

HISTORY OF MEDICINE AND HYGIENE IN MEDIEVAL KERALA
14th -16th CENTURIES

A Thesis Submitted in 2011 to the University of Hyderabad in Partial
Fulfillment for the Award of the Degree of

DOCTOR OF PHILOSOPHY
IN HISTORY

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DECLARATION

I, YASSER ARAFATH. P, hereby declare that this thesis entitled “HISTORY OF MEDICINE AND HYGIENE IN MEDIEVAL KERALA 14th -16th CENTURIES” submitted by me under the guidance and supervision of Professor R.L. Hangloo is a bonafide research work. I also declare that this has not been submitted previously in part or full to this university or any other university or institution for the award of any degree or diploma.

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CERTIFICATE

This is to certify that the thesis entitled “HISTORY OF MEDICINE AND HYGIENE IN MEDIEVAL KERALA 14th -16th CENTURIES” submitted by YASSER ARAFATH.P bearing Regd. No. 03SHPH06 in partial fulfillment of the requirements for the award of Doctor of Philosophy in History is a bonafide work carried out by him under my supervision and guidance.

The Thesis has not been submitted previously in part or in full to this or any other university or institution for the award of any degree or diploma.

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Abbreviations

<i>I.E.S.H.R.</i>	Indian Economic and Social History Review
<i>I.H.C.</i>	Indian History Congress
<i>I.H.R.</i>	Indian Historical Review
<i>J.A.S</i>	Journal of Asian Studies
<i>S.I.H.C</i>	South Indian History Congress
<i>CUP</i>	Cambridge University Press
OUP	Oxford University Press
AES	Asian Educational Services

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Chapter-1
Introduction
to
The Study of History of Medicine and Hygiene in Medieval Kerala

History of Medieval Kerala has been studied by many scholars, by exploring various facets of its social and cultural life.¹ Like their counterparts in other regions, historians here engaged themselves in the narration of political, social, economic and cultural behaviour of the people, in various capacities.² As a result, new areas of socio-cultural history have come to the limelight in the history-writing in the past six decades.³ However, one of the major areas in which the region made significant contribution: Medicine and practices of Hygiene, have not yet received satisfactory attention that they deserve. Therefore, I am making an attempt in this thesis, to explore the history of medicine as well as the practices and principles of Hygiene, with special reference to the region of Malabar.

The area chosen here falls in the broad area of history of medicine and science. As this subject has not received adequate attention in the existing historical narratives, a study of people's behaviour and actions in a particular historical juncture, shall be contributory for further examinations. When the region specific writings in Kerala

¹K. P. Padmanabha Menon, *History of Kerala*, Vols.4, Cochin Government Press, Eranakulam,1924,-1937; L.A.Krishna Iyer, *Social History of Kerala*, Book Centre Publications,Vol.2, Madras, 1970

²Sreedhara Menon, *Social and Cultural History of Kerala*, Sterling Publishers, Trivandram ,1979

³Stephen Frederic Dale, *Islamic Society on The south Asian Frontiers; The Mappilas of Malabar; 1498-1922*, Oxford Clarendon Press, Oxford,1980; Mathew, K. S,*Portuguese Trade With India in the Sixteenth Century*, Manohar, New Delhi,1983 Bahauddin, K.M, *Kerala Muslims:The Long Struggle*, Sahithya Pravarthaka Cooperative Society Ltd.Kottayam,1992; Gangadhran, T. K, *Kerala Charitram*, Calicut University Stores, Calicut, 1998

evolved into the community specific histories,⁴ many important aspects of this plural society have been overlooked. Therefore, it necessitates a deeper penetration into the multiplicity of norms, rules, rituals and consciousness that evolved in medieval Kerala from fourteenth to the end of sixteenth century.

Anyway, dominant narratives of history show us that, every society evolves through certain amount of scientific rationality and attitude.⁵ This urge for knowledge and the endeavour in pursuit of the same, makes the history of science central to human civilisation.⁶ The tendency to be curious can also be seen in Kerala society wherein, the habit of taking knowledge into continuous perusals was in existence from the time of Aryabhata.⁷ This was actually the result of a strong syncretic tradition established in medieval period.⁸ This syncretism was evolved through a dual process; continuous socio-cultural interaction within the social organisation due to the constant association with the outside world⁹ and also internal social dynamics within the region.¹⁰

Medieval Kerala had possessed one of the rich scientific traditions as its understanding of philosophy, astronomy, metallurgy, mathematics, building technology,

⁴Shangunni Menon, *A History of Travancore, from The Earliest Times*, Higgins Bothams, Madras, 1878, Padmanabha Menon, *Cochi Rarajya Charitram*, Government Press, 1912; O.K. Nambiar, *Kunjalis; Admirals of Calicut*, Asia Publishing, Bombay, 1963; T.K. Ravindran, *Asan and Social Revolution in Kerala*, Trivandrum, 1972; A.P. Ibrahim Kunju, *Mappila Muslims Of Kerala, Their History And Culture*, Trivandrum, 1989; Susan Bayly, *Saints Goddesses and Kings*, Cambridge University Press, Cambridge, 1989

⁵Irfan Habib, "Pursuing the History of Indian Technology: Pre-Modern Modes of Transmission of Power" *Social Scientist*, Vol. 20, No. 3/4. (Mar. - Apr., 1992), pp. 5-12

⁶Seyyed Hossein Nasr. "Science and Civilization in Islam," *New American Library*, New York 1968, pp.3-8

⁷George Varghese, *Passage to Infinity*, Oxford University Press, 2010

⁸Tara Chand, *The Influence of Islam on Indian Culture*, Allahabad, 1946 .

⁹André Wink, *Al-Hind: The Making of The Indo-Islamic World*, Brill Leiden, Boston, 2004

¹⁰Rahman , A (ed), *Science and Technology in Indian Culture: A Historical Perspective*, NISTADS, New Delhi, 1984, pp 22-23. 1984.

botany and medicine, had been recognised all over.¹¹ Nevertheless, the recognition that had been given did not develop into a catalyst force in order to facilitate engagements with practical existence of the said scientific consciousness. Hence, the praxis of healing and hygiene could not gather much of scholarly attention. However, it should be noted that, they developed sufficient consciousness towards different aspects of medicine and hygiene such as dress, physical cleanliness, diets and drugs. Yet, these consciousnesses were inexorably intertwined with religion and associated nomenclatures, like it happened elsewhere.¹²

My work, therefore, is an effort to understand the belief systems, practices and attitude of different communities towards the concept of disease, body, health, illness and hygiene. This also locates the cause of diseases and the nature and application of that curative practices that prevailed in the society during the period of our study. In other words, it is a study of how the medicine was working in a multicultural society and the way diffusion of various forms of medical knowledge occurred. This work is also going to be an attempt of revisiting the socio-cultural history of medieval Malabar through the cultural prism of medicine. Henery E Sigereist says “medicine is nothing else than the manifold relations between diseased and the cures.... Thus the medical history is a social history”¹³. Thus, social history of medicine has not only brought in the notion of health, illness and hygiene among different strata of the society but also the gap between the

¹¹ Seyyed Hossein Nasr, *Science and Civilization in Islam*, ABC International Group, Chicago, 2001, p.169; Hendrik Adriaan Van Rheede Tot Draakenstein, *Hortus Malabaricus, Continens Regni Malabarici Apud Indos Celeberrimi Omnis Generis Plantas Rariores*.1693

¹² George Saliba *Islamic Science and the Making of the European Renaissance*, MIT, Washington, 2007

¹³ Henery E Sigieriest, ‘Seminar’ at California Academy of Medicine, March 11, 1940.

popular and dominant perception and practice in understanding the wider dynamics of the society.¹⁴

Medicine is a cultural category embedded in the social moorings of any given society and shaped and reshaped by political, cultural, religious and professional atmosphere surrounding it. Every community developed a specific pattern of belief and behaviour in order to adapt themselves to the environment they were living in. These adaptations are a results of the beliefs and practice of the given communities. This results in their own perception of meaning of health problems, treatment systems and understanding of the hygiene and medicine. Therefore, it can be said that the medieval conception of the diseases was not a mere pathological entity but, the outcome of socio-historical process of time.¹⁵

As far as medieval societies are concerned, there existed a continuous blur between the scientific truth and mythical belief. From the beginning of the fourteenth century, a new paradigm evolved in India as circumstances were created for the application of scientific ideas to the problems of governance and economy. Indigenous societies were forced to adapt new technology and knowledge system in order to adapt itself to the new socio-economic transformation. These developments also influenced the realm of technology and medicine in the medieval period.

For Medieval societies in Kerala, diseases were thought to be the result of grave sins, breaking of social norms in present or previous life. It was considered a punishment for defiance of social and moral norms. Tribal people living in the fringe of the

¹⁴David Arnold, *Imperial Medicine and Indigenous Societies*, OUP, New Delhi, 1989; “Cholera and Colonialism in British India”, *Past and Present*, No.113,pp.118-151, 1986.

¹⁵Michel Foucault, *The Birth of The Clinic, An Archaeology of Medial Perception*, Vintage Books, New York, 1973

“civilizations” still consider ill health a result of witchcraft, black magic, displeasure of the deities and spirits existing on the boundaries of the villages.¹⁶ “Civilized” main stream medieval society was no different in its attitude towards disease and ill health. Even though people developed more sophisticated attitude towards these problems, fundamental causatives remained the same in relation to certain diseases such as small pox, chicken pox, leprosy, measles etc.¹⁷ They also perceived these diseases as the hand work of unsatisfied goddesses and arranged elaborate rituals under the supervision of prominent leaders of their respective caste and community.

Islamic community, *Mappilas* was no different in treating the illness as in medieval Kerala. The ill health, they sometimes perceived as the fallout of resented *Shaiks* and *Jinni* and responded accordingly. Medical practices of medieval Kerala involved a rich mixture of religion and culture. For keeping sound health, the canonical texts stressed temperance in all matters - food, sleep, exercise, sex and medicine. The healthy life was supposed to remain in constant harmony with the universe and true religious teaching. Purity rules were formulated for personal hygiene, social gatherings, sexual intercourse, eating of unclean food and so on. Some practices like *Kalari*, meditation, yoga, *shoucha* (art of cleansing), can be seen in the wider context of medical

¹⁶ This belief system is very strong in tribal communities of *Kurichiars*, and *Kattunaykkar* in the Malabar areas of Kerala. Though these communities have their own system of Pharmacology and well developed treatments system for some disease like snake bite, anemia, and viral fever the causative element are still considered to be the handy works of the above mentioned phenomenon. *Kurichiarns* in the Malabar area still consider many diseases as the curses from *Malamuthappan* or *Malabhagavathi* who some times are not happy with the people around who pollute the environment by their physical or moral acts. Interview with Kelappan Vaidyar, Vilangadu, Calicut, District. On 25-05-2006

¹⁷ M.J.Gentes, “Scandalizing The Goddess at Kodungallur”, *Asian Folklore Studies*, Vol-51, No.2, 1992. “The goddess is believed to cause small pox when unhappy, and a family may call a *Veliccappatu* (illuminators) to prevent or cure this dread disease.”p.307.

and hygiene system in medieval Kerala. For example, *Kalari*, a holistic exercise and treatment tradition, gave much importance to personal hygiene, and public health through proper physical and mental orientation and agility.¹⁸ In course of time, regardless of religion and caste, it became a common legacy in the tradition of health practices in medieval Kerala.

The relationship between hygiene and hierarchy was very evident in the social functioning of the medieval Kerala. Connection between the power and the maintenance of the personal and public hygiene had been evident in all civilisations including Indus valley civilisation. Enclosures, boundaries and borders which were objects and means of public/ private hygiene, however have scant reference in the historiography of Kerala. Through the proper use of religious scriptures, cultural tools and authority, dominant castes used principles and practice of hygiene as a tool for exclusion and inclusion. Circulation and mobility of the people of “polluted” or “*mlechhas*” were controlled and lines of barriers were strictly maintained in the urban and non-urban areas.¹⁹

Medieval Kerala shows us that ‘practicing hygiene’ was imposed as a responsibility and duty of different caste in order to have a proper management of the caste hierarchy and gender related functions. The pursuit of hygiene had been central to the community formation, purity of the self and community and integrity as well.²⁰

¹⁸ Philip Zarilli, *When the Body Becomes all Eyes*, OUP, New Delhi, 1998; *Kathakali Complex*, Abhinav Publications, Delhi, 1985

¹⁹ Sreedhara Menon, *Social and Cultural History of Kerala*, Sterling Publishers, Trivandrum, 1979; P.K.Gopalakrishnan, *Keralathinte Samskarika Charithram*, (Malayalam), Kerala Bhasha Institute, Trivandrum, 2000, p.421

²⁰ Alison Bashford, *Imperial Medicine: A Critical History of Colonialism, Nationalism and Public Health*, Palgrave, Macmillan, 2004 “It has become a way of imagining and embodying integrity and, problematically, homogeneity or purity of the self, the community, and especially in the early to mid twentieth century, the nation.” p.4

Development of the notions like ‘personal hygiene’, ‘domestic hygiene’, ‘social hygiene’, ‘ritual hygiene’, ‘caste hygiene’ was maintained by rigid maintenance of the ritual, geographical, legal and actual boundaries in the name of “*pulayappedi*” and “*parayappedi*.” Through proper facilitation of ‘self’ and ‘other’ this practice was continued as late as nineteenth century. Practices like constructing strange notions regarding the functioning of the female body, the biological change, menstrual cycle and distancing it with ‘purity’, and so on were nurtured by different communities. This was actually a part of ‘hegemonizing’ the total socio-cultural fabric of Medieval Kerala by using body as a medium. Among all, women from *Nair* community underwent the highest degree of degradation under this organised and well maintained system.²¹ Here the female body becomes the site for the construction of authority, legitimacy and hegemony and for what they perceived as corrective social and physical process.²²

History of sciences, medicine and hygiene cannot be studied from the conventionally defined themes of the traditional historians. Important contributions could be made if political, economical cultural aspects of these areas incorporated into the study of such developments.²³ This pattern has the advantage of establishing a new framework for understanding the nature and characteristics of that region’s society and culture in its totality. Significant feature of History of Science, Medicine and hygiene lies in its necessarily interdisciplinary nature. It borrows and benefits from different disciplines.

²¹ Nur Yalman, “On The Purity of Women in the Castes of Ceylon and Malabar”, *The Journal of The Royal Anthropological Institute of Great Britain and Ireland*, No.1 (Jan-June.,1963),pp.25-58

²² David Arnold, *Colonising the Body: State Medicine and Epidemic Disease in Nineteenth Century India*. OUP, Delhi, 1993

²³ Irfan Habib, “Pursuing The History of Indian Technology: Pre-Modern Modes of Transmission of Power”, *Social Scientist*, Vol.20, No.3/4 (March-April.,1992)pp.1-22

Philosophy, sociology, anthropology, political economy etc... provide valuable insights. But dependence on one aspect with the simplicity of a historical narrative may make any fine historical reconstruction difficult to comprehend. This would help us to understand how medical men in history, experimented direct natural phenomenon through direct observation of natural along with scriptural directives they had.²⁴

Man, nature, religion and then existing socio-political condition formed the basis for the development of healing traditions and hygiene praxis in medieval Kerala. From fourteen to the end of sixteenth century, the region had witnessed establishment of different medical traditions such as Ayurvedic and Islamic medicinal practices. Therefore, anxieties and curiosity of the people in the region was reflected in the texts written during this period. So, the history of medicine and hygiene in medieval Kerala should be studied within ‘the wider spheres of thought, culture and society’.²⁵ This would bring out aspects such as the real merchandisers of the medicine and hygiene, power and control of knowledge and parallel traditions. This would be possible only if we try to study different social groups at work during the period.

These social groups are very important in relation to the understanding of medieval historical realities, as most of these groups keep continuity of some customs and practices that their earlier generation had been doing during the time of our discussion.²⁶ The continuation of practices also resulted in the development of new

²⁴ Deepak Kumar, “Developing a History of Science and Technology in South Asia” *Economic and Political Weekly*, Volume. 38. No 23, June 07 , 2003.

²⁵ Porter, R (19880): ‘What is History of Science?’ in J Gardiner (ed), *What is History Today*, London, pp 69-71

²⁶ Duarte Barbosa, *A Description of the Coast of Africa and Malabar in the Beginning of the Sixteenth Century*, (trns), Henry E. J. Stanley, The Hakluyt Society, London, 1865, reprint, CUP,2009, William Logan, *Malabar Manual*, Asian Educational Service, New Delhi,1951

technological advancements, which of course confined within upper hierarchy.²⁷ These technologies could be treated as different form of knowledge which would take us in the exclusivities of various culture areas. Medicine for long has been considered both a science and an art. It has enormous social implications and probably equally important political and cultural dimensions as well. Earlier, we had some studies on the Indian medical tradition as part of philosophical and cultural enquiries.²⁸ Now, even scholars of modern Indian history, sociology and anthropology have taken medicine in a big way to understand the different aspects of peoples' history. These new vistas of learning traversed through many complex realities of health, hygiene, healing and control.

Apart from the above-mentioned concerns of a general and societal nature, one may also ask certain specific questions, as Roy Porter²⁹ does in the context of medieval England. This work rises some important questions such as a) how disease was understood? b) What were the main patterns of healing traditions? c) Can magico-religious healing in Kerala be contextualised historically d) How did medical pluralism emerge in medieval Kerala? e) What was the scope and nature of interactions between classical traditions and 'little' traditions of therapeutics? f) What role did the political patronage play in the development of medical traditions g) how do caste and religion play in the development and deterioration of the healing traditions. Therefore this thesis put

²⁷ W E Bijker, T P Hughes, and T J Pinch (eds), *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Cambridge, Mass; 1987.

