ്പിക്കുന്നും, വിരിക്ഷ്യ, സ്വപ്നസ്രവണം, വീര്യസ്രവണം, മൂത്രത്തിൽകൂടിയുള്ള വെള്ളപോക്ക്, മൂത്രത്തെ മൂൻപോ, പിൻപോ ഉള്ളിൽ പോകുക മുതലായ ലൈംഗികസംബന്ധമായ എല്ലാവിധ രോഗങ്ങളേയും നിശ്ശേഷം ശമിപ്പിക്കുകയും ചെയ്യും. വില 1-ന് ഉ. 7-0-0. 3 വീതം ഉ. 4-0-0.
നിർമ്മാതാക്കൾ: മാധവവിലാസം ആയുർവേദവൈദ്യശാല, തിരുവായാടി, ആലപ്പുഴ.
N B. എല്ലാ സ്ഥലങ്ങളിലും ഏജന്റുമാരെ ആവശ്യമുണ്ട്.

As far as food recommended by the article for a healthy diet[47] was concerned, it followed the traditional upper caste Hindu notions. "Eat moderately and include curd or butter milk in your daily diet. Can have a little non-veg food, better avoid that too. Protect your feet with footwears. Do not

45 Ibid.
46 *Malayalarajyam* Daily, 26.10.1952
47 Ibid.

drink water while you eat. Drink water during the interval between two sessions of eating. Eat only fruits once a day"[48], the article read. The English food habits and preferences were not considered recommendable. Non vegetarian food was not considered advisable. Curd and buttermilk were considered unavoidable. There were restrictions and conditions to be followed regarding drinking water and regarding eating food.

Sleeping time is considered very significant as far as the healthy lifestyle is considered. Nine hours of sleep a day was advised and the ideal time for that sleep is also prescribed. "Go to bed at nine at night and do not get up before six in the morning"[49], the article suggested.

The doctor considered physical health and well-being inseparable from the mental and moral aspects of life. Articles in *Dhanwanthari* were regularly giving advice on food, exercise and sleep to maintain the wellness of the body was prescribed so as to maintain the mental and moral aspects towards attaining perfect health. The advice regarding the attitude to be developed for ensuring good health mainly focused on the moral stands. Avoid jealousy and forgiving every error done against one were important elements of the attitude to cultivate in one to attain good health. Analysing the suggestions given for the maintenance of a healthy body, it was found that there was no distinction made between the scientific material suggestions and the moral suggestions. This could be understood as a natural outgrowth of the integral approach followed in traditional medicine in which the physique, the mind and the soul are treated inseparable and integrated.

The advice regarding care for good health given by the doctor included spiritual and moral advice. He asked to not talk about the disease to anyone.

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[48] T Narayana Nambi, "Aarogyarakshaamaargangal (Ways to Protect Health)", *Dhanwanthari*, Book 7. No 11., p.128.

[49] Ibid, p. 129.

Do not hold a grudge against anyone. Forgive those who do bad to you. Never be envious. Never let vengefulness enter your mind. Never reveal secrets. Believe that everyone is only virtuous in accordance with her/his ability and idea. Do not conflict with anyone, consider everyone needed. Be with children and love them. Pet some pet animals. Never kill anything and never utter cruel words.

Improve your character. Never ridicule anyone. Think that ridiculing words is bad. Repeat this idea to yourself. Avoiding ridiculing words is better than any medicine. Nothing enlightens your fame like the good words you utter and the good stories you tell. "These are the ways to improve your physical wellness. It is not only that the people who live in accordance with these guidelines would live long, but also that their lives would be highly valuable. They would live for a minimum of a hundred years and enjoy all good things in life."[50]

While deliberating on the dress style apt for male and female bodies, Ravi Varmma Koyithampuran kept two important criteria in mind. The first was the scientific nature of the dress to be selected. The second was the comparison and evaluation of the way of dressing existing in Kerala with the English style. For every understanding, the reference point was either the English way or the traditional way. In the discussion about the apt dress, Thampuran was neutral and he tried to give significance to the scientific aspects only. However, he was critical about the native dressing style.

Koyithampuran advised that dress should be thin and it should not restrict the movement of the body organs. If we analysed the ordinary dress people wear, it would be clear that it has many deficiencies. The local dress for men was 'mundu' and '*melmundu*'. This was neither necessary dress nor

[50] Ibid, p.130.

luxury. The women generally wore *'pudava', 'melmundu'* and *'raukka'* (blouses). *'Raukka'* was a dress that neither covered the body well nor served as a luxury. *'Pudava'* was not useful for anything other than damaging the waist. The European dress for males was somewhat good. English dresses other than belts, tight shirts and fashionable boots with sharp front ends were good according to him.

Whatever quality the English male dresses had; a hundred times worse were the English female dresses. "But, as we know, women live for fashion and they are ready to bear with any difficulty or suffering for that. English female dress cannot be justified by any science. That even causes certain diseases."[51]

Dresses that suit the time and space of Kerala then were to be fixed, Koyithampuran argued. Then he identified certain criteria for good healthy dress. Dress should protect feet, cover body and clad head. 1. No dress should be so tight that it may block the free flow of blood or the natural growth of organs. 2. Drees should not be using too much cloth and too heavy. 3. A dress should not be worn tight around the body. It should be worn so as to fall from the waist or shoulder. Boots were good for protection of feet. But do not wear boots with a narrow front.

For women, boots (same as men's boots, not like the high heeled boots of the English ladies), *'pudava'* or '*paavaada*' (skirt) around waist, a dress that covers the body and hands on the body (with an undergarment) and a headdress or umbrella, if she was moving out of home should be the dress. The *'pudava'* or '*paavaada*' (skirt) should not be worn too tight around the waist. The upper garments should not suppress the breasts. These were the advice for women that he had to make.

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[51] Ravi Varmma Koyithampuran, "Protocol of Health Care and First Aid", *Dhanwanthari*, Book 10. No 9., p. 97.

The criticism Koyithampuran raised was less in case of the English dress. The English male dress was acceptable to Thampuran. The only suggestion he had to give in the case of the male dress was that the front end of the boots used by men should not be too narrow. But the English female dress was not at all agreed upon. In his criticism about the English female dress, Thampuran never used any moral allegation or critique. He stuck to the scientific concept about dressing. The criteria he suggested were all from the point of view of the science of healthcare. But the suggestions given for an apt dress style for women included certain indirect suggestions.

The approach to male and female dress was slightly different. Thampuran took special care to mention no 'moral aspect' of dressing and to stick on to the scientific aspects only. He did not openly speak about the modesty or any such aspect of the dress. Neither for men, nor for women. However, there were two very noticeable differences while talking about the dress apt for women. He said that women should wear an undergarment on the upper body. This criterion was not included in the case of men. More noticeably, he mentioned that women should cover their upper body completely including the hands. This suggestion was also absent in the case of male dress.

What is the basis of wellness was a topic discussed several times in the journal Dhanwanthari. Often the idea expressed was that wellness was not physical alone. It had got a spiritual or moral aspect. Control over the senses was deemed to be a necessary condition for wellness and health. This was in the context that the Ayurvedic idea about the human body was that it was a combination of the physical, mental, moral and spiritual aspects. The spiritual and the moral are inseparable and the moral was always emphasised. The immoral was referred to as the "sinful" and the diseases were sometimes pictured as a natural impact of commitment of what was immoral.

Vettoor K P Narayanan deliberated on the relationship between morality and health. Working of the five sense organs should be moderate, he advised. Over exertion of the sense organs could cause many issues.

"Na peedayedindriyaani

Na chaithaanyathilaalayel" was the judgement of *Vagbhataacharya* in this regard, the doctor reminded. One could keep the sufferings of the diseases away by avoiding over pampering or over exertion of the sense organs and being careful to see what is necessary, to hear what is necessary and to enjoy only what is permissible.

Narayanan also advised to avoid listening to terrifying noises, smelling fault-smelling objects and touching mal-air and the like. But one had to be very particular about seeing beautiful things, hearing sweet voices, smelling fragrant objects, enjoying tasty food and touching fresh air and the like. One had to be dedicated in what she/he was doing, but also had to be moderate. "Those who see the wicked actions, hear the ill words, kill and eat the co-creatures and touch the women of others are definitely bound to suffer from diseases. It is not advisable to leave the senses free to their own inclinations. Have control on your senses"[52], he advised.

The whole world was considered to be influencing human wellness or health. What one saw and heard and touched influenced the health of the body. The government made the education for children free and compulsory towards the end of ensuring the well-being of the people.[53] The sensory experiences were deemed to influence the self that was inside and remaining inseparable from the body. The moral self was inseparable from the physical self. Experiences of the sense organs were taking in the outer world through

[52] Vettoor K P Narayanan, "Disease", *Dhanwanthari*, Book 14. No 8., p. 27.

[53] Regional Archives Ernakulam, File No. C-181, The Cochin Free and Compulsory Education Act, 1948.

the sense organs. And this outer world influenced the human body. The criteria for separating the desirable from the undesirable was moral in nature.

Athiyarathu Krishnan Nair initiated a discussion on the purposes of life. He ascertained the significance of the body with reference to the philosophy of the four purposes of life. It was only with longevity that humans could satiate all the *four 'Purushaarthams', Dharma, Artha, Kaama* and *Moksha* (the four purposes of life*). Vaagbhataachaarya*, the great Ayurveda teacher had said in his world-best *'Ashtaangahridayam'* that what man required first was longevity that helped achieve the four purposes of life and that man should strive for that. The literal meaning of the term 'aayuss' (which is Malayalam equivalent for 'longevity') was 'that which is always going'. "There is nothing worse than not giving proper attention to longevity."[54] What he was trying to say was that the human body that was the seat of the four-purpose oriented longevity was immensely significant. The same was the advice of the great Ayurveda teachers as well. *Kalidasa* also says: "*Shareeramaadyam khalu dharmmasaadhanam"* (Body first; dharma then only)."

The essayist stated that the purpose of life could be realised only through a sufficient life span which in turn could be achieved by a healthy body. According to him, the sexual energy of a person was the best indicator of a healthy body. This led him to conclude that the sexual energy of a person was a means that helped realise the purposes of life. The Ayurvedic treatment pattern called *Vaajeekaranam* helped maintain the sexual health intact. Thus, this aspect of Ayurveda was very significant according to him.

How the human body was perceived in this paradigm was very distinct. The human body was important, but not as an end, on the contrary, it was a

[54] Athiyaaratthu Krishnan Nair, "*Vaajeekaranam* (Energizing Man Like a Horse in Sexual Intercourse)", Dhanwanthari, Book 14. No 10., p. 113.

means. The human body and its health were important because a healthy body only could ensure a sufficiently long span of life. And that longevity was required for the attainment of the purposes of life. Thus, even while talking about the importance of life and body and the sexual energy of the body, these material factors and the care for the material body were justified by the spiritual purpose behind all of them.

Sexual energy and capabilities were desirable as they helped achieve spiritual purposes. As a natural continuation of this logic, it was argued that even health acquires a moral and religious dimension. The healthy body of an individual was the result of the purity observed in the life of her/his parents. Even longevity resulted from the same. Similarly, purity norms were to be observed in the life of an individual in the early youthhood if he/she wanted to remain healthy throughout life and sexually healthy throughout youthhood.

Athiyarathu Krishnan Nair deliberated on factors that provided sexual health, and its relationship with the overall health of a human body. He showed that the great scholars have assumed the average longevity of different species and that *Vaagbhataacharya* had estimated human longevity as hundred years. The cause of the birth of a human child was the coming together of the menstrual blood and semen respectively from father and mother. "If the menstrual blood and semen are not pure, the child would have to suffer from illness all through its life. The wrongs committed by parents make the child's body just like a worn-out tree."[55]

Humans are generally interested in sexual pleasures, Nair pointed out. Young men and women usually ignore their body while they seek sexual pleasure. But they seem to not realise the reality that sexual pleasure can be

[55] Ibid, p. 115.

enjoyed only if the body is maintained. They not only spoil their youthhood, but also make their offspring ill for all their life span, he wrote.

The point that *Vaajeekaranam* was not intended to serve just material carnal interests was further argued by stating that it helped increase the power for procreation. *Mr Nair showed that Vaagbhataachaarya* had divided the *Ashtaangahridaya* into eight *Thantras.* Actually, it was through the *Rasaayanam* and *Vajeekaranam*, which was one of those eight strategies, that a man became a 'real man'… Knowledge about '*Rasaayanam*' should be through *'Vaajeekaranam'*. However, *rasaayanam* was for both men and women, while *Vaajeekaranam* was exclusively for men… The literal meaning of the term *'Vaajeekaranam'* was 'Making man as strong as a horse in sexual intercourse'.

According to the author of the '*Rathithanthram*', men ruin their most significant ability of sexual intercourse through the wrongs they commit in the beginning of their youthhood. This could be cured only through *Vaajeekaranam*, Nair argued. He thought, "everyone would share my opinion that *Vaajeekaranam* should be practised by every man for well-being not only in life in this world, but also in the life after death."[56] He explained that one should not wonder how *Vaajeekaranam* was necessary for wellbeing in the afterlife. Sexual intercourse causes childbirth and according to the sacred texts, it is the son who saves one from the hell called 'Puth'. Thus, by energising sexual intercourse, Vajeekaranam causes childbirth and that ensures well-being after death, he concluded. Procreation could provide one with a son. And, the son was the one who was going to save the individual from the hell that is called *'Puth'* (the son is called *'puthran'* because he saves *("thraananam")* his father from the hell called *'Puth'*). Ultimately, sexual prowess leads one to earn bliss after death. This was arguing in favour of

[56] Ibid, p. 117.

vajeekaranam, the Ayurvedic technique for improving sexual prowess, by providing sex a religious dimension.

The negotiation of the idea of a healthy body included negotiation on the dress and food that are best suitable to the men and women of the land. This discussion considered the human body as a universal category and caste and such social differences were separated and deemed to be irrelevant in matters affecting the human body as such. At the same time, the same logic of viewing the human body as a universal category was extended to take the example of Japanese food habits to uphold vegetarianism. Again, caste notions about 'food purity' also were not negated. Elements of a healthy body were sought to be identified. Discussion on the issues pertaining to the female body included underscoring the traditional social and family roles entrusted upon women. Looking into the concept of the wellness of the human body, it was concluded that wellness of the body owed not only to tangible or medical elements, but also to moral, mental and intellectual aspects of life. A level of control of the senses and *vaajeekaranam* would ensure effective sexual life and that would be an indicator of a healthy body. Thus, the health of the body was identified to be something resulting from an integrated approach to life.

CHAPTER 5

THE SOCIO-POLITICAL EXTENSIONS OF THE NEGOTIATION

Negotiation of the idea of a healthy body had direct socio-political extensions. The understanding of body politic and an extension of the body individual was one example. To ensure the health of the individual body, public health measures were inevitable, it was recognized. It was taken up by the native and the colonial states as well as the various medical knowledge systems while holding divergent ideas regarding how to ensure community health through precaution against pandemics. As it was deemed to be an area where western medicine was successful, the negotiation was also in that terrain. This involved correction of traditional ideas in the light of 'scientific knowledge'. Growing nationalist discourses of the time were extended to the field of health care and the concept of a 'Hindu body' that was both politic and medical at the same time was negotiated. Social reform ideas also had their bearings on this negotiation. Physical wellness and the role of state in ensuring it were the other important concerns whereto the negotiation was extended.

Public Health

The state in the region which later became Kerala during the time maintained its hegemony, of which the concept of welfare state was a major force. Health and aligned areas came under negotiation in this context. Steps taken to prevent the spread of contagious diseases were in accordance with the principles and ideas of western medicine. Even the Ayurveda medical publications that were intended to promote that stream of medicine were bound to follow the government instructions regarding the publication of colonial medical officers in this regard.

The Government asked the editors of *Dhanwanthari* to publish an article on tuberculosis prepared by a panel of expert English doctors which was translated by someone under the anonymous name MG. The article gave a detailed instruction regarding the dos and don'ts related to the care to avoid the spread of tuberculosis. Significance was attached to pure air. The patients were advised to stay outside home, in pure air and in the sun. They were also advised to avoid cold, rain and dust. Avoiding spitting in open space was also asked to do. Patients were asked to use a towel to keep their face clean and they are advised to keep social distance about five to six feet. Patients were asked to eat a good quantity of food. They had to avoid any practice that could cause spread of the disease. Wearing woollen dress and avoiding kissing and such body contacts also were recommended.

"We are publishing an article prepared by a panel of expert English doctors and including their opinions about tuberculosis, the ways to prevent its spread, under the orders of the government and translated into vernaculars for publication, translated and sent to us by a person named MG."[1] The instructions were thus published in response to government orders. And the article thus published clearly stated how the people had to take precaution against the contagious disease. The main advice was regarding cleanliness which was factual, but also rooted in the colonial concept of an aligned environment of the colony that caused ill-health. As David Arnold noted, the native indigenous environment was viewed by the coloniser with prejudice. "This, provokingly, was 'uncolonized space' in Western eyes, an abode of ignorance and superstition, a place of dirt, darkness, and disease."[2]

"This disease spreads mostly through contact with the infected person and also through mal air. It spreads quickly in areas where there is absence of

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1 M G, "Tuberculosis", *Dhanwanthari*, Book 9. No. 5., p. 196.

2 David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India,* Los Angeles: University of California Press, 1993, p. 256.

cleanliness and also in areas that are thickly populated. To put it short, we can say that it happens because of the neglect of the science of physical wellness."[3] 'Neglect of science of physical wellness' was pointed out as the major reason for the spread of the disease. In making this statement, actually, the writer was questioning or even repudiating the scientific nature of the traditional medical practices of the land. Those centuries old systems of the land were not accepted in this brief, not as 'sciences. It was not only the upkeep of the environment or simply cleanliness which were not scientific, but also the social practices and morality and legal system which needed to be 'scientific'. "A belief that Indian women were more attuned to their environment. Twining, for instance, thought hysteria was rare among Indian women because of "the modified scale of sympathies" between body and climate which saved Indians from many of the complaints which afflicted Europeans."[4] The article on protective steps to be adopted against the contagious disease clearly brought forth this conviction the writer had. "The Indian women who spend most of their time in the unclean atmosphere of their houses are easy prey to this disease."[5]

During the times of Plague in the early 1900s, precautions were advised by a modern English doctor and it was published by the *Dhanwanthari*. It was isolation, cleaning and other precautions against infection by microbes.

If someone is found having fever in an area where the epidemic is identified, then it should be doubted as the epidemic, the article advised.

The main method to do it (preventing the spread of the epidemic) as advised by the article was to prevent the epidemic from entering a new area

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3 K T Theyyunni Menon, "Plague or Pandemic", *Dhanwanthari,* Book 2. Vol 7., p. 133.

4 David Arnold, *Op.Cit.,* p. 255.

5 K T TheyyunniMenon, "Plague or Pandemic", *Op. Cit.*, p. 134.

and to destroy it before it spreads to others even if it enters a new area. If a person from an area where the epidemic was identified came to a new area where it had not yet been reported, then that person should not be allowed to mingle with people and should be kept in isolation for ten days and should be observed to see whether any symptom of the disease was seen. The person should be in isolation for one more month after getting cured of the disease. Then, all the dress and other things used by the patient should be set to fire.

Just as in the case of the people, no object or goods shipped from an infected country should be unloaded in a new country before seven days after it reached the coast and no one should be allowed to enter that ship before the stipulated time gap, the article read.[6]

The attempt to prevent the spread of the contagious diseases were also accompanied by the development of such facilities in the government hospitals. For example, the Kerala State Archives at Thiruvananthapuram preserves files that discuss the need to construct and maintain separate exclusive wards in the Kanjirapally Government Hospital for treatment of the patients affected by contagious diseases. The Durbar Physician wrote to the Dewan of Travancore on 20th May 1901: "I have the honour to forward for the favourable consideration of the following extract made on my inspection of the Hospital, Kanjirapally, on 27th March, 1901.

iii buildings

A Pooliah ward, now an old dead house, being used as a Pooliah ward.

A contagious diseases ward, yes a semipermanent shed.

6 Ibid, pp.160–161

Furniture…"[7]

"Plague became a problem only after its probable reintroduction to India in 1896 and was largely controlled by the 1920s."[8] The state action, promotion of the western medicine and the instruction given to all the traditional medical streams to follow the instructions of the Allopathic experts in times of crises like that of the contagious diseases, was medium to the establishment of the hegemony of western medicine.

Writing on the communicable disease syphilis, the author attempted to trace the place of origin of the disease. He did it with the help of etymology and history. The Malayalam term for Syphilis, *Parankippunnu*, was analysed to prove that the disease was of French origin. Then the article explained why the ancient teachers of India had not studied about the disease. The analysis led to two important conclusions with one assumption considered unquestioned; that the ancient great teachers of India could have left no important disease unstudied. The conclusions derived on the basis of this understanding were, first, syphilis could not have been there in India before the arrival of the Europeans, and second, Europeans imported serious diseases to India.

The article on syphilis started with the observation that for some time, numerous new diseases that had not come in the attention of the great teachers of the land and had no chance to come in their attention have been coming into India. One among them was '*Firamgarogam*' or '*Parankippunnu'*. The local people also use the terms '*Ushnappunnu*' or *'Parankippunnu'* to refer to it. This very term leads us to assume that this disease was brought to and spread in India by the *Parankis* (the Firangis, ie, the French). The use of the

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7 State Central Archives Thiruvananthapuram, File No: 10763 (3), Acquisition of Land to Extend Hospital Facilities

8 Jayant Banthia and Tim Dyson, "Smallpox in Nineteenth-Century India", *Population and Development Review*, Vol. 25. No. 4., December 1999, p. 650.

term '*Kappal*' (Ship) to refer to this disease reinforced this assumption. Some people opined that the term *Paranki* stood for the Portuguese and thus the disease was spread by the Portuguese. Some others theorised that '*Firamgam*' was the Sanskrit version of France and thus *Firamgarogam* was French Disease and that the assumption was correct because the English name of the disease, Syphilis, originated from a French term for mutual love and because the beauty and freedom of the French women are well known. "But some may doubt how *Bhavamithran* who wrote the famous *Bhaavaprakasham* and lived in 1550, that is before the arrival of the French and after the arrival of the Portuguese, referred to it."[9] An assumption was added that even though the disease was brought to India by the Portuguese, it originated in France. In any case, everyone shared the idea that the disease was imported to India.