²⁸ Bhagvat Singjee, *Aryan Medical Science*, 1895, reprint, Delhi, 1993; U C Dutt and G King, *The Materia Medica of the Hindus*, Calcutta, 1922; Shiv Sharma, *The System of Ayurveda*, 1929, reprint, Delhi, 1993; J Filliozat, *La Doctrine Classique De La Medicine Indienne*, translated by Dev Raj Chanana, Delhi, 1964; P V Sharma, *History of Medicine in India*, New Delhi, 1992, Charles Leslie, *Asian Medical System-A Comparative Study*, Berkeley, 1976, pp.133-58.

²⁹ R. Porter, *Disease, Medicine and Society in England 1550-1860*, Cambridge University Press, Cambridge, 1993, p 2.

these questions in sharp focus to illuminate the capricious nature of science and tradition where drawing distinction between two became impossible during the time. Traditional healing practices saw human body as “sacred”, though not all, and dealing with that believed to have required certain elements of religiosity while colonial medicine saw body as an object for rule and domination.³⁰ The history of medicine and hygiene in medieval Kerala cannot be studied without understanding the basic problem of the relationship between the society and the broader questions of science. The questions that should be asked is what was the exact nature of the relationship between the society and medicine is in a inconsistent socio-cultural landscape. This study, thus, tries to focus on hitherto neglected areas of medicine and hygiene from people’s world view. As far as medicine is concerned, physician or healer centric account of the history of medicine would represent a major drawback in the whole exercise.³¹

Disease and death are universal phenomenon and are reflected in the realms of promises and punishment in all religious scriptures. Even in medieval Kerala, these two things have been constantly evoked to control and create a canvas of fear psychosis in the wandering human minds. The anxieties and uncertainties towards life and death were best reflected in their perception towards health, hygiene and medicine. It will be interesting to understand the society by using the alternatives of hygiene, disease and medicine for a holistic historical inquiry. The identification of the centrality of medicine to understand the society has taken different turns in different regions of the world. Social constructionist theory of Medicine regards disease and medicine more ‘socially

³⁰ Bewell, Alan (1999): *Romanticism and Colonial Disease*, The Johns Hopkins University Press, Baltimore, p 24.

³¹ Roy Porter, “The Patients’ View, Doing Medical History From Below”, *Theory and Society*, Vol.14, No,2, Mar,1985,

constructed' than biologically occurred.³² Roy Porter and W.F. Bynum contributed immensely to understand the dynamics of society by using the variant: doctor-patient relationship in any functioning society and medicine from below.³³ This approach concentrates much more on the role of patients from different strata of the society and the way they played in the larger societal setting.

In India, medicine and the concept of hygiene threw open many new areas for the social and cultural historian to carry out many layered studies. Medieval people and some communities believed that the disease were the consequence of breaking the socio-cultural taboos or punishment from the gods and goddess. This was especially noticed in the medieval Indian village system.³⁴ Interestingly, this attribute can be seen among the religious communities like Christianity and Islam in medieval Kerala.³⁵ Disease was also considered to be the effect of unsatisfied saints or divine beings in the village space. The effort here, is therefore, to reconstruct the history of past through the social perception of disease and hygiene in relation to different communities that were founded on the hierarchy of purity, pollution and hygiene.

Area of Research

Any research has to locate itself in a specific geographical area for obtaining better articulation and comfort of the reader. Therefore, my research area would be the

³²James C Riley, *The Eighteenth Century Campaign to Avoid Disease*, Macmillan London, 1987; Andrew Wear(Ed), *Medicine in Society: Historical Essays*, Cambridge University Press, Cambridge,1992.

³³R.Roy Porter and W.F. Bynum (Ed) *Medical Fringe and Medical Orthodoxy 1750-1850*, Croom Helm, London, 1986, Roy Porter, "The Patient's View, Doing Medical History From Below", *Theory and Society*, Vol-14, No.2, March, 1985.

³⁴M.J.Gentes, "Scandalizing The Goddess at Kodungallur", *Asian Folklore Studies*, Vol-51, No.2, 1992, 295-322

³⁵Susan Bayly, *Saints Goddesses and Kings*, Cambridge University Press, Cambridge,1989

present geo-political boundary of Kerala. However, in order to make it more clear and specific, I have focused much on the region of Northern Kerala generally known as Malabar. The term *Malabar* is actually the ancient name for the entire Malayalam speaking areas, extended from the Northern landmark of Mount Deli to down South, Cape Comorin.³⁶ British occupation in 1792 of Malabar confined this region to the Northern areas of the Kerala. Therefore, the present study concentrates more on the geographical areas of the Malabar district of erstwhile Madras presidency. It is situated on the west coast of India and lies between northern latitude, 10°15' and 12°18' and east long 75°14' and 76°15' and stretches along the shores of the Arabian Sea for a distance of 150 miles.

From times immemorial, the shore of Malabar was an area of attraction for international trade and commerce. With the easy accessibility to the interior parts of the region and relatively tranquil nature of the seashore, this portion of the coastal area invited merchants from all around the world. In course of time, this route became the busiest passages to different countries of Africa and Asia. This exposed the region to the international trading and the economic activities that subsequently affected the entire course of history of this region.³⁷ This unique identity makes Malabar a sought after subject of the historians. These areas now include the present day districts of Kozhikode, Kannur, Malappuram, Wayanad and Kazaragode in the state of Kerala. However, the nature of the subject also demands frequent references from other regions of Kerala as

³⁶Duarte Barbosa, *A Description of the Coast of Africa and Malabar in the Beginning of the Sixteenth Century*, (trns), Henry E. J. Stanley, The Hakluyt Society, London, 1865,reprint,CUP,2009,pp.21-31

³⁷ Stephen F Dale, "Trade Conversion and The Growth of Islamic Community of Kerala, South India" *Studia Islamica*, No.71, 1990,pp.155-175

well. Therefore, this thesis takes the reader to many such places where and when parallel traditions have been noticed. Hence, the region of Malabar and Kerala have been invariably used throughout the thesis.

Period of the Study

The period of this study is from the beginning of fourteenth to the last decade of sixteenth century, which signifies the political fragmentation and subsequent establishment of many local kingdoms after the collapse of *Kulashekhara* Empire of Mahodayapuram in twelfth century. Culturally, this period also witnessed the complete disappearance of Buddhism from Kerala and establishment of a unique Islamic community called *Mappilas*. This community of Muslims attained a strong cultural space in the region of Malabar by the mid of fourteenth century. Sixteenth century signifies the journey of Malabar to the colonial modernity with the intrusion of European powers on Arabian Sea after the emergence of Portuguese in the region.³⁸ These three centuries marked the social consolidation of Brahmins as the most dominant social group who formulated the norms and methods of day-to-day life of majority population in the region. Their association with another dominant caste called Nairs, facilitated an entirely unique pattern of social functioning in which concepts such as hygiene, purity and healing underwent a complete makeover.³⁹ These developments corresponded with the

³⁸ C.Raymond Beazely, "The Colonial Empire of The Portuguese to The Death of Albuquerque," *Transactions of the Royal Historical Society, New Series*, Vol.8, 1894, pp.109-127

³⁹ C.J.Fuller, "The Internal Structure of The Nayar Caste", *Journal of Anthropological Research*, Vol.31, No.4, (Winter, 1975)pp.283-312; Joan P Mencher, "Changing Familial Roles Among South Malabar Nayars", *South Western Journal of Anthropology*, Vol.18, No.3, (Autumn, 1962), pp.230-245 "Polias (pulayans) the laboring lower clans are named ; By the proud Nayres the noble rank is claimed ; The toils of culture and of art they scorn, The warriors plumes their haughty brows adorn ; The shining falchion brandished in the right, Their left arm wields the target in the fight ; of danger scornful, ever armed they stand; Around the king, a stern barbarian

consolidation of lower/untouchable castes such as *Tiyyas*, *Parayas*, *Pulayas* and *Vannans*.

However, I have taken certain amount of flexibility to look at the centuries immediately succeeding the period under consideration. This has been done to tie the arguments coherently and to see the extent to which the continuity of the practices in medicine and hygiene existed.

Sources

This study is based mostly on primary sources; textual and non-textual from thirteenth century. Textual and literary tradition of medieval Kerala gives considerable reference to curative and healing practices of different religious and social categories during the period. The textual sources consulted include medieval *sandesakavyas* such as *Kokasandesham*⁴⁰ (Early fifteenth century) and *Ananthapuravarnanam*⁴¹ (fifteenth century). Early literary source such as *Vatakkannattukal* (Northern Ballads) also gives significant inputs for the study.

Sandeshakavyas form a very important source in the construction of the socio-cultural history of medieval Kerala. *Sandesha* (message) *Kavyas* (poetics) were very common literary tradition from early medieval period. Early *sandeshakavyas* in Malayalam were written in chaste Sanskrit which was beyond the comprehension of ordinary people or even the normally educated persons. Among the early

band.” Appeared in “The Lusiad” the epic poem of Luis de Camoens, the restless soldier-poet landed on the Malabar coast with some political purpose and detachments of the Portuguese in 1553. cited in F. Fawcett, Superintendent of Government Railway Police, Madras, “Nayars of Malabar”, *Madras Government Museum Bulletin*, Vol. III, No. 3, 1915, p,5

⁴⁰*Koka Sandesham* (trans), Prof.Gopikkuttan, , Current Books, Trichur, 1996

⁴¹*Ananthapuravarnanam*,Compilation and Commentary by K.Rathnamma, State Institution of Languages, Trivandrum, 1997

Sandehsakavyas, *Suka Sandesham* is considered to be the first written in tenth century A.D.⁴² There were *sandeshakavyas* written in *Manipravala* (mixture of Sanskrit and early Malayalam) language. Two of these *sandeshakavyas* are available for the readers now. *Unnuneeli Sandesham* is the only *Manipravala Sandeshakavya* that is available now in its complete form. “No other *Sandeshakavya* describes the geography and the beauty of Kerala as *Unnuneeli* does”, states one of the well known scholars in this literary genre.⁴³ The poet of the text was familiar with temples, *Theruvus* and urban centres across the region of Kerala. This *Sandeshakavya* was written in fourteenth century and is immensely helpful for the historian to reconstruct the history of that period. *Koka Sandesham* is another *Kavya* written in fifteenth century and was brought to light by Katamassheri Narayana Pisharadi in 1943. Till then, people and the scholarship of Kerala were completely unaware of this important work which gives a clear picture of many socio-cultural-and economic traits of the fourteenth century Malabar society.⁴⁴

Arabic sources written in the sixteenth century make one of the biggest contributions with regard to the history of Malabar. Texts such as *Al Fathhul Mubeen* (1578)⁴⁵ is very important as it deals with the volatile political system of Malabar in the

⁴²This was written by one Lakshmee Das who belonged to Karingapalli Manai in the nearby area of present day Cochin. This text can be used as major historical sources as it describes the geography and the religious institutes in the entire region of Kerala, from Rameshwaram (Tamilnadu) to Thrikkana Mathilakam (Kerala). It gives a complete picture of Hindu temples and *Kulams* (ponds) as it traverse across a very large geographical area.

⁴³*KokaSandesam*, Current Books, Trichur, 1996, p.17

⁴⁴*Ibid*, p.34.

⁴⁵Quasi Muhammad, *Al Fathhul Mubeen Li Ssamiriyilladhee Yuhibbul Muslimin*, (“Clear Victory for the Samutiri who Loves Muslims”), 1578, (trans-Malayalam) by Mankada Abdul Aziz, Al-Huda Book Stall, Kozhikode, 2000

sixteenth century. Another text of great significance, *Tuhfathul Mujahideen* (1583)⁴⁶ becomes very important in relation to the social and ritual practices of hygiene among the people of medieval Malabar.

Arabic-Malayalam textual tradition gives a proper understanding of the religio-magical treatments prevailed in the Malabar in the sixteenth and subsequent centuries. These texts included *Maala* texts such as *Muhyuddheenmala* (1606), *Badarmala* (1779), *Rifayeemala* (1781) and *Nafeesath Mala* (1895) deal with the ways in which Muslims in general perceived disease, health and healings. One significant development in this regard was the compilation of medieval Islamic healing practices with the title “*Fee Shifau Nnasi, Ithu Upakaram*” and “*Shuruthi Petta Ponnani Faropakara Tharjama*” in 1885. These two compilations of healing practices deal with the treatments for different illnesses during the period under consideration.⁴⁷

Medieval Ayurvedic sources such as *Chikitsa Manjari* (*Manipravala* period)⁴⁸ and *Mahasaram* (compiled in 1820s) are compilations of ancient and medieval practices of hygiene and medicine. These texts give us valuable information about the actual Ayurvedic medical practices that prevailed in medieval Kerala during the period under

⁴⁶Zainuddin Makhdom, *Tuhfathul Mujahideen Mujahideen Fee Ba-a-si Akhbaril Burthukhaliyeen*, translated as “A Gift to The Warriors with Information about Portuguese.” Written in Arabic (tr-Malayalam), C.Hamsa, Al-Huda Book Stall, Kozhikode, 1999.

⁴⁷*Fee Shifau Nnasi Ithu Upakaram* and *Shuruthi Petta Ponnani Faropakara Tharjama* are two different Arabic- Malayalam texts which compiled the religio-spiritual-magical systems prevailed among the Mappila community. These were written by the son of Ponnani Shiek and became very popular in the region. The treatments prescribed in these books are still used by some of the Sufi/Saints in the region treating various diseases irrespective of the socio-cultural differences. These books deal with many problems and illusion a common man face with and give “answers” according to Quran, Prophets and holly saints. They even specify the symptoms and time of the death to the patients apart from warding away the evil spirits and “*Jifreeth*” an extra human creation which is capable of doing anything. These books are now printed and Published by C.H.Muhammad Koya and Sons, Thirurangadi, 2001.

⁴⁸*Chikitsa Manjari*, (trns), Sriman Nambothiri, Vidyardambham Publishers, Alapuzha, 1990,p.14

consideration. *Chikitsa Manjari* was originally a *Manipravala* text which is not available now; but the printed copy of the same is available with many medieval *Ayurvedic* families such as Mezhathur Vaidya Madom in Thrithala. *Ashtanga Hridaya* and *Ahstanga Sangraha*, written by Vagbhatantha (between A.D. seventh and ninth century)⁴⁹ also give ideas of *dosha* based actual practices that were very prominent in the medieval healing practices in Kerala.

Travelogues are other major resources for constructing history of medieval Kerala in general and Malabar in particular. Rich tradition of travel writing on Malabar has been meticulously scrutinised and extensively used to give very useful glimpses on the region. My collection of major travelogues include Rabbi Benjamin of Tudela (1167), Chao-Ju-Kue (1178), Marco Polo (1288), Frier Jordanus (1324), Ibn Battuta (1346), Fa-Hsien (1436), Abdu-al-Razaq (1442), Barbosa (1500-1516), Ludovico Di Varthema (1503), (1649), John Fryer (1672-1681), Fra Paolino Bartolomeo (1776-1789), Jacob Canter Visscher (1717-1723) and many such works.

I have used two Portuguese documents (English translations) such as Gasper Correa's *Lendas da India*, which now available as "The Three Voyages of Vasco Da Gama and his viceroyalty." Other source is the *Roteiro* (rutter) or Journal of the journey which now titled as *Em nome de Deus: The Journal of the First Voyage of Vasco da Gama to India, 1497–1499*.

Folk literature also constitutes an important element as the practice of medicine and hygiene has had its own share of continuations. Ethnographical studies and colonial

⁴⁹ N.V.K.Varier, *Ayurveda Charithram*, Kottakkal Arya Vaidya Sala, 2002,p.51

documents show that each community under review somehow retains many practices especially in the area of hygiene and healing.⁵⁰

These facts have been corroborated with extensive personal visits to different historical places to see the functions of rituals and festivals which were carried out from the period of our study. These visits include number of temples, important mosques built during medieval times, prominent *ashtavaidyan* families such as *Vaidyamadom*. Since occasional visits alone did not help in making sense of many rituals associated with the concept of hygiene and diseases, it has been necessary for me to stay with some of the practicing communities such as *kurichiar* to understand the nuance and intricacies of the rituals and traditions involved in healing. Certain traditions and rituals are practiced during particular seasons of the year during folk festivities. These are major evidence for reconstructing the history of the region, since most of these festival originated in early medieval periods.

This study has also consulted the existing historical writings on Kerala and Malabar from nineteenth century onwards written by native as well as foreign scholars. Secondary sources are used to understand the socio-cultural evolution of the society in the given time especially in relation with specific communities and caste groups. However, none of these studies deal specifically with the history of medicine in medieval Kerala or Malabar. Therefore, my work has been perhaps the first attempt in expounding the complex socio-cultural situations involved in the practice of hygiene and treatments in the region.

⁵⁰*Some Marriage Customs in Southern India*, Madras Government Museum, Vol. IV, No.3, Government Press, Madras, 1903, *The Village Deities of Southern India*, Vol.V, No.3, Madras Governemnet Museum, Government Press, 1907

Chaperisation

The present study is divided into different chapters to facilitate a clear understanding of the theme of our study in an organized manner. Since, the history of medicine and hygiene has not been paid adequate attention in the existing writings on Kerala, I have tried to make the Second chapter, an extensive review of literature pertaining to the history of sciences and medicine. This would give a comprehensive idea as to how European and Indian scholars approached these subjects till very recent times.

Third chapter “Principles and Practices of Hygiene in Medieval Malabar,” deals with larger structure of the society where different principles of hygiene and its practices: social, ritual and physical are discussed. Examination of societal institutions and different social categories with all its facets has been carried out, in order to relate the way society and different forms of authorities treated health and hygiene. Hierarchical structure of the caste system, relations between different social and religious groups are also taken into consideration. This is also looking at the upkeep of the public health and hygiene in different creeds during the period under consideration. This part analyses the process of how religious ideas, social customs, economic positions, traditions and the medical relevance influenced different communities regarding their upkeep of hygiene and public health. Considerable attention has also been paid to bring to light the ‘hygiene trade’ by which beauty enhancing herbs and cosmetics were largely exchanged.