When the colonial government and the aligned western medicine viewed the environment of the colony problematic and causing spread of diseases, the colony and the local medical practitioners saw west and the incoming people from different western countries as agents of spreading contagious diseases.

An Ayurveda scholar was trying to explain the importance of cleanliness in fighting Cholera. In doing so, he actually accepted all the Allopathy ideas in this regard. However, he translated those ideas into the language and terminology of the Arya Vaidyam. The title itself reflected that, more than dealing with the ways to avoid cholera alone, the author tried to present cleanliness itself as a necessary prerogative for health and tried to identify and explain the basic principles of cleanliness. The approach was scientific; the author first defined the disease cholera and thereby showed that lack of cleanliness was the reason by which it spread.

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9 "Firamga Rogam (Syphilis)", in *Dhanwanthari* Book 2. Vol 9. p. 172.

Attukaal Neelakantappillai concluded that Cholera was an experience that resulted from the poison in the form of the microorganisms that came from the faeces or vomiting resulting from the Cholera infected persons and entered the stomach of a person through his nose or mouth. In certain seasons, and in all seasons, somewhere in India, it spread in accordance with the conditions of the weather. These poisonous animals are very small organisms. They are so light that they are carried by air. These organisms multiply if they enter water. And if the water is polluted, they multiply very fast, but they perish if put in clean water. "Thus, drinking water should always, especially during cholera seasons, be kept clean. Cleaning all wells in the villages is imperative."[10]

Thoma Katthanar from Pala, an Ayurveda doctor, strongly argued that a major hindrance in the path of progress of Ayurveda was that many of the Ayurveda practitioners kept their traditionally acquired knowledge about treatment and medicines a secret. He argued that this practice had been a cause of the decline that the Ayurveda stream of medical science was facing. He strongly opined that the practice should be given away. Ayurveda doctors should share their medical knowledge so that it could be useful to both the people and to the stream of medicine. He also shared his knowledge about the effective medicine to cure Jaundice.

Thoma Katthanar believed that one of the causes of the decline of our stream of medicine and the rise of other streams was that many of the great doctors do not reveal but keep their knowledge about infallible medicines a secret. No one could estimate the number of infallible medicines that were invented by the forefathers. Many of them had been lost forever because of this attitude of certain doctors. But he had no doubt that, still there were many doctors who knew about infallible medicines. "In order save such knowledge

[10] Aattukaal Neelakantapillai, "Laws of Cleanliness", *Dhanwanthari*, Book 3. No 8. p.35.

from perish, I join the request of the Dhanwanthari that 'the knowledge of infallible medicines should be published'"[11]

He presented his idea that the Ayurveda medical stream would progress if the knowledge possessed by various experts personally and by virtue of knowledge acquired by legacy be shared and personally kept books and records be published. This was an awareness inspired by the model of the standardised and organised nature of the western medicine introduced to the native medical practitioners under colonial rule. In other words, the industrialised version of the western medicine – one in which there was a mechanical and well-defined system in place for functioning – caught the attention and approval of the traditional medical systems. This was a process going on in parallel in colonies in general. "In industrialization lay salvation, they believed: but it was also thought necessary to avoid the pitfalls of blind imitation and crude industrialization. Efforts were to be made not to lose a human, any Indian, face. The colonists had talked about moral regeneration for a long time. This, the nationalists viewed as propagandist in nature. Instead, they dwelt upon a 'synthetical' economic and industrial regeneration."[12]

An essayist gave instructions regarding how to keep the body clean to prevent cholera. The suggestions for proper maintenance of cleanliness of the body included those for cleaning the body, ensuring cleanliness of food and cooking and also of water and other resources. Here, the last suggestion, was not to be afraid of cholera. The suggestion was that the fear element could cause ill effects to the body. The essayist considered the mind as part and parcel of the body. Thus, the definition for body in the context was physique

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[11] K T Thomma Katthanaar, "Siddhaushadham (Use of Effective Medicine, Infallible Remedy Medicine)", *Dhanwanthari*, Book 4. No 2. p.39.

[12] Deepak Kumar, "The 'Culture' of Science and Colonial Culture, India 1820-1920", *The British Journal for the History of Science,* Vol. 29. No. 2., June 1996, p. 208.

plus mind and it was comfortably expanded to the food one ate and the surroundings in which one lived.

Dr King's advice to keep the body clean for fighting Cholera were published.The advice included ten points to be noted. They were:

1. Keep your body and clothes clean as much as possible. If the body is weak, take a bath in lukewarm water only.

2. Food should not be luxurious, but protein-rich and of good quality.

3. Avoid all types of plants, fruits and leaves that may cause diarrhoea from diet.

4. Over-drinking of anything, careless walking, sleeping less and getting soak or being in moisture are all to be avoided.

5. Never use cooked food once it gets cold. Be careful that flies do not sit on food. Never eat plants of leaves raw. Wash them well in boiled water before cooking. May use salt in food, but it should not be allowed to be too much and cause diarrhoea.

6. Law quality water should not be kept at home. Use only pure water.

7. Milk and water for cleaning the mouth, cooking or drinking should be boiled before use.

8. Take no medicine that may cause diarrhoea.

9. In case of any sign of diarrhoea, take medicine for the same. Anyone experiencing diarrhoea twice in 24 hours should do this. And,

10. Do not think about, talk about or fear cholera.[13]

[13] K V, "The Easy Cleanliness Laws of Dr King", *Dhanwanthari,* Book 4. No 10., p. 231.

Vaidyan Thechunni Thomas argued that Ayurveda was better than Allopathy for treating Cholera, at least in our land. He tried to prove the argument with reference to his own personal experience. However, the Vaidyan was not challenging the efficacy of Allopathy. Instead, he assumed that Ayurveda was better for the treatment of Cholera in this land, maybe because of the climatic and such factors. He said he regretted saying that in his area all the five persons who underwent Allopathy treatment for Cholera died. It was seen that Aryavaidyam was better than Allopathy for treatment of Cholera in his area, he claimed. The forefathers invented Aryavaidyam so as to suit the conditions of weather and land. He expressed his opinion "that if an experiment is conducted by treating 100 cholera patients with Allopathy protocol and another 100 with Ayurveda, the advantage of Ayurveda will be proved."[14]

It may be noted that the Vaidyan was ready to subscribe to the idea that the Indian environment could cause spread of disease and its acuteness and even the inefficacy of western medicine in treating contagious diseases. The claim made on the basis of personal experience, according to Thechunni Vaidyan was that Ayurveda was better than Allopathy for treatment of Cholera. Still the conclusion had a compromising nature. It indicated the readiness to accept the idea of 'impact of our environment on the spread of disease and treatment of diseases'. The recognition of the impact of the environment can be seen to have evolved through negotiation.

Correcting Traditional Concepts Regarding Health of the Body

Post-delivery bath in cold water had become a common practice in Kerala. Eledathu Thycadu Divakaran Mooss, a writer and Ayurvedic scholar, wrote about the practice criticising it using logic and ideas from English

[14] Thechunni Vaidyan & Thomas Ollur, "Cholera", *Dhanwanthari*, Book 5. No 1. p. 36.

medicine. The author described the problems caused by the post-delivery bath in cold water. He argued against the evil custom in the language of a social reformer. Two things he pointed out as causing the social evil were patriarchism and casteism. Another observation was that the people of the time did not understand the injustice of the custom because it had been in practice when they were born. Thus, the call was to look at and study a custom from the point of view of logic and science rather than from the point of view of customs and practices. He also emphasised on the responsibility of the doctors and local medical practitioners to stop this unscientific practice.

Bathing after delivery is one among the age-old dangerous practices among *Malayalis.* Even if the delivery was done at midnight; even if it is raining cats and dogs; even if the lady is too tired; even if the pond is too distant, it was ordered by the elders that the lady who delivered should not even take gulp of water until she immediately went to the pond and took a bath in the cold water. Even though a minority nowadays do not observe this custom, most of the people, especially the upper caste people, follow it completely. There are many examples of the tragedy that many women who are extremely tired due to delivery and other issues fall asleep while being dragged to the pond for a post-delivery bath. What a pity! Who created this cruel custom? It should be doubted that this is a creation of some ancient men who were so cruel to women. Otherwise, it could be assumed that this custom began with the beginning of the necessity of the upper castes to accept the help of some lower castes at the time of delivery. We don't find it an injustice as we are used to it from a young age. "This practice is to be stopped by the local medical practitioners; but it is doubted that even their going near them would demand a purging."[15]

[15] Eledathu Thycaud Devakaran Mooss, "Prasavasnanam (Bath after Delivery)", *Dhanwanthari,* Book 4. No 5. p. 75.

While criticising the custom of post-delivery baths and arguing for its elimination, the practice and understanding of the English doctors was used to prove the point. The writer went to the extent of maintaining that it was the duty of the local medical practitioners to put an end to the practice. However, the writer tried to distinguish between the custom and the stance of the traditional medical system. According to him, the post-delivery bath was just a custom; it was sanctioned neither by English medicine nor by Ayurveda. He made it implicit that he did not move away from the Ayurvedic notions even when he argued against a local practice, he himself agreed as allowed by the Kerala society. More importantly, here the argument was that the practice was unscientific and undesirable and both unscientific nature and undesirability were proved with the help of the notions of English medicine. He just added that the Ayurvedic notions were not different. The point of reference was, of course, English medicine.

The practice of *Prasavasnaanam* could not be stopped if Mooss described how much the practice was criticised by the English doctors and made them feel bad, he observed. The English doctors considered it an important part of the treatment of the just delivered women to let them lie down still for a prescribed length of time without moving even for excretion. This was the opinion of the local medical practitioners too. It was a pity that they didn't give proper attention to it, as it was in many other cases, he felt. "People do not care for any of these. The bath will go on its course. Some may open their eyes once they are in trouble. What is the use?"[16]

The writer went on to analyse the origin of the practice of post-delivery baths. He found the origin of the practice in the caste system. The midwives who assist women of upper castes at the time of delivery came from lower castes. The practice of untouchability became an issue on this occasion. On

[16] Ibid, p. 76.

the one hand, the service of the lower caste was required as the expertise lied with them and because the very service was considered to be impure and thus suitable only to lower castes. On the other hand, the assistance at the time of delivery necessitated body contact between the woman delivering and the woman assisting. There emerged the issue of caste and untouchability. Men did not face the issue and casteism was always associated closely with patriarchism. All this had already come up in the arguments of the writer but he was not ready to criticise either casteism or untouchability. The writer resorted to the typical method of arguing against the unhealthy, unscientific practice with reference to English medicine, and then arguing that the evil practice was not 'actually' sanctioned by the traditional medicine, but only a deviation from the original course recommended by the traditional medicine. One may notice the parallel approach in the social reform movements like that of the Arya Samajam. There the argument in general was that, all social evils that were seen as 'social evils' in the light of the western thought and knowledge were not originally sanctioned by the Vedas or religion, but only deviations.

Notably, the writer ended up not criticising the caste notion of untouchability which was the natural course of logical argument, but by arguing that lower caste women were no better in the art of care at the time of delivery. Rather than arguing against the care notion of impurity, he recommended a solution to the problem by evading the need to accept the help of lower caste women. He argued that the women of upper castes also could attain this expertise and knowledge by experience. In doing so, he was able to evade the problem of the notion of untouchability, but he was also, even though unstated, overlooking the issue of the notion of the impurity of the work of a midwife who assisted at the time of delivery. Maybe, the writer was subscribing also to the patriarchal notion that the work was apt only for women, whether lower caste or upper caste.

Mooss identified a caste basis for the evil practice. He wrote that he didn't want to say that the water devil will permit people to do anything, even if they understood the problems in advance. It should have been after the upper castes got corrupted and began to act as if they were not to be touched that they started using the service of *Velatthis* (Women of a lower caste who acted as midwives) in order to avoid complications at the time of delivery, he assumed. In some places, the position of Velatthi was held by *Kshurakatthi, Mannaatthi, Kolachhi or Malayi* (Women of different lower castes). He added 'with much pain' that, those days, those people claimed their rights but did not try to understand the possible dangers at the time of child delivery or take responsibility to solve those issues. Even though the women were seen to have had some knowledge regarding delivery as they had gained much experience, the same was seen to be acquired by many old women of other castes as well and thus it seemed that it did not cause any advantage in appointing women from these specified castes rather than the women from once own castes for help at the time of child delivery. "Thus, it should be taken care of that the lower castes do not touch at all. If so, the purity – impurity issue can be solved to a certain extend"[17]

The main issue addressed in the article was that of the unhealthy custom of post-delivery bath that originated from casteism. Along with this, the necessity of internal cleanliness, an idea purely from English Medicine, was pointed out and argued for. Here again, the touchstone was English medicine and the author only supplemented it by maintaining only silence about the notions of the local medical traditions in this regard. His final conclusion was using a logical declaration that "*Apamaryyadakku keezhmaryyadayilla*" (There is no sanction by custom for evil customs).

[17] Ibid, p. 78.

He said he was not differing from reminding that the problems caused by laxity in internal cleanliness, cleanliness of vagina and uterus, are in no way less than those caused by the compulsion to take bath immediately after child-delivery. It was proved by several examples that the practice of "giving water" and the like were not at all sufficient in this. English doctors did logically argue that this caused fever after delivery and that if a woman was seen to have caught fever after delivery, then the first preference shall be given to internal cleanliness, he opined.

Ayurveda does not forbid a bath in lukewarm water to women after delivery, in case they are healthy otherwise. English doctors forbid even this because they fear the women should not move at all. Thus, they advise that even to remove dirt of sweat, no bath but only wiping with a piece of cloth or sponge should be used, Moss differentiated the positions taken by the two systems of medicine on the issue. He concluded by "noting that, as no medical tradition advises the practice of plunging into cold water soon after delivery, we must fix in mind that there shall not be any custom of evil practices *("Apamaryyadakku keezhmaryyadayilla")* and should eradicate this practice."[18]

The pattern of argument followed in this article and the negotiation of the social evil or ritual practice can be seen following the general pattern of social reform movements of India in the nineteenth century. "Social reform under the auspices of caste organisations, thus, took several forms, though the secular, westernised sabhas and conferences outnumbered the other forms. While admitting that social reform through disciplined caste bodies often aroused more enthusiasm and proved more lasting, than through general associations, social reformers who were not associated with the caste reform

[18] Ibid, p. 77.

movements came to dispute their value for Hindu society as a whole."[19] It may also be mentioned that the reform movements carried elements of revivalism and that this also received reflection in the negotiations undertaken in the realm of medicine.

'Pathyam' is one of the basic aspects of Ayurveda. It means, repudiation of certain food items while a person is under Ayurvedic treatment. The items usually prescribed as *'pathyam'* include the food items that are hot or sour in taste. This causes difficulty to patients from two points: firstly, they have to restrain themselves from taking the food they like, and, secondly, at least some times, the lack of proper intake of food may cause problems to the patient.

Here, the writer argues that *'pathyam'* was the worst disappointment of Ayurveda in its comparison with English medicine. He also showed the example of deficiency problems sometimes increasing as a result of the *pathyam* observed as a part of the treatment of the same problem.

The editorial article in Dhanwanthari on 'Pathyam' argued that the doctor should carefully analyse whether the restrictions he would suggest could cause problems and also that whether the sudden shift from the food pattern followed would cause some issues.

The article said some may raise questions like 'Where does this practice come from?' or 'Can this be one without any authentic reference for the same?' Then the author gave his opinion.

The doctors of the times must have paid much attention to the treatment of leprosy. As part of the treatment of it, the repudiation of the food

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[19] Charles Herman Heimsath, "The Local Social Reform Movements In Northern India", *V Dayananda Saraswati and the Social Reform Movement in Northern India*, Cambridge University Library, 1964, p. 290.

items considered objectionable for the patients became a practice. The acidic and other sharp tastes that were not allowed for the leprosy patients gradually became tastes that were considered *'pathyam'* while certain ayurvedic medicines are administered. The same medicines were used for the treatment of some other diseases as well. Now, the *pathyam* also was extended to the patients of those diseases… In course of time, it became a practice that these tastes were *pathyam* whenever a person took any Ayurvedic medicine. It seemed that it was the practice which finally became the notion that a person under Ayurvedic treatment for any disease should not take any food item hot, sour or salty, he assumed.[20]

The author continued to explain that the practice of *pathyam* was needed and gave a generalised list of *pathyams* to be observed while undergoing Ayurvedic treatments.

According to him, the restrictions listed below were to be followed by the patients of all diseases in general.

1. Use of raw water is not allowed for drinking or bathing or cleaning the body. Use only lukewarm water for all this.
2. No coitus. Carefully avoid even a wet dream.
3. Excretion and urination should neither be denied, nor be forced earlier than natural.
4. No exercise, that means nothing straining the body to be done.
5. Avoid excess anger or sadness.
6. No sun, mist or excess wind to touch the body.
7. Don't travel much on foot or by vehicle.

[20] "Pathyam", *Dhanwanthari,* Book 5, No. 5, p. 109.

8. Don't speak loud or long.

9. Don't sit or walk for a long duration.

10. No smoke or dust shall touch the body.[21]

The ayurvedic scholar who authored the article sought to understand the shortcomings of Ayurveda with reference to and in comparison, with the western medical practices. *Pathyam* was something that naturally created restrictions and hardships for the person who underwent Ayurvedic treatments. This issue was not there while undergoing Allopathic treatment. But there were certain taboos and restrictions for the treatment of any disease, the writer agreed and gave a list of such restrictions. The Ayurvedic concept was upheld, but the negotiation itself originated out of the recognition of the difference with the Allopathic practice.

It was argued in the light of English medicine and the practices of the English, that *'prasavaraksha'* (service at the time of delivery) should have been done by medically qualified persons. The traditional way followed by the people of the land was to seek the help of the ladies of expertise in the field. They were women of certain lower castes who were entrusted with the responsibility of assistance to ladies and the babies at the time of delivery.

The essayist had several reasons to argue that the practice should end and that the service of doctors should be used at the time of delivery. Delivery did not require any medical attention in itself. But one could catch different diseases very easily at the time of delivery and thus medical attention is advisable. "Most of these diseases and the deaths at the time of delivery occur

[21] "Pathyam", *Dhanwanthari,* Book 5. No. 5., p.111.

due to lack of proper attention… Thus, to arrange for a doctor's service at the time of delivery in advance is very useful."[22]

"Exercise of hegemonic power in society leads to the internalisation of dominant ideas, which make possible structures of dominance and subordination. In a caste society such as Kerala, dominance and subordination was effectively worked out by the legitimising principles of Hinduism." The logic of entrusting the duty of assistance at the time of delivery to women of specific castes who were known as *pettichis* thus had religious shade. In other terms, the physical and medical assistance provided at the time of child delivery was a ritual social one as well. The ritual and social aspects of the occasion and the activity of assistance at the time of delivery were emphasised by the caste implications on the same. Thus, any medical suggestion to improve or correct the service at the time of child delivery could not be simply medical or physical; it had to be rather social and religious too. In this context, an argument in favour of some correction or improvement in a medical practice essentially became a stance for the socio-religious reform movement.

Enquiring on the reasons of child death, the writer found the absence of doctors at the time of delivery as one important reason. The local people were reluctant to avail the assistance of a doctor at the time of delivery. People generally clung to the practice of seeking the assistance of the traditional *pettichis* or midwives belonging to specific castes. The author strongly argued that doctor's assistance was helpful to ensure the health of the baby and mother.

A series of articles on child death were published by Dhanwanthari in its editorial page. The significance of the attention to be devoted to the mother

[22] RamaVarieru LMS, "Prasavaraksha", *Dhanwanthari*, Book 1. No 8., p.153.

and the new-born at the time of delivery was the key point of discussion. The practice of delivery time care in different parts of the world, the rough statistics of child death in different parts of the world and the steps to be taken to help the newborn to survive were discussed in the article. The article, as a part of its agenda, discussed the practices of the people in Kerala at the time of child delivery. Many such practices were analysed and found requiring rectification. "If one looks at the practices (associated with delivery) like taking certain oils without any thought about the digestions and just in the fear to violate custom, drinking a *'mukkudi'* prepared with the waste plants collected from here and there, serving water again and again for reasons not known, walking frequently and the unclean surroundings, one has to wonder how at least some women who deliver survive!"[23] The author added that women pretend that doctors have no entry in such affairs. The idea of scientific diet was later recognised by the state and it is attested by the appointment of a nutrition officer.[24] This was over confidence and the result would be either death or the inability to care for the children and impure breast milk.

The essayist also sought to argue that the new born baby should be fed by its own mother. He argued against the practice of some other women being made to breastfeed the newborn baby instead of its own mother. The arguments in favour of the reforms needed for better care at the time of child birth thus became one with the nature of social reform once again. This was, in another realm, arguing for the delivery care system to be modified in the light of the advantages made by the western societies in this regard.

Bringing to attention the issue of breast feeding the young born children, the article noted that it was a common practice among people that

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[23] Editorial Article - "Baalamaranam", *Dhanwanthari,* Book 1. No. 11., p.203.

[24] State Central Archives Thiruvananthapuram, File No: DHS B25, Appointment of a Nutrition Officer

the new born baby was breastfed by some other women instead of its own mother. He expressed confidence that there would not be any argument against the fact that it was the mother of the baby herself who should breast feed the baby. "The baby that receives every required element for its development from its mother would not have anything so suitable and good as its own mother's breast milk. Thus, as far as possible, breast feeding by any other woman shall not be allowed."[25]

Should Arya Vaidyam be reformed? The question was discussed in a series of articles published in Dhanwanthari. It was in the form of questions and answers.