This section of the thesis also deals with the concept of ‘body’; private and social; by examining the textual and non textual sources. Human body, in this period, was perceived in various ways for legitimising the caste and power hierarchy in the medieval Kerala. I have invested considerable amount of time in reconstructing the notions of

social, ritual and physical hygiene in the cultural setup of pre-modern Malabar. This section does also deal with the concepts of ‘pureblood’, ‘half blood’ and the elements of ‘pure’ and ‘impure’.

Fourth chapter, entitled “Social Perceptions of Diseases and Healing in Medieval Kerala, with Special References to Malabar” is an attempt to see the way different communities approached disease and healing in the region. This chapter explores the evolution of perceptions, village therapies and role of divine beings in the entire process of curing. Through this chapter, one can understand the subtle and definite functioning of different socio-economic groups in the complex realities of diseases and healings. Medicine here becomes an important variant to understand the socio-cultural revolution in the culture area of Malabar.

Using medical and health practices as a historical tool, I have examined the co-existence of the different cultural norms and values in the region from fourteenth century. This chapter becomes very important because it looks at how the new societal formation here shaped the concepts such as personal ‘body’ and ‘social.’ Medieval Malabar experienced a unique community/caste crystallization in which only certain ‘bodies’ were believed to have been worth treating and respected.

Fifth chapter, “Physicians, Treatments and Medicine Markets in Medieval Kerala” deals with different groups physicians at work during the period of our study. Importance has been given to the classical as well as the popular physicians who had emerged from the lower section of the society. This chapter also deals with different texts in use during the medieval period in Kerala and the various herbs and medicines people

used. Important aspect of this chapter is that it deals with medicine markets across Malabar by scanning extensively the primary sources available.

Thus, by looking at the everyday rituals and rites of various communities, this work has arrived at certain conclusions that I think would help to give some preliminary ideas about an overlooked area in the history of Medieval Kerala.

Chapter-2

Major Themes in the Historiography of Science and Medicine

In the recent past there have been great surge in the scholarship of History of Science and Medicine in Asia. Started in 60s and 70s of last century with Charles Leselie and others, this has come a long way, as many scholars took it up as a different tool to understand the society as a whole. However, it remains a fact that most of the studies have been confined to the broader areas of Colonialism and its impact on indigenous societies. However, historians are aware that science, technology and medicine tend to produce histories of its own and can be used to understand the history of any given civilization.¹ From Sarton ² through Henri Sigerist,³ History of Science and Medicine has created its own space in the larger framework of the history of society, culture and politics. History of science and medicine could reflect continuous actions of men and the impact they created on the human consciousness and behavior.

A close observation of the history of science and medicine would divulge that, varieties of elements assisted the evolution of the subject. Any study of the history of medicine and hygiene under the backdrop of its socio-cultural contexts would be impossible, had discernible and controlling factors not taken into cognizance.⁴ By overlooking these factors, colonial enterprises and scholarship from 19th Century onwards attempted to reject various indigenous knowledge traditions in Asia and Africa for being superstitious and

¹ Roy Porter, "The Patient's View: Doing Medical History from Below, *Theory and Society*, Vol.14, No.2, March., 1985, p.175.

² George Sarton, often is called the, "Father of History of Science and Technology", *Current Comments*, Vol, 8, p.241, 1985. His major works are included, *Introduction to the history of science: From Rabbi ben Ezra to Roger Bacon*, the Williams & Wilkins, 1950 *The Appreciation of Ancient and Medieval Science During Renaissance (1450-1600)*, University of Pennsylvania Press, 1955; *The History of Science and New Humanism*, Harvard University Press, 1962.

³ Henry E Sigerist, *Land Marks in the History of Hygiene*, OUP, New York, 1956

⁴ A.Rahman, *Science and Technology in Indian Culture: A Historical Perspective*, National Institute of Science, Technology & Development Studies, Delhi, 1984

peripheral. Authors in the following paragraphs expose that ‘superstition’ and ‘naïve’ sciences in the Asia-African continents was as much prevalent as it gets in the European continent as well. And also it uncovers the empying ambitions of the western scholars from 19th century.

Health Medicine and Mortality in The Sixteenth Century by Charles Webster⁵ is considered to be one of the well brought out works publications in the realm of history of medicine in pre-industrialized society. Various authors greatly dealt with different areas in history of medicine such as diseases, death, astrological medicine, and so on.⁶ The first four papers are dealing with health behavior in Sixteenth Century Europe⁷ which includes death rate, infant mortality and such related areas. Paul Slack examines the reasons for high death rate in Sixteenth Century which was witnessing large scale epidemic and famine across the region.⁸ Roger Schofield along with E.A.Wriggley examines the child mortality rate by biometric analysis. Andrew W Appleby does explore the dietary traditions of different strata of the period. His chapter examines how the changing material condition facilitates the dietary tradition of different strata of the society especially middle and low class.⁹

“Medicine in the English Middle Ages” by Faye Gets¹⁰ is a remarkable and small book dealing with many intricacies of Middle Age medical practices in England such as medical travelers, institutions, practitioners, texts and faith systems.¹¹ Getz describes many practitioners and varied individual practices across the region of England.¹² England during this time witnessed effective medical markets representing diverse practitioners with different

⁵ Charles Webster, (ed). *Health Medicine and Mortality in the Sixteenth Century: Cambridge Monographs on the History of Medicine*. Cambridge, CUP, 1979

⁶ Ibid, pp.237-275

⁷ Ibid, pp.9-117

⁸ Paul slack “Mortality Crises and Epidemic Disease in England:1485-1610”,ibid, pp.9-60

⁹ Andrew B Appleby, “Diet in Sixteenth Century England: Sources, Problems, Possibilities,”Ibid, pp.97-116

¹⁰ Faye Gets, *Medicine in the English Middle Ages*, Princeton, Princeton University Press, 1998

¹¹ Ibid, pp.20-35

¹² Ibid, pp.8-9

approach towards body and medicine.¹³ Functional designation of the practitioners was very tricky, confusing and inappropriate to an age when specialization had not begun to assert itself and when healers tasks were so mixed.¹⁴ Carole Rawcliffe's book¹⁵ gives an account of hygiene practices in later medieval England. By using original sources including letters and travel writing the author gives us a very clear picture of "hygiene concept" in England. Climatical influence on diseases and healing and the natural medicine are also dealt with great vigor.¹⁶

Rawcliffe give glimpses on the ideas of body presented and gives a detailed understanding of the dominant medical and social construct of body.¹⁷ The author convinces us that British believed that management of body and health were as significant as the treatment of the diseases. Sudden and "unnoticed" death became a routine in the medieval age irrespective of the race, religion and creed.¹⁸ Fear of sudden death was a constant fear in the medieval period also, the writer points out. The book deals with the disease and sacred, ideas of sin, insanity caused by natural and demonic forces, natural and supernatural sources of treatments.¹⁹

Medicine and Society in Early Modern Europe by Mary Lindemann,²⁰ can be considered a great contribution for bringing out many untouched areas of European history. This is considered to be one of the best documents written by a professional historian in the realm of social history. This book highlights the medicine in the early Europe with Britain in focus. It is also attempts to bring a "new history" and present the reader a more accurate and

¹³ Ibid, p.83

¹⁴ Ibid, p.43

¹⁵ Carole Rawcliffe, *Medicine and Society in Later Medieval England*, Sutton Publishing, England, 1995.

¹⁶ Ibid, p.136

¹⁷ Ibid, p.202

¹⁸ Ibid, p.5

¹⁹ Ibid, p.19

²⁰ Mary Lindemann, *Medicine and Society in Early Modern Europe*, , *New Approaches to European History*, CUP, 1999

focused research in the social history of medicine.²¹ It gives ample space for the concept of “body” and “ill health” and fighting the diseases. The author gives interesting pictures of epidemics like Plague, Small Pox and Tuberculosis. ‘Barber-Physicians’ and ‘Learned Practitioners’ forms a major area of the study.²² Lindemann gives a good account of the public consciousness of the hygiene and public health by giving sufficient references to the way they carried out the cleansing work on the road and streets.²³ One interesting aspect of this study is the focus on the “other side” of the medical history: the patients.²⁴ We come across the examples of how the real patients made choices in Sixteenth and Seventeenth Century.

Meanwhile, Luis Garcia-Ballester makes a wonderful effort in an extensively researched work of history of medicine concentrating on the ‘other Europe’: Spain. Focusing on all major religious community of the medieval Spain, the author illustrates the practice and teaching of the medicine in the region. By using medicine as historical tool, the writer gives a valuable account of coexistence of three religions for four centuries.²⁵ First part of the book deals with the foundations of the medical science in the Thirteenth century Spain and the social factors, perceived as crucial in the assimilation and transmission of the medical thoughts. Second part addresses the role of the Jewish doctors in the Christian society and their approach towards the Christian scholastic medicine. Next part deals with the question of the disintegration of the Muslim community and its effect on the medicinal practice as a whole. This part also shows the way Arabic medical treatises get absorbed in the medical curriculum of the medieval Italy and France. Medical literature in Arabic remained the

²¹ Ibid,p.5

²² Ibid,p.262

²³ Ibid,p.196

²⁴ Ibid,p.8

²⁵ Luis Garcia-Ballester, *Medicine in A Multicultural Society: Christian, Jewish and Muslim Practitioners in the Spanish Kingdoms,1222-1610* Aldershot, England, Ashgate Publishing, 2001

undisputed scientific language in the hands of the Thirteenth century Jewish and Muslim scholars. The work catalogues the known surviving manuscripts in Arabic which are the strong testimonials to the wealth of the Arabic medical knowledge that circulated outside the Christendom and social order. An interesting law which was known as *Valencian Furs* (laws) required all the physicians possessed a University Degree, an attempt to effectively and subtly Christianize medical professions. This law denied entry to non-Christians in to the Spanish universities. Examinations by the local doctors and municipal authorities had the power to screen all the applicants including barbers and apothecaries. Qualified women doctors were not available as the medical profession was out of question for them and also because Christian laws did not permit it. If somebody from the female gender found practicing or gives medicine, she had to undergo sever punishments like getting whipped through the town.

Nevertheless, these impositions could not be implemented as there was an acute shortage of the health care and medical practitioners. The author shows that the social tensions prevailed in a multicultural society in which majority community tries to impose its will on the other groups. He laments the confrontations between the ecclesiastic authorities and secular professionals, and their respective healing prerogatives and, increasingly overt persecution of the religious minorities by a privileged Christian majority. And there was a gradual decline of the Islamic medical practice in Spain where medicine was a flourishing science before the beginning of the 'new world' as explained by Peter E.Pormann.²⁶ By Sixteenth century Islamic medicine got ruralised and isolated from the classical textual traditions. They were denied to practice within the framework of a dominant and new culture area as its proponents were dismissed as folk healers and were marginalized.

²⁶ Peter E.Pormann, Emilie Svage-Smith, *Medieval Islamic Medicine*, Georgetown University Press, Washington, 2007,pp.53-54

Last part of the book deals with *Morisco*-Spanish Muslims who were forced to convert into Christianity. Dominant social force used all methods of persecution to get the conversion done to assimilate the minority through aggressive ways. This also resulted in the disintegration of the medical subculture of the *Morisco*. The author uses medicine as historical variable to illustrate the complex cultural contexts. It also shows how religion played a great role in the thoughts practice of the medical profession as in the case of all Mediterranean cultures.

The Great plague has been a major subject of the historians of this genre. There has been many works on this dreaded incident that happened in Europe in frequent interval.²⁷ Stephen Porter makes an attempt to investigate the cruel outbreak of the Bubonic Plague in England still considered to be one of the decisive incidents in this study.²⁸ This had happened in 1665 and shook the entire population of the country as well as the continent.²⁹ He describes how from 1340s onwards the “Black Death” became a frequent visitor in the history of the London especially in 16th and 17th centuries.³⁰ This work deals with the outbreaks of the epidemic in the London proper and the spreading of the large and smaller cities nearby. He gives us a detailed account of the policy and its implementation by the governments: state and cities.³¹ Officials deployed quarantines, wrestled with the question whether the healthy should be isolated from the sick, or some extra taxes should be levied from the urban rich and so on.³²

²⁷Stephen Porter, *The Great Plague*, Stroud, Sutton Publishing Limited, 2000. Other related works are Sally Sheard; Helen J Power, *Body and City, Histories of Urban Public Health*, Ashgate, 2000; Elizabeth Lane Furdell, *Royal Doctors, 1485-1714, Medical Personal at the Tudor and Stuart Court*, University of Rochester Press, 2001.

²⁸ Porter, op.cit, p.8

²⁹ Ibid, pp.75-76

³⁰ Ibid, pp.10-11

³¹ Ibid, pp.86-128

³² Ibid, p.16

Roy Porter sketches the evolution and development in medicine through ages of human existence.³³ He also explains how medicine was integral to and developed out of wider religious, scientific, philosophical and political beliefs of the culture, which surrounded it. This work is an interesting attempt to examine the traditions of both East and West in wider context. This tradition was followed by Guenter B Risse Risse develops a method that he describes in his introduction, “hospital narratives and case histories” to describe a sort of personal history of the hospital in its specialty based on case histories of patients and thus combining an institutional view from above with a patient’s view from below.³⁴ This sublime work facilitated a plethora of works dealing with medieval hospitals in subsequent years.³⁵ Other area that historians of medicine and science found interest was ingredients of medicines in medieval period. Anne Van Arsdall brought out interesting areas of middle age herbariums in England.³⁶ This book deals with real and unreal practitioners of medicines, yet, both of them used herbals and other medical ingredients.³⁷

Literature in the history of hygiene and its notion and function are very scanty in the history of medicine discipline even now. History of public health and individuals’ practice of hygiene have been overlooked by the scholars of history of medicine. Considered as a major work, Henry E Sigerist’s book does not make a break through.³⁸ The author referred to the concept of the hygiene in five different historic periods. It starts with Galen through Renaissance, Enlightenment and finally ends up with modern concepts of the hygiene.³⁹ Virginia Sarah Smith, brings out the universality of the “cleanliness” from classical Greek to

³³Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity*, Norton, 1997

³⁴Guenter B Risse, *Mending Bodies, Saving Souls: A History of Hospitals*, New York, OUP, 1999

³⁵Kevin Patrick Siena, *Poverty and the Pox: Venereal Disease in London Hospitals, 1600-1800 England*, University of Toronto, 2001; Sioban Nelson, *Say Little Do Much: Nursing, Nuns and Hospitals in the Nineteenth Century*, University of Pennsylvania Press, 2001

³⁶Anne Van Arsdall, *Medieval Herbal Remedies: The Old English Herbarium and Anglo-Saxon Medicine*, Routledge, New York, 2002

³⁷*Ibid*.pp.38-39

³⁸Henry E Sigerist, *Land Marks in the History of Hygiene*, OUP, New York, 1956; Mikkeli H, *Hygiene in the Early Modern Medical Tradition*, 1999

³⁹*Ibid*, p.9

Crusades.⁴⁰ She states that every society and region “has its own unique profile and history of cleansing, purification, or hygienic practices and its own cultural mix.”⁴¹ Alison Bashford analyses the concept of hygiene in a colonial setting focusing on the colonial enterprises in Australia under British occupation.⁴² The author explored the prejudice of the colonial state towards the population in terms of the colour, race and gender.⁴³ This analysis is made by taking cue from different areas and aspects of the hygiene; sex hygiene, domestic hygiene, social hygiene, national hygiene, moral hygiene, tropical hygiene, maternal hygiene, racial hygiene, international hygiene and more⁴⁴ Colonial policies of hygiene were executed by the defined boundaries of “enclosures” and “boundaries” and “excluded” and “included” citizenship.

History of science, technology and medicines pertaining to the medieval period is very scanty and has been overlooked by many historians and there is great scope for the same. Many ambitious works have been failed to understand culture gaps of science and technology in medieval India. There is great deal of lacuna in many works dealing with science in general and medicine and hygiene in particular.⁴⁵ In one of the popular works in the last decade, A.Rahman,⁴⁶ tries to put in ‘the interrelated way the social, philosophical and cultural characteristics of a distinctive world civilization of India evolved’ in the first volumes of his ten volume series. In an earlier venture D.M. Bose, S.N.Sen, and B.V.Subbharayappa attempted to highlight the glory of Indian science and technology. This

⁴⁰Virginia Sarah Smith, *Clean: A History of Personal Hygiene and Purity*, OUP, Oxford, - 2007

⁴¹Ibid,p.6

⁴²Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health*, Palgrave, New York, 2004

⁴³Ibid,pp.81-85

⁴⁴Ibid,pp.4-5

⁴⁵A.L.Basham, “The Practice of Medicine in Ancient and Medieval India”, pp.18-44 in Charles M. Leslie (ed), *Asian Medical Systems: A Comparative Study*, University of California press, California, 1976

⁴⁶A.Rahman, (ed)*History of Indian Science, Technology and Culture, A.D.1000-1800*, OUP, New Delhi, 1999

attempt had been made out for expressing the superiority that India had in terms of originality and innovations.⁴⁷

This work is an attempt to highlight some part of the science and technology following the footsteps of larger Orientalist historians by just glorifying the classical and medieval Indian sciences and technology by sometimes misjudging of the historical facts with some prejudiced and preconceived notion of the history.⁴⁸ This work concludes by making that the development and innovations in India have become virtually extinct after the establishment of “Islamic power” in 12th Century. Creative and innovative urges of the Indian sciences; astronomy, numbers, algebra and medicine had seen their lowest ebb in twelfth and mid nineteenth centuries which correspondence the period of Sultanate and Mughals in Indian subcontinents.⁴⁹

Nevertheless, later historians did not agree with this prejudiced construct of Indian history and came up with new insights in the existing knowledge. These new group of scholars wanted to break the orient list construct by bringing syncretism elements in sciences and technology. By concentrating more on the plural aspects of the science and overlooked elements of the Muslim contributions, they have been trying to rectify some of the misdeeds of the orientalist/indologist historians. Irfan Habib countered the prejudiced notion of the growth and plurality of the science, technology and medicines in Asia along with the development of new political culture.⁵⁰

O.P.Jaggi's⁵¹ work traced the history of technology and sciences from stone age to present in his magnum opus, *History of Science and Technology in India*. His first volume

⁴⁷D. M. Bose, Samarendra Nath Sen, B. V. Subbarayappa, *A Concise History of Science in India*, Indian National Science Academy, Delhi, 1971

⁴⁸Ibid, p. pp.450-465

⁴⁹Ibid, p.486

⁵⁰Chahryar Adle, Irfan Habib, (eds), *History of Civilizations of Central Asia: Development in Contrast : From The Sixteenth to the Mid Nineteenth Century*, UNESCO, Turin, 2003

⁵¹O.P Jaggi, *History of Science, Technology and Medicine in India*, Volume 10, Atma Ram, 1973; *History of Science and Technology in India: Science in Modern India*, Atma Ram, 1984

traces the advances the Stone Age man made in India specifically during Harappan civilization and the second volume deals with the Vedic civilization. He makes most of his understanding from Sanskrit sources especially Vedic and makes a tiring effort to project that the Vedic and Pre-Vedic society was scientifically very advanced. The study is primarily based on the uncritical study of the Sanskrit sources and translation of the same by non-Sanskrit scholars.