Initiating a debate on Ayurveda reform, Ananthapurathu Koyithampuran noted that people had different opinions regarding the question whether Arya Vaidyam should be reformed or not. Some argued that the stream of medicine was perfect and thus no reform was needed. As there were different opinions regarding the question, the editorial board framed some questions and sent them to some knowledgeable people. They sent replies too. Given below are the questions and the answers sent by *Ananthapurathu Mootha Koyithampuran* and *Kerala Varma Valiya Koyithampuran.*

1. Is Arya Vaidyam acceptable free of shortcomings in its present condition? Why?
2. Should Arya Vaidyam be reformed? Why?
3. If reform is needed, what kind of reforms are needed? How can these reforms be made?

Answers given by *Ananthapurathu Rajaraja Varma Moottha Koyithampuraan*:

[25] Ibid, p. 204.

1. *Arya Vaidyam* is now suffering from the lack of wealth of the four-fold '*paadachathushtayam'*.[26]

2. The Questions II and III should be solved by strengthening the *Paadachathushtayam".*[27]

The four aspects necessary for the making of a good Ayurvedic Vaidyan according to the first expert, Ananthapurathu Mootha Koyithampuran, were guru, experience, skill and moral. He openly admitted that the medical system needed total repair and renovation. However, the renovation needed was explained with the help of the concept *Paadachathushtayam.* This expert seemed to be aware of the shortcomings of the system. But the reform recommended was not modernization or reform but revival. Only the recapitulation of what had been lost in course of time was required.

The second expert, Kerala Varma, also expressed the opinion that Arya Vaidyam should be reformed. For that, he gave the English medical system as a model. According to him, the state had a role to play.

Kerala Varma Valiyakoyithampuran stated that it was the lack of proper development for Arya Vaidyam that it did not try to keep the medicine ready and bestowed as it is done by the English doctors. In order to reform

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[26] *Paadachathushtayam* is constituted by the four elements of doctor, medicine, servant and patient. The science theorizes that each quarter of the *Paadachathushtayam* has to have four specific qualities. Good education from the guru, sufficient experience of witnessing *Vaamana* and other treatments, capacity to make guesses and the complete absence of sin by body, tongue or mind. The four qualities needed for medicine are imagination diversity in case of the essence and content, ability to cure many diseases, blending of preparation and refinement and suitability in accordance with time and space. The four qualities necessary for the servant are love for the patient, morality, skill and intelligence. The patient should have the four abilities, wealth, obedience to the doctor, ability to communicate his difficulties and symptoms to the doctor and presence of mind. As there is no perfection of qualities in either of these four quarters these days, there is no perfection for *Arya Vaidyam* now.

[27] Ananthapurathu Mootha Koyithampuran, "Should Arya Vaidyam be Reformed?", *Dhanwanthari*, Book. 4. No. 1., p. 14.

Arya Vaidyam, the recognition should come from the native rulers of Kochi and Thiruvithamkoor and from the nobles like the Zamorins of Kozhikode, he opined. In course of time help from the English government also may be sought, he suggested."[28]

The second expert also shared the opinion of the first expert that Aryavaidyam required reform. According to him, Kerala Varma Valiya Koyithampuran, what was required for Aryavaidyam was reform and not revival. He wanted reform of Aryavaidyam after the model of modern western medicine. The two experts shared the opinion that Ayurveda required 'reform'. But the changes the two suggested were different from one another. The first meant 'revival' while the second stood for 'reform'.

The presence of revival elements along with reform caused a slow, mingled and peculiar transformation and modernization of indigenous medicine in relation with modern western medicine. There were followings as well as oppositions to the western medicine simultaneously. "By the turn of the 20th century, there were oppositions from various, often contrary, quarters to the colonial discourse against indigenous systems… Unlike in the case of western medical education, the institutional developments in ISM did not bring an end to the traditional forms of training conducted through patasalas and through apprenticeship. In fact, the non-institutionally qualified practitioners constituted the bulk of the ISM practitioners even till 1990."[29]

Dhanwanthari published an article on delivery care that was already published in the book 'Childbirth' published by the Christian Literature Society. The article put forward a few arguments regarding the care to be taken for the delivery and upbringing of a healthy new generation. The

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[28] Kerala Varma Valiya Koyithampuran, "Should Arya Vaidyam be Reformed?", *Dhanwanthari,* Book. 4. No. 1., p. 16.

[29] V Sujatha, Leena Abraham, "Medicine, State and Society", *Economic & Political Weekly EPW,* vol xliv no 16, April 18 2009, pp.37-38.

significance of family life and the care at the time of child delivery were emphasised. The importance of availing expert assistance at the time of delivery was elaborated. The author categorically mentioned the importance of avoiding superstitious practices and baseless customs. Then the discussion progressed towards a deliberation on the age apt for marriage and openly criticised the practice of early marriage. The article openly supported the English idea of scientifically fixing the age of marriage. The article also argued that a healthy generation and a healthy nation could be developed only by taking scientific steps to ensure birth and delivery care. In other words, modern science, especially Allopathy, should be adopted to bring up a really strong national body.

The article observed that each year, many women die in India due to problems at the time of delivery or due to the post-delivery fever. About three fourths of deaths occurred due to lack of knowledge regarding child delivery or due to the defects of the care given during delivery. Scholars opine that death occurs during delivery due to the absence of proper clean air, rest or other necessities of life. Isn't it only natural that a person experienced only in haircut simply ruins a time-piece that is given to him for repair? the article asked. Just the same is the case when an old lady ignorant about human body and even alphabets and blindly following all the foolishness that they have heard from someone or the wife of a barber is entrusted with the care for the delivery of one's dear wife. Thus, it was concluded that delivery should be assisted by expert midwives.

The majority of the midwives are idiotic, superstitious and inadvisably decayed, the article noted.

"In order to give birth to healthy and energetic babies the parents should be mature by age; should be without the weaknesses resulting from

over-work; and should be with a healthy body maintained by clean air and good food."[30]

The article pointed out that the people in general during the time had certain customary sections of the society employed for the service at the time of delivery. It was usually the women of the barber caste who were employed for the purpose. Velan and Mannaan were also communities which were engaged in such services. "Here, medicine was not the monopoly of any particular community… the social characteristic of medicine can be understood from the multiplicity of the lower caste communities and families that had been practising medicine hereditarily."[31] The article noted that there were many communities that had been practising in certain aspects of medicine if not medicine as a whole. The Velan and Mannaan communities practised medicine and also were experts in providing assistance at the time of child delivery. But the author turned critical about this centuries old practice. He argued for the employment of the trained and educated persons in the service for the purpose. It was not the customs but the scientific training and knowledge in human physiology and anatomy and also in the process of delivery that was required. The argument in favour of the following of the English model of fixing of minimum age for marriage and healthy food and environment also was inspired by the modern western practice. It was in 1870 that eight Nair women were selected and trained in western medical care during delivery.[32] In 1886, a nursing college for girls from different castes

[30] Chirayinkeezhu P Govindappillai, "Delivery Care", *Dhanwanthari*, Book 5. No 1., p. 38.

[31] P Bhaskaranunni P, *Pathonpathaam Noottaandile Keralam*, Thrissur: Kerala Sahithya Academy, 2012, p.375.

[32] P Vinayachandran, *Kerala Chikithsa Charithram*, Kottayam: Current Books, 2001, p.60.

also was started at Kollam. Maternity Hospital worked as a separate institution until 1905 when it became Women and Children Hospital.[33]

The approach of the scholars of Indian medical systems to Indian practices during the time was considerably modified by the new sense of science and rationality spread by western thought, education and medicine. "Part of the power of the colonial medical discourse of the period lay in the manner in which medicine self-consciously conceived of itself as a science, based on careful local observation and eschewing the ill-informed "speculation" of the past and the rank "superstition" associated with Indian concepts of disease and healing."[34] Thus, the scholars began to look into the Indian social customs and practices related to the human body. Chirayinkeezhu P Govindapillai, for instance explored the practices of child marriage and he came to the following conclusions.

A major cause of infant death among Hindus is early marriage, Govinda Pillai identified. The same was one among the reasons why Hindu body was inferior in strength when compared to the body of the Europeans. There was nothing wrong in stating that 'most of the Hindus are children of children'. Infertility was also more common among women married at a low age when compared to women married after getting mature in age. Women usually reach puberty at the age of twelve in India, but she does not attain maturity then.

Minimum age for marriage should be sixteen, he suggested. "Eighteen would be better. For men, it should be a minimum of twenty-one. Perhaps, a higher age is advisable. Infant marriage is disastrous on other grounds too. It

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33 Ibid, p.64.

34 David Arnold, *Colonising the Body: State Medicine and Epidemic Disease in Nineteenth-century India,* London: University of California Press, 1993, p.15.

adds to the hindrances to girls' education and contributes to the number of child widows."[35]

The practices and lifestyle of the upper class including the kings and their families also came under review. The impotency of the kings of India in large numbers was shown as an example. "Raja Sir T Madhava Rayar once said that Indian princes now often have no issues and if at all they have children, they have either health issues or they are fools or mentally retarded. He also gives the example of the last king of Thanjavur who married seventeen girls a day and still had no issues."[36] This criticism needed the courage and logic offered by the new situations. The situations included the medical, the social, political and the intellectual situations of the time and they worked together to produce such negotiations. Later, the state restrained child marriage through legislation.[37]

The deliberations on the superstitions and social evils and customs and practices that needed correction in the light of the new sensibility was not one-directional. When the native practices and customs were evaluated and criticised using the intellectual tools provided by western knowledge, especially by modern western medicine in the context, there were also occasions in which the same intellectual tools were used to evaluate and criticise the western society and their practices. The native scholars found that there are superstitions in Europe too. For instance, Kunnathu Janarddana Menon pointed out two superstitious practices of English.

"There are superstitions related to medicine in Europe as it is in our land. It would be interesting to read about some of them.

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35 Chirayinkeezhu P Govindappillai, "Delivery Care", *Dhanwanthari,* Book 5. No 1., p.38.

36 Ibid, pp.38-39

37 Regional Archives Ernakulam, File No. IV 1116, The Cochin Child Marriage (Restraint) Act, 1941.

1. Many English people believe even today that paralysis can be cured by wearing a ring which is bought with the money earned by begging.

2. Countrymen of England generally hold that stomach issues can be cured by putting a cross on the stomach."[38]

Both the examples shown were practices of superstition associated with the human body and the curing of its illnesses. One superstitious practice had a religious aspect while the other was just a folk practice. The pointing out of such practices were intended to show how and why the acceptance of the need for reform of the native society did not mean that the natives were no way inferior to the English; if the natives were in need of reform, so were the English. Being in need of reform did not mean inferiority.

Ravi Varma Koyithampuran wrote an article in Dhanwanthri on Scientific Medicine and First Aid (Dhanwanthari Book 10, No 3). One of the ideas he wanted to emphasise was that the heart was not the source of emotions. In a reply to him, titled "A congratulation" and published in the next issue of the Journal, one author with the anonymous name M S N wrote that this idea was totally wrong. He was also critical about the language used by the doctor. He opposed the way doctors attributed female personification to nature and earth. In the same tone Ravi Varma replied, maintaining his position strongly on the issues discussed. An article by P K Varier added his own observations in this controversy and made his position clear, in complete support for the points raised by Varma and criticising the notions presented by MSN. It was clear that the article by MSN, in a ridiculing tone, was not accidentally published. It was published with the intention of raising some questions on the issue.

[38] Kunnathu Janarddana Menon, "Some Superstitions", *Dhanwanthari*, Book 7. No 3., pp. 55-56.

Varier argued forcefully in favour of surgery. Mr MSN had argued that the heart or brain should not be cut open. He used the poetical concept to prove the point. Varier argued that the practice of surgery was very much beneficial and it was necessary for not only research, but also for treatment of the patients.

Then he drove the generalisation that it was necessary to put the ideas presented by even the venerable ancient teachers of *Aryavaidyam* to the test of science. He argued that the only way to progress for any branch of knowledge was to accept the reality of the lack of all true knowledge given and to remain ever open for criticism and ever ready for correction. He said that *Aryavaidyam* could progress only by constantly testing the ideas it holds and refusing the theories that were proved wrong and by improving the ideas that were proved short of perfection.

The generalisation on the necessity to continue ever with research and improvement in *Aryavaidyam* led to Varier's observations about science itself. He categorically mentioned that science knowledge was never to stop evolution. It should always remain self-critical and should always grow. Science or scientific theories are never complete. Any science could continue to flourish only through constant review and refinement.

Varier accepted that everyone would definitely share the appreciation MSN wrote on the article of Ravi Varma Koyithampuran. But his advice could not be shared. He opined that Thampuran must repeal his opinion that 'Heart is a pool of blood' and said that the poetic concept that it is the source of intelligence and emotions was wrong. He requested to avoid the statement. He showed that it was now a well-established fact that the heart was not the source of intelligence and emotions. He said that MSN had written that 'the heart or brain of a living body should not be cut open.' He showed that *Vaidyas* cut open the bodies of numerous animals and organisms everyday as

part of research. He asked whether MSN was ready to say that those beings had no intellect or emotions. May be a little lesser than man, but even the tailless monkeys have intelligence, he observed. It should also be noted that there were many humans living with only one of the two lungs as the other had been removed through surgery. There were records to show that a person whose heart was injured lived for nine more days after surgery. He said he himself had seen several instances of open head surgeries. He could even show the same to MSN. If he still refused to admit, he can only say that he was as mistaken as the poet who wrote those lines.

It was a must to respect the words of the ancient scientists, Varier agreed. But, if they had gone wrong somewhere, it was always better to accept the reality than blindly believing what they told. *Vaidyas* should – like Mr MSN – neither avoid criticising them, nor let people believe what they are told without questioning. This was the reason why *Aryavaidyam* was not progressing. The forefathers had made several discoveries and had written about them. But science should be seen as a living tree that kept ever growing. It was the duty of the *Vaidyas* to understand that the forefathers could also have had some shortcomings and to analyse what they had taught and to improve whatever they had taught when necessary. If the Vaidyas thought that they were incapable of doing so, that marked the decline of science. "Because the others would continue improving their sciences and that would ultimately result in the comparative backwardness of our science."[39]

The discussion continued when Vaikom Vadakkumkoor Rajarajavarmma Thampuran wrote an article titled 'Heart' and published it in Dhanwanthari, Book 10, No 6, Pp 63A-65. He argued that according to the Ayurvedic texts and great teachers of Ayurveda, the heart was the seat of intelligence and emotions. This could not be questioned as the principles

[39] P K Varier LMS, "A Reverse Congratulation", *Dhanwanthari,* Book 10. No 5., p.54.

given by the above said texts and gurus are perfect and could not be questioned. The Thampuran stood for all the ideas presented by Mr MSN. "It is a great adventure to start to correct the principles founded and tested and proved and established by the great gurus of Aryavaidyam all of a sudden. It should be said that as far as Aryavaidyam is considered, there is no need to correct or improve it and that the principles of Aryavaidyam are all perfect from times past several centuries."[40]

The arguments of *Vaikom Vadakkumkoor Rajarajavarmma Thapuran* were challenged by P K Varier in his article titled "A Reply" in *Dhanwanthari* book 11, No 7, Pp 80A – 81A. He totally disproved Thampuran's stance that heart was the seat of life, intelligence and emotions. The methodology used by Varier was to give details of experiments conducted. He also challenged Thampuran to personally witness an experiment. "I do say that the question 'Where is human intelligence situated in the human body' can be answered by evidence. We can harm an animal's brain completely except the lower portion of the brain called Medulla Oblongata, without killing it."[41]

Varier continued to say that he had shown some experiments to a practitioner of *Aryavaidyam*, but that *Vaidyan* was not ready to accept what he saw with his eyes. Instead, he stuck to his interpretation of the Sanskrit verses of the ancient texts regarding the issue and blindly held it and refused to believe what he saw. In that case, nothing could be done. Thus, the debate on where in the human body the intelligence, emotions and life were located turned to one on the methodology of science.

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40 Vaikom Vadakkumkoor Rajarajavarmma Thampuran, "Heart", *Dhanwanthari*, Book 10. No 6., p.64.

41 P K Varier LMS, "A Reply", Dhanwanthari, Book 11. No 7., p.80.

Varier clearly stated that he held *Aryavaidyam* in the highest esteem. At the same time, he was not ready to say that it was perfect. He pitied that he had to say that it was high time that the *Aryavaidyans* should stop their age-old practice of reciting some sanskrit verses from ancient texts of Ayurveda whenever a point regarding any particular topic was raised by someone and then arguing that the point did not corroborate with the idea in the verse recited. "*Aryavaidyam* will not progress until you stop this practice and prepare yourself to understand the point raised by the others and try to see whether that point was valid or not by its own merit."[42] P K Varier was able to pinpoint the scientific methodology to be followed in medicine. The traditional knowledge tested and improved in the light of the methodology of modern western sciences thus became the ideal *Aryavaidyam* in the idea regarding it held by P K Varier.

In the very issue in which P K Varier answered the Thampuran and argued for the adoption of scientific methodology for the updating and improvement of *Aryavaidyam*, a series of articles on the same theme began publishing. The very beginning of the series clearly mentioned the central argument. If Varier's reply to Thampuran theoretically presented the need for adopting scientific methodology, this series focused on the practical issues arise out of the lack of adoption of the scientific methodology – lack of systematic training and certification for the practitioners of *Aryavaidyam* and the unwillingness to receive new knowledge and improve *Aryavaidyam.*

"There are two things that have caused the decline of *Aryavaidyam* and hinder its progress. The first one is the misunderstanding of the local medical practitioners that they are Vaidyans and the other is the false feeling among some people that the *Aryavaidyam* is perfect and thus there is no need to

[42] Ibid, p.81.

adopt any knowledge from anywhere into *Aryavaidyam* and that there is no need to improve it."[43]

'Two Important Matters' became a series of articles in reply to the argument raised by those who hold the idea that heart is the seat of intelligence and emotions. The context was the debate on the topic mentioned. But the ultimate turn of the discussion was towards a discussion on what was scientific medicine and what were the criteria to decide on what was scientific and what was not scientific. "Thus, the first thing I regret to say is that it is high time that many of us who consider ourselves "doctors" should correct it."[44] The indication was then explained that in order to be a doctor, one had to be scientific.

The editorial of the Dhanwanthari Book 15, No 1, discussed the issue whether sins committed in this life or in the lives before this birth cause diseases. The essayist began by defining 'sin'. "Whatever activity in the form of thought, speech or action committed by mind, tongue or body against the wellbeing of the community of humans is called sin."[45] Then he brought in the point that the Hindus believed that whether sins committed in this life or in the lives before this birth cause diseases. Many other communities of the world also hold similar beliefs. But the English medicine was completely silent about the belief. Thus, the discussion on the issue turned into one about the correctness of the different medical streams. The essay assumed that English Medicine was silent about such aspects of diseases because the stream of medicine was comparatively recent and yet to be matured.

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43 Editorial Article, "Two Important Matters", *Dhanwanthari*, Book 10. No 7., p.81.

44 Editorial Article, "Two Important Things (Continued)", *Dhanwanthari*, Book 10. No 10. p.117.

45 "Sins and Diseases", *Dhanwanthari*, Book 15. No 2., p. 33.

However, the author's attempt was to interpret the belief that sins committed in this or the former lives could cause diseases. This was done in a logical way, giving no space for superstition or religious assumption.

The writer discussed prostitution and argued that an illegal or immoral coitus could not be committed with the observance of the laws of effective sex because the couple would not be able to concentrate and because they would have no material situations favourable for the same. Thus, such a coitus could generate many emotional and physical problems. Such sex could also result in the communication of sexual diseases. This could be transferred to the next generation as well as to the ones around. "… Thus, it is established that the sins committed beget not only invisible impacts, but also many visible signs. So, undoubtedly, committed sins cause diseases one way or the other."[46] In short, the principle that sins committed in this or the former births could cause diseases was not a religious one, but only logical and correct. This was interpreting that, traditional ideas often considered religions have got logical explanation. In other words, this was again arguing that the Ayurvedic ideas were correct even in the light of modern medicine, only that the principles were stated in Ayurveda in a different language. Well explained, those principles could be found scientific.

Modern science and its notions of scientific attitude and reasoning along with the logic of argument were accommodated in the arguments of the writer. At the same time, the infallibility of the old native belief that the sins beget punishment was upheld. The deliberation on the question of the impact of sins took the form of a negotiation of the age-old native belief in the light of the understanding and logic of modern western science.

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[46] "Sins and Diseases", *Dhanwanthari*, Book 15. No 1., p.46.

"Hindu Body"

Thrissur Thycaud Narayanan Mooss, an Ayurvedic scholar, wrote an article on *Ashtavargga,* a group of eight medicines. The medicines, according to him, were of immense significance as they provided eight minerals important for the human body. However, while explaining about the *Ashtavargga,* he made certain passing comments about the health of the 'Hindu body'.

Mooss invited attention to the *'Ashtavargga'* that was a group of eight medicines that include *Meda, Mahameda, Jeevakam, Idavakam, Riddhi, Vriddhi, Kakoli, and Ksheekamkoli*. The scientific theory was that the 'ojass' of the body was really the light of the minerals in the body. Thus, we cannot avoid the care of these minerals. There are several medicines that help this care, but none of them was as useful as the Ashtavargga that was discussed above. It was doubtful whether there was any other medicine as useful as this even if we search the whole medical knowledge, he opined. "But, during this period of extreme weakness of the Hindu body due to many reasons, it should be said with great regret that "unavailable medicine for incurable disease" because many of these medicines are not available anywhere."[47]

Two things are noticeable here. Firstly, there is a concern, 'Hindu body'. This was imagining a national body that was undergoing the colonial experience and trying to get rid of the yoke. The national body was imagined as an image of the individual body and the weakness was regretted. Secondly, many of the minerals grouped as Ashtavargga were unavailable and this was a pity just like the absence of any remedy for the weakness of the national body. The references were not simply regretting alone, they also reflected the pride and confidence in 'the great past' that the 'Hindus' had. "The

[47] Thrissur Thycaud NarayananMooss, "Ashtavargga", *Dhanwanthari,* Book 2. No 3. p.132.

indigenous systems were so marginalised that they sought survival more in resistance than collaboration."[48] Open resistance was, but, not easy. The pride and confidence in the past superiority of the native medicine over the modern western medicine was at the same time a form of resistance and a way of building confidence to get shaped into a national body.