Waltraud Ernst and Bernard Harris⁵² make an effort to construct the colonial power and its racial prejudices in the field of sciences and medicine in British India and Africa.⁵³ The main objective of the book is the political and ethnographical discourse on the race in the backdrop of the Colonial Raj across the colonies. Authors in the book “share an ambition to break away from the conventional understanding of the subject and expose some of the dangerous and destructive patterns that were established when the absurdity of the race was elevated into a central political, cultural and economic concept and endowed with a power to both determine and explain the unfolding of history”⁵⁴

There is a serious initiative in this book to explore the claims of the racial superiority and western medicine as a hegemonic tool in colonies from the Enlightenment period itself. David Arnold in his article in the book “An Ancient Race Out Worn’: Malaria and Race in Colonial India, 1860-1930”⁵⁵ casts a serious apprehension on the “racial logic of belonging” and Enlightenment root of racial hierarchy prevalent in the colonial mindset. “Racialized” science and scientific and cultural justification racism played main role in framing and implementing many policies; legal institutional or medical; in colonial states. Scientific

⁵²Waltraud Ernst and Bernard Harris (eds), *Race, Science and Medicine, 1700-1960*, Routledge, New York, 2001

⁵³Ibid, pp.80-144

⁵⁴Ibid,p.2

⁵⁵Ibid, pp.123-143

racism is diversely refashioned during this period and was given biological and cultural attributions.⁵⁶

David Arnold traces the history of India from 18th century onwards after the first onslaught of the colonial power on Malabar Coast.⁵⁷ This book fills the gap in the historiography of India by putting up an in-depth study of science, technology and medicine during the colonial phase in the country. This is not a conventional book of history of science and technology but a detailed understanding of the science innovation and policies and its impact on the individuals and specific social strata.⁵⁸ The author tries bringing in science as a cultural construct and with its own political agendas and institutional structures.⁵⁹ Arnold seeks the science as a parameter to understand the different modalities of the society in colonial period. In other words, he brings in the socio-cultural character of the sciences and technology in colonial India. His book is an attempt to understand the ‘recipient’⁶⁰ societies in which the “western science has been received and situated in relation to indigenous epistemologies and practices”.⁶¹

The author also refers to some earlier works which emphasizes the strong position of the scientific temper and traditions of the Indian societies before and after the emergence of the colonial power. He says that those indigenous medical practices have shown its own tendency of plurality and this plurality and differences across the regions had its own strength and weaknesses. Earlier, Arnold tried to examine the relation between the colonializing project and its implication on different fields like science and technology, art and language.⁶² Arnold tries to examine the notion of the “Body” as a site of colonial legitimacy, control and

⁵⁶ Ibid, p.6

⁵⁷ David Arnold *Science, Technology, and Medicine in Colonial India*, Part 3, Volume 5, CUP, UK, 2000

⁵⁸ Ibid, pp.169-170

⁵⁹ Ibid, pp 129-131

⁶⁰ Ibid,p.9

⁶¹ Ibid,p.2

⁶² David Arnold, *Colonizing the Body: State Medicine and Epidemic: Disease in Nineteenth Century India*, University of California Press, California, 1993

authority.⁶³ The author explores the diverse interests of the colonial state by focusing on the health policy and the way they treated three dreaded diseases; Cholera, Smallpox and Plague.⁶⁴ Medical intervention from the colonial state not only termed as “civilizational mission” but also a legitimacy for their permanent settlement on Indian territory.⁶⁵ By giving a new look into the colonializing project; Arnold also brings to the notice the responses of the Indians to the emerging field of medicines.⁶⁶

Zaheer Baber⁶⁷ gives a general overview of the situation by giving us an abstract level discussion on colonial impact on Indian science and technology. But this book gives a strong foundation of the period prior to the British in the chapter titled “science, technology and society in medieval India.”⁶⁸ His book talks about the universal character of the sciences and its relation with social organizations.⁶⁹ There is a detailed discussion on the scientific attitude prior to the 16th century and goes on explaining the colonial encounter with the local scientific attitude and approach. Baber discussed the scope of power in disseminating knowledge communication after the establishment of the hegemonic power. Baber makes a survey of the Indian technology; ancient and medieval, regarding astronomy, meteorology and military technologies.⁷⁰ There had been great exchanges between India and other South Asian countries and Middle East and talks about the way Indian numerical tradition with great political patronage influenced other culture areas.⁷¹

⁶³ Ibid,p.57

⁶⁴ Ibid.pp.130-159

⁶⁵ Ibid,p.58

⁶⁶ Ibid,p.121

⁶⁷ Zaheer Baber, *The Science of Empire: Scientific Knowledge, Civilization and Colonial Rule in India*, Delhi 1998.

⁶⁸ Ibid.53

⁶⁹ Ibid.P.58-59

⁷⁰ Ibid, pp.60-62.

⁷¹ Ibid,p.82; for further references see, George Saliba *Islamic Science and the Making of the European Renaissance*, MIT, Washington,2007,pp.18-20; Seyyed Hossein Nasr, *Science and Civilization in Islam*,ABC International Group, Inc.Chicago,2001,pp.140-160

C.A.Bayly⁷² gives an idea of how the British were able to penetrate in the Indian mind during the late medieval period with superior knowledge and science.⁷³ British, as Bayly goes, seemed to have, in spite of the ‘superior’ knowledge, found great difficulty to understand the geography, language and local customs of the conquered.⁷⁴ Even after one century of existence, British more or less depended on the newly educated Indian middle class to explore Indian mind and psyche.⁷⁵ This inadequate knowledge about the indigenous led British heading into many disasters including many defeats in the hands of ‘less civilized’ and marginal communities. Bayly explains the debates among the Indian and British intellectuals pertaining in to the field of astronomy, language and medicine and makes a middle path between “colonial sciences were a pursuit of pure knowledge” and “it was tool in search of power.”⁷⁶

Scholarship on history of medicine in India has been growing over a period of time. This tradition was initiated by H.R. Zimmer who analysed some important aspects of ancient Indian medical systems especially Ayurveda.⁷⁷ His work is a general presentation of the evolution of the ancient Indian medicine through centuries. This was carried forwarded by Henry Sigerist, who tried to find common elements and conceptual similarities in Greek, Hindu and Persian medical traditions.⁷⁸ Dr.P.Kutumbaiah presented a comprehensive introduction to Ayurvedia system of medicine.⁷⁹ The major portion of his work is concerned with the doctrines of classical Indian medicine, found in the Caraka and Susruta Samhitas. The author touches upon themes such as Harappan medicine, the magico-religious practices

⁷² C.A.Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India 1780-1870*, Cambridge, 1996

⁷³ Ibid, p.4

⁷⁴ Ibid, pp.365-366

⁷⁵ Ibid, p.147

⁷⁶ Ibid, p.252

⁷⁷ H.R.Zimmer, *Hindu Medicine*, Baltimore, 1948

⁷⁸ Henry Ernest Sigerist, *A History of Medicine: Early Greek, Hindu, and Persian medicine*, Oxford University Press, 1961

⁷⁹ Dr.P.Kutumbaiah, *Ancient Indian Medicine*, Orient Longman, Mumbai, 1962

of medicines in the Vedas and the medical references in the Brahmanas and Upanishads. Asoke K.Bagchi locates the medical practices in medieval India with special attention to Ayurveda and Unani.⁸⁰ His work discusses elaborately, medicine and medical development of Indian subcontinent.⁸¹

Charless Leselie and Allan Young did one of the path breaking works in the field of history of medicine and its comparative nature.⁸² This book can boast of lot of sophistication in the study area and hailed by many scholars in the field of science and technology. These collection of articles make a strenuous effort to make comparative studies on the medicinal system in East Asia, South Asia and Islam.⁸³ They deal with Japanese Anatomy, Chinese medicine and traditions in the South Asia. There are some thought provoking essays on the Ayurvedic tradition and its many facets. Concepts of death and nature, science, experimentation and clinical practice in Ayurveda are giving new dimension to the socio-historical perspective of the system.⁸⁴ Essay by Francis Zimmermann examining the concept of violence and the non- violence in the semantics of Ayurvedic tradition.⁸⁵ On the Islamic medical tradition we have a comparative study focusing on the relative similarities between Greek and prophetic medicine and the Islamic Humoralism in some geographical areas.⁸⁶

Another important study edited by Charles Leslie, brought out a comparative outlook in the field of medicine.⁸⁷ This work explores some interesting facets of Indian, Islamic and Chinese medicine in ancient and medieval times.⁸⁸ Priya Vrat Sharma⁸⁹ explores the ways in

⁸⁰ Asoke K.Bagchi, *Medicine in Medieval India: 11th to 18th Centuries*, 1997

⁸¹ Ibid,p.125

⁸² Charless Leselie and Allan Young , (eds), *Paths To Asian Medical Knowledge, Comparative Studies of Health and Medical Care Series*, University of California Press, 1992,

⁸³ Ibid,pp.129-255

⁸⁴ Ibid,p.129

⁸⁵ Ibid,p.209

⁸⁶ Ibid,p.257

⁸⁷ Charles M. Leslie, *Asian Medical Systems: A Comparative Study*, University of California Press, Berkeley, 1976

⁸⁸ Ibid,pp.18-63

which Ayurveda evolved and borrowed from different traditions of the world especially through the exchange with Islam.⁹⁰ Nevertheless, the scanty resources used in this task make it a difficult narrative to take in to consideration. Taking a drastic shift from the existing writings, Seema Alavi explored the influence of Islamic medicine and Unani on Indian socio-cultural canvas during later medieval times.⁹¹ Alavi expounds tradition of Indo-Islamic medicine or Unani and the way it worked in a different political backdrop in pre modern time as well.⁹² Spanning a period of 400 years, she details the way Unani evolved as medical tradition and remained strong in the face of hegemonizing forces of western medicine.⁹³

Mark Harrison and Biswamoy Pati attempt to resolve the cognitive areas of the history of medicine in the colonial period.⁹⁴ The book tries to examine the new areas of history of medicine in recent times. It gives a detailed description of the colonial construct of the public health and the discussion pertaining to it focuses on the two strands in the historiography.⁹⁵ Systematic analysis of the friction between the policy makers back in Britain and the agents in Calcutta is an eye opener to the students of the Colonial History of Medicine.⁹⁶ Poonam Bala explores the impact of the Colonial State on the traditional medicinal system in India.⁹⁷ She explored the impact of professionalisation and commercialization of the medicine on existing tradition of Unani and Ayurveda system of knowledge in 19th and 20th century in Bengal.

⁸⁹ Priya Vrat Sharma, (ed). *History of Medicine in India (from Antiquity to 1000 A.D.)*. New Delhi: Indian National Science Academy, 1992.

⁹⁰ Ibid,p.469

⁹¹Seema Alavi, *Islam And Healing: Loss And Recovery Of An Indo-Muslim Medical Tradition 1600-1900*, Palgrave Macmillan, 2008

⁹² Ibid,pp.19-53

⁹³ Ibid,p.14

⁹⁴ Mark Harrison and Biswamoy Pati, *The Social History of Health and Medicine in Colonial India*, Routledge, 2009, New York

⁹⁵ Ibid,p.45

⁹⁶ Ibid,p.15

⁹⁷ Poonam Bala, *Medicine and Medical Policies in India: Social and Historical Perspectives*, Lexington Bokks, UK,2007

Mark Harrison, one of the leading historians of Medicine has made an impressive effort to bring about the relations between the functioning of the nature, environment and imperialism.⁹⁸ He explores the ways in which British saw Indian climate as a constraints upon their imperial ambition.⁹⁹ Harrison demonstrates how the reciprocal activities of the climate, race and colonial authority evolved in eighteenth and nineteenth century and laid the foundation of the modern view of Indian climate.

First settlers from British East India Company settled on the eastern coast of Indian where climate resembled with Northern Europe.¹⁰⁰ When Mughal Empire became virtually defunct, colonial power became supreme authority economically and politically. This time, ideas about racial fixity not fluidity emerged. British by this time viewed the Indian “the other.” Harrison accounts the way British perceived the hygienic practices, public and private. Reformers had seen improved sanitation as a means of the social development. Better hygienic practices improved the races of all types and shows us the colonial prejudice of the “purity” and “impurity.”¹⁰¹

Thus, this chapter tries to locate the evolution of the history of sciences in general and medicines in particular. This chapter thus reflects that there are many studies that have been carried out by historians and sociologists on different areas of the history of medicine. Various aspects like medicine; practitioners, new inventions, great personalities in the field and so on have been referred to in most of the works especially in the initial stages of the historiography. Later, historians started turning their attention towards the colonial and imperial invasions and the way that affected the whole functioning of the indigenous medical

⁹⁸ Mark Harrison, *Climates and Constitutions: Health, Race, Environment and British Imperialism in India, 1600-1850*, New York, OUP, 1999

⁹⁹ Ibid, p.105

¹⁰⁰ Ibid, p.7

¹⁰¹ Ibid, pp.84-86

traditions. Some of them focused on the issues of interactions between different medical practices in different regions of the world.

None of the above mentioned works do deal with healing and medicinal practices of medieval Kerala where the practice of Ayurveda and Islamic healing tradition found a strong foothold. Moreover, existing historiography of Medieval/Modern Kerala has not made considerable attempts it should have, for the richness in the sources and the changes, hygiene and medical practices brought in. Early writings on Kerala concentrated to a great extent on the political history of the region.¹⁰² Subsequently, scholars started expounding different aspects of socio- cultural life of the region concentrating only on the dominant narratives.¹⁰³ Historiography of the Malabar region also followed the same pattern in which ruler, his activities and associations occupied much space.¹⁰⁴ Following years witnessed a new trend; writing of community histories; largely by western scholars who attempted to bring out socio-cultural life of exclusive communities.¹⁰⁵ However, these writings do not address one of the interesting areas in the history of the region; Medicine and Hygiene.

My work, therefore, draws a strong justification for a serious attempt to explore the practices of healing and hygiene in medieval Kerala with special references to Malabar including the sixteenth century.

¹⁰² K.P. Padmanabha Menon, *Kochi Rarajya Charitram* (Malayalam) Trivandrum, 1912; K. P. Padmanabha Menon, *History of Kerala*, Vols-4, Cochin Government Press, Ernakulam, 1924,-1937; Ealamkulam Kunhnan Pillai, *Studies in Kerala History*, N.B.S.Kottayam, 1967

¹⁰³ L.A.Krishna Iyer, *Social History of Kerala*, Book Centre Publications, Vol- 2, Madras, 1970; Robin Jeffrey, *The Decline of The Nair Dominance: Society and Politics in Travancore, 1847-1908*, Vikas, New Delhi, 1976; M. G. S. Narayanan, *Political and Social Condition of Kerala Under The Kulasekara Empire*, University of Kerala, Kottayam, 1972; Sreedhara Menon, *Social and Cultural History of Kerala*, Sterling Publishers, Trivandrum, 1979

¹⁰⁴ K. M. Panikkar, *Malabar And Portuguese: Being A History of The Relations of The Portuguese with Malabar from 1500 to 1663*, D.B.Taraporevala Sons, Bombay, 1929; K.P.Krishna Ayyar, *Zamorins of Calicut- From the Earliest Times to A.D. 1806*, Norman Printing Bureau, Calicut, 1938; O. K. Nambiar, *Kunjalis: Admirals of Calicut*, Asia Publishing, Bombay, 1963.

¹⁰⁵ Stephen Frederic Dale, *Islamic Society on The South Asian Frontiers; The Mappilas of Malabar; 1498-1922*, Oxford Clarendon Press, Oxford, 1980; Susan Bayly, *Saints Goddesses and Kings*, Cambridge University Press, Cambridge, 1989; Roland Miller, *Mappila Muslims of Kerala: A study in Islamic Trends*, Orient Longman, Madras, 1992.

Chapter-3

Principles and Practices of Hygiene in Medieval Malabar

The word hygiene, if applied in the broadest sense, signifies the rules and regulations for a near faultless state of mind and body. It is neither desirable nor possible to dissociate from examining the tradition of healing and hygiene, the basic elements of the life; mind and body. Traditional societies and their cultural ethos understood them as complementary to each other by nature. Any incongruity in this basic premise was believed to have caused total breakdown of living patterns and social life.¹ Historically, cleansing; physical, social, ritual; appeared to have been a universal subject, though its applications and principles in different cultural areas.² My examination here is confined to medieval Kerala, where hygiene as a practice occupied significant place in the entire social formation and relations for the reasons of a unique social processing.³ This chapter tries to explain the way medieval societies in Kerala approached hygiene in its three different manifestation; social, ritual and physical.