The third chapter of the essay on child deaths and the ways to prevent it, *Baalamaranam,* discussed in detail the precautions the couple have to take while intercourse. This was in the form of a detailed list of 'do's and 'don'ts' and explanations of the same. Patriarchy, acceptance of the lessons given by the early teachers just because they have done so, and attempts to prove the traditional concepts to be scientific could be read in the article.

"The great teacher who told, *"Santhofyahurapathyaartham dampathyossamgathim rapha"* definitely meant that sexual intercourse is meant for procreation only. Thus, it is clear that intercourse should be done avoiding all the conditions that prevent conceiving and following all those conditions that are favourable to impregnation."[49]

The writer proceeded to explain the list of things forbidden in sexual intercourse. 'Women on top position' was the first thing he put in the list. He explained that the position was not natural, it did not allow proper passage of sperm, it could cause damage to the uterus and so on. Secondly, he advised that coitus shall be avoided during menstruation. The other taboos for coitus were third, when the wife is not pleasing to the husband, fourth, women with sexual diseases, fifth, with pregnant women, sixth, with women soon after delivery, seventh, with wives of other people, eighth, with animals and ninth, *'anangamaithunam'* (sexual intercourse without involving genitals).

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[48] Deepak Kumar, "Medical Encounters in British India, 1820-1920", *Economic and Political Weekly,* Vol. 32. No. 4. January 25-31, 1997, p.169.

[49] Editorial article, "Baalamaranam", *Dhanwanthari,* Book 1. No 9., p.162.

The taboos were to be observed because they helped develop a healthy generation. The observance of the taboos and conditions for proper sexual coitus and sex in general could, it was argued, beget a healthy generation.

The article on child death was concluded with a reiteration that the real remedy for child death lay in the education of women. Throughout the article, the writer established through examples that ignorance and blind following of the customs always led to dangers. Thus, the concluding note arose from the recognition that medicine and science were integral to society and social reform.

The editorial article on child death summarised the causes of the child's death and their remedies. According to the article there were only two hindrances in taking care of the children in this manner. These were the ignorance of women and poverty. If the latter was a result of the former, we just had to hurry to eradicate the former problem. It might be asked how people who toiled every day to earn their daily necessities be able to care for their children in this manner. But if they were knowledgeable about child care, they could satisfy most of these conditions. Thus, it was advised that, if proper attention was given to educate the women, the worry about child death could be avoided. An immediate measure needed was the establishment of "child care homes" for orphan children under the initiative of the government or the local potentates, the article suggested. "Anyway, it is our strong conviction that our children's luck will rise the day when our women are freed from ignorance."[50]

The argument integrated scientific thinking of modernity and elements of social reform. Women's education was given primary priority. The argument for orphanages for children elucidated the essayist's concern for the

[50] Editorial article, "Baalamaranam", *Dhanwanthari*, Book 1. No 12., p. 220.

health of the nation that he believed to be important. "Concepts such as citizenship, the state, civil society, public sphere, human rights, equality before the law, the individual, distinctions between public and private, the idea of the subject, democracy, popular sovereignty, social justice, scientific rationality, and so on all bear the burden of European thought and history. One simply cannot think of political modernity without these and other related concepts that found a climactic form in the course of the European enlightenment and the nineteenth century. These concepts entail an unavoidable—and in a sense indispensable— universal and secular vision of the human."[51] The social reform argument in favour of women education in order to achieve health of the nation was thus a negotiation between the traditional medical practitioners and the colonial modernity.

P V Krishna Varier wrote an article on the Secret of Long life-Span and in the article, he quoted an English Scholar, Boyd Leonard enumerating the factors that help achieve longevity. The factors were the following. 1. No excess in anything, especially in eating and drinking. 2. Don't live to eat, but eat to live. 3. Know that fresh air is your best friend. 4. Keep body and mind pure. Cleanliness is next to faith in God. It is a fort against diseases. 5. Give no space for tensions. 6. Be active and not lazy. No lazy person has ever lived for a hundred years. 7. One should have a deep aspiration. 8. Exercise in fresh open air, but not in excess. 9. Get up early, but sleep sufficiently. 10. Beware of all emotions. Each of them affects longevity. 11. One should have an ambition in life. 12. One should find a good friend (wife) in life.[52] The quote P V Krishna Varier used in his article contained an integral view about life. It included physiological, psychological, social and environmental aspects. It included things that were to be avoided as far as the physiological and

[51] Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference,* Oxfordshire: Princeton University Press, 2000, p. 5.

[52] P V KrishnaVarier, "The Secret of Long Life-Span, (According to Scholar Boyd Leonard)", *Dhanwanthari* Book 2. Vol 2., p.8.

psychological aspects were concerned – excess food, drink, tension, impurities – and things that were needed as far as the social and environmental aspects – fresh air, wife etc. – were concerned.

P K Varier argued that a society should give proper attention to the wellness of the body. He refused that the Indian notion that everything was the result of 'Karma' was not correct. He substantiated his point by pointing out the example of the English society; they also had a high rate of curable diseases and death which came down to one fourth in half a century, because of the care they started attaching to the wellness of the body.

"P K Varier observed that some may argue that everything happens according to 'Karma' and one dies when the 'Karma' is over and that no one can even kill a person when her/his 'karma' is not ended. But he said didn't know how these people would explain the fact that the death rate was low among those who took care of the wellness of their body. Nobody could deny this, if it was considered that certain societies did not care for the wellness of the body until recent times and then the death rate and diseases were high among them, but when they started giving attention to such things, these rates came down. He said this example could be found in the history of the English, who were the rulers then. They started paying attention to physical wellness not more than half a century ago. "Ever since they started paying attention to physical wellness, they have to face only one fourth of the curable diseases and deaths when compared to the situation before that."[53]

P K Varier projected individual health as a part and result of community health. Members of a society could together develop practices that were healthy. That could benefit tall members of the society. Varier also denounced the obscure ideas like that of 'karma' which were believed to be

[53] P K Varier, "Sareerasukhasaasthram (The Science of Physical Wellness)", *Dhanwanthari,* Book 2. Vol 3., p.37.

influencing life span. The argument was, in essence, to repudiate the illogical concepts about life and longevity and to focus on the necessary health care. "If the emergence of science in the late nineteenth century as a sign of western power constituted the 'native' as an objective of scientific discourse, the enactment of this process displaced the representations – 'western science versus 'native superstitions' – of colonial domination."[54]

P K Varier argued for scientific evaluation of the system and a straight approach to human body in which the body was seen as a natural reality and not as an obscure thing having relations with mythical concepts like that of karma[55]. Still, there was no mention of any word like 'superstition' to refer to what was considered the 'ancient' or 'traditional'.

Contributing to the discussion on reform of Ayurveda, in the 7th part of the discussion, Kaviyur Parameswaran Mootthathu who is also the Palace vaidyan of the state of Travancore, argued that revival was required rather than reform. He substantiated his point by referring to the history of Ayurveda which he interpreted as to have been perfect prior to the coming of the Muslim rulers and to have received setbacks at the hands of the invasion of the Muslim rulers.

Moothathu argued that all ancient Hindu knowledge systems declined due to the invasion of the fanatic Muslim invaders. The knowledge systems thus declined include the interpretations of Sushrutham. He thought that the Maharajas of India also became incapable of materially supporting the practitioners of Ayurveda. Many of the scientific treatment procedures were lost. "Thus, Arya Vaidyam needs reform in areas like knowledge in Physiology and treatment procedure, treatment procedure and Ayurveda

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[54] Gyan Prakash, "Science 'Gone Native' in Colonial India", *Representations,* No. 40., Special Issue*:* Seeing Science, Autumn, 1992, University of California Press, p. 154.

[55] P K Varier, "Sareerasukhasaasthram (The Science of Physical Wellness)", *Dhanwanthari,* Book 2. Vol 3., p.36.

pharmacology in which areas we have met with much loss."[56] The identification of the areas of weakness of the Ayurveda by Kaviyur Parameswaran Moothathu was parallel to the argument of the Ayurvedic practitioners of the time who had been arguing for supplementing Ayurveda with knowledge in certain areas by receiving the same from Allopathy. The argument that Ayurveda became backward only due to Muslim invasion amounted to declaring that the original Ayurveda and thus the ancient Hindu society were second to none.

There was a discussion in Dhanwanthari on the proper maintenance of cleanliness of kitchens. The argument was that cleanliness of the kitchen was essential for health. But kitchen cleanliness was different from caste to caste and religion to religion. Indirectly the author hinted that the upper caste Hindu notion of cleanliness, healthy body and health was the acceptable standard.

The article cautioned that it was rare that the materials people eat get into the kitchen and change their attire. Thus, it was definite that the cleanliness and other qualities of the kitchen, which was the dressing room of the food people eat, determined the qualities and impurities of the food they eat. People do not give proper attention to the fact. Still, compared to many other people, Malayalis are much better in this matter, he opined. But all Malayalis are not alike in this case. By and large, the Muslims and lower caste Hindus do not give proper attention to this matter. Maybe due to their poverty. "Among Namboodiris, adultery committed by their women is termed as *"Adukkaladosham"* (Kitchen Impurity). From this, we can deduce that they were able to identify the kitchen as the source of all well-being of the family.

[56] Kaviyur Parameswaran Mootthathu, Superintendent of Thiruvithamkoor Naattuvaidyashala, Palace Doctor of Travancore, *Dhanwanthari,* Book 4. No 8., p. 186.

The diseases that spread through food are seen communicated to those castes which keep their kitchen clean only very rarely."[57]

The caste aspect of cleanliness was discussed in detail in the article. At the same time, there was an interpretation that the caste-wise differences in approach to cleanliness of the kitchen could be the result of the economic conditions of the different castes. Castes were parallel to classes. Caste, class and human body were brought into a deliberation and the deliberation was claimed to be a scientific one. Caste was sought to be equated to class so that the deliberation could sound not based on the traditional 'illogical' and 'unscientific' ideas or categories. At the same time, the ultimate point the deliberation tried to drive in was that the caste differences were real factors that influenced or shaped cleanliness of the respective communities.

Dhanwanthari published an article in Book 4, No 10 which discussed in detail the advantages of marriages to human mind, values and body. It also gave the precaution that marriage age was important. The idea expressed in the main body of the article was that early marriage was not suitable for health and that marriage age for boys and girls were 25 to 30 and 21 to 25 respectively. Then the author added a note that the marriage age in India may be less as for the differences in the climate. Thus, he avoided a clash with the age recommendation of the Arya Vaidyam. At the same time, the Arya Vaidya advice in this regard was not included in the main text, but just added as a note.

The article on the relationship between marital status and wellness of the body quoted the observation of Heufland that marriage was necessary for the fulfilment of the moral obligations of man. He observed that it prevented man's unhealthy practices and immune him from the harmful lack of

[57] Narayanan Nambi, "Adukkala (Kitchen)", *Dhanwanthari*, Book 4. No 9., pp.206-207.

enthusiasm. It regularised the pleasure experience and made it moderate. It enhanced the family wellness that was the purest, cost effective and uniform. It was the most suitable for physical and moral health. It was also the way to maintain the human mind in the moderate medium level that was the most suitable for the long life-span.

Still, marriage at an early age was not advisable. It could cause several losses including health. "With situations favourable, a boy should get married between 25 and 30; for girls, it's to be between 21 and 25. (This is a norm for the people of Europe who live in cold climates. According to Arya vaidyam, here in this part of the world where climate is warm, girls of 16 years may marry boys of 20 years.)"[58]

The article reflected the fact that the author's view of life was that it was an integral whole of the physical, social and moral aspects of life. The wellness of the human body could not be attained without moral and social wellbeing. Physical pleasures also needed to be socially and morally acceptable. The social institution of marriage was one that helped maintain all these aspects well. All these ideas were presented with reference to an English doctor's article. The integral approach to the human body that was embedded in Ayurveda matched with the quote from the English doctor. But when the negotiation progressed to the age of marriage, there was a difference between the opinion of the Ayurvedic texts and that of the English medical experts. The *Dhanwanthari* article first accepted that early marriage was not good for the health or wellbeing of the body. At the same time, the question of what was the apt age for marriage was handled with care. Here the article was not ready to accept that the Ayurvedic idea was not correct. The difference between the English and the Ayurvedic ideas about the minimum age for

[58] "Marital Status and its Impact on the Wellness of the Body", in *Dhanwanthari*, Book 4. No 10., p 241.

marriage was explained as a result of the difference in climate. As the Indian climate was warmer, the minimum age for marriage here could be lower than the same in the cold European climate. In short, the article 'was able to' substantiate and uphold the scientific English idea about minimum age for marriage but was not ready to move any a little from the traditional native notions regarding the same.

N Veluppillai, famous as the author of *'Paachakachinthaamani'*, wrote an article titled *Naayanmaarude Maarkkakkalyaanam*, on the practice of circumcision among the Nairs. He started by mentioning that it was well known that the *Muhammadiyas* make their sons *Muhammadiyas* through the ritual of circumcision (*Sunnatthu/ Maarkkakkalyaanam)* just like the Brahmins make their sons *'Dwijas'* through the ritual '*Upanayanam'*. He justified these practices by mentioning that *Upanayana* and *Sunnatthu* were compulsory rituals for these castes. However, this sanction of the practice for its religious compulsion could not be extended to the other Hindu castes, he felt. "If any of a Hindu undergoes *Sunnatthu*, he is detected as a handicapped. He is then not eligible to perform any Vedic ritual or to enter temples. This is the danger caused to the Hindus who perform *Sunnatthu*."[59]

Veluppillai argued that the practice of circumcision was not actually sanctioned by the Holy Book of the Muslims. The book *Bhaktavijayam*, according to him, said that the divine mendicant Kabir Das, who was a Muslim, was of the opinion that *Sunnatthu* was not recommended by the Holy Book and the cruel ritual was not really sanctioned even for the Muslims. He concluded this observation by stating that he didn't mind whether the Muhammadiyas argued that there was never a person called Kabir Das, or if

[59] N Veluppillai, "Naayanmaarude Maarkkakkalyaanam, Circumcision Among the Nairs", *Dhanwanthari*, Book 9. No 9., pp. 142.

they performed *Sunnatthu*. He declared he was not ready for an argument with them.

He proceeded to strongly argue against the practice of circumcision by Nairs. He was writing about the *Maarkkakklyaanam* performed by the Nairs with an introductory note that "it was unwanted and ridiculous for the Nairs to perform the useless and cruel ritual called *Sunnatthu*."[60]

The Nair boys of the Taluks south of Thiruvananthapuram were compelled to undergo the ceremony of *Sunnatthu* in the beginning of their youthhood, he said. He didn't know about the Taluks north to Thiruvananthapuram. They held it that the Sunnatthu was to boys just as equal to what was *kettukalyaanam* (ceremony in celebration of the reaching of puberty by Hindu girls) for girls. They also performed celebrations that lasted for seven days in relation to the *Sunnatthu*. He also remarked that it was a matter of concern that the boy who performed Sunnatthu would learn all the unwanted things needed for a sexually immoral life from their elder friends within these seven days of the celebration.

Veluppillai traced the origin of the Markkakalyaanam among Nairs to an Islamic attack on Travancore. The Mukilan who attacked Travancore in the year 855 conquered the regions between Edava (Varkkala) and Aaruvaamozhi instituted certain Muhammadiya practices including *Chelaakarmmam* or *Sunnatthu* in this region, he explained. The poor Hindus of the region practised the same for their fear of the Mukilan. Veluppillai, thus concluded that the practice was immoral.

After concluding that the practice of circumcision was immoral, Veluppillai analysed the physiological aspects of the practice. He did this by expressing his belief that the human body was a perfect divine design in

[60] Ibib, p. 143.

which there was no unnecessary element or organ in it. Especially, the sexual organs were of cardinal significance and they should be considered and treated that way. There was no Useless organ created in the body of any living organism created by God. Especially, the most cardinal organs like eyes, mouth and sexual organs were kept safe by God by covering them with skin and hair. One of the most significant among these organs was the sexual organ on which *Sunnatthu* was conducted. They had forgotten the wonderful work of God who added the fullness of enjoyment into this organ and have wrapped it with skin so that its softness should not be affected and have designed it so pleasurable that it caused procreation of all living beings.

Veluppillai expressed his opinion about the practice of circumcision "that when the skin cover is removed, the organ would become hard and less sensitive. May this substantiate my argument that *Sunnatthu* is against nature's laws and that it is simply devilish and equal to human sacrifice to unnecessarily cut the soft part of the body of one's own child and to celebrate it while the child suffers from pain."[61] The basic arguments put forward by Veluppillai were two. Firstly, the practice of circumcision was neither native to India, nor willingly accepted by the natives of India. It was forced on the Indians. Secondly, the practice was against nature and what was against nature could not be accepted as what was natural was both divine and perfect. According to the traditional Ayurvedic principles, well-being of the human body and its maintenance could be had by "Considering the bodily constitution, pathological history, the Dosha characteristics, lifestyle and environmental conditions in an individual's routine lifestyle."[62] Thus,

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61 Veluppillai, N, The author of 'Paachakachinthaamani'., Naayanmaarude Maarkkakkalyaanam, Circumcision Among the Nairs, in *Dhanwanthari*, Book 9, No 9, PP 143

62 Jaiswal YS, Williams LL, A glimpse of Ayurveda, The forgotten history and principles of Indian traditional medicine, in *Journal of Traditional and Complementary Medicine*, (2016), pp.1-4, p.3

Veluppillai maintained the position that the traditional Ayurvedic notions were all of sanctity and they required no correction.

P V Krishna Varier, in his article 'Burning Dead bodies' (Dhanwanthari, Book10, No 5, Pp 55A), argued that the Hindu practice of burning dead bodies was much more scientific and advantageous than the practice of burying them. He first maintained that cleanliness had reduced the spread of communicable diseases in Europe. Then he put forward the point that as far as the practice of dealing with the human dead bodies, the European practice was comparatively much inferior to that of the Hindus. The Europeans very rarely burned dead bodies; they usually buried them. But the Hindu practice was that of burning. The Hindu practice was more scientific as it allowed the body not to mix with soil and thus the disease-causing elements were killed by fire. He strongly recommended that the western states should have educated their public about the advantages of the Hindu practice and should have asked them to follow the same. At the same time, he analysed the reasons why the Europeans did not burn their dead and identified religious and practical reasons. The Hindu religion sanctioned the burning of the dead bodies, but the Islam and Christianity did not, he maintained. And if burnt, the dead body would not be available for future investigations was the practical reason. Both the issues were not standing and could be taken care of, he argued. The comparative advantage of a traditional Hindu socio-religious practice over a European practice was the point emphasised.

P V Krishna Varier wondered why the advanced and civilised western nations did not give proper attention to cleanliness in dealing with dead bodies and accept the practice of burning dead bodies that was the accepted practice of the Hindus. He earnestly requested "everyone belonging to all religions and all societies to follow this practice of burning dead bodies that is advantageous to everyone including the dead, their relatives and the whole

society."[63] In this deliberation also Mr Varier expressed the conviction that the traditional Indian practices were faultless and even a model to the Europeans.

Many scholars opined that *Aryavaidyam* could prosper only with a proper understanding of the human body, both its internal and external organs and their functioning. A proper understanding of the internal organs and their functioning was lacking in the Ayurveda and the same became evident when Ayurvedic practitioners got familiarised with western medicine that is assisted by Physiology and Anatomy. The absence of a proper study of Anatomy and Physiology was recognized and several series of articles were published in the Dhanwanthari to equip the *Aryavaidyans* with the knowledge in these two sciences. The articles thus published were from the perspective of the western medicine naturally. But there were also attempts to synthesise the knowledge of the sciences Physiology and Anatomy with the knowledge in Ayurveda.

The human body was perceived as having three aspects. They were also like an extension of the universe. The human body was perceived as a part and parcel of the universe. What was there outside was not really separable from what was inside. What the body accepts from the outside thus became determining as far as the health of the body was considered.

"I am going to describe the human body by dividing it into three aspects, *Sthoolashareeram* (the Gross Body), *Sookshmashareeram* (the Exact Body) and the *Kaaranashareeram* (the Cause Body)."[64] The science of the *Sthoolashreeram* was *Shareerashaasthram* (Physiology), and it dealt with all the external and internal organs of the body.

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63 P V Krishna Varier, "Burning Dead Bodies", *Dhanwanthari*, Book 10. No 5., p. 55.

64 V K Nair, "Naradehaniroopanam (Human Body Analysis)", *Dhanwanthari*, Book 11. No 2., p.38.

The claim that all medical traditions of the world originated from Ayurveda and India was repeated. But another claim was raised in the editorial of the *'Dhanwanthari'*, Book 16, No 6. The argument was that the medicinal plants were the most abundantly available in India and for most of them, India was the homeland. "There is no need to hesitate to say that India is the homeland of most medicinal plants in the world. Whatever be the medical practice of the world, most of its medicine can be seen growing in the soil of India. Nowadays, many may be reluctant to agree to the truth that the medical practices originated in India and that the medicines come from India. Whether people agree or not, it is simply the truth."[65]

This claim was made in the introduction part of an article on the medicinal value and uses of the plant *Aadarooshakam* which was known in Kerala as *Aadalodakam*. The very next paragraph after the first paragraph making the above mentioned claim ended with the statement that Aadarooshakam grew better and taller in Ceylon.[66] The claim was that not only did India possess 'the great medical science' Ayurveda, but also that the environment of India was 'best suitable for Ayurveda' as the land was bestowed with the resources for Ayurvedic medicine. It was not clear in the article whether the writer considered Ceylon a part of 'India' or simply contradicted his own statements. In any case, the claim was an indirect reply to the Argument raised by the colonial medical experts that the environment of India was congenial to the spread of diseases. By the beginning of the twentieth century, under the experience of the threat of cholera for several decades by then, the British had become very critical about the non-hygienic

[65] Editorial, "Aadarooshakam", *Dhanwanthari*, Book 16. No 6., p. 205.
[66] Ibid, p. 206.

Indian atmosphere and society and Indian medicine. They had come to fear the Indian marketplaces.[67]

Social Reform and Medicine

Social and cultural significance attached to children, necessity to take care of babies, statistical analysis of the rate of child birth and death, and an analysis of the reasons of child death were discussed in an article on child death which gave a complete study of the various aspects of the child deaths. In course of explaining the reasons of child death, the author came to discuss the practice of child marriage. He distinguished between marriage and procreation. The simple explanation provided was that children born to couples of early ages were probably more prone to child death. But, the Ayurvedic practitioners had foreseen this and had warned. They did this by distinguishing between child marriage and procreation. According to the Ayurvedic tradition, the writer argued, that the child marriage was sanctioned by Ayurveda not for procreation, but for a social arrangement only.

The author started by expressing his intention to discuss the causes of the child's death and the ways to overcome the same. He proceeded to enumerate the causes. The first cause was the problems in marriages. He emphasized that among the many problems associate with the marriages in India, the most detestable and dangerous was that of the child marriage. It was simply an experience driven knowledge for everyone that, if a seed not ripe enough was sawn, either it would not germinate or the plant that germinated would neither be strong nor be fruitful. Thus, it was evident that those who wanted to have healthy offspring should not try to procreate before they reached a ripe age. Child marriage was detested because it could give way to this danger. It was no wonder that the immature children who knew nothing

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[67] David Arnold, *Cholera and Colonialism in British India*, Oxford University Press, No.113., Nov. 1986, p. 138.

about what was marriage and what was the purpose of it might resort to some mischievous plays. The problems caused by this evil practice were innumerable.

The sperms produced before ripe age perish because of immaturity and those produced in old age due to weakness. The author only wanted to say that this was extremely dangerous in the eyes of medical science. "Even though the *Smrithis* said that one should marry before reaching puberty, it never permits coitus then."[68] This was sufficiently explained in medical science. He argued that *Ashtangahridaya* of *Vagbhatananda* says that a boy of 21 years of age may marry a girl of 12 years and he can attempt to procreate when he turns 25 and she turns 16. Thus, it was clear that marriage, according to the great teachers, was just putting in order the husband-wife relationship…. Even though the Hindu sciences permitted coitus for women after turning 16, that was not ripe enough an age to bear children according to the Europeans.

The writer pointed out that it was often observed that the first child of many women died due to weaknesses and when we observe closely, we also see that those mothers were not yet in ripe age to bear children. *Ashatangahridaya*, he said, states that it was difficult for the coitus of a couple of immature age to bear children, and also that even if it bore a child, it would probably die, and, if it lived, it would have some serious health issues.

The article was in favour of abolition of child marriage. On the one hand, the article argued, with reference to traditional medicine and English medicine, that the practice caused weakness to the Hindu society as a whole. On the other hand, he argued that the practice was not in the real tradition of the Hindus. The writer tried to link the health of the body of children with the

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[68] Editorial article, "Baalamaranam", *Dhanwanthari*, Book 1. No 11., p.124.

health of the body of the nation. A healthy generation only could ensure a strong nation state. "I think there is nothing wrong in stating that the Hindu community which was once able to defeat every other race with knowledge, power and enthusiasm has now become weak and is in such a bad condition mainly because of this practice of child marriage…" [69]

It was the faith and confidence of the writer in the 'glorious past' of the 'Hindus' that reflected in the statements like that in the past, Hindus were able to defeat every other race with knowledge. Whatever weakness occurred was due to the corruption of the basic principles in the sacred texts. Thus, what was needed for the rebuilding of the nation body with all its strength was to get rid of the corruption. The spirit of the Swadeshi movement was glaring in this stance and argument.[70] As far as the practice of child marriage was concerned, it was such an impurity or corruption and was to be stopped. It is notable that the writer argued not for the abolition of child marriage itself. He only argued that the Indian system permitted early marriage, but not coitus or pregnancy at an early age. The net effect was social revival without reform and without causing resistance.

In the second part of the article on child death, the writer argued that marrying at the right age was important as far as the birth of a healthy generation of children was considered. The problems of child marriage already presented; the writer then turned to the case of late marriage. He began by stating that it was already clear from what was already written that early marriage was a cause of child death. It was to be added that late marriage equally caused child deaths.

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69 Ibid.

70 Prof Hardas Mukharjee and Uma Mukharjee, *India's Fight for Freedom or The Swadeshi Movement (1905 - 1906)*, Calcutta: Firma K L Mukhopadhyay, 1958, p.198.

The author then analysed the effects of late marriage. The possibility was that of the birth of children from sperms that were weak due to old age. The children thus born would be weak indeed. Even if such children survived, they would not be healthy, the writer argued. Late marriage could also cause other issues. If men didn't marry at the right age, that could lead them to prostitutes and they would lose both healthy sperm and money. A medical reason was also given; that, any organ of the body functions well when that was regularly used in a moderate manner. "Thus, if one doesn't utilise the sperms that are produced in his body at the right age in the right way, it cannot be expected that the same could be used rightly later and even if utilised, it won't yield good results. Organs of the body have a particular nature. If they are used regularly, their ability will last. If either they are used excessively or they are not used, then their ability would be gradually lost."[71]

Sperm overflow, wet dreams, and numerous other diseases could be caused by late marriage, he cautioned. So, late marriage had no advantage at all. On the other hand, it caused dangers. Thus, he advised that we must understand late marriage as a cause of child death and should avoid it. The author moved on to argue that the marriage between a couple who do not match each other in age can cause trouble both to the relationship between the two and also to the offspring of the marriage.

Another area, in which rectifications were needed in the practice of marriage, was the marriage between two persons who were closely related to each other by blood. Here, he cited the examples from the Brahmin community; they did not sanction marriages between members of the same extended family. The writer pointed at the difference between the moral principles and the medical principles. The marriage between brothers and sisters may be very convenient on several grounds, but such marriages were

[71] Editorial article, "Baalamaranam", *Dhanwanthari,* Book 1. No 7., p.145.

banned by societies. The moral principles behind this were very complicated, but the medical principles were very clear.

"…Even though I cannot explain the moral principles behind this at this stage, the medical reasons are obvious; because, close relative marriages can result in the birth of unhealthy children… On the other hand, if a couple marries from different clans, the possibility is that even the hereditary diseases may get weaker and after a few generations, those diseases may cease to exist… It must be in recognition of this fact that the forefathers advocate exogamy."[72]

There were two important aspects in these observations: firstly, he marked a difference between the moral principles and medical principles and secondly, he never forgot to prove that there was no clash between the medical principles and the traditional moral principles. The basic concept underlying indirectly was that the medical principles were to be separated from the social and moral and they were to be objective, but in the final analysis, the practices advocated by tradition were proved the same as those upheld by medical science. This, in turn, the argument put forward was that the traditional ideas were objective and scientific. It was more than maintaining that ancient Indian knowledge was faultless. The example of the Brahmin practice of avoiding marriage between close relatives was notable. What was implied without mentioning straight was attesting the Brahmanical superiority even in the case of social rituals and practices.

How far could sexual matters be openly discussed in a journal, even when the journal was medical in content? The articles of *Baalamaranam* (Child Death) and *Rethaskhalanam* (Wet Dreams) were published in Book 1, No 8 of *Dhanwanthari*. As the issues addressed in those articles necessitated

[72] Ibid, p.148.

reference to sexual matters in detail, such content came to be part of the article and they were dealt with somewhat openly as it was suitable to a discussion on medical issues related to the human body. An editor's note in the current issue brought it that some of the subscribers of the magazine did not find it proper to discuss such sexual matters in this open manner. The editor justified the article but also expressed apology.

The note said that a great mind had communicated to them his opinion that the articles on *Baalamaranam* (Child Death) and *Rethaskhalanam* (Wet Dreams) in the issue of *Dhanwanthari* included improper content. But there were also some other great persons who had opined that a medical journal should have done at least that much and also that it should have been said in the manner it was said. "We thought that it would be self-deceit if we do not say things openly in medical matters and that is why we published those articles as they came to us. Anyway, we apologise if it did not match the taste of the readers."[73]

The negotiation of medical themes and the negotiation of the health of the human body never separated themselves from the moral deliberations. Deliberation on morality was considered part of the deliberation of the health of the body. The body was never devoid of moral or ethical aspects.

Venkitachalayyar Thrikkariyur Vaidyan wrote about an incident[74] in which a thirty-year-old Brahmin youth caught the problem of being perfectly in good health, but not being able to utter a word or to eat. A lot of money was spent on witchcraft (*Manthravaadam*) as his family consulted magical healers and it was identified in the *prashnamvaypu* that the problem arose

[73] Editors' Note, *Dhanwanthari*, Book 1. No. 9., p.198.

[74] Venkitachalayyar Vaidyan Thrikkariyur, "Cannot Say", *Dhanwanthari*, Book 5. No 4., p. 13.

when an *aruvalayakshi* caught him by neck. There was no effect. It was after one week that they left witchcraft and consulted a vaidyan.

What actually happened was discovered later. A week before, this man, along with a few others, was surveying a land near the hills. When he was a bit away from the others, he happened to see an elephant closely and was frightened deeply. Venkitachalayyar concluded by saying that "Thus, I have only this to say; in case someone has any illness, what should be done first is to consult a doctor."[75]

Venkitachalayyar clearly argued for treating the human body scientifically, repudiating magical and mysterious healing practices. He was not hesitant to point out the foolishness and danger in magical practices.

The government of Travancore was also taking steps towards the wellbeing of the people through medical institutions. The appointment of women officers in charge of the well-being of the inmates was one such initiative. The Durbar Physician made a request to the Dewan regarding such an appointment through the proper channel and the request was accepted. The request of the Durbar Physician stated that "... it cannot be done if an efficient staff is not sanctioned (with) responsibility for the wellbeing of the inmates… in direct charge of the institution."[76] In response to the request, a female night watcher was sanctioned by the office of the Dewan. Women getting admitted for treatment and women being able to be employed as a night watcher are well evident from the order dated close to the beginning of the twentieth century.

Women of upper castes following the custom of taking bath in cold water in a pond soon after delivering a child was deliberated by E Rama

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75 Ibid.

76 State Central Archives Trivandrum, File C No 6727,

Varier LMS. The author harshly criticised the practice of compelled bathing soon after delivery. The custom was sanctioned by the "*Sixty-four anachaarams*" of *Sankaracharya*. He interpreted that the great sage would have intended to give instructions for the upkeep of the cleanliness and purity and health of the body and that he might have presented the dos and don'ts as the will of the god because he wanted the people to follow them. The author also expressed the doubt that that cruel practice that was seen in no other land was in vogue in our land in order to express the fact that there was no love for the own people in the *marumakkathaayam* (matrilineal system).

The British Government had banned many cruel practices of Hindus like Sati. But Rama Varier doubted that practice (in which women were compelled to bathe in the nearest pond soon after their delivery irrespective of climate and other aspects) was crueller than sati. He believed that the practice was not banned by the British Government, because the Government had not noticed it, first, because it was in vogue only in Malayalam and, second, most of the Malayalam land was ruled by native princes. "For some people, this is one among the sixty-four '*anaachaarams*'! Pity! People do not contemplate on why the intelligent Sankaracharya Swami made these '*anaachaarams*."[77] If examined separately, anyone would be convinced that most of these were intended to keep cleanliness, purity and welfare of the body, Varier evaluated. He also observed that there were reasons to consider some of the *'Anaachaarams'* as impure and as causing the wrath of God. He declared his opinion that the foreseer Swami must have known that if such instructions were not given, people would not follow that and that they would have become unclean.

Rama Varier was cautious to make himself sound scientific and supported social reform. But the reform he advocated for was not repudiating

[77] E Rama Varier LMS, "Prasavraksha", *Dhanwanthari,* Book 1. No. 12., pp. 230-231.

anything that was sanctioned by the old gurus. The post-delivery bath was unscientific and cruel, he argued. But the same was one among the practices advised by Shankaracharya. Rama Varier interpreted that Shankaracharya advised this practice just because of his concern for cleanliness and because he knew that people would follow instructions only if given in the name of God. The interpretation was plausible but the fact that the practice was made mandatory by the great sage remained a fact. Acceptance of the medical facts ascertained by the Allopathic intervention was, thus, such a precarious task. It necessitated the argument in favour of the glaring empirical evidence presented by allopathy while taking the position that no ancient guru was ever wrong. It was this dilemma that formed the pattern of the negotiations undertaken by the Native medical scholars who tried to make a bridge with Allopathic medicine and its knowledge.

The infallibility attributed to great gurus and texts was not always applicable to all the communities. In the third part of his article on delivery care, Chirayinkeezhu Govinda Pillai made certain generalisations and observations. He gave a comparison of the statistics of death at the time of delivery among members of different communities. The number of Muhammadiya women who died in Calcutta at the time of delivery was about double that of the Christian women, Govindappillai wrote. "It was also told that, of the Muhammadiya infants born there a year, half the number died within a year and among those infants who died within a year, half died within fifteen days. Most of them died due to lack of fresh air."[78]

He specifically mentioned a few practices that are to be avoided during delivery. Notably, in avoiding these practices, he pointed out European practices as a model. "It is a pity that women are compelled to deliver their infants in small closed rooms. Worse is the case when fire is kept lit in those

[78] Chirayinkeezhu Govindapillai, "Delivery Care (3)", *Dhanwanthari*, Book 5. No 4. p. 9.

small rooms. Even worse is it when kith and kin women assemble in that room and remain talkative. These factors cause generation of fault air that the lady and the child often dies."[79]

What Govindappillai sought to establish was that health and cleanliness were influenced by social and communal identity as well as social norms. Cleanliness and health had a cultural background. Different communities had different norms regarding cleanliness and care during different occasions in life. Many such practices were to be discarded or to be totally reworked. At the same time, good social practices were also seen to have a social and cultural base. Govinda Pillai was not hesitant to point out the European model. He argues that the Christians of India also had comparative advantage in terms of cultural practices that effectively promoted health, he wrote. Govindappillai suggested that the Muslim cultural practices were unscientific and that it was so with many other Indian communities.

Strong Medicine, Strong Body; Strong body, Strong Nation

The negotiations on the wellness of the body were extended to a recognition of the nation as a body, an extended version of the bodies of the individuals who constituted the nation. The negotiation of the national body had many aspects to deliberate on and many issues to consider in relation with the socio-political conditions existing during the period. Wellness of the individual body in relation with the wellness of the national body was a major concern. The emerging idea of the national body reflected in the debates around the concerns of the individual body. The wellness of that body was imagined as the responsibility of both the ruler and the ruled. The national body was like an organic integrity of which wellness could be realised in an integral way only. P K Varier, while discussing the wellness of the body,

[79] Ibid, p. 9.

observed that human beings were the wealth of the nation. Their works and the results of their work were the income of the country. Thus, the rulers were responsible just like the people in ensuring the welfare of the community. "The rulers and the ruled should co-operate to do whatever possible to make the places apt for the wellness of the body which is the basis of the welfare of the community."[80]

What exactly did Varier mean by wellness of the body? What should have been the practical concern of the state in ensuring the broad aim of the wellness of the individual body and thereby the national body? The concerns to which found its reflection the formulation of the state policy. Varier sought to answer the question by equating the beginning of wellness with health. Health was to be ensured firstly by avoiding situations that could cause illness. He maintained that "prevention is better than cure" was acceptable to all those who knew the worldly principles. That had to be the basis of the science of physical wellness. The first aim of the science of treatment also was the upkeep of health and longevity. But medical science also included treatment for diseases because humans could not completely avoid diseases whatever care they might have taken. "The daily routine and seasonal routine that are discussed in the *Aryavaidyasaasthram* shows the method to prevent diseases. It shows that the science of physical wellness is a part of medical science."[81]

An essay written and read by Paliyathu Cheriya Kunjunni Achhan Avargal in the third annual meeting of the Arya Vaidya Samajam at Thrissivaperoor expressed the confidence that India and Ayurveda were great in ancient times. Muslim Invasions caused the deterioration of India and

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[80] Varier, P K., Sareerasukhasaasthram (The Science of Physical Wellness), in *Dhanwanthari*, Book 2, Vol 3, p.37.

[81] P K Sareerasukhasaasthram Varier, "The Science of Physical Wellness", *Dhanwanthari*, Book 2. Vol 3., p.37.

Aryavaidyam. Both this nation and its traditional medical system made a comeback under the peace under British rule. He was of the opinion that Ayurveda held a uniquely high position among all the branches of knowledge thanks to the efforts of the great people from the very beginning through all those millennia. But fortune was not stable. "The fragrant and green trees that are the efforts of the great men have been attacked by a tempest for some time. Readers might already know that this tempest is the Muslim invasion."[82]

The repeated attacks had agitated the Hindu way of life that was rooted in perfect union, caused many calamities to India and Indians and affected Ayurveda along with several other things. But for the last one century, these troubled Indians have started enjoying under the shade of the given famous double lion flag. Beyond that, the smooth breeze of freedom that flowed from that flag had awakened Indians to be enthusiastic about their duties. It was then a daily experience of theirs that a large number of internally and externally delighted men highly qualified by this famous breeze and Western education worked for their own wellbeing in different ways. Among those, some very qualified men were putting in efforts to modernise *Ayurveda* and the best examples were the pharmaceuticals of *Kavirajanagendrasenar, P Subbarayi* and *T Swamy*, the libraries and printing presses of *Jeevanandavidyasagaran* and *Jyeshtaramamukndaji* and the Ayurvedic college of Calcutta.

These words of Paliyathu Cheriya Kunjunni Achhan Avargal attempted to summarise the millennia old history of Ayurveda into three stages: stage one, the ancient period of glory and reputation; stage two, the Islamic period of decline and weakness; and, stage three, the British period of education, self-realisation and rebirth. The Islamic intervention is compared

[82] Paliyathu Cheriya Kunjunni Achhan, "Ayurveda and British Rule", *Dhanwanthari*, Book 2. Vol 9., p.187.

to a catastrophic tempest while the British influence was described as an energising breeze. The language he used was highly metaphoric and he was all in praise of British rule, being fully convinced about the positive and rejuvenating impact of British rule on Ayurveda. We can also notice that Achan Avarkal literally followed the three-fold periodization of Indian History followed by the British historians.[83]

The European planters of Peermade in Travancore, the present Idukki district of Kerala were trying to establish a sanatorium there by about the beginning of the twentieth century. The cardamom officer of the Peermade region informed the related officers that the project for the construction of a sanatorium at Peermade by the Roman Catholics of the region was wasteland and that it was not registered.[84] The region was significant for the presence of the European planters and a CSI church and allied facilities. Thus, besides the state endeavour, such individual and group initiatives were in place in distant areas of Travancore during the period.

The article titled 'Travancore Government and Scholarships'[85] strongly argued for the modernization of traditional medicine. Significance was attached to medical education. According to the writer, both the content and the structure of the traditional medical education needed total upgrade and modernization. The measures suggested for the modernization of traditional medicine summarily follow the model of modern English medical education.[86] The essayist argued for the establishment of medical colleges for

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[83] Michelguglielmo Torri, "For a New Periodization of Indian History: The History of India as Part of the History of the World", *Studies in History*, 30(1) 89–108 © 2014, SAGE Publications, p. 90.

[84] State Central Archives Thiruvananthapuram, File No. B209, Construction of a Sanatorium at Peermade by the Roman Catholics.

[85] Editorial Article, "Travancore Government and Scholarships", *Dhanwanthari*, Book 2. No. 11. P. 227-228.

[86] V Sujatha and Leena Abraham, "Medicine, State and Society", *Economic & Political Weekly EPW*, April 18, 2009, vol xliv. no 16., p. 39.

education in traditional medicine and also argued that medical students should learn Anatomy in detail and should develop a clear understanding regarding the internal organs of the body. Study of Anatomy was perceived as immensely significant as it had already become a fact of general agreement that traditional medicine lagged much behind English medicine because of its lack of efficiency in diagnosis of diseases and in conducting operations.

Both the issues could be overcome only if the practitioners had competence in understanding the nuances of the functioning of the organs of the human body. It is significant to note that Dhanwanthari had already started publishing a series of articles familiarising the internal organs, their features and functions.[87] These articles were so long, comprehensive and elaborate that they tried to provide a total picture about the human body in all its details. The writers were English doctors from medical college Madras. The attempt to modernise traditional medicine was thus, basically one which followed English Medicine in its knowledge pattern and its organisation. However, following English medicine was intended to maintain the ground of traditional medicine.

The author himself knew that they had written several times on the necessity to modernise the local medical tradition. But they also knew that, considering its significance, it would not be enough even if we repeat it another hundred times. He linked it with God. God created medical science to save the most important body. Thus, that branch of knowledge should be given more attention. “If we thought about the nature of our physique, the temperature of the land we inhabit, seasonal changes, food habits, familiarity from the ancient times, purity of medicine, economy, less risk and the convenience to use in village or town, we will have no doubt in concluding that the local medical tradition is the best suitable one for the Hindus and

[87] Book 2 and 3 *Dhanwanthari*

especially to the Keralites."[88] He pointed out that it was the prime duty of the government and the leaders to rectify the shortcomings, if any, occurred to that system of medicine.

He also showed that the significance of encouraging local medical systems was understood by the North Indian states of Calcutta, Bombay and Punjab. The respective governments joined hands with 'several great men' and established hospitals that followed traditional medical methods and medicine factories. They also established medical colleges, and conducted examinations to modernise the local medical practices. They had success in their effort for some time. He noted that the effort had not been sufficiently done in Madras. It was happy news that the Travancore Government was then doing a little bit in that regard. Still, those efforts were not sufficient, he regretted.

To the author, modernising medicine meant making qualified doctors and good quality medicine available to the people. If doctors were to become experts, colleges where they could study and practice were necessary. For that, good teachers were needed. Whatever their expertise, no present local doctor was good for that. The local doctors usually became helpless before the challenges of operations and diagnosis. This was because they did not know Anatomy properly. What the author emphasised was the need for the local medical practitioners to master anatomy. We can see several other promoters of Ayurveda during the time also arguing for the study of Anatomy.[89] In other words, mastering a branch of western medical knowledge was necessary for the local medical practitioners to be proficient and more effective in their practice and service.