‘Disease *per se* had no existence’⁴ in medieval Malabar as it was broadly understood as the results of violating different hygienic principles imposed on the society. Scripts and traditions in the region reinstated certain beliefs that considered the state of body and societal functioning was affected by every mental, moral and social action by the participants.⁵ Therefore this chapter tries to explore the ways in which people in medieval Malabar perceived different aspects of daily life such as clothing, food, water, climate, status, sex,

¹*Chikitsa Manjari*, (trns), Sriman Nambothiri, Vidyarambham Publishers, Alapuzha, 1990

²Sarah Shaver Hughes, Brady Hughes, *Women in World History, Reading from Pre-History to 1500*, 1995, p.71; Norman Roth, *Daily life of the Jews in the Middle Ages*, Greenwood Publishing Group, Westport, 2005; Fátima da Silva Gracías, *Health and Hygiene in Colonial Goa, 1510-1961*, Concept Publishing Company, New Delhi, 1994

³Virginia Sarah Smith, *Clean: A History of Personal Hygiene and Purity*, OUP, New York, 2007, p.2

⁴I have taken this idea from Hereward Carrington, from *History Of Natural Hygiene*, 1996, p.58

⁵Zainuddeen Makhdum, *Tuhfathul Mujahideen fee Ba-a-Si Akhbaril Burthukhaliyeen*’ translated as “A Gift to the Warriors with Information about Portuguese.” Written in Arabic (trns-Malayalam), C.Hamsa, Al-Huda Book Stall, Kozhikode, 1999, pp.40-41

occupations, religion, morality through different principles of hygiene to facilitate an undisturbed and uncontested social pattern.⁶ This exploration further established the fact that, the multiple concepts and practices of hygiene in medieval Malabar, mostly consciously and at times unconsciously were devised to boost up the social and ritual supremacy of the dominant social forces with whose support rulers established their political legitimacy.⁷

Hygiene in general can be considered a science which treats the health of the body by various mechanisms. Hygiene on one hand deals with the causative elements which make the body, mind and environment of men unhealthy and on the other medicine deals with curing these by various means as it comes.⁸ Medieval Kerala perceived that carelessness towards one's own being and indifferent attitude towards structured community and life, make them sick. Dreaded diseases such as consumption, typhoid or typhus fevers, small pox, scarlet fever, cholera and so on were seen as the result of utter negligence of one of the most prominent characteristics of the human civilization; sanitation and different principles of Hygiene.⁹

In medieval Malabar, health problems were generally defined within the religious and spiritual terms. Emergence and establishment of diverse cultural groups in the region during the medieval period, provided premises for different rites, rituals and concepts to deal with

⁶ F S B Francois De Chaumont, *A Manual Of Practical Hygiene*, J. & A Chuechill, New Buklington Street, 1878, p.23

⁷ Sheila Faith Weiss, *Race Hygiene and National Efficiency: The Eugenics of Wilhelm Schallmayer*. This work expounds the works of Schallmayer, German Physician (1857-1919) who founded along with Alfred Ploetz, *The German Eugenics* or German Race Hygiene concept. University of California Press, California, 1987

⁸ "The study of hygiene includes the examination of the conditions which affect the generation, development, growth, and decay of individuals of nations and of races, being on its scientific side coextensive with biology in its broadest sense, including sociology" Albert Henry Buck, *A Treatise On Hygiene and Public Health*, Vol.2, W. Wood and Company, London, 1879, p.3

⁹ John J Pilley, *Hygiene The Principles Of Health*, Geo Gill and Sons, London, 1888, pp.56-78; V.T Induchudan, "The Secret Chamber: A Historical, Anthropological & Philosophical Study of the Kodungallur Temple", Cochin Devaswom Board, 1969; J Gentes, "Scandalizing the Goddess at Kodungallur", *Asian Folklore Studies*, Vol,51, 1992, pp. 295-322

multiplicities of hygiene sensibility.¹⁰ It bore resemblances to any society in the middle age such as Europe or Arabian Peninsula, where diseases were connected with sin, hygiene and moral impurities.¹¹ Therefore, canvas of this chapter consists of many elements such as food; its preparation, usage, and abuse; water; its significance in communities, availability, rituals associated water, religious and customs in relation to water.¹² Cloth, an important element of physical hygiene and its use and consumption, its regulation and importance in the maintenance of the hygiene has also been looked into. However, the main thrust area of study focuses on the way various notions of personal cleanliness through which the realization of body and social space acquired during the period concern through the praxis of purity and impurities: physical, moral and ritual.¹³

Pursuit of hygiene, physical and moral, was considered by upper strata to be the paramount priority as it became a method of imagining the integrity and the purity of the self and community.¹⁴ Socio-cultural life in Medieval Malabar had experienced with various aspects of physical, social and moral hygiene and the negligence of which was believed to

¹⁰Koka Sandesham (trans), Prof.Gopikkuttan, Current Books, Trichur, 1996; Fra Paolino da San Bartolomeo, *Voyage to the East Indies; Observations Made During A Residence of Thirteen Years Between 1776 and 1789 in District Little Frequented by the Europeans*, (trans) by William Johnston, London

¹¹ George Rosen, *A History of Public Health*, The John Hopkins University Press, Maryland, 1993 p.29

¹² Lisa J Lucero, *Water and Ritual, The Rise and Fall of Classic Maya Rulers*, University of Texas Press, Austin, 2006, pp.5-33

¹³D, Dennis Hudson, *The Body of God, An Emperors Palace for Krishna in Eight-Century Kanchipuram*, OUP, New York, 2008, pp.90-95; Anna A Slaczka, *Temple Consecration Rituals in Ancient India*, Brill, Leiden, 2007,p.204

¹⁴Alison Bashford, *Imperial Hygiene: A Critical History of Colonialism, Nationalism and Public Health*, Palgrave, New York, 2004, p.4; W. E Dhanakoti Raju, *The Elements Of Hygiene On The Laws Of Health*, C Foster And Company, London, 1875, pp.1-3, “When the heart hides the blood-vessels by which the blood derived from food is conveyed to every part of the body, the organs of respiration which purify the blood by means of the air we breathe,—when these other organs of the body remain entire and perform their respective functions regularly and smoothly, no uneasiness or pain is felt, and we are enabled to enjoy life, and to discharge efficiently the various duties devolving upon us. Such a condition of the body is called health”

have caused miseries and sufferings.¹⁵ These miseries were actually seen as the direct results of violating of the human beings of the law of nature and cultural pattern which. And hence, violation, as it believed, effected immediately on human body and disrupted social life.¹⁶ All caste/religious groups in the region generally believed that the violation of different normative agencies of health, such as sacred bath, sacrifices and ablutions, did not necessarily result the immediate destruction of the health, social order and environment but rather caused a gradual decay would definitely fall upon at times though.¹⁷ Apart from some major diseases such as *malaria*, *small pox* and *cholera*, most of the health problems were believed to have occurred due to the ignorance and carelessness of different hygiene concepts practiced in the society at multiple levels.¹⁸ Thus, the death from afore mentioned diseases were classified as *ku- mrtyu* or bad death which in turn assisted in establishing certain cleansing rituals that further reduced social relations.¹⁹

Nevertheless, in practice, many actual and health problems emerged out from the precarious physical hygiene conditions prevailing among the poor due to the negligence by the multiple layered authorities.²⁰ Epidemic diseases had generally one pattern by which it

¹⁵Ahmad Bava Musliar, *Feehi Shifahunnas upakaram Upakaram*, C.H.Muhammad and Sons, Thirurangadi, 2001.p.22-26

¹⁶Friar Odoric, "The Eastern part of the World Described"(trs), Henry Yule, *Cathay and the Way Thither Being A Collection of Medieval Notices of China*, Christians used to prepare their holy water by mixing some particles of earth from the tomb of the apostle of Thomas.Vol.1, Hakluyt Society, London, 1866, p.74

¹⁷James Hastings and John A.Selbie, *Encyclopedia of Religion and Ethics*, Kessinger Publishing, 2003, part.1, p.7, MJ Gentes, "Scandalizing the Goddess at Kodungallur", *Asian Folklore Studies*, Vol. 51, No. 2, 1992

¹⁸Gaspar Corrêa, *The Three Voyages of Vasco de Gama, and his Viceroyalty*, Hakluyt society, London, 1869, pp.150-154 Correa gives a clear picture of Cholera in Malabar in AD early 16th century; Robert Sallares, *Malaria and Rome, A History of Malaria in Ancient Italy*, OUP, New York, 2002, pp.93-103; Cited in Andrew David Cliff, Matthew Smallman-Raynor, *Infectious Diseases: A Geographical Analysis : Emergence and Re-Emergence*, OUP, Oxford, 2009,p.84

¹⁹Shirley Firth, Dying, *Death and Bereavement in a British Hindu Community*, Peeters, 1997,p.53

²⁰Duarte Barbosa, *A Description of the Coast of Africa and Malabar in the Beginning of the Sixteenth Century*, (trns), Henry E. J. Stanley, The Hakluyt Society, London, 1865, Reprint, CUP, 2009, "There were people who live in the mountains very poorly and miserably. And they have no other

originates from the filthy and unhealthy conditions of medieval Malabar where poor people lived under malnourished condition as reported by 16th century travelers.²¹ Subsequent centuries, witnessed large scale malaria which generally began as dysentery which in turn created a proverb by itself in the region which goes like “if you are subject to dysentery avoid Malabar”.²² The living condition of poor, who were generally lower caste groups such as *Pulayar* and *Parayar*, exposed them to damp and cold.²³ During the monsoon season this brought to them acute liver problems and Malaria.²⁴ Nevertheless these menaces gradually spread across the regions and finally affected affluent and powerful sections who could afford to treat themselves with greater access to superior knowledge, access and money and power.

By 16th century, Communities in this region had scrupulously defined normative rules, applied regulating and monitoring agencies at temporal and non temporal level to keep multiple level of hygienic and health practices.²⁵ This in return facilitated some technical

occupation than bringing wood and grass to the city for sale, to support themselves. And these people have no intercourse with any others, nor others with them, under pain of death ; and they go naked, covering only their middles, many of them do so with only leaves of trees, and some with small and very dirty cloths.” p.141

²¹*Em nome de Deus: The Journal of the First Voyage of Vasco da Gama to India, 1497–1499*, (trns), Glenn J. Ames, Brill, Leiden, 2009, p.89, “This (surrounding crowd in expectation for food) was due to the multitude of people who live in this country and the scarcity of food for them. One time it even happened that some of our men were mending some sails and took biscuits with them to eat. So many people surrounded them, both small children and grown men, that they took the biscuits out of their hands, and in the end, they had none to eat.”

²²William Logan, *Malabar Manual*, Vol.1., AES, New Delhi, 1887,p.217

²³ Ibid,p.218; Barbosa, “They are looked upon as worse than the devil, and as altogether condemned i1 so that by looking at them only they consider themselves as defiled and excommunicated, which they call contaminated.They support themselves on *yname*,(?) which is like the root of the maize which is found in the island of Antilla, and on other roots and wild fruits, and they cover themselves with

leaves and eat the flesh of wild animals.”p.144

²⁴Ibid,p.218; Barbosa, “They are looked upon as worse than the devil, and as altogether condemned i1 so that by looking at them only they consider themselves as defiled and excommunicated, which they call contaminated.They support themselves on *yname*,(?) which is like the root of the maize which is found in the island of Antilla, and on other roots and wild fruits, and they cover themselves with leaves and eat the flesh of wild animals.”p.144

²⁵Zainuddhin Makhdum, *Thuhafathul Mujahideen*, Thirurangadi Press, Calicut, 2002,pp.40-43; “There are among them high castes, low castes, and castes of other degrees in between.A bath is

advancement also, worth mentioning though exclusive in practice, with the capacity of further development which could withstand many historical nuggets.²⁶ Hygiene at the principle and practical level maneuvered itself with close proximity of socio-cultural morality which of course did have a direct relation with political authority.²⁷ Main sources of the information for this study are obtained from textual and architectural findings from the area under scrutiny. While textual references give ample data for the socio-cultural aspects of hygiene, architectural archetypes such as *Kovilakams* (palaces), *Illams*, and *Mana* and ecclesiastical structures such as temples and mosques give valuable insights in to the technical aspects of the hygiene processing. It is worth to remember that the inferiority of the laterite stone as building material and abundant supply of the long lasting forest woods created a base for a unique architectural style in medieval Malabar.²⁸

Generally, concepts of hygiene and sanitary conditions had in many ways affected every sections of the population.²⁹ General appalling sanitation condition caused many water born contagious diseases of which the end result was widespread deaths in many Asian countries in which Malabar region was more susceptible.³⁰ This sense of insecurity in terms of hygiene brought in water in to the centre stage of scriptural and practical basis of hygiene of all living communities such as *Nambutiris*, *Nair*, *Thiyya*, *Pulayar*, *Mappila* and so on as it happened across the world.³¹ Water terms such as *Kulam* (ponds), *Chira* (lake), and *Kinar*

obligatory on high caste hindus in the event of any physical contact with the members of the low castes or they happen to be together within the boundaries and limits prescribed for intercourse.” *Tuhfat al-Mujahidin*, 2006,p.42

²⁶Elizebeth Lane Furdell, *The Royal Doctors, 1485-1714; Medical Personnel at the Tudor and Stuart Courts*, University of Rochester Press, 2001, pp.1-17

²⁷Zainuddin Makhdhum, op.cit,p.46, Engseng Ho, “Custom and Conversion in Malabar: Zayn al-DinMalibaris’s Gift of the Mujahidin: Some Accounts of the Portuguese”, in Barbara Metcalf (ed), *Islam in south Asia in Practice*, Princeton University Press, Newjersey, 2009,pp.405-406

²⁸By A.H. Longhurst , *Story of the Stupa*, p.33

²⁹Zainuddhin Makhdhum,op.cit, p.47

³⁰Radhey Shyam Chaurasia, *History of Medieval India From 1000 AD to 1707 AD*, 2002

³¹*Ananthapuravarnanam* (14th-15th Century Sandesha Kavya).Compilation and Commentary by K.Rathnamma, State Institution of Languages, Trivandrum, 1997, p.15-18;29-35; Lisa J. Lucero,

(well) established themselves not only in the cultural lexicography but also in the political processing in the region.³² Authority and control over water bodies became a tool for political legitimacy which could make rulers like Samutiri in Malabar more “sacred” and politically superior.³³

There were *sarassus*(pond) such as Pathmanabha Temple Ponds in Trivandrum which was believed to have been constructed by *Agni Devan* (the God of fire) or Vishnu and were to be protected by the ruler.³⁴ The continuous struggle between the King Samutiri of Malabar and other chieftains over the political legitimacy of supremacy was decided by the chain of fights called *Mamankam*,³⁵ a celebration which was originally activated to hold the sacred right of the descent of the sacred river Ganga in to the Sacredmost River in Malabar, *Bharatha* or *Nila*.³⁶ By the virtue of being the tangible authority over a sacred river and its bank, Samutiri was uplifted to the status of the “*rakshapurush*”, considered a moral authority or the protector of the social and cultural life in the region.³⁷ These political and moral actions began with elaborate rites hygiene rituals such as *maghasnanam*, a ritual purification ceremony at the commencement of the festival.³⁸ The River *Perar* (*Bharathappuzha*) which

Water and Ritual: The Rise and Fall of Classic Maya Rulers, The University of Texas Press, 2006; Susan C. Anderson and Bruce H. Tabb, (eds), *Water, Leisure and Culture European Historical Perspectives*, Berg, Oxford, 2002; Francesca De Châtel, *Water Sheikhs & Dam Builders: Stories of People and Water in the Middle East*, Transaction Publishers, New Brunswick, New Jersey, 2007; “Mohammedans are divided in to four sects, which are called saphy(Shafites), Anaphy (Hanafites), Malck(Malekites) and Ambeli(Hanbalites) of which the first are chiefly found on this coast. These sects are called thus after the name of four teachers.” Adrian Moens, 1781, op.cit, p.199.

³²Kokasandesam, op.cit, pp.11-19

³³Ibid, p.61, lines-14-4

³⁴Ananthapuravarnanam, op.cit, p.10, lines-16-17

³⁵Philip Zarilli, *When the Body Becomes all Eyes*, OUP, New Delhi, 1998, p.41

³⁶Dick Luijendijk, *Kalarippayat: The Structure and Essence of an Indian Martial Art*, CIP, Den Haag, US, 2008, p.50

³⁷*Koka Sandesam*, line-21-22, p.66 “Mamankam festival had originally been celebrated under the auspices of the Chera emperors. In 12th century the Zamorin conquered this place and assumed the proud function of the *Raksapurusa* or protector of the Mamankam.” *The Indian Historical Quarterly*: Volume 6, 1930

³⁸Kokasandesam, op.cit, p.67, lines-23

had been considered as ‘sacred water body’ acquired its ritual superiority during the period concerned.³⁹

Also, the common people, at practical and philosophical level, had realized the importance of the water and its usage during the time under study.⁴⁰ In Malabar, people were generally believed to have had their body cleaned twice and it was necessary on their part to wash properly the hand and face before every meal since they were forced to engage mostly in agriculture related activities where mud and dirt must have been integral part of their daily chores.⁴¹ Meticulous observance of this practice was on one side mandatory by the social normative while on the other clinical reasons worked its course.⁴²

Joëlle Allouche-Benayoun, writes of Jewish tradition in Algeria

“The rites of water embody the passage from the profane to the sacred, the passage from the “outer” to the “inner,” the passage from the state of nature to the state of culture. But above all....(they) seem to be a symbolic way of casting out the existential anguish inherent in the thinking human being.⁴³

Number of mosques was at work at places such as Calicut, Cannore, Quilon, Ponnani and Friday congregational prayers (*Jumaath*) during the period, as reported by Ibn bathuta, Abd-al Razzak and others. These were was part of an established practice of scriptural based Islamic religious community on the coast who had adhered to the basic principles of hygiene,

³⁹Ibid, p.68, lines-24

⁴⁰*Kokasandesam*, op.cit, lines-28-29, p.70

⁴¹Duarte Barbosa, *Description of the Coasts of East Africa and Malabar. A Description of The Coasts of East Africa and Malabar in the Beginning of The Sixteenth Century*, London, Printed for the Hakluyt Society, p.108

⁴²A.L, Basham, “The Practice of Medicine in Ancient and Medieval India”, in *Asian Medical Systems; A Comparative Study* (Ed), Charles M.Leslie, University of California Press, Berkeley,1977, pp.18-43

⁴³Joëlle Allouche-Benayoun, “The Rites of Water for the Jewish Women of Algeria,” in *Women and Water: Menstruation in Jewish Life and Law*, (ed), Rahel R. Wasserfall, Brandeis University Press, Hanover, 1999, p.213)

purity and pollution.⁴⁴ The architectural patterns and textual traditions give testimonies to a well established Islamic community which was called *mappila* on the entire coast of Malabar.⁴⁵ They, along with numerous Muslim traders from Arabia, must have been very specific in the provisions of the physical hygiene, as these practices acquired a well defined pattern in the entire Muslim world during the period under study.⁴⁶ They had adhered to the hygiene principles of *Shafi School* of *Sunni* Islam which was strongly prevalent from Hadramauth to South East Asia during this time.⁴⁷ *Shafi-i-Jami* Masjid at Cochin, constructed before 16th century, testify the strong presence of *Shafi* framework of Islamic hygienic practices such as *Vudu*, *Janabath*, *Janaza* and Circumcision prevalent on the Malabar region.⁴⁸

⁴⁴Em Nome de Deus: *The Journal of the First Voyage of Vasco da Gama to India, 1497–1499* (trans&ed), Glenn J. Ames, Leiden, Boston, 2009, p.145, “In this (Calicut) city there reside many very wealthy Moorish merchants, and all the trade is in their hands. They have a fine mosque, in the square of the town.”; Abdul Sheriff, *Dhow Cultures and the Indian Ocean: Cosmopolitanism, Commerce, and Islam*, Columbia University Press, New York, 2010, p. It is interesting that during 14th century itself, names of the days of the week came in to existence such as *Velliazhcha* (Friday) and *Jnayarazhcha* (Sunday). *Payyannurpattu*, op.cit, p.26, lines-85

⁴⁵Roland Miller, *Mappila Muslims of Kerala, A Study in Islamic Trends*, Orient Longman, Madras, 1992, pp.40- 42

⁴⁶“The spread of Islam produced a distinct Islamic folk culture which is termed as the Mappila culture. Here the proliferation of indigenous elements, the Islamic doctrines, Sufi and other religious orders and fraternities created favourable atmosphere for mixing together of the officially prescribed rules of religion with folk features..” says Husain Raṣṣattāi, *Mappila Muslims: A Study on Society and Anti Colonial Struggles*, Other Books, Calicut, 2007,p.66; Brian A. Catlos, *The Victors and The Vanquished: Christians and Muslims of Catalonia and Aragon, 1050–1300*, Cambridge University Press, UK, 2004, p.56; Andrew Rippin, *Muslims: Their religious Beliefs and Practices*, 2005, Routledge, p.103-119

⁴⁷ Andre Wink, *Alhind, The Slave Kings and The Islamic Conquest*, E.J. Brill, Leiden, 1997, p.277; “As bearers of Islamic knowledge and prestige, *Hadramis* were creators of Islamic knowledge; *H adramis* were everywhere potential creators of public spaces and institutions. Not surprisingly *Hadramis* were welcomed in the new port cities and states where they made local alliances and functioned in important capacities. What is fairly remarkable about the Hadrami experience is that they were able to retain a distinct identity at one level, and at the same time create a completely new one. Lakshmi Subramanian, “Commerce, Circulation, and Consumption Indian Ocean Communities in Historical Perspective” in *Indian Ocean Studies: Cultural, Social, and Political Perspectives* (Ed), Shanti Moorthy and Ashraf Jamal, Routledge, New York, p.142

⁴⁸Mehrdad Shokoohy, op.cit, p.224; Seyyed Hossein Nasr. *Science and Civilization in Islam*, New American Library. New York 1968, "Islam, as a guide for all facets of human life, had also to concern

Ubiquitous water bodies, ponds (*Kulams*) were very common in medieval Kerala.⁴⁹ These water bodies also represent a different dynamism of social control as they associated, directly, to the dominant socio-political authorities.⁵⁰ Ponds associated with non-temporal spaces were under the direct control of *nambutiri* priests who were under the kingly patronage as it happened in the medieval Europe.⁵¹ Alberuni mentioned exquisite sacred ponds at different sacred geographies in India in his Kitābul Hind.

“Our people, (the Muslims) when they see them, wonder at them
and are unable to describe them, much less to construct anything
like them.”⁵²

Abundance of secular and sacred water bodies set in, the people of Malabar taking two times bath (*kuli*) which by medieval time came around as a cultural compulsion before taking their daily meal.⁵³ Different styles of bathing were prescribed for different occasions, for its hygienic relevance, such as pregnancy, delivery, death, prayers etc.⁵⁴ “Early in the morning, these pagans go to wash at tank, which (where) tank is a pond of still water and

itself with the more general principles of medicine and hygiene. There are several verses of the Quran in which medical questions of a very general order are discussed; there are also many sayings of the Prophet dealing with health, sickness, hygiene, and other questions pertaining to the field of medicine. Such diseases as leprosy, pleurisy, and ophthalmia are mentioned; remedies such as cupping, cautery and the use of honey are proposed. This body of sayings on medical questions was systematized by later Muslim writers, and became known as Medicine of the Prophet (*Tibb al-Nabi*), p.192

⁴⁹Ananthapuravarnanam, op.cit,

⁵⁰Ananthapuravarnanam, op.cit, p.18, lines-37-38; Kokasandesam, lines-19-9

⁵¹Gary R. Varner, *Sacred Wells A Study in the History, Meaning, and Mythology of Holy Wells & Waters*, 2nd Edition, Algora Publishing, New York, pp.38-39

⁵²NK Singh, A. Samiddin, Global (eds), *Encyclopaedic Historiography of the Muslim*, Vision Publishing House, Delhi, 2003, World, 2003, p.54

⁵³T.K.G Panikkar, *Malabar and its Folk*, Asian Educational Services, New Delhi, 1983, p.199

⁵⁴Ananthapuravarnanam, op.cit, pp.8-10, lines, 14-16, “oil bath, athletic exercise simple bath and oil syringing are also necessary as these will restore health and establish the digestive powers and likewise create intellectual brightness, personal beauty, acuteness of senses and prolongation of senses” says William Logan, *Malabar Manual*, p.219

when they are washed, they may not touch any person until they have said their prayers and this in their house.”⁵⁵

Along with this, eating customs were also developed as this period becoming suggestive to use right hands for eating as the left hand was considered unhygienic and polluting.⁵⁶ People eating with left hand were considered morally weak by the society irrespective of other differences. They did it because touching food with left was considered “polluted” as the left hand was associated with cleaning the body parts after toilets and a way of *satan*.⁵⁷ Therefore, in medieval Malabar, certain hygienic practices got religious character by which their observations were enhanced.⁵⁸ People developed the concept of having individual plates for taking food which ensured much desired physical distance of one from another. For Christians, there were prohibitions on eating flesh upon Saturdays in memory of the lord and eating the flesh was considered a moral sin.⁵⁹

The synod doth command all the members thereof upon pain of
Mortal Sin, not to eat flesh upon Saturday, in memory of our lord’s

⁵⁵Ludovico Di Varthema, *The Travels of Ludovico Di Varthema in Egypt, Syria, Arabia Deserta and Arabia Felix, in Persia, India, and Ethiopia, AD 1503 to 1508*, (trans)from original Italian edition of 1510, by John Winter Jones, London, 1863, p.149

⁵⁶Barbosa, op.cit, 114

⁵⁷Barbosa says, “ He then begins eat with right hand, taking handful of the rice without a spoon, and with the same hand he takes some of all the dishes and mixes it with the rice and with his left hand he must not touch anything of what he eats” op.cit, p.114; In an hadith, Jabir reported that allah’s Messenger forbade that a man should eat with the left hand or walk with one sandal or wrap himself completely leaving no opening for the arms (to draw out) or support himself when sitting with a single garment wrapped round his knees which may expose his private parts” *Imam Muslim*, Book, 024, Number, 5234.

⁵⁸Dinesh Bhugra, *Psychiatry and Religion: Context, Consensus and Controversies*, Routledge, New York, 1996, p.99

⁵⁹Michael Geddes, *The History of the Church of Malabar; From the Times of its Being Discovered by the Portuguese in the year 1501, Giving an Account of Persecutions and Violent Methods of the Roman Prelates to Reduce them to the Subjection of the Church of Rome*, London, 1694, pp.350-354

burial, but Eggs, Milk, Butter, or Cheese they may lawfully eat upon Saturdays.”⁶⁰

Sources provide “depictions and descriptions” ⁶¹ of the bathing facilities and pattern of physical and moral cleansing rituals associated with that as bathing rituals were involved in fighting as well as harvesting .⁶² Contact with “impure” people and environment necessitated a ritual bath with all its paraphernalia.⁶³ Initiation for yearly harvest and fighting another person were begun with ritual bathing.⁶⁴ Even the blood shedding fights were preceded by a cleansing ritual bath. “Aromal Cevakar, famous medieval warrior in *Kdathanadu* of the Malabar region had to undergo a ceremonial bath with all the rituals before he set out for the *angam* or duel.”⁶⁵ In Malabar, bathing mostly occurred in the nearby river or in the private ponds or wells where many herbals and related elements were used.⁶⁶ Apart from the ritual benefit these bathing also helped to retain the body composure as well as the use of herbs for body washing was very prevalent there.⁶⁷

These were easily available in the shrubs and bushes and the jungles as described *Sandeshakavyas*.⁶⁸ In northern ballads (*Vatakkann Pattukal*), we have ample evidence for people using different types of herbs such as sandalwood, musk and oil for bathing. These

⁶⁰Ibid,p.357

⁶¹Paul B New man, *Daily Life in the Middle Ages*, pp.152-155

⁶²*Ananthapuravarnanam*, p.14,lines-28-29

⁶³Ibid, pp.41-44 lines-100-106

⁶⁴ “just before the harvest (in august) a member of the family, after a ceremonial bath fetches a sheaf of paddy from the fields. He is greeted by a women with a burning oil lamp.” Says, M. T. Narayanan, *Agrarian Relations in late Medieval Malabar*, ICHR, New Delhi, 2003, p.161, Says K.S.Mathew, *Society in Medieval Malabar: A Study Based on Vadakkann Pattukal*,1979

⁶⁵Ibid.

⁶⁶*Ananthapuravarnanam*, lines-41-51, “People used *Karpooram*, *Kastoori*, Sandal Wood and oil”says, Chau-ju-Qua, cited in Velayudhan Panikkassheri, p.114.

⁶⁷*Ananthapuravarnanam*, lines-25-28

⁶⁸ C.R.Rajagopalan, “Vazhi Vanibha Natarivu Manippiravalathil”, in *Natarivu* (ed).C.R.Rajagopalan, DC Books, Kottayam, 2008, pp.72-73; *Ananthapuravarnanam*, lines-32

were also used even by heroes like Tacholi Othenan.⁶⁹ Unlike in Europe, where bathing was largely a communal activity for many material reasons⁷⁰, it had been individualistic in nature in medieval Malabar, except for occasional ritual hygienic baths such as *Theertha Snanam*.⁷¹

Political establishments ensured the physical well being and basic physical hygiene of the foreign traders, who were in majority, Muslims. “In the road stations along Malabar special rest houses, *dyar al-muslimin*, were reserved for Muslims, without which the Muslim traders could hardly be expected to have travelled.⁷² Small and simple wells were dug up to cater the commercial, physical and ritual needs of the traders, especially the caravans which were generally carried out by the Arab merchants.⁷³ The accounts of foreigners who visited the region during the period, reported a sort of organized structure of bath houses and wells along the trade routes in entire Malabar region, some of which are still in use or renovated.⁷⁴

“The road over the whole distance runs beneath the shade of trees and at every half a mile there is a wooden shed with benches on which all travelers, whether Muslims or infidels may sit. At each shed there is a well for drinking and an infidel who is in charge of it. If the traveler is infidel he gives him water in vessels; if he is Muslim he pours the water in to his hands, continuing to do so until him sign to him to stop. However, Muslims are most highly honored amongst them except that

⁶⁹“Tachcholi meppayil kunhi odenan took an oil bath, and rubbed over his body A mixture of perfume, sandalwood and musk And sat down for dinner.” William Logan, Malabar Manual, Vol.1,

⁷⁰Paul B New Man, op.cit, p.152

⁷¹*Kokasandesam*, op.cit, line-23,p.67

⁷²Andre Wink, *Al-Hind The Making of the Indo-Islamic World* , Brill Leiden, Boston, 2004, op.cit,p.74

⁷³Ibid, p.71

⁷⁴Edward C. Sachau, London: Trubner & Co., Ludgate, Hill.1888, Ballantyne, ‘They grow their hair, beard and moustache and walk around half naked. Some people wear two fingers width cloths around their waist while most of the people use cotton dresses and long socks. ’Al Beruni, p.91

as we have said they do not eat with them nor allow them in to their houses”⁷⁵

Thannerpanthals, (water stopovers), the place where travelers offered water, were very common in entire region of Malabar and medieval literatures talk about resting merchants and travelers at these places.⁷⁶ Nevertheless, dominant castes maintained their moral and social hygiene by having their own bath houses and tanks in the confinements of their compound. “A tank (pond) is an inseparable accompaniment, and in most Nambutiri houses there are three or four of them, the largest being used for bathing and the others for general and kitchen purposes.”⁷⁷ Thus bathing and bathing facilities served to emphasize the social status and significance of the communities concerned. Therefore construction, management and control of bathing facilities and water bodies became one of the important aspects of the socio-cultural life of Malabar.⁷⁸ King Zamurin of Calicut, Ali Rajas of Arakkal, King of Cochin and many local rulers and upper caste groups maintained their rein over water bodies through local chieftains or militia.

Perfume and fragrance had formed a tradition by themselves in the cultural setup of Medieval Kerala, as they were part of most of the rituals stretching from birth to death. Verthema describes the ways in which Brahmins in Malabar (*Nambutiri*) used perfume and scents to bring to gods divinity and exclusiveness by applying scented water over idols before worshipping them in temples.⁷⁹ Idols, altars and idols were perfumed in Malabar during the medieval time.⁸⁰ Smell featured predominantly in all aspect of life, ill health and well being

⁷⁵ Ibn Bathuta, *Travels in Asia and Africa, 1325-1354*, The Broad Way Travelers, Britain, 2005, p.232

⁷⁶ *Kokasandesam*, op.cit, lines-20

⁷⁷ Edgar Thurston, K. Rangachari, *Castes and Tribes of Southern India*, Volume 1

⁷⁸ See the elaborate discussion about water, society and power in Paolo Squatriti, *Water and Society in Early Medieval Italy, 400-1000*, Cambridge University Press, United Kingdom, 1998

⁷⁹ Varthema, op.cit, pp.137-138

⁸⁰ *Ibid*, op.cit, p.138

as removing filth; physical, moral and verbal.⁸¹ Barboza gives us a detailed aspects of the tradition of elite people keeping themselves ‘good smelling’ and ‘perfumed.’ Also he gives some details of “smelling good” herbal substances such as saffron, cinnamon, jasmine, special ginger called *hely* which cultivated at Cannanore, *Putjak* and many other sweet smelling herbal objects.⁸² Inscriptional sources indicate that, Camphor, a highly qualified source of perfume, was traded as a commodity from 11 century in Malabar.⁸³ Photos from 18th century show that the tradition continued and proper care was taken care of especially by the royal and elite women for the up keeping the body.⁸⁴

Even though the upper caste women used descent costumes, they were not to be seen outside the residential boundaries without escort and were strictly confined as “*gosha*” as they were called “*antarjanam*” which signifies “inside people.”⁸⁵ They have apparently oiled their hair with the abundant availability of the coconut oil and covered their body with muslin or Cotton which they used to make *rouka* the long cloak.⁸⁶ Upper caste noble women used to have “long hair, black eyes, extended years which is pierced and straight delicate persons. They are accustomed to wash twice a day; to anoint their bodies every week with coconut oil, or white of an egg; and to rub their skin with a plant called *Incia*, the rind of which has property of removing all filth. This ablution and friction strengthen the body and the same time prevents too violent perspiration.”⁸⁷ Nevertheless, lower caste women from *mukkuvas* or *paravas* were prohibited from wearing dresses above their waist and were described as the ones who “ reveal head, breast, front, back, hand and full body in order to solicit with their

⁸¹Alain Corbin, *The Foul and the Fragrant: Odor and the French Social Imagination*, Berg Publications, New York, 1986, p.vi

⁸²*Kokasandesam*, op.cit, p.63, lines-18. *Kukkumam* or Saffron as a cosmetic item found its place in *Kokasandesam* where its termed as *Kashmeeram*; *The Dutch in Malabar*, op.cit, p.219 .

⁸³Nilakanta Sastri, 1932, p.323

⁸⁴Photo of an 18th Century Tampurati of Kuttipuram Kovilakam is attached.