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88 Editorial Article, "Travancore Government and Scholarships", *Dhanwanthari*, Book 2. No. 11., pp. 227-228.

89 V Sujatha and Leena Abraham, "Medicine, State and Society", *Op. Cit.,* p. 41.

In the year 1906, on February 12, the Dhanwanthari directly addressed the Swadeshi movement. The key argument was that the Swadeshi ideal was acceptable but it could be realised only if the Hindus were physically strong first. The Hindu culture and civilization was the only original one in the whole world. All the other societies had to borrow from the others and none of them was perfect. The Hindu society had all the texts that were perfect and that was the base of it. However, through ages, all the advantages of the Hindus had been lost as the foreigners had come in and had taken away all the precious things. The Swadeshi ideal was acceptable because it attempted to revive the original Hindu strengths. But that revival should have started from the physical aspect. Hindus should first become physically competent. It was Arya Vaidyam that was going to really help the purpose.

The editorial article[90] argued that it was only a well-known fact that the Hindus or the Aryans were a community that had earned high knowledge and had reached the pinnacle of civilization and they lived freely much before the emergence or even birth of the other societies of the world. A look at the history of the early Hindus would easily confirm that even the societies of the twentieth century had not earned as much advancement as the early Hindus had acquired at least in a few areas. If a community attained development, definitely they had borrowed from other communities. But, in the case of the early Hindus, they did not have to depend on anyone even for a single thing. The earliest of all texts of the world is the Hindu Vedas. If any science of the world has advanced, its root was India.

"Alas! What use is there in claiming that the great grandfather Agasthya drank all the seven seas! The condition of the Hindus today is

[90] Editorial Article, "Duty of the Swadeshis", *Dhanwanthari*, 12.02.1906, Book 3. No 7. pp. 1-4.

pathetic. Advancements achieved by the forefathers are just stories now."[91] Great books had been taken away by the foreigners. Then, the Indians were left with some wealth. But, all that wealth, leaving not a single paise, had been taken away by the Mohammedans and the others. Some commerce was left. Then that was also taken away by the foreigners; so progressed the lamentation in the essay.

The author proceeded to explain that India had been looted of all her resources and knowledge and advancement and stated that nothing valuable was left. It was very clear that the article did not make any open statement against British rule or its adverse effects on Indian society or economy. The author clearly hinted that the early Hindus had a much more advanced civilization and knowledge base when compared to any other societies of the world, including the English. But while making comments like that the Muslims took away the wealth of India, the article was silent about what the English rule had done. It was the mainstream story of Indian history as it was projected by the European historians and the Indologists that the article followed in its arguments.[92]

However, emerging nationalism and the faith in the abilities of the country to make a comeback were upheld. However, the writer had his own ideas regarding the come-back. That was revival rather than reform. It was also clear that the deep respect for the abilities of the English, including the respect and adoration for their physique was glaring.

The article called to forget the bygone stories. He expressed his happiness that some gentlemen of the country had come to brood over the backwardness of the country and about the ways to solve that issue. There were many people who strived towards that end then. Some conducted

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91 Ibid, p.1.

92 Bipan Chandra(ed.), *India's Struggle for Independence, 1857 – 1947*, Penguin, 1988

meetings and tried to sensitise people regarding the real nature of the issue; some conducted conferences; some tried to develop crafts; some sought for ways to strengthen trade, some boycotted foreign goods, some others promoted swadeshi goods, all those efforts signified a surge of national feelings in India. But, if deeply analysed, it could be seen that all those efforts were like manuring the fruit instead of the roots, he opined.

The essay first diagnosed that all problems of the country were results of the failures a people have got in their daily routine and in the flaws in the medical system that they followed. It was definite that the health and illness of a people depended on the routines and medical systems followed by those people. "Thus, the first duty of the Swadeshi who aspires good for our nation is to strengthen our medical stream, to follow it and to better our physical health and intelligence."[93]

In the sixth part of the debate on reforming Arya Vaidyam, K C Kesava Pillai argued that Ayurveda needed total reorganisation. He suggested some basic changes in the way Ayurveda was functioning. The model for reorganisation, modernization and updating was Allopathy. What Mr Pillai argued for was total reorganisation of the system. Significance was attached to the formalisation of medical education and its monitoring by the state. Traditionally, the kings and the nobles promoted and supported and individuals took the initiative. Here, the writer recognized how state intervention could bring about authentic monitoring. This meant the recognition of the power and role of state.

K C Kesava Pillai agreed that Arya Vaidyam or the local medical practice was not short of problems. The causes of its shortcomings were, scarcity of real *Vaidyas* (doctors); lack of ways to recognize the real doctors

[93] Editorial Article, "Duty of the Swadeshis", *Dhanwanthari*, 12.02.1906, Book 3. No 7. p.3.

from those who pretend to be so and different from the English medicine, Arya *Vaidyam* did not keep medicines ready and it did not undertake surgery and machines were not used in it. There should be modern medical colleges for Arya *Vaidyam*, Pillai argued. There should be perfect and faultless text books and they should be printed and made available to students. The imperfection of the Arya V*aidyam* should be resolved by accepting from day by day advancing English medicine the knowledge of Anatomy and Surgery with proper adaptations to time and space. A garden of medicinal plants should be developed in the vicinity of the Ayurveda medical college so that students can learn about medical substances directly by observing and experimenting. They should pass the examination and obtain a certificate. They should always keep machines and medicines ready for usage. "For all this, not only nobles and commons, but also the Government should act."[94]

In the Dhanwanthari issue published on 1082 *Makaram* 1 (1907 January 14), P V Krishna Varier published an article on the history of medical science in Japan. The article was written in the context of the defeat of Russia by Japan in the Russo-Japanese War of 1904-05 and trying to explain the same. He argued that the victory of Japan was neither accidental nor sudden. It was the result of the power of the state of Japan which originated from the effective medical system in their tradition and the strength of the physique of the people of Japan maintained by that medical system. In fact, Mr Varier was arguing that the strength of the body of the state was a result of the strength of the body of the people. And, to strengthen the body of the natives, native medicine should be strengthened.

He had no doubt that the main causes of the victory of Japan were the strength of their forces, the perfection of their war materials and the skill of their leaders. But definitely there were other reasons too. This is because

[94] K C Kesava Pillai, "Reform Arya Vaidyam", *Dhanwanthari*, Book 4. No 6., p.127.

those factors could not have originated overnight. The science of war during the period was not possible without the development of sciences like Natural Science and Chemistry. "Thus, it can be stated beyond doubt that the glory attained by Japan now would not have been possible without the prior achievement of social reformation and development of various sciences."[95]

Varier identified reformation and science as the base of modernization. Same were the causes of the strength of a nation. Strong medicine could beget a strong body and a strong body could make a strong nation was the logic presented by Varier. His understanding of the strength of the nation carried the general spirit of the Vaidyas and Ayurveda scholars of the time who argued for revitalization of Aryavaidyam. Analysing the bases of the strength of an Asian country, Japan, against Russia, a European country, Varier concluded science and reformation which are the roots of European modernity as the strengths of Japan. So, he was arguing that science and reformation were needs of the national body just like medicine and treatment to the individual body.

In the fifth annual session of the *Aryavaidyasamaajam* held on 1082 Kumbham 1 (1907 February 13), the proposal regarding modernising Ayurveda medical education and getting it approved by the government and university was presented, discussed and passed. The third decision taken in the committee in this regard was that the, "Application should be filed with the Government and University for recognition of Ayurveda as a main subject for medical education examinations conducted by them. This application should be presented before the *Madirashi Mahajanasabha* to be accepted by the Provincial Conference. Some of the leaders of the *Aryavaidyasamajam*

[95] P V Krishna Varier, "History of Medical Science in Japan", *Dhanwanthari*, Book 5. No 6., pp. 137-138.

shall go to Madirashi and try to get it all done."[96] The proposal was presented by P A Krishna Menon and seconded by K C Veerarayan Rajavu and P Govinda Menon. All members supported and the proposal was passed unanimously.

The objective was both to get the system modernised and to get it free from fraudulent practice of Ayurveda. The discussion going on in the journal Dhanwanthari had clearly shown the necessity to modernise the system. The way pointed out by all the respondents in the discussion to win the objective was to follow the method and system followed by the Allopathy stream. Getting the support and approval of the government or university was understood as a way to bring in uniform standards and to avoid the issue of the practice of the 'non-qualified *Vaidyas*'.

The observation regarding the economic aspect of using English medicine in an article on *Siddhaushadham* brought in the issues raised by the Swadeshi movement. The author stated that English medicine was expensive. It was also important that the money spent on English medicine went out of the country. He also observed that this loss of money affected the economic wellbeing of the natives. While the comparative advantages of Ayurveda was emphasised once again, the argument of developing nationalism was brought in to strengthen the preference for *Ayurveda.*

He wondered that it didn't seem that there were people who could find out the total amount spent by the Keralites on Allopathy medicine. It was a great disadvantage that a considerable part of the wealth that Indians made for their wellbeing with immense effort was enjoyed by the English people as that wealth was spent on Allopathy medicine. He also concluded that three fourths

[96] K C Kesava Pillai, "Reform Arya Vaidyam", *Dhanwanthari*, Book 4. No 6., p.129.

of the medicine the Indians bought from the English could easily be taken from nature in India itself.[97]

An Ayurveda doctor, whose name was not mentioned in the article presented his ideas that it was always better to follow the design and the ways of nature. A doctor should only help the natural course. The doctor's job was to ensure the natural course. Even if the natural course was difficult to go through, that was ultimately the most suitable and advisable way. The *vaidyan*, writing on his experience of assisting a child birth, was solely dedicated to emphasise the principle. He found the woman – about fifteen or sixteen years of age – suffering from pain and having much difficulty in delivering the child. But the vaidyan did only what was necessary. He did not go for a caesarean. Bare minimum intervention in the natural course was his policy. More than that, he claimed, he knew the natural course well. Thus, he only "helped" the natural course.

Through a few questions, the *vaidyan* came to his conclusions about childbirth. He made the necessary intervention of breaking the amniotic sac only. Then he moved out of the room of the woman undergoing delivery pain and waited for nature to take its course. It was fulfilled successfully.[98] The principle attempted to be proved through the description of this normal delivery was that the doctor was expected to follow the natural course of things as far as delivery was concerned. Medicine was understood as following the natural course and making interventions only when corrections were needed in the course, if it went wrong somewhere. Doctor was only to follow nature and medicine was only to assist nature.

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97 Itty Vengal Vaidyan, "Siddhaushadhamaala (Continuation)", *Dhanwanthari,* Book 5. No. 7., p. 135.

98 A Doctor, "A child Delivery", *Dhanwanthri,* Book 10. No 2., p. 24.

The vaidyan proceeded to explain the purpose of retelling his experience. "You may wonder why this incident is narrated here. It is narrated here because, people generally hold the idea that, if there be some difficulty in childbirth, instruments are inevitable. But the doctor's duty is to assist nature only."[99] Caesarean would be permissible only when it was inevitable. The doctor also explained the questions he asked the person who came to inform him about the patient. The question whether the woman was urinating or not was to know whether the pain she had was real labour pain or not. If there was no urination for a long time, it was definitely labour pain. If the amniotic sac was broken and still the child was not coming out, then the only way out was caesarean and it should be done without any delay. It was to decide on this question and to whether he had to start before his lunch that he asked whether the amniotic sac had broken or not, he wrote.

The doctor was using an experience to present his ideas about the situations which indicated that caesarean was necessary. The opinion was expressed in the context of the increasing number of caesarean operations taking place.[100] To follow the course of nature meant to understand the course of nature through sharp observation and then to follow it patiently. How far could humans, especially doctors, intervene in the course of nature was the question addressed in the article. Caesarean was understood as an artificial human intervention in the course of nature. But that was a possibility which could not be completely repudiated. Thus, the vaidyan ended up maintaining that the technique was advisable when the situation demanded it as necessary. The need to attain proficiency in the technique of caesarean by a doctor was thus unquestionable. The point remained was 'only when necessary.'

[99] Ibid, p.24.
[100] Ibid, p.22.

The inauguration of the Ayurveda Medical College at Kozhikode was held in a meeting conducted on the 14th and 15th of January 1917, in the 15th annual session of the *Aryavaidya Samaajam*. Kozhikode Samoothiri Raja inaugurated the Medical College. A detailed report of the event was published in the next issue of *Dhanwanthari* (Book 14, No 7). The resolutions passed in the meeting were given and the first one was declaring loyalty to the British crown. "Thereafter, the first resolution that "the strong loyalty this association has in the British Crown should be recorded and that the association do pray for the success of the British empire in the great war that is going on" was passed."[101] State support was necessary for the Ayurveda Medical college in their initial stage and thus it was solicited after declaring complete loyalty to the British crown.

A few days after the celebration of the 15th annual session of the Aryavaidyasamajam of Kerala and the foundation of an Ayurvedic Medical College at Kozhikode, the eighth annual session and exhibition of the *Nikhila bhaarathiyaarya vaidya samaajam* were held in Pune in 1917, on February 24 and 25. Three Hundred Vaidyans from across India and important citizens like Bal Gangadhara Tilak were present. It was Pandit Gopala Charlu who opened the exhibition. He and Tilak spoke in the meeting. The annual session was presided over by the King Emeritus of Kochi, Sir Rama Varma GCSI, CIE. The ideas which were already put into practice by the *Aryavaidyasamaajam* of Kerala were discussed in the Session and resolutions were passed towards the same. "The following decisions were taken in the meeting:

[101] Special Report, The Fifteenth Annual Session of the Aryavaidya Samaajam and the Inauguration of the Ayurveda Medical College, *Dhanwanthari,* Book 14. No 6., p. 139.

1. An All India Ayurveda Medical College should be founded.

2. A committee was formed to raise funds for the purpose and it was decided that the Kochi Raja and other Rajas should be members of the committee.

3. A representative committee should meet the Viceroy to earn the support and recognition of the government for the Indian medical tradition."[102]

An important thrust of the ideas came up and the resolutions passed was that the knowledge system of *Ayurveda* should be modernised and that state support was necessary for the modernization and revival. Even when the Associations were trying hard to meet the challenge paused by the western medicine[103] and situations that arose out of the colonisation of India, they were particular about the support of the colonial state itself to meet the challenge. This was because, they understood that meeting the challenge of the competition from a modern branch of knowledge[104] could not be possible without modernization of the self and the support of the state.

On 15th August 1918, a resolution was presented in the Madras Legislative Assembly by T Ramgachaari seeking state support for the progress of Ayurveda. In the resolution, certain demands were raised and these demands reflected Ramgachaari's ideas regarding how the medical stream could be revived and also regarding what the state could do in this regard. The demands raised were:

1. "To collect, translate and publish the ancient texts of Ayurveda

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102 "Nikhilabhaarathiyaaryavaidyasamaajam", *Dhanwanthari*, Book 14. No: 8., p. 48.

103 Deepak Kumar, "The 'Culture' of Science and Colonial Culture, India 1820-1920", *The British Journal for the History of Science*, Vol. 29. No. 2, June 1996, p.205.

104 Gyan Prakash, Another Reason: Science and the Imagination of Modern India, *Op.Cit.*, pp. 201-203.

2. To conduct reliable enquiries into the Ayurvedic medicine and science

3. Establish Ayurvedic and Yunani medical schools and colleges and arrange for the students of these courses the facility to study Anatomy and Physiology in the Government Allopathic Medical Schools and Colleges."[105]

The demands pointed out the conclusion regarding the strengths and weaknesses of Ayurveda as it was derived from the discussions on the same. The supporters of Ayurveda, as it was reflected by the presenter of the resolution, were confident in the authenticity of the ancient texts and the scientific character of it. While stating that Ayurveda was scientific, the notion that a branch of knowledge needed to be accepted as 'scientific' for the state to recognize, promote and support it was endorsed. Being scientific was thus an unstated, but unquestioned condition for the state to recognize a branch of knowledge. On the other hand, Rangachaari himself seemed to be convinced about the two areas where Ayurveda as well as unani lagged behind: Anatomy and Physiology. Thus, facilities for the students of Ayurveda and Unani to get trained in these two areas were requested for.

The resolution was not accepted by the house because it was voted against. The main opponent was Sir Alexander Cardew. The points raised by him brought forward the argument that the two systems of medicine under discussion were not modern or scientific. Sir Alexander Cardew's central argument was that a medical system that originated before the birth of science could not be deemed to be science. The editorial article in Dhanwanthari tried to counter the points raised by Sir Alexander.[106]

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[105] Editorial Article, "Ayurveda and the Cooperation of the State", *Dhanwanthari*, Book 16. No 1., pp. 11 – 16.

[106] "Firstly, Ayurveda comes from a very ancient *'Jaambavaan Age'*.
Secondly, the present Ayurveda is just the leftover elements of an extinct system.

The very first point that the system of Ayurveda was too old was countered by raising the argument that its antiquity was its sanction. The author pointed out that India had been undergoing several political and social challenges throughout long millennia, but Ayurveda had never stopped being the main system of medical treatment for the people. Thus, the very survival of Ayurveda, its antiquity, was the evidence of its relevance and strength. It was also argued that Allopathy would have gone extinct, had it not been promoted by the state.

Taking up the second point of Sir Alexander, that the Ayurvedic system was outdated and destroyed, the author raised the counter argument that the allegation originated out of the lack of a proper understanding of the principles of Ayurveda. Then, the author proceeds to explain that "Ayurveda is simply a collection of the principles of treatment of diseases. It has never been destroyed and it can never be destroyed. It is based on the laws of nature and it follows the laws of nature. Even if the whole world is undergoing a war, a particular medicine would work."[107]

Thirdly, this system is not known to most of the civilized world and that it was kept as a mystery.

Fourthly, Ayurvedic texts are written in Sanskrit, they were written before the invention of the microscope and thus their authors were totally ignorant about microbes.

Fifthly, the state should not spend on an outdated system.

Sixthly, it is foolish to spend on this old and outdated system simply because it is a system authored by the ancient Hindus.

Seventhly, Ayurveda and Yunani are not scientific and they emerged before the birth of sciences.

Eighthly, promoting such traditional medical systems would in effect mean that the poor people are prompted to leave the best possibilities of the Western Medicine." – Excerpt from The Editorial Article, Ayurveda and the Cooperation of the State, in Dhanwanthari, Book 16, No 1, P.11 – 16, which quoted the speech of Sir Alexander Cardew

[107] Editorial Article, "Ayurveda and the Cooperation of the State", *Dhanwanthari*, Book 16. No 1., p.12.

The impact of not a single medicine would change over time. The daily routine of Indians was based on the principles of Ayurveda. The principles of Ayurveda on the basis of which the very routine of the life of people in India was organised were not all written down in texts. Many of these principles simply existed in the memories of the people and got practised in their lives. They memorised these principles and handed them over from generation to generation. There were texts. But the amount of Ayurvedic knowledge that existed in the memories of the people was much more than what was written in texts. The principles of treatment of diseases and the principles of diagnosis were all much better understood when explained by a guru. Thus, even if all the texts of Ayurveda were lost for some reasons, all the principles of it could be reconstructed from nature, from the daily routines of the Indians and from the advice of the wise old people.

In addition to this, the basic texts like Charakam, Vaagbhatam and Sushrutham have not been lost. They were still available in plenty. The author expressed his confidence about the possibility to reconstruct all the achievements of Ayurveda from the texts as well as from the memories of the people. More importantly, he was convinced that the authenticity of the texts was unquestionable. There could have been some gap between the knowledge in the texts and the interpretation of it by parties that were not sufficiently well versed. "However," he agreed, "it cannot be hidden that certain mistakes occur in the usage of the knowledge in the texts due to the ignorance of those who use them."[108]

This stance of the Ayurvedic scholar denoted two positions taken. The first one was regarding his conviction about the authenticity of the texts. The stance was just the same as that held by the social reformers of the nineteenth and the twentieth centuries: there is no mistake in the ancient texts, there

[108] Ibid, p.13.

could not be any mistake in them, only misinterpretations due to ignorance were possible[109]. The texts were infallible. This stance reflects the religious nature of the knowledge and the approach of the supporters and practitioners of the system of knowledge Ayurveda.

Secondly, the very point that there were mistakes taking place in the usage of the knowledge in the authentic and unquestionable texts was used to argue for governmental assistance for rejuvenation of Ayurveda. There were mistakes taking place in the practice of Ayurveda. That necessitated the purging of the practice of Ayurveda. But that purging was expensive and time consuming which could not be undertaken by individuals. That was the reason why the government should support the effort.

The argument put against the third criticism about Ayurveda was that it was known nowhere outside India was objected to by raising the point that it was not the responsibility of Ayurveda that it shall be known. At the same time, Ayurveda had been studied by several scholars outside India. A list of such scholars was furnished too. The author also added that "People of all civilised nations do know that the point of origin of all systems of medicine is Ayurveda."[110]

Another argument levelled against the request for sanctioning of government funds for the promotion of Ayurveda was that Ayurveda was not scientific and that there was no objective technology used for the investigations in Ayurveda. The absence of the use of microscopes in Ayurveda, its failure to identify the existence of microbes and its treatment system without concerning microbes were pointed out as evidence of the lack of scientific nature of Ayurveda. That issue was sought to be countered

[109] Kenneth W Jones, "Socio-Religious Reform Movements in British India", *The New Cambridge History of India*, Cambridge University Press, 1990. P. 167.

[110] Editorial Article, "Ayurveda and the Cooperation of the State", *Dhanwanthari*, Book 16. No 1., p.12.

through a set of arguments. The Ayurvedic scholar claimed that he had read in many pages in the *Ashtaangahridayam* and in the *Charakam* references about microbes. He had no difficulty in agreeing that the ancients knew only a little about the microbes. "But, will Mr Cardew argue that all varieties of microbes have been identified and that no new variety will be discovered with a better microscope?"[111]

This was the logical part of the argument. That argument was supplemented by the claim that the ancient gurus were not completely devoid of microscopes. The *Sooryakanthakkallu* of the olden days was a kind of microscope, the writer argued. He also claimed that the mendicants of the ancient times were equipped with many miraculous powers, including the power to see the unseen. There was nothing that they could not see, he claimed.