⁸⁵Fawcett, *Nambutiris*, op.cit, p.40

⁸⁶Ananthapuravarnanam, p.27, line-61

⁸⁷Fra Bartolomeo, op.cit, p.153; they have “long hair, black eyes, extended pierced ears. They used muslin or cotton to make *rouka* the long cloak”*Anathapuravarnanam*, op.cit, lines-61,p.27

wicked language forgetting themselves.”⁸⁸ These was supplemented by the nature of their employment such as fishing and dyeing that did not expected them of taking care of their body. These jobs made them exposed to sun and air in contrast to the upper caste women who were always in the protection of men and shades of palm gardens and enclosures.⁸⁹

The tradition of smell continued alluring various cosmetic items found in markets in medieval Malabar.⁹⁰ Many specialized *Theruvu* (streets) in the region during medieval period suggest that there was sufficient demand for the commodities for local and international consumption.⁹¹ *Vadakkan Pattukals* (Northern Ballads) give plenty of references to such street markets as *Kalavanibha Theruvu* (Street of Potters), *Chakkaravanibha Theruvu* (Street of Jaggery), *Chaliya Theruvu* (Street of Weavers) and many *Angadis* (markets) sprang up in medieval Malabar.⁹² Large quantities of cosmetics, for which they built big *pandiyala* (warehouses), goods imported in to South India from west Asia, South East Asia and china.⁹³

These products were traded in *Theruvu*; of which some of them named after the communities that dominated the functionalities such as *Jonaka Theruvu* and *Nazrani Theruvu* at Nadapuram which dominated by Muslims and Christians respectively.⁹⁴ Thus, traders had carried out their mission of decorating human bodies, with the protection of the

⁸⁸ *Ananthapuravarnanam*, p.41,lines-100

⁸⁹ Bartolomeo.op.cit, p.153

⁹⁰ *Ananthapuravarnanam*,op.cit, lines,55-60,pp.25-27

⁹¹ Barbosa, op.cit,p.59; R.A Donkin, “Between East and West; The Moluccas and the Traffic in Spices up to the Arrival of Europeans”, in *Memoirs of the American Philosophical Society*, Philadelphia, Vol. 248, 2003, p.56

⁹² M.C.Appunni Nambiar, (ed), *Vadakkan Pattukal*, Kottayam, 1983, pp.194-195

⁹³ *Payyannurppattu*, op.cit, p.16, lines-50. Apart from the herbals and cosmetics items traded were arms and warring equipments in these towns. In tradition, where martial arts and related medicines developed, traders made profit of trading arms such as *kuntham*, (long spear), *shoolam* (sort of a small spear), *valu* (sword), *vel* (arrows), *kaikkatthi* (Pen knife) and so on. Op.cit, p.10, lines-28; Kathleen Gough and David Schneider, *Matrilineal Kingship*. University of California Press, Los Angeles, 1961, p.321

⁹⁴ K.S.Mathew, op.cit, pp.45-46

rulers who enormously benefited from these endeavors.⁹⁵ “Whenever foreign merchants enter their ports three secretaries of the king immediately repair on board their vessels write down their names and report them to him. The king thereupon grants them security for their property which they may even leave in the open field without any guard.”⁹⁶ This was happening in a situation where consumption, ownership or displaying many material items such expensive clothing, ornaments, and even descent dwelling by the lower caste groups were made out to be punishable offence in a highly “sumptuary” structure of medieval Malabar.⁹⁷

Generally, women in Medieval Malabar gave immense importance to embellishing their body with expensive items such as *Kanakam* (gold), *Mothiram* (ring), *kampi* (metal bangles) to increase physical beauty.⁹⁸ Medieval poets perceived as “perfect and beautiful” when women have ‘eyes like *karimkoovalam* (black back tree), long eyes stretching unto ears and smell generating thick hair.’⁹⁹ *Vaniyams* (market) traded in *mutthu* (pearl), *manikyam* (emerald), *rathnam* (precious stones), *Vajram* (diamond) under the tutelage of merchant guilds who were very powerful in the region.¹⁰⁰ This markets also traded in *ari* (rice), *payaru* (lentil), *pananeer* (rose water), *puli* (tamarind) under the patronage of powerful *chetti* merchants and other *Kulavaniyars* (grain merchants) well in to 18th century.¹⁰¹

⁹⁵Zainuddin Makhdum, 2006, p.46

⁹⁶Rabbi Benjamin of Tudel, *The Itinerary of Rabbi Benjamin of Tudela*, (ed), A.Asher, A.Asher &Company, London, 1840, p.138

⁹⁷Paula Richman, *Questioning Rāmāyaṇas: A South Asian Tradition*, University of California Press, California, 2001, p.210

⁹⁸*Payyanurpattu*, op.cit, p.30

⁹⁹*Kokasandesam*, op.cit, p.59, lines-11 and 64, p.89 *koonthal* was the term for hair.

¹⁰⁰*Payyanurpattu*, op.cit, p.30, “A lucky venture! A lucky venture! Plenty of rubies, plenty of emeralds, many thanks you owe to God for bringing you to a country where there are such riches!”Em Nome de Dues, op.cit, p72

¹⁰¹*Ibid*,pp.29-30, lines-96-97, Barbosa, op.cit,p.31

The vibrant and organized networks of aromatic materials from different gardens in Malabar were exported to different part of world.¹⁰² The pattern of cosmetic herbs exported from the region was noticed by medieval travelers such as Bathuta in 14th century.¹⁰³ This export business was largely done by the Arab merchants who were settled and became wealthy on account of that.¹⁰⁴ “Ten to thirty men stood to pull at each oar. Garden-herbs and ginger were grown on deck, and on it, too, were houses built for the chief officers and their wives. The quarters of the junk were three-fold, fastened together by spikes”¹⁰⁵ and gone to different part of the world. Other groups of merchants included in these trading activities were *Tulikar* (Turks), *Mandakar* (not known), *Kalingar* (odisha), *Gaudar* (Bengali merchants), *Pandinadanmar* (Nadars from Tamilnadu), *Kutayariyar* (Brahmins from Kudaku), *Chozhiyar* (Tamil merchants).¹⁰⁶ Large *kappals* (ships) were entrusted to export these commodities in various markets within Kerala and outside as mentioned by *Payyanurpattu*.¹⁰⁷ This proposition explains that spices and cosmetics formed a major commodity on the mercantile activities of the Malabar.¹⁰⁸

The commodities in this *Theruvu* included precious stones, pearls, perfumes, aromatics, myrobalans, honey, wax, textiles including silk of which the best quality was known as *veerapali*.¹⁰⁹ Silks items from China such as raw silk, silk stuffs, silk stockings,

¹⁰²Ibid,p.44

¹⁰³Ibid

¹⁰⁴ibid

¹⁰⁵ibid

¹⁰⁶*Ananthapuravarnanam*, p.42, lines-102

¹⁰⁷*Payyanurpattu*, op.cit, pp-14-16, Ship Building process in Malabar got detailed explanation in this 13/14th century song, op.cit, pp.12-14, lines-36-41

¹⁰⁸Gaspar Correa, op.cit, p.156

¹⁰⁹Barbosa,op.cit,p.64, *Payyanurpattu*,p.10, lines-29-30, *Kokasandesam*, op.cit,p.57,lines-8, *Ananthapuravarnanam*, p.78, lines-62; “There is an island about a league from the mainland, inhabited by fishermen, who do nothing but fish for pearls. There is no water in the island, and many barges go daily to a large river on the mainland where they are filled with water-no tubs or barrels being used. When the animals of the island see these barges return, they immediately hasten to the shore to drink out of these barges. Pearls are not fished at any island except this one which lies quite 60 leagues this

were exchanged extensively in different parts of Medieval Kerala for people who were conscious about physical appearance and upkeepment.¹¹⁰ In Malabar, apart from the local *theuvus*, from 13th century onwards the ports of West Coast also attained significant positions in trading these commodities. Quilon (Kollam) was an important port and the Chinese Yuan emperors sent missions to this place.¹¹¹ Some items such as cloves were used for oral hygiene as its bark were prescribed for tooth ache at least from early tenth century traded extensively here.¹¹² The account of Jacobus Visscher describes the existence of such Bazars; though fortified; which exchanged commodities with Britain and Dutch in the later periods as well.¹¹³

We get instances of important materials like black, cinnamon, pepper, ginger and clove used even in Italy as it is and is mentioned elaborately in the many works of famous women physician Trotula.¹¹⁴ Nevertheless, expensive and rare items were used by the city elites who were generally positioned themselves on the top of caste hierarchy too and experienced refined and structured pattern of the hygienic measures. These cosmetics items

side of Calicut.” Girolamo Sernigi, *Second Letter to a Gentleman at Florence*, This letter was written in August 1499 after the return of the São Gabriel under the command of João de Sá, op.cit, p.152

¹¹⁰Dutch in Malabar, op.cit, p.220

¹¹¹Upinder Sing, *A History of Ancient and Early Medieval India*, p.587

¹¹²“Goods shipped to Orissa in the middle of the fourteenth century and Kulam in Malabar included cloves and nutmegs.”ibid, p.158

¹¹³Jacobus Visscher, *Letters from Malabar,(1743) tr.: To Which is added An Account of Trava”ncore, and Fra Bartolomeo’s Travels in that Country*, Madras, 1862, p.119; R. A. Donkin, op.cit, 71

¹¹⁴Monica H Green, (ed&trns), *The Trotula, The Medieval Compendium of Women Medicine*, PENN, University of Pennsylvania, Philadelphia, 2001 “histories of women as in histories of medicine, readers often find a passing reference to a mysterious person called Trotula of Salerno. “Trotula,” for whom no substantive historical evidence has ever been brought forth, is said by some to have lived in the eleventh or twelfth century and is alleged to have written the most important book on women’s medicine in medieval Europe, *On the Diseases of Women* (De Passionibus Mulierum)”. p.1 .Another work “*Women’s Cosmetics*” relies on both local ingredients (numerous herbs and animal products) and imported substances (frankincense, cloves,(India), cinnamon (India), nutmeg, galangal).p.46; “First, a quintal²¹ of cinnamon is worth 25 cruzados, A quintal of cloves is worth 20+es, A quintal of pepper is worth 15+es, A quintal of ginger is worth 11+es, And in Calicut a bahar,²² equal to 5 quintals is worth 20+es, A quintal of nutmeg is worth 16+es, A quintal of lac is worth 25+es, *Em nome de Deu*,op.cit, p.119

were used in multiple capacities. People even preserved the dead bodies by applying fragrance and medicines to keep them for years, says Rabbi Benjamin¹¹⁵. This is to note that this practice is still carried by *Viswhakarma* Brahmin families in Kerala especially in the Palaghat area. Even Swamiyar from *Vaidiyar* clans do it and it is known as *samadhiyiruthal* of which Rabbhi would have felt as the common practice of Kerala. They applied many oils, sandal and *bhasmams* and covered the dead body properly and keep in a stone casket which would be later filled with *karppooram*, *sabrani*, and *salt* and was thought as preserving the body. “the dead body having been laid on the pile rice is scattered over the deceased’ face and mouth by all blood relations, and pieces of gold are placed in the nine openings of the body, apparently to provide the deceased soul with money for its journey by whatever exit it leaves the body, thus recalling the somewhat similar practice of the roman world. After fire has been applied to the pile the company retires and bathes. They observe pollution for ten days and during that time abstain from supper and the use of salt in curries.”¹¹⁶

Prevention of the public and private odors was a very prominent practice of the period by using different herbal components. Various fragrances were used according to the situation and place and it was very common in houses, temples, mosques and churches.¹¹⁷ This practice was not confined to the rich class of the society but percolated in to the polluted and *mlechcha* communities but the standard and coast were varied.¹¹⁸ Depending on the climatical conditions and the availability of the plant varieties, they used various items of deodorant and spread the fragrance in the entire habiting place. Plants such as Frankincense (*Boswellia Sacra*) were very much part of the traditional church services in Malabar to signify that the prayers could raise to the presence of the god like the same way the sweet

¹¹⁵Rabbi Benjamin, op.cit,p.140; “the inhabitants do not bury their dead but embalm them with certain spices, put them upon stools and cover them with cloths, every family keeping apart.”

¹¹⁶William Logan, op.cit, p.129

¹¹⁷Medieval fondness towards perfumes and incenses was illustrated by Marco Polo, p.68

¹¹⁸Constance Classen, Devid Howes, *Aroma; The Cultural History of Smell*, Routledge, London, 1994, p.129

smell goes up.¹¹⁹ People yielded fragrance from *Thulasi, Rose flower, Saffron, Resins, Spikenard, Sandal Gums*, and from many other spices like *cardamom, ginger and camphor*.¹²⁰ There were organized and specific pattern for the extraction of the fragrance and specific components gave different smells. There was no gender constraints to the use of perfumes as women used it for specific cleansing purposes like face and skin.

Many of the plants came from nearby forest and jungles where generally lower caste people were assigned to do the gathering job, as the upper caste communities were prohibited from undertaking the agricultural/labor related works.¹²¹ Since people applied fragrance to enhance the smell in living space and possessions, there had to be human labour to prepare, blend, and compound various plants like aloewood, saffron, musk, rose, jasmine, sandalwood, henna, and civet.¹²² However, given the social and cultural confinement of the period suggest that women in general used aromatic substances for the agreeable presence in the private space as their involvement in the public was considered unethical or sacrilege.

The smell of aromatics and other fragrance was very prominent in the rituals of all communities on the Malabar Coast to make rituals completed with good smell.¹²³ This period was known for its elaborate rituals for attaining worldly as well as the otherworldly gains. Rituals originated in early medieval period used many commodities to discharge enticing

¹¹⁹K. P. Paul, *The Eucharist Service of the Syrian Jacobite Church of Malabar: The Meaning and Interpretation*, Gorgias Press, New Jersey, 2003, p.94

¹²⁰Marco Polo, p.170; "From this land of Calicut, which is also called Upper India, comes the spices that are consumed in the east and west, in Portugal, and in all the countries of the world. Precious stones of every type also come from this city called Calicut. That is: in this city there are, of local production, the following spices: much ginger; pepper, cinnamon, even though this is not as fine as that coming from an island, called Çilam(Kollam) which is eight days journey from Calicut. All this cinnamon passed through the city of Calicut. There is an island, called Melaca which sends cloves to this city. The ships from Meca [Mecca] load spices here and carry them to a city in Mecca, Em nome de dues, op.cit,p.98

¹²¹J.R.Freeman, "Gods, Groves and Culture of Nature in Kerala", in *Modern Asian Studies*, Vol, 33, no.2, 1999

¹²²Constance Classen, Anthony Synnott, op.cit, p.126

¹²³Gerald A Klingbeil, "Bridging the Gap: Ritual and Ritual Texts" in the *Bible Bulletin for Biblical Research Supplements*, US, 2007, p.219

smells; for the moral satisfaction of the gods and goddesses.¹²⁴ Certain plants such as *Thulasi*, *Neem*, *Peepal*, *Dhrbha* that ensured ritual hygiene in religious functions were considered to be sacred and believed to have had curing powers.¹²⁵ People in all creeds believed the immediate relation between the ill health and the God. Batuta explained that the beliefs among the sea robbers as well, who never harm or alarm the people who inhabited around the Coast or in the island as they believed that they would be burnt by the wrath of god with serious ill health if they do so. Therefore they even used to forgo the sea robbers and left those free unpunished.¹²⁶

Black Death was very common in the period under the scan and reported on the coast of Indian Ocean.¹²⁷ Bathuta does not mention its brutal occurrence in Malabar or any other region in Kerala. But he gives an account of the endemic spreading across the cost the Nile as result of the unhygienic practices of the population across the river. Plague has always been the result of the unkempt environment and unhygienic surroundings which leads to the uncontrollable breeding of the transmitting elements like rodents.¹²⁸ “On his return to Cairo, he found the Black Death wasting the population. Mocking, lethal, invisible, this awful plague was rapidly sweeping westward and destroying whole families. There were mass burials in Egypt as it happened elsewhere especially in Europe and it was not an exceptional situation at any count. Modern science later on proved beyond any doubt that the scientific

¹²⁴Cardamom, a main ingredient for many of the medieval fragrance making was cultivated in Quilandi which was a major export zone in the medieval period. Al Beruni, p.106

¹²⁵V.V.Balakrishnan, *Chedikalum Avayyude Oushadhagunangalum*, DC Books, Kottayam, 2007 op.cit, p.256

¹²⁶Bathuta,p.- then he talks about some customs of married couple on the occasion of the marriage on which the bride rose and kissed her groom's hand ; he sat beside her, and he and she put betel and fawfel into one another's mouth. Then the covering of the platform was let down, and the whole structure, with bride and bridegroom on it, was carried into the palace.

¹²⁷Akhil Bakshi, *Silk Road on Wheels: Travels Through Central Asia and Tibet*,p.15

¹²⁸Lester K Little, *Plague and the End of Antiquity: The Pandemic of 541-750*. New York, NY: Cambridge University Press,2007,pp.34-36

significance of the plants in the rituals, though it is still a question if people who ritualized these plants knew its scientific significance.¹²⁹

Widespread offerings on the incense in the Hindu and Muslim ritual especially in Saints worships in the indigenous Islamic practices had in that way medical and ritual significances.¹³⁰ The significance of the perfumes actually had two dimensions; symbolic and hygienic. They recognized alliance of fragrance and ritual in order to keep a divine and hygienic environment.¹³¹ Combustion is associated with purification in ritual and hygienic sense for which they used *Ashtagandha* type of fragrances for creation of *dhoopa*.¹³² They wanted to evoke a temporary body of the spirit through incensed smoke of the rituals. “Sun worshipers in medieval Kerala take up their censers and burn incenses in honor of this their deity.”¹³³ Combination of herbs and incenses and scents were used to awaken a particular deity or please the divine body of the saints.¹³⁴ They used the aromatic substances to offset the pungent and sickening smell of the organic materials as evident from many rituals of significance.¹³⁵ People in medieval Kerala used different kinds of lacs, coarse camphor, good quality borax, camphor for anointing the idols, eating and for the eyes, eagle wood, aloe-

¹²⁹ Malika Mohammada, *The Foundations of the Composite Culture in India*, Aakar Books, Delhi, 2007, p.374

¹³⁰ During medieval period usage of incenses was widely prevalent across communities. Says Meenakshi Khanna, *Cultural History of Medieval India*, p.238. This tradition goes on uninterruptedly with Saints worshipers at places like Ajmer and Nizamuddin which are of medieval origin.

¹³¹ Steve Van Toller, G.H Dodd, *Fragrance: The Psychology and Biology of Perfume*, Elsevier Science Publishers LTD, Essex, England, 1992, p.187

¹³² *Kokasandesam*, op.cit, p.74, lines-35-36

¹³³ Rabbi Benjamin, op.cit, p.140

¹³⁴ Rosemary Guiley, *The Encyclopedia of Magic and Alchemy*, Info Base Publication, New York, 2006

¹³⁵ Nicola Conti, p.27 “They enter the temple morning and evening, having first washed themselves in pure water ; and some times prostrating themselves upon the ground with hands and feet held up, repeat their prayers and kiss the ground, at others offer incense to their gods by burning spices and the wood of the aloe.”

wood, musk powder, fresh tamarinds, Indigo,¹³⁶ encienzo, amber, mirobolans, coloured sandals to enhance their physical and ritual visibility.¹³⁷ Other cosmetics they used were spikenard, white sandal, nutmeg, mace, acoro (calamo aromatic); a kind of aquatic plant used in medicine, turbith, convolvulus turpethum, the root of which was used as purgative.¹³⁸ They also made use of serapine, socotra aloes, cardamums, rhubarb and Opium¹³⁹ which was largely traded in Calicut by Chinese and Arab merchants.¹⁴⁰

The markets of perfumery had a long history of its own on the entire Malabar Coast.¹⁴¹ The history of perfume trade of Malabar with Western and Eastern Europe goes back many centuries. Most of the commodities traded were having direct or indirect association with perfume industry inside the land and outside. Pepper, a major component in the medieval and even in the early colonial period was traded with many places in Far East and eastern European countries.¹⁴² These items were not only used in the food preparation as widely believed, but used a major component in the incense making industry. Other commodities like cardamom and ginger; that had a significant application in rituals and cosmetics; were traded along with pepper and used in the many sacrificial rituals in the

¹³⁶Marco Polo, op.cit.p.410 “they procure it from an herbaceous plant which is taken up by the roots and put in to tubes of water where it is stuffed to remain till it rots when they press out the juice. This upon being exposed to the sun and evaporated leaves a kind of paste which is cut in to small pieces of the form in which we see it brought to us.”

¹³⁷Barbosa, op.cit, pp.221-222

¹³⁸ ibid

¹³⁹Barbosa, op.cit, pp.221-224

¹⁴⁰Chopra R N, I.C. Chopra, *Indigenous Drugs Of India*, p.205

¹⁴¹Stephen Dale, “The Hadhrami Diaspora in South Western India: The Role of Sayyeds of the Malabar Coast” in Ulrike Freitag, W.G.Clarence-Smith (eds) *Hadhrami Traders, Scholars and Statesmen in the Indian Ocean, 1750s-1960s*, Leiden, New York, 1997,p.187

¹⁴²Nicolo Conti, Storage Houses (*pandikashala*) were common across the city as thousands of traders across the world thronged to exchange commodities such as pepper, dried ginger both of them had strong medicinal value. Also commodities such as *ilavarngapatta*, *thannikka* were exchanged for the medicinal and culinary purpose. p. 183.; Rabbi Benjamin, op.cit,p.139

Christian/biblical religion across the world.¹⁴³ These commodities were generally cultivated in the high land areas of Malabar where communities such as *Ezhavas* and *Mappilas* were engaged along with other agrarian communities over the region.¹⁴⁴ These communities completely engrossed in the production, distribution and delivery of the items which were mostly bought by the incoming merchants from different part of the world.¹⁴⁵ Coastal areas of Malabar; Panthalayani Quillion, Bepore, Ponnani, Tellicherry, Ezhimala, Chirakkal and many other places had strong economic bond with hinterland merchants who could extract maximum profit out this business.¹⁴⁶

However the extensive markets meant for enhancing physical beauty and ritual reverence did not transcend to the practical life of common people. Hygiene ladders in the medieval centuries prohibited these items from permeating in to the practical life of lower caste groups who did not have a sublime life to live with. This brought in to huge disparities in the consumption of the cosmetics and ornaments. Rich women could afford to wear gold, silver, emerald, sapphire, bronze, special stones imported from Golconda and many such places to make their body complete, enhanced and protected.¹⁴⁷ Poor and working women used things made of clay, ordinary stones, and things like that which were easily and cheaply available.¹⁴⁸ Rich women also used the cosmetic items which make them young, youthful and

¹⁴³ Patric Faas, *Around the Roman Table: Food and Feasting in Ancient Rome*, Palgrave Macmillan, New York, 2003, p.33

¹⁴⁴ P.K.Gopalakrishnan, *Keralathinte Samskarika Charitram*, State Institute of Languages, Trivandrum, 2000, p.

¹⁴⁵ K.P.Singh, *The People of Kerala*, p.

¹⁴⁶ Johnsy Mathews, *Economy and Society in Medieval Malabar (AD1500-1600)* St.Mary's Press and Book Depot, Changanacherry, 1996; Genevieve Bouchon, "Sixteenth Century Malabar And Indian Ocean" in *India And The Indian Ocean 1500-1800* (Ed) Ashin Das Gupta and M. N. Pearson, OUP. Calcutta, 1987, p. 168.

¹⁴⁷ Daud Ali, op.cit, p.200; "Generally the women of this country are ugly and short in stature, and wear much gold jewelry around their necks, and many bracelets on their arms; and on their toes they wear rings set with precious stones." En dome de dues, op.cit, p.72

¹⁴⁸ Nikitin, says that south Indian land is over stalked with the people; but those in the country are very miserable whilst the nobles are extremely opulent and delight in luxury" cited in Robert Sewell, (trns),

clean. *Thampuratti* and *Kettilamma* women from *Kovilakams* elated themselves with wide use of rose water, amber, *kasthuri*, *sambrani*, *thippali*, *kayam* which were also considered “sacred” and outside the ambit of poor’s reach. These items were mostly locally produced and sometimes imported to Calicut city due to the excess demand by the royal and rich women who by law and norms prohibited inferior beings wearing them.¹⁴⁹

Makhdom corroborates the facts written by Bathuta in the earlier century, regarding the male and female dressing pattern on the Malabar Coast. Body was generally exposed, as they usually wore a short piece of cloth which covered very little of their body. It covered just the waist and little below and followed by all castes and genders among the Hindus. As an agrarian community, people in the lower strata, attended and involved the outdoor activity with the only exception of the Brahmin women who strictly remained indoor to keep the moral as well as physical purity. Nevertheless, elite Nair women also showed themselves with much embellishment; dress and the ornaments, mostly in order to bring in the desirable *sambandham* relations from ritually superior Brahmins.¹⁵⁰

The hygienic and fashion attitude of these two sections was well noticed as they were “very clean and well dressed, they hold it a great honor that they know how to please men. For them bath is more an article of faith than a daily ablution...no dress, however, slightly soiled, will be worn again. A sense of almost hieratic purity breathes from them like an emanation....the upper part of the (body) remains bare, but for a necklace round the throat, and occasionally a gold belt or gold bosses in the ears” was the general pattern of the

Forgotten Empire: Vijayanagar, A Contribution to the History of India, The Eco Library, Middle Sex, 2006 cited in p.57

¹⁴⁹Feiseen, Velayyudhan, *passim*, op.cit, p.200

¹⁵⁰Makhdom, op.cit.p. 41; “All or most of these people are clothed in cotton-cloths from the waist down to the knee, but from the waist upwards they go naked. Courtiers and men of condition dress in the same manner, but make use of silk stuffs, reddish or scarlet or of other colors, as seems good to them. The wives (ladies) of men of condition are clothed above the girdle in very white and delicate linen; but the wives of the lower degree are naked above waist.”Em nome de dues, op.cit,p.149

aristocratic women in Malabar.¹⁵¹ At the same time general condition of lesser privileged as they were noticed as poor women having dark and thick hair on their head which was generally knotted at the back side while it was different in the case of upper caste women who made it on the top of the head in the front.¹⁵²

Arab merchants, who were also devout Muslims, traveled across the region of the Malabar in search of spices and easier routes to the different places from the hinterland, were the real beneficiaries along with the native merchants of the bathing rooms and the wells for personal and religious needs. Special rest houses were reserved for Muslim merchants called as *Darul Muslimeen*, in which they could do the normal hygienic practices along with their ritual purifications and worships.¹⁵³ These merchants had established huge mosques in the city of Calicut with the assistance of Samutiri in order to structuralize the ritual pattern of purification.¹⁵⁴ Every mosque built bore from outside the image of temples as the masonry and artisans generally belonged to non-mappila community.¹⁵⁵ But the reality of the interior of the mosques express the amalgamation of Indo-West Asian architecture as “the tiered roofs of the buildings and the corridors around some of the mosques are examples of local forms taken from domestic architecture and from Hindu shrines. Other features such as doors with semi-circular arches and *mihirabs*, semicircular in plan with arches are forms preferred by the Arab settlers.”¹⁵⁶

Attached washing tanks (*houz*) in the mosques were used by Muslim community as the common place for purification unlike caste Hindus who constructed sacred ponds on the

¹⁵¹Maud Diver, *Royal India: A Descriptive and Historical Study of India's Fifteen Principal States and Their Rulers*, Hawthorn Books, US, 1942, pp. 218-219

¹⁵²Feiseen, *ibid*

¹⁵³Andre Wink, *op.cit*, p.74

¹⁵⁴Abdu Razak, *India in the Fifteenth Century : Being a Collection of Narratives of Voyages to India, in the Century Preceding the Portuguese Discovery of the Cape of Good Hope*, (trns)K. H. Major, London, The Hakluyt Society, 1885, p.14

¹⁵⁵Balagopal T.S.Prabhu, “Kerala Architecture” in P.J.Chériyan (ed), *Essays on the Cultural Formation of Kerala*, KCHR, Trivandrum, 2007, p.58

¹⁵⁶Mehrdad Shokoohy, *op.cit*, p.247

basis of ritual hierarchy.¹⁵⁷ Water bodies constructed attached to mosques at Calicut, Cannanore and many other places served “practical, ritual and symbolic use of water” and notion of purifications in Islamic sensibilities.¹⁵⁸ However the construction pattern adopted by Muslims for *houz* was similar to the ponds constructed with the medieval temples.¹⁵⁹ Well established pattern of washing/purifying tanks express in itself that of a settled Islamic community that adhered to Islamic hygienic principles and purifying concepts like any such communities during the period.¹⁶⁰ The pattern and construction of the bathing ghats and ponds the notion of cleanliness attained a ritualistic among different communities in their daily affairs in Medieval Malabar.¹⁶¹ Even though practice of constructing ablution pool (*hauz*) in the centre of a covered hall only started in 16th century, mosques and related rituals were very much part of their life.¹⁶²

Clothing and its relation to the environment and cleanliness can be constructed from the paintings pertaining to the period especially by the colonial invaders who came to Malabar in 15th century and it surprising that the pattern still continues in many part of the Kerala in all section of the populace.¹⁶³ Cotton and Muslins from Cheol were the principle material for dressing and the elite class always used the best variety of the cotton materials.¹⁶⁴

¹⁵⁷Kokasandesam, op.cit,p.61,lines-14

¹⁵⁸Amelia Helena Sliwoski, *Islamic Ideology and Ritual: Architectural and Spatial Manifestations*, State University of New York, Buffalo, 2007, p.31

¹⁵⁹Balagopal T.S.Prabhu, “Kerala Architecture” in P.J.Chériyan (ed), *Essays on the Cultural Formation of Kerala*, KCHR, Trivandrum, 2007

¹⁶⁰Roland Miller, *Mappila Muslims of Kerala, A Study in Islamic Trend*, Orient Longman, Madras, 1992, 39-40; Seyyed Hossein Nasr,p.192

¹⁶¹K.P.Padmanabha Monon, *Cochirajyacharithram*, Mathrubumi, 1989, p.76

¹⁶²Ibn Bathuta; Mehedad Shokoohy, op.cit.p.247

¹⁶³“Once the date for *poittu* was fixed, Otenan made all the preparations namely, getting costly dress and ornaments, ... When he went to Calicut to purchase the dress and other things,” K.S Mathew, *Society in Medieval Malabar: A Study Based on Vadakka Pāṭṭuka*, p.110

¹⁶⁴Barbosa, op.cit, p.70; Marco Polo describes Kerala as the land where no tailor lived. There was not a need for a tailor as people were not really in need of them as they wore very little that unstitched. Marco Polo, the author himself attributed the reasons to the humidity and the hot climate. p.38;

Roomals (handkerchiefs), *cambay* (cloth item from cambay), *tuppatti* (common garments) and other types of garments were very common on the Malabar Coast.¹⁶⁵ Like in the Gulf of Cambay, Muslims on the Malabar coast dressed in *Izar* and *Mizar*, i.e., a long trouser and a jerkin respectively as, spacious pattern of these garments made sure of the easy regulation of the air and temperature.¹⁶⁶ Muslims by this time generally differed themselves from the earlier naked body and started to cover up due to the consciousness about a religion and its regulations.¹⁶⁷ Tight fit was not used by any section and even the Muslim women did not use much spread veils in North India on Malabar Coast.¹⁶⁸ Cau Ju-Kua describes that “the ruler of the country has his body draped, but goes barefooted. He wears a turban and a lion-cloth both of white cotton cloth. Sometimes he wears a white cotton shirt with narrows sleeves.”¹⁶⁹

People in Malabar would have resorted to the minimum and decent way of dressing to avoid over heat and subsequent sweating which leads to the formation of microbes which cause skin rashes and allergies.¹⁷⁰ Microbes accumulated in folds cause many allergies and skin disease and it is very prominent in the tropical countries. However, it is difficult to say that the intricacies involved in their formation and related health problems were understood by the common people or travelers. But travelers from Marco polo to Buchanan give vivid description about the climate of the region. Climate used to be very humid and sultry often on the entire area of Arabian Sea and Malabar Coast. “During the whole of the summer the heat is extreme. From the third hour of the day people shut themselves in their houses until the

“Journal of the Royal Asiatic Society of Great Britain & Ireland”, *Royal Asiatic Society of Great Britain and Ireland*, 1834, London, p.595

¹⁶⁵Dutch in Malabar, op.cit, p.220

¹⁶⁶Raj Kumar, *Encyclopedia of Untouchables: Ancient Medieval and Modern*, pp.239-240

¹⁶⁷Em nome de dues, op.cit, p.149; Raj Kumar, “they go naked and bare, and wear a piece of cotton or of silk around their middle and with nothing on their head. some Moorish feet merchants on the other hand wear a short shirt extending to the waist but all pagans go without a shirt”. p.143

¹⁶⁸K.M. Ashraf, *Life and Culture of People in Hindustan*,

¹⁶⁹Rajkumar, op.cit, p.240

¹⁷⁰Ludovico Varthema, *The Travels of Ludovico Varthema* (trans) from the original Italian edition of 1510), John Winter Jones, Hakluyt Society, London, p.143

evening, at which time everybody goes out.”¹⁷¹ The extreme climate on Arabian Sea forced Arab and Chinese merchants to sail after the month of May since Indian “littorals dotted with numerous ports and harbours, which were already known for their brisk export and import trade were ideally located as stopovers of ships sailing across the Indian Ocean.”¹⁷²

Due to the extreme humidity sailors generally started off their journey to the western coast of India when sun comes in Sagittarius, i.e, the second half of November and the first half of December.¹⁷³ Ibn Bathuta made a sarcastic comment on the arrival of the king on a sultry day by saying “tragedy followed a comedy” as the king arrived in the stormy weather with just a loin-cloth¹⁷⁴ under his waist and a scantiest of headgear, and a necklace of jewels. He was also decorated with *kuda* (umbrella), the royal insignia of the ancient and medieval kings.¹⁷⁵ There was special dress makers in places like Dharmmadam and Panthalayani in Malabar, who exported to royal and aristocratic people across the world dresses demanded in the specific climatic pattern of the respective geographic region.¹⁷⁶ Native population also

¹⁷¹Rabbi Benjamin, op.cit, p.139

¹⁷²Ranabir Chakravarti, “Seafaring, Ships, and Ship Owners: India and the Indian Ocean (AD 700-1500) in Ruth Barnes, David Parkin (eds), *Ships and the Development of Maritime Technology on the Indian Ocean*, Routledge Curzon, London, 2002, p.32

¹⁷³George Fadlo Hourani, *Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times*, Princeton University Press, New Joursey, 1979,p.74

¹⁷⁴John of Monti Corvine says that “He does not, however, equally admire the persons of the natives, who seem to him to resemble devils rather than men. These devils were all black and naked, having only a piece of cloth tied round their Middle, and holding in one hand a shining javelin, and in the other a buckler of bullocks hide. On being presented to the *Sameri* (samuthiri), or King, whom he found, in a similar state of nudity, in a hall adorned with paintings, and surrounded by two or three thousand attendants.” Says Abdurazak, p.56 On special occasion king would appear with all the paraphernalia and the symbols of the power folded in his extensive dressing materials which was not in accord with the tradition of the time and the region. Al-Beruni, p.103

¹⁷⁵Mahuan says that Cochin Raja used turbans unlike his counterparts of the other region. Most of the time turban would be or in Yellow or white which was emulated by the ordinary folk as well. This turban would have to be the direct result of the high humid condition prevails in the Cochin coast port which was very near to the palace.p.193

¹⁷⁶Al-Beruni, op.cit, p.103

delighted in applying the perfumes and “bathing twice a day, which the heat forces them to do yet trees give delicious shade.”¹⁷⁷

Bathuta observed that people in Malabar wore a little; irrespective of the caste, religion, gender and the position.¹⁷⁸ Other travelers had also corroborated this observation without citing reasons; health, social or ritual.¹⁷⁹ Nevertheless, it is for sure that the unique climate and the geography necessitated the larger behavior of scanty dressing.¹⁸⁰ Ferishta, the historian of Deccan, talks about hostile condition of the Deccan through which people unfamiliar with the topography maneuvered rigorous political actions.¹⁸¹ Interestingly, not only wearing but also removing the dresses in it expressed a way to show hygiene rituals and social hierarchy