He added that it was also wrong to assume that the ancient Indians did not have any magnifying glass or microscope. *Soorykaantham* was a type of magnifying lens. Then, the spectacles for long sight were not a western invention, he maintained. Beyond that, the inability to see the microbes was a reality for the ordinary people. "The mendicants could see beyond what the senses could… There was nothing invisible to them. They are the ones who discovered the atoms."[112]

While subscribing to the modern pattern of logical argument, the author was completely convinced about accepting all verses of the ancient texts as infallible.

The human body as it was negotiated was a universal category, but at the same time, it had socio-political dimensions. The medical idea of a

[111] Ibid, p.16.
[112] Ibid, p.15.

healthy body was negotiated in a wider canvas and the negotiations were extended to all aspects of life. The negotiation pertained to public health as it was now established that the health of the individual body was a result of the community health. Both individual and community health could be achieved through scientific methods only, it was recognized. The traditional methods for the achievement of the same needed several corrections. *Anaachaarams* like *prasavasnanam* were to be stopped and the 'Hindu body' was to be strengthened. 'Hindu body' could be strengthened by identifying the 'correct tradition' and by carefully purging all the '*anaachaarams'* that had crept in the traditional medicine and society at large. This was the right way to assure the wellness of the body and society and that was the responsibility of the state.

CONCLUSION

"The work of a mission may be compared to a man growing from the feeble efforts of childhood to the vigorous activity of healthy manhood. The head and body may be regarded as the Church – in the widest sense of that word – the right arm to the educational department, the left arm to the medical department, and the legs by which he stands and walks to the industrial work of the mission. At the end of a hundred years, we are a fully developed man, but still a bit weak on the legs."[1] This is how a missionary imagined society in the beginning of the twentieth century-society was viewed as a human body. The negotiation of the idea of a healthy body in Kerala from 1900 to 1970 kept this idea all through and tried to understand and develop the whole society as a healthy human body.

By the beginning of the period of study, western medicine had gained popularity and patronage of the colonial and native states enough to challenge the indigenous medical practices as the popular medical system. The notion that science was unquestionable, true and universally applicable was accepted by the time. The native medical practices had to negotiate with the western medicine and a focus of this negotiation was the idea of a healthy body. Formal medical journals to newspaper articles and advertisements and state government files to discussions among medical practitioners of different streams carried on this negotiation. With 'authentic' written texts comprising the treatment plans and philosophy, Ayurveda came up representing the indigenous medical systems and negotiated with Western Medicine on behalf of them all.

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[1] I H Hacker, *A Hundred Years in Travancore 1806-1906, Centenary Memorial Volume of the Work of the London Missionary Society in Travancore; South India*, H R Allenson Limited, Racquet Court, Fleet Street E C, 1908.

The first aspect of the negotiation was that the native state, the colonial state, the practitioners of western medicine and the native medical elite engaged themselves in the negotiation in the context of a number of dynamics. Firstly, it was recognised that there was a multiplicity of perceptions of the human body. The perceptions of western medicine on the human body were studied by the native practitioners of indigenous medicine and they began to reinterpret their own perceptions in the light of the new knowledge they received. They were generally open to the modern medical techniques, tools and knowledge but tended to reinterpret the mythical and mysterious elements in their medical systems so as to prove that they were in coherence with the ideas of western medicine.

The acceptance of the notion that what was scientific was unquestionable was another important intellectual context in which the negotiation took place. Tools like thermometer and the practices like registering inventions in the name of the inventors and the scientific method of enquiry were thus completely received. On the other hand, traditional medicine and its concepts and glory were defended. This went up to the extent of the growth of revivalism in Ayurveda. However, the revivalism was coupled with modernization and this manifested in accepting that all possibilities opened up by western medicine were to be utilised. It was argued that Ayurvedic Medical colleges should be established and production of medicine should be industrialised and modernised. On the other hand, it was also argued that even western medicine originated from Ayurveda.

Against these dynamisms created by colonial modernity, modern science, scientific method, modernization and revivalism, the understanding of the human body by the traditional medical knowledge systems of the land were revisited. The science of the body was revisited first. The native medicine's view that the human body was made of *panchabhootha* and that

its illness was the result of the imbalance of the *tridosha* was not repudiated but the theory of germs that spread diseases was accepted. 'Unscientific practices' of traditional medicine were criticised and 'causes' were enquired for understanding phenomena. Readiness to study Chemistry and Anatomy developed among the native medical elites.

A debate on the nature of menstruation reflected the nature of negotiations of the idea of a healthy body during the period. It showed that the very model of validating knowledge underwent change. Earlier, the veracity of knowledge was established by referring to the sacred texts. Now, logic and evidence were needed for the same. Thus, the nature of negotiation of the medical ideas itself was influenced by the method of modern science. The subscription to modern science and scientific method was but not a complete shift. The native medical elites maintained confidently that "traditional knowledge can never be false." The contradiction between the acceptance of modern scientific method on the one hand and upholding the infallibility of traditional knowledge on the other was to be overcome. This was done by taking a position that the ancient and medieval medical compositions were all correct but often misinterpretations took place. Reinterpretation was the way out and that was attempted on.

All negotiations accepted the significance of the human body. The discussions did not view the human body in isolation. It was generally negotiated that wellness or health of the individual human body could be realised only through the wellness and health of the society as a whole. Thus, western notion of public health was accepted. This was further extended to uphold the Ayurvedic concept that wellness of the body could be realised only by observing the laws of nature. The universality of the human body was an idea inbuilt in the science of western medicine. This was coupled with the

idea of the need for coherence with the natural laws in Ayurveda and it was seen that social categories are not applicable to the human body.

Health care and the maintenance of the body were focused in the negotiations. The new western style of dressing was evaluated. It was argued that the convenience element in western style of dressing was strong and that western way of dressing could be good for men but not for women.

The modern western medical idea of cleanliness of the surroundings as a necessity for the health of the human body was accepted by the state and the traditional medical practitioners. The strengthening of the national body also required cleanliness because it made the human body healthy. Apart from this connection forged between the individual human body and the national body the composition of the body also was understood to be important. Health of the human body was understood to be related to its beauty which was seen as a reflection of the correct proportion of its elements. Sexual health was seen as an important indicator of the health of the body as a whole. Sexual health of the body was seen not simply depending on the body, but as something divine, as a result of purity and depending on morality. Food, nature, and seasons also were seen as elements determining sexual health.

The negotiation of the idea of a healthy body had socio-political extensions. Cleanliness of the body and surroundings and methods of prevention of communicable diseases were discussed and were understood to be the concerns of the state. This led to connecting individual bodies with national bodies and the concept of the 'Hindu Body' was upheld. In order to bring up a healthy 'Hindu body', false traditional concepts about the health of the body like *'prasavasnanam'* were to be repudiated. *Aryavaidyam* was to be reformed, doctor's service was to be ensured at the time of delivery, and the age of marriage was to be raised.

Care for the health of the next generation, ensuring longevity, and marriage and sex were important for the building up of the health of the Hindu body. Hindu body could be healthy when Ayurveda was revived. Not reform but revival was sought. It was claimed that India was the homeland of medicine and medicinal plants. The westerners had to learn from Hindus. The practice of circumcision that was followed by some Hindus was criticised in this context as an example of the unhealthy practices that had crept in the Hindu medical practice. This position was taken by the same medical elites who advised that in case of illness, one should consult not a magician but a doctor.

The debates amongst the Ayurvedic physicians on indigenous medical tradition sought to encapsulate the emerging concerns of national and religious identities, within the context of body politics. Health and healthcare thus were political and cultural as much as that of disease and cure.

RECOMMENDATIONS

The present study focuses on the negotiation of the idea of a healthy body in Kerala during the period 1900 to 1970. It explores the various dynamisms involved in the negotiation of the idea, and investigates the socio-political and other implications of the negotiation. The negotiation was traced mainly through the exchanges carried on through the medical journal *Dhanwanthari*, the popular publications and government records during the period. The Ayurvedic practitioners and their positions and the concerns and forces that worked behind their exchanges with the western medicine and the government and other agencies have been given the central attention.

The intellectual developments and the negotiation of ideas that were influenced by various dynamisms that shape life during the period could be further explored. The negotiation of the idea of a healthy environment was carried out in various realms during the period. This negotiation also was closely related to public health, and other concerns of the colonial government, the native states, the newly formed Kerala state, the social organisations, institutions and various other agencies. It could form an area of research.

The connection between the ideological premises and the concern of the emerging material situations of the period could be a general area to be investigated. For example, the negotiation on the role and presentation of the female body in the emerging socio-political and material conditions of the period has been explored as a part of this study but it could be addressed further in research. Negotiation of the ideas like ‘the divine’, ‘the infallible tradition’, ‘the scientific’, and ‘the authentic and true’ can be explored as part of this general area.

The idea of ‘knowledge’ itself was a much negotiated one in Kerala during the period of this study. The dominant western idea was negotiated and, in that process, various native ideas regarding the same were deliberated and reinterpreted. Negotiation of the idea of ‘knowledge’ and forms of knowledge had its bearings on different walks of life. The ‘authentic knowledge’, ‘the traditional knowledge’, ‘the real knowledge’, ‘the scientific knowledge’, ‘the divine knowledge’, and ‘the useful knowledge’ are some of the concepts that were negotiated and the negotiations can be rewarding topics of research.

GLOSSARY

Aarthavam	:	Menstruation
Adukkaladosham	:	Literally, 'kitchen impurity'; the term is used to refer to adultery committed by female members of a family, especially noble families
Anjanam	:	A cosmetic material used for darkening the eyelids –usually used by women; A semi-solid Ayurvedic preparation that can be applied externally to comfort the eyes
Aruvalayakshi	:	An evil spirit
Aryavaidyam	:	Another term for Ayurveda, indicating its noble nature
Ashtangahridayam	:	Essence of the Eight Branches of Ayurveda, one of the primary ancient texts of Ayurveda
Ashtavargga	:	A group of eight Ayurvedic medicines providing minerals essential for human body
Baalamaranam	:	Child death
Chakoram	:	Pheasant, traditionally associated with omen
Chelaakarmmam	:	Circumcision, same as *sunnathu*
Dakshina	:	Donation, fees or honorarium given to a cause, a Hindu/ Jain/ Buddhist practice
Dhatu	:	Vital tissues that support the body's structure, growth, and nourishment
Doothadilakshanam	:	The traditional branch of knowledge about the omens
Jaambavaan Age	:	Olden age
Kaivisham	:	An occult medical substance secretly administered to an enemy or someone to be enchanted in order to destroy or enchant that person; part of traditional popular occult practice in Kerala
Karma	:	The universal causal law by which good or bad actions determine the future modes of an individual's existence
Kathanar	:	A christian priest
Maarkkakalyaanam	:	Cirumcision

Manthravaadam	:	Sorcery
Panchbhootha	:	Earth, water, fire, air and space – the five fundamental elements of nature according to Ayurveda and Hindu philosophy
Pathyam	:	Certain restrictions in food and other matters required while under Ayurvedic treatment
Pettichis	:	Women specialized in assisting ladies at the time of delivery
Pipeelikavisarjjanam	:	A magical chant believed to be used to call back the snake that bit somebody and to make it take the venom back
Prashnamvaypu	:	A traditional magical practice for unveiling mysteries and future
Rasaayanam	:	'*Rasa*' means 'nutrition' and '*Ayana*' means 'microcellular channels'; '*Rasayana*' means nutrition at microcellular level; it's a branch of treatment in *Ayurveda*
Sunnathu	:	Circumcision, the operation of cutting away all or part of the foreskin of the penis, a Judaic-Islamic practice
Swadeshi	:	A movement that upheld the ideals of self-sufficiency and national independence in India
Tharavad	:	Ancestral home, of the affluent, often of the Nairs of Kerala
Vaidyan	:	Indigenous medical practitioner
Vandhya	:	A woman who is unable to become pregnant

BIBLIOGRAPHY

Primary Sources

Regional Archive Ernakulam, File No. Ke 22/1, The Cochin Tobacco (Amendment) Act 1942

Regional Archives Ernakulam, File No. A115, Administration Report of the Public Health Department for the year, 1955-56

Regional Archives Ernakulam, File No. B 52 2 7820/40, Acquisition of Land for a High School Play Ground, 1940

Regional Archives Ernakulam, File No. C-172, The Cochin Public Health Act, 1949

Regional Archives Ernakulam, File No. C-181, The Cochin Free and Compulsory Education Act, 1948

Regional Archives Ernakulam, File No. C-181, The Cochin Free and Compulsory Education Act, 1948

Regional Archives Ernakulam, File No. C-182, The Cochin Balaniyojana Education Act, 1948

Regional Archives Ernakulam, File No. FD4-1658/23, Shortage of Rice,1949

Regional Archives Ernakulam, File No. IV 1116, The Cochin Child Marriage (Restraint) Act, 1941

Regional Archives Ernakulam, File No. K-89, Child Employment Act

Regional Archives Ernakulam, File No. T15 942, The Travancore Cochin Registration of Birth and Death Act, 1953

Regional Archives Ernakulam, File No. T24-163, The Travancore–Cochin Removal of social Disabilities Act, 1953

Regional Archives Ernakulam, File No. T72-3151, The Cochin Maternity Benefit (Amendment) Act, 1946

State Central Archives Thiruvananthapuram, Bundle 228, File No: B6611, Treatment of Male Patients by Miss Yardley

State Central Archives Thiruvananthapuram, File No: 10763 (2), (3), (4), (5) Drainage for Residency Hospital Trivandrum

State Central Archives Thiruvananthapuram, File No: 10763 (5), Acquisition of Land for Contagious Ward in Government Hospital Kanjirapally

State Central Archives Thiruvananthapuram, File No: 209, Building a Sanatorium at Peermade

State Central Archives Thiruvananthapuram, File No: 6727, Correspondence of Durbar Physician and Dewan

State Central Archives Thiruvananthapuram, File No: 6945, Appointment of a Female Medical Officer

State Central Archives Thiruvananthapuram, File No: B255, The Plague, Instructions for Police Officers and Other Laymen, Thiruvananthapuram, dtd, 27 Feb1897

State Central Archives Thiruvananthapuram, File No: B32, Appointment of Male Nurses to Teaching Hospitals Discontinued

State Central Archives Thiruvananthapuram, File No: B44 2949, Disposal of Dead Bodies

State Central Archives Thiruvananthapuram, File No: DHS B25, Appointment of a Nutrition Officer

State Central Archives Thiruvananthapuram, File No: DHS Bundle 23, Transfer of Medical Department Staff

State Central Archives Thiruvananthapuram, File No: DHS Bundle 25, UNICEF1, 2, Storage of UNICEF Skim Milk Powder

State Central Archives Thiruvananthapuram, File No:10763 (3) Acquisition of Land to Extend Hospital Facilities

Magazines and Newspapers

'*Malayalarajyam',* Malayalam daily

Articles and Journals

"A child Delivery", in *Dhanwanthri,* Book 10, No 2.

"An Unbiased Doctor - Rajass and Aarsha Knowledge", in *Dhanwanthari,* Book 16, No 9, Kottackal, 1919.

"Antipyrin" in *Dhanwanthari,* Book 1. Volume 2.

"Cherippu (Footwear)", *Dhanwanthari,* Book 2., Vol 9.

"Deenakkar Kidakkkunna Muri (The Room of the Patients)", in *Dhanwanthari* Book 2, No 5.

"Duty of the Swadeshis", in *Dhanwanthari,* Book 3, No 7.,1906.

"Editor's Notes", in Dhanwanthari, Book 2., Vol 9.

"Editor's Notes", in *Dhanwanthari,* Book 2. Vol 10.

"Editorial - Aadarooshakam", in *Dhanwanthari*, Book 16, No 6.

"Editorial - Aryavaidya Medical College", in *Dhanwanthari*, Book 14, No 6.

"Editorial Article - Ayurveda and the Cooperation of the State", in *Dhanwanthari*, Book 16, No 1.

"Editorial Article - Ayurveda and the Cooperation of the State", in *Dhanwanthari*, Book 16, No 1.

"Editorial article – Baalamaranam", in *Dhanwanthari*, Book 1, No 12.

"Editorial article – Baalamaranam", in *Dhanwanthari*, Book 1, No 11.

"Editorial article – Baalamaranam", in *Dhanwanthari*, Book 1, No 7.

"Editorial article – Baalamaranam", in *Dhanwanthari*, Book 1, No 8.

"Editorial article – Baalamaranam", in *Dhanwanthari*, Book 1, No 9.

"Editorial Article - Duty of the Swadeshis", in *Dhanwanthari,* Book 3, No 7, 1906.

"Editorial Article - Two Important Matters", in *Dhanwanthari,* Book 10, No 7.

"Editorial Article - Two Important Things (Continued)" in *Dhanwanthari,* Book 10, No 10.

"Editorial Article, on Wellness and Scientific Routine – Constipation", in *Dhanwanthari,* Book 3, No 2.

"Editors' Note", in *Dhanwanthari,* Book 1, No. 9.

"Factors Congenial to Increased Longevity", in *Dhanwanthari,* Chapter 118, Book 5, No 6.

"Firangarogam (Syphilis)", in *Dhanwanthari Book 2 Vol 10.*

"How the Westerners Got the Knowledge of Medicine", in *Dhanwanthari,* Book 7, No 11, pp.127-8.

"Laws for Attaining Longevity", in *Dhanwanthari,* Chapter 119, Book 5, No 6.

"Longevity increasing Factors", in *Dhanwanthari,* Chapter 121, Book 5, No. 7.

"Marital Status and its Impact on the Wellness of Body", in *Dhanwanthari,* Book 4, No 10.

"Materials that Reduce Life Span", in *Dhanwanthari,* Chapter 120, Book 5, No. 7.

"Nikhilabhaarathiyaaryavaidyasamaajam", in *Dhanwanthari*, Book 14, No8.

"Pathyam", in *Dhanwanthari,* Book 5, No. 5.

"Perfect Nature and Form; their Features - Part 6", in *Dhanwanthari,* Book 3, No 11.

"Prathyeka Vaidyanmaar (Specialist Doctors)", in *Dhanwanthari,* Book 2, Vol 7.

"Signs of Long Life in Everyone", in *Dhanwanthari,* Chapter 117, Book 5, No 6.

"Sins and Diseases", in *Dhanwanthari,* Book 15, No 1.

"Sins and Diseases", in *Dhanwanthari,* Book 15, No 2.

"Special Report - The Fifteenth Annual Session of the Aryavaidya Samaajam and the Inauguration of the Ayurveda Medical College", in *Dhanwanthari,* Book 14, No 6.

"Swantham Prasthavana*",* in *Dhanwanthari, Book 1. Number 1.*

"The Ancient Physiology - Last Part", in *Dhanwanthari,* Book 15, No 12.

"Ushnamaapanayanthram" in *Dhanwanthari* Book 1. No 5.

"Vishoochika", in *Dhanwanthari, Book 1. Number 1.*

Achhan, Paliyathu Cheriya Kunjunni. "Ayurveda and British Rule", in Dhanwanthari Book 2, Vol 9.

Danchibai, H L Meter LMS., in Indian Medical Records (Translated by PVK Varier), 'About the Twig that Stuck Inside' (*"Chullikkol Ullil Pettathu"*), in *Dhanwanthari,* 2.

Editorial Article - Duty of the Swadeshis. in *Dhanwanthari,* Book 3, No 7.

Editorial Article - Travancore Government and Scholarships. in *Dhanwanthari,* Book 2, No. 11.

Govindappillai, Chirayinkeezhu P. "Delivery Care", in *Dhanwanthari,* Book 5., No 1.

Govindappillai, Chirayinkeezhu. "Delivery Care", in *Dhanwanthari,* Book 5, No 4.

K V. "The Easy Cleanliness Laws of Dr King", in *Dhanwanthari, Book 4,* No 10.

Katthanaar, K T Thomma (Mutholy Vaidyashaala, Pala). "Siddhaushadham (Use of Effective Medicine, Infallible Remedy Medicine)", in *Dhanwanthari,* Book 4., No 2.

Koyithampuran, Ananthapurathu Mootha. "Should Arya Vaidyam be reformed?", in *Dhanwanthari,* Book. 4, No. 1.

Koyithampuran, Ravi Varma. “Protocol of Health Care and First Aid”, in *Dhanwanthari,* Book 10., No 9.

Amma, B Bhageerathi, “Shuchithwam(Cleanliness)”, in *Dhanwanthari*, Book 2., Vol 10.

KrishnaVarier, Panthalam. ‘Medicine’, in *Dhanwanthari Book 3 Vol 2.*

M G, “Carbolic Acid”, in *Dhanwanthari* 2.

M G. “Some Questions about Vishavaidyam”, in *Dhanwanthari*, Book 2, No.6.

M G. “Tuberculosis”, in *Dhanwanthari,* Book 9., No. 5.

Menon, C Komu., “Reply to an Article Written by an English Doctor” in *Dhanwanthari Book 2, No. 7.*

Menon, Chenkulathu Komu, “Plague or Agnirohini”, in *Dhanwnathari* Book 3, No. 7.

Menon, K G Theyyunni, “Plague or Pandemic”, in *Dhanwanthari*, Book 2, Vol 9.

Menon, Kunnathu Janarddana. “Some Superstitions”, in *Dhanwanthari*, Book 7.

Menon, Vaidyavishaaradan P K Ramunni. “Bhakshanavidhi (Food Rules)”, in *Dhanwanthari*, Book 16, No 4.

Moosad, Channazhi Kumaran. “Avatharika - Vishavaidyam”, in *Dhanwanthari*, Book 1, No. 1.

Mooss, Eledathu Thycaud Devakaran. “Prasavasnanam (Bath after Delivery)”, *Dhanwanthari Book 4*, No 5.

Mooss, Thrissur Thycaud Narayanan. “Ashtavargga”, *in Dhanvanthari*, Book 2, No 3.

Moossad, Channazhi Kumaran, Vishavaidyam 2, Doothadilakshanam (the messenger and other omens), in *Dhanwanthari, Book 1, No. 2.*

Moossad, Channazhi Kumaran. “Vishavaidyam 1; Avatharika”, in *Dhanwanthari, Book 1, Number 1*, 1894.

Moossad, Channazhi Kumaran. Vishavaidyam - 3, Doothadilakshanam (the messenger and other omens) in *Dhanwanthari*, Book 2, No. 3.

Moossad, Mananthala Neelakantan. “Ayurvedam”, in *Dhanvanthari* 1.

Mootthathu, Kaviyur Parameswara. “Palace Doctor of Travancore”, in *Dhanwanthari,* Book 4, No 8.

Nair, Athiyaarathu Krishna. “Routine During the Menstrual Period”, in *Dhanwanthari*, Book 14., No 9.

Nair, Athiyaaratthu Krishnan., "Vaajeekaranam (Energizing Man Like a Horse in Sexual Intercourse)", in *Dhanwanthari*, Book 14., No 10.

Nair, V K. "Naradehaniroopanam (Human Body Analysis)", *Dhanwanthari*, Book 11, No 2.

Nambi, Narayanan. "Adukkala (Kitchen)", in *Dhanwanthari*, Book 4, No 9.

Nambi, T Narayana., Aarogyarakshaamaargangal (Ways to Protect Health); From an English Medical Journal, in *Dhanwanthari*, Book 7., No 11.

Nambiar, Sreeman P P Kammaran. "Rajass", *Dhanwanthari*, Book 16, No 5, Kottackal, 1919.

Nambiar, Vaidyan P P Kammaaran. "Pathrasamvaadam, Govasoori Prayogam (An Explanation)", in *Dhanwanthari, Book 3 No 4.*

Nambiar, Vaidyan P P Kammaran. "Arya Vaidya Reform - Part 4", in *Dhanwanthari*, Book 4, No 4.

Nambiar, Vaidyan P P Kammaran. "Rajassum Aartthavakaaryavum",in *Dhanwanthari*, Book 17, No 11, Kottackal, July 1 920.

Nambiar, Vaidyan P P Kumaran, "Reforming Arya Vaidyam (Part 4)", in *Dhanwanthari, Book 4, No 1*.

Narayanan, Vettoor K P. "Disease", Dhanwanthari, Book 14., No 8.

Neelakantapillai, Aattukaal. "Laws of Cleanliness", in *Dhanwanthari*, Book 3, No 8.

P M V, "Soothikaamritham(Daily Routine)", *Dhanwanthari*, Book 7., No 2.

P M. Antidote, *Dhanwanthari*, Book 1, No. 2.

Pathra Samvaadam (Newspaper Debate); A Request, in *Dhanwanthari*, Book 3, No 3.

Pillai, K C Kesava. "Reform Arya Vaidyam", in *Dhanwanthari*, Book 4, No 6.

Pillai, Sreeman Umayanallur N Gopala. "Nammude Tholi(Our Skin)", in *Dhanwanthari*, Book 15, No 12.

PKV, "Shareera Shasthram", in *Dhanwanthari*, Book 1, No.1.

Raja, K C Veerarayan, "Swaasam", in *Dhanwanthari* Book 4, No 4.

Raja, K C Veerarayan, Swaasam, in *Dhanwanthari* Book 2, No. 5.

Shankaranarayanan, Kollankode Vadavannur. "Sleep", in *Dhanwanthari*, Book 4, No 1.

Shankarappillai, Vaidyan P. “Commerce of Medicine” (Read out in the Ochira Agricultural Industry Exhibition), in *Dhanwanthari*, Book 9.

Shasthrikal, K Keralavarmma. “What the Students Should Study in the Medical College”, in *Dhanwanthari Book 3. No 11.*

Shasthrikal, P Venkiteeshwara., Government Doctor, Karamana Hindu Medical College Publisher, in *Dhanwanthari Book 3. No 11.*

Soundaryarogya deerghajeevithopaayangal (Effects and Benefits of Beauty), in *Dhanwanthari* Book 3., Volume 8.

Thampuraan, Kodungallur Kunjikkuttan. Reform Arya Vaidyam - Part 6, in *Dhanwanthari,* Book 4, No 6.

Thampuran, Kodungallur Kunjikuttan. “Visham”, in *Danwanthri,* Book , No 5

Thampuran, Vaikom Vadakkumkoor Rajarajavarmma. “Heart”, in *Dhanwanthari*, Book 10, No 6.

Tharyan, Sreeman K I. “Health”, in Dhanwanthari, Book 16., No 2.

Tharyan, Sreeman K I. “Utthamasanthathy ulpaadanam(Giving birth to the Best Offspring), in *Dhanwanthari* Book 17., No 3.

The Editor, “Editors Notes”, in *Dhanwanthari, Book 2, No. 4.*

Vaidyan, Itty Vengal. “Siddhaushadhamaala - Continuation”, in *Dhanwanthari*, Book 5, No. 7.

Vaidyan, P Shankarappillai. “Commerce of Medicine”, in *Dhanwanthari*, Book 9, No 12.

Vaidyan, Sree P M Govindan. “Aartthavakaaryavum Rajassum”, *Dhanwanthari*, Book 17, No 6, Kottackal, February 1920.

Vaidyan, Sree P M Govindan. “Rajassalla”, in *Dhanwanthari,* Book 17, No 8, Kottackal, April 1920.

Vaidyan, Sreeman P M Govindan. “*Aartthavakaaryam* (The Case of Menstruation)”, in *Dhanwanthari,* Book 16, No 2, Kottackal, 1918.

Vaidyan, Thechunni Thomas Ollur. “Cholera”, *Dhanwanthari, Book 5,* No 1.

Vaidyan, Thrikkariyur Venkitachalayyar. “Cannot Say”, in *Dhanwanthari*, Book 5, No 4.

Vaidyan, V Kittunni. “Kshourakkatthi (Barber’s Knife)”, in *Dhanwanthari*, Book 2., Vol 10.

Varier, E Rama, “Prasavraksha”, in *Dhanwanthari,* Book 1, No. 12.

Varier, Kunjan. “Aayus”, in *Dhanwanthari,* Book 4, No5.

Varier, P K, LMS., “Sthaulyam(Obesity)”, in *Dhanwanthari,* Book 10, No 11.

Varier, P K. “A Reply”, in Dhanwanthari, Book 11, No 7.

Varier, P K. “Sareera Sukha Shaasthram (The Science of Physical Wellness)”, in *Dhanwanthari* Book 2, Vol 3.

Varier, P K. “Shareera Sukha Shaasthram – water, wells”, in *Dhanwanthari,* Book 3., No 4.

Varier, P K. “Sterility”, in *Dhanwanthari,* Book 14., No 9.

Varier, P Krishna. “LMS, Reform Arya Vaidyam - Part 4, in *Dhanwanthari,* Book 4, No 4.

Varier, P S., “Kaivishaparhaaragulika, Kaivisham Remedy Pills”, in *Dhanwanthari,* Book 6, No 11.

Varier, P V Krishna. “Burning Dead Bodies”, in *Dhanwanthari,* Book10, No 5.

Varier, P V Krishna. “History of Medical Science in Japan”, in *Dhanwanthari,* Book 5, No 6.

Varier, P V Krishna. “The Secret of Long Life-Span”, in *Dhanwanthari,* Book 2, Vol 2.

Varier, P V, Krishna., “Sarppavishatthinu Oru Puthiya Chikithsa”, in *Dhanwanthari* (Mal.), Book 3, No 1, August 1906

Varier, Vaidyan Cherpulassery P Achyutha. “Maamsabhakshanam(Non vegetarian Food)”, Dhanwanthari, Book 2., Vol 12.

Varier, P K Krishna. “Rasasindooram”, in *Dhanwanthari, Book 3 No 8.*

Varier, P K. “A Reverse Congratulation”, in *Dhanwanthari,* Book 10, No 5.

Varier, P K. “Doctors”, in Dhanwanthari, Book 10, No 8.

Varier, P K. “Swantham Prasthaavana”, in *Dhanwanthari,* Book 1, No 1.

Varier, P K., “Sareerasukhasasthram (The Science of Physical Wellness)”, *Dhanwanthari* Book 2, No.3.

Varier, P Krishna LMS. “Madirashi, Snayavya Paddhath - Nervous System”, in *Dhanwanthari,* Book 4, No 2.

Varier, P S. “Dhaathupushti (Sexual Health)”, in *Dhanwanthari,* Book 7, No 11.

Varier, P S. “Siddhoushadham”, in *Dhanwanthari* Book 2, Number 11.

Varieru, Rama. “Prasavaraksha”, in *Dhanvanthari,* Book 1, No 8.

Variyer, P K. “Shareerasukhasasthram – Vaayu”, in *Dhanwanthari,* Book 2, Vol 9.

Veluppillai, N. “Naayanmaarude Maarkkakkalyaanam(Circumcision Among the Nairs)”, in *Dhanwanthari,* Book 9, No 9.

Vidyadharan, A. “Few of My Doubts”, in *Dhanwanthari*, Book 1, No. 2.

Published Works

Alter, Joseph S. “Gandhi's Body, Gandhi's Truth: Nonviolence and the Bio-moral Imperative of Public Health”, in *The Journal of Asian Studies,* Vol. 55, No. 2., May, 1996.

Arnold, David. “Cholera and Colonialism”, in *Past and Present in British India*, No. 113, 1986.

Arnold, David. “Western Medicine in an Indian Environment”, in *Science, Technology and Medicine in Colonial India*, Cambridge: Cambridge University Press, 2000.

Arnold, David. *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-century India*, University of California Press, 1993.

Banerjee, Madhulika. “Public Policy and Ayurveda: Modernising a Great Tradition”, in *Economic and Political Weekly, Vol. 37, No. 12* Mar. 23-29, 2002.

Banthia, Jayant & Tim Dyson. “Smallpox in Nineteenth-Century India”, in *Population and Development Review*, Vol. 25, No. 4., Dec. 1999.

Basalla, George. “The Spread of Western Science: A three-stage model describes the introduction of modern science into any non-European nation”, in *Science, Vol. 15,* 5 May 1967.

Basalla, George. *Across Cultural Borders: Historiography in Global Perspective*, United Kingdom: Rowman & Littlefield, 2002.

Bashford, Alison. *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health*, United Kingdom: Palgrave Macmillan, 2003.

Bates, Don (ed.). *Knowledge and the Scholarly Medical Traditions,* United Kingdom: Cambridge University Press, 1995.

Bellenoit, Hayden J. *Missionary Education and Empire in Late Colonial India, 1860–1920*, London: Pickering & Chatto, 2007.

Bennan, Andrew. “Asian traditions of Knowledge: the Disputed Questions of Science, Nature and Ecology”, in *Studies in History Philolosophy, Biology & Biomedical Sciences,* 33, 2002.

Bhaskaranunni, P. *Pathonpathaam Noottaandile Keralam*, Thrissur: Kerala Sahithya Academy, 2012.

Bode, Maarten and Payyappallimana Unnikrishnan. "Evidence Based Traditional Medicine: For Whom and to What End?", in *E-Journal of Indian Medicine* Volume 6, Yokohama: United Nations University-Institute of Advanced Studies, 2013.

Bode, Maarten. "Taking Traditional Knowledge to the Market: The Commoditization of Indian Medicine", in *Anthropology & Medicine* Vol. 13, No. 3, December 2006.

Cell, John W. "Anglo-Indian Medical Theory and the Origins of Segregation in West Africa", in *The American Historical Review, Vol. 91, No. 2.*, April, 1986.

Chakrabarty, Dipesh. *Provincializing Europe Postcolonial Thought and Historical Difference*, Princeton: Princeton University Press, 2000.

Chandra, Bipan. *India's Struggle for Independence, 1857 – 1947*, Penguin, 1988.

Chopra, R N. *Report of the Committee on Indigenous Systems of Medicine*, New Delhi: Government of India - Ministry of Health, 1948.

Cleetus, Burton. "Subaltern Medicine and Social Mobility: The experience of the *Ezhava* in Kerala", in *Indian Anthropologist*, Vol. 37, No. 1 (Special issue on the Ethnography of Healing) Jan-June 2007.

Cleetus, Burton. letters to the Vaidyan in Burton Cleetus and Anne Geritsen ed. *Histories of health and Materiality in the Indian Ocean World*: Medicine Material Culture and Trade, 1600-2000, Bloomsbury, London. 2023

Cleetus. Burton. *New diseases, newer categories: Ayurveda's engagement with Epidemics in Travancore* in Studies in History, in Burton Cleetus ed. Special Issue Epidemics and Society: *Historical* and Contemporary Perspectives Studies in History in Studies in History Sage Volume 39 Issue 1, February 2023.

Cohen, Lawrence., "The Epistemological Carnival: Mediations on Disciplinary Intentionality and Ayurveda", in Bates, Don (ed.), *Knowledge and the Scholarly Medical Traditions*, United Kingdom: Cambridge University Press, 1995.

Croizier, Ralph C. "Medicine, Modernization, and Cultural Crisis in China and India, Comparative Studies" in *Society and History,* Vol. 12, No. 3, Cambridge University Press, Jul. 1970.

Das, Anirban. "Medical Knowledge of the Body: Colonial Encounters" in *Rethinking Marxism Volume 13., Number 2.* 2001.

Das, Anirban. "Medical Knowledge of the Body: Colonial Encounters", in *Rethinking Marxism,* Volume 13. Number 2., 2001.

Drakenstein, Hendrik Adrian van Reede tot. *Hortus Indicus Malabaricus, Continens Regioni Malabarici Apud Indos Celeberrimi Omnis Generis Plantas Rariores,* 12 Volumes, published in Amsterdam from 1678 to 1693.

Ernst, Waltraud. *Mad Tales from the Raj: Colonial Psychiatry in South Asia, 1800-58,* United Kingdom: Anthem Press, 2010.

Girija, K P. *Mapping the History of Ayurveda: Culture, Hegemony and the Rhetoric of Diversity,* India: Taylor & Francis, 2021.

Grove, Richard. "Indigenous Knowledge and the Significance of South-West India for Portuguese and Dutch Constructions of Tropical Nature", in *Modern Asian Studies,* Vol. 30, No. 1, Cambridge: Cambridge University Press, February 1996.

Hacker, I H. *A Hundred Years in Travancore 1806-1906,* Centenary Memorial Volume of the Work of the London Missionary Society in Travancore; South India, Fleet Street E C: H R Allenson Limited, 1908.

Halliburton, Murphy. "Resistance or inaction? Protecting Ayurvedic Medical Knowledge and Problems of Agency", in *American Ethnologist, Vol. 38, No. 1.*

Hardiman, David. *Healing Bodies, Saving Souls: Medical Missions in Asia and Africa,* New York: Editions Rodopi, 2006.

Heimsath, Charles Herman. The Local Social Reform Movements In Northern India, *in V. Dayananda Saraswati and the Social Reform Movement in Northern India,* Cambridge University Library, 1964.

Jaiswal, Y S and Williams L L. "A glimpse of Ayurveda, The forgotten history and principles of Indian traditional medicine", in *Journal of Traditional and Complementary Medicine,* 2016.

Jeffrey, Robin. *Politics, Women and Well-Being: How Kerala became 'a Model'?,* New York: Palgrave Macmillan, 1992.

Jones, Kenneth W. "Socio-Religious Reform Movements in British India", in the Series, *The New Cambridge History of India,* Cambridge University Press, 1990.

Keller, Richard C. "Taking Science to the Colonies: Psychiatric Innovation in France and North Africa", in Sloan Mahone and Megan Vaughan (eds), Psychiatry and Empire, Cambridge Imperial and Post-Colonial Studies Series, Palgrave Macmillan, New York, 2007.

Kleinman, Arthur (ed.). *Medicine in Chinese Cultures: Comparative Studies of Health Care in Chinese and Other Societies*, United States: U.S. Department of Health, Education and Welfare, 1976.

Krishnankutty, Gita. *A Life of Healing: A Biography of Vaidya Ratnam P S Varier*, Penguin India, 2001

Kumar, Deepak. "Medical Encounters in British India, 1820-1920", in *Economic and Political Weekly, Vol. 32*, No. 4., Jan. 25-31, 1997.

Kumar, Deepak. "The 'Culture' of Science and Colonial Culture, India 1820-1920", in *The British Journal for the History of Science*, Vol. 29, No. 2., June 1996.

Langford, Jean M., medical mimesis: healing signs of a cosmopolitan "quack", in *American Ethnologist*, University of Washington, 1997.

Langford, Jean. "Ayurvedic Interiors: Person, Space, and Episteme in Three Medical Practices", in *Cultural Anthropology,* Vol. 10, No. 3 Aug., 1995.

Larson, Gerald James. "Ayurveda and the Hindu Philosophical Systems", in *Philosophy East and West*, Vol. 37, No. 3., July 1987.

Leslie, C M. "The Rhetoric of the Ayurvedic Revival in Modern India", *Man, Vol. 63*., Royal Anthropological Institute of Great Britain and Ireland, May, 1963.

Livingstone, David N. "Tropical Climate and Moral Hygiene: The Anatomy of a Victorian Debate", in *The British Journal for the History of Science,* Vol. 32, No. 1, Cambridge University Press, March 1999.

Mohan, P Sanal. "Prathyaksha Raksha Daiva Sabha and the Imagining of Equality in Twentieth-century Kerala", in *Modernity of Slavery: Struggles against Caste Inequalities in Colonial Kerala*, Oxford University Press, 2015.

Mukharjee, Hardas. and Uma Mukharjee. *India's Fight for Freedom or The Swadeshi Movement; 1905 - 1906*, Calcutta: K L Mukhopadhyay, 1958.

Mukharji, Projit Bihari. *Nationalizing the Body: The Medical Market, Print and Daktari Medicine*, United Kingdom: Anthem Press, 2011.

Panikkar, K N, "Colonialism, Culture and Revivalism", in *Social Scientist, Vol. 31, No. 1/2.*, Jan. - Feb. 2003.

Panikkar, K N, *Colonialism, Culture, and Resistance*, India: Oxford University Press, 2007.

Pati, Biswamoy and Harrison Mark. *The Social History of Health and Medicine in Colonial India*, New York: Routledge, 2009.

Pati, Biswamoy. "Science and the Imagination of Modern India", in *Social Scientist, Vol. 29, No. 7/8,* July - August, 2001.

Planalp, Jack M. *Heat Stress and Culture in North India*, United States: U.S. Army Medical Research and Development Command, 1971.

Prakash, Gyan. "The Modern Nation's Return in the Archaic", in *Critical Inquiry*, Vol. 23, No. 3, Front Lines/Border Posts 1997.

Prakash, Gyan. *Another Reason: Science and the Imagination of Modern India*, Princeton: Princeton University Press, 1999.

Prakash, Gyan., "Science "Gone Native" in Colonial India", in Representations, No. 40, Special Issue*: Seeing Science*, University of California Press, Autumn, 1992.

Priyadarshini, S, J S Ashadevi, V Nagarjun and K S Prasanna. "Increase in Drosophila Melanogaster "Longevity Due to Rasayana Diet: Preliminary results", in *Journal of Ayurveda & Integrative Medicine*, Vol 1, Issue 2, April 2010.

Raj, Kapil. "Colonial Encounters and the Forging of New Knowledge and National Identities: Great Britain and India,1760-1850", in *Osiris, 2nd Series, Vol. 15, Nature and Empire: Science and the Colonial Enterprise*, 2000.

Raj, Kapil. *Relocating Modern Science Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900*, Palrave Macmillan, 1998.

Schiebinger, Londa. *Plants and Empire: Colonial Bioprospecting in the Atlantic World*, United Kingdom: Harvard University Press, 2009.

Sharma, Jayeeta. "British science, Chinese skill and Assam tea: Making empire's garden", in *The Indian Economic and Social History Review, 43. 4*, New Delhi: SAGE, 2006

Sharma, Madhuri. *Indigenous and Western Medicine in Colonial India*, New Delhi: Cambridge University Press India, 2012.

Sivaramakrishnan, Kavita. "Constructing Boundaries, Contesting Identities: The Politics of Ayurveda in Punjab (1930-40)", in *Studies in History, 22. 253*, New Delhi: Sage Publications, 2006.

Sloan Mahone and Megan Vaughan(eds.), *Psychiatry and Empire*, London: Palgrave Macmillan, 2007.

Sujatha, V & Leena Abraham, Medicine, State and Society, in *Economic & Political Weekly - EPW*, vol xliv no 16., *April 18*, 2009.

Tambe, Ashwini. *Codes of Misconduct: Regulating Prostitution in Late Colonial Bombay*, United Kingdom: University of Minnesota Press, 2009.

Thirumal, P and C Laldinpuii Lalrozami. *Modern Mizoram: History, Culture, Poetics*. India: Taylor & Francis, 2018.

Tirtha, Swami Sadashiva. *The Ayurveda Encyclopedia: Natural Secrets to Healing, Prevention & Longevity*, New York: Ayurveda Holistic Center Press, 1998.

Torri, Michelguglielmo. "For a New Periodization of Indian History: The History of India as Part of the History of the World", in *Studies in History,* 30(1) 89–108, SAGE Publications, 2014.

Varier, Aryavaidyan P K., *Dhanwanthari Masika Prabandhasoochi*(Mal.), Kottackal: Publication Division, Vaidyaratnam P S Varier's Aryavaidyashala, May 2011.

Vinayachandran, P. *Kerala Chikithsacharithram* (Mal.). Kottayam: Current Books, 2001.

Vysakh, A S. *Re-imagining Indigenous Medical Traditions in Travancore*, Ph D Thesis, Thiruvananthapuram: University of Kerala, 2014.

Wujastyk, Dagmar and Frederick M Smith (eds.). *Modern and Global Ayurveda Pluralism and Paradigms*, Albany: State University of New York Press, 2008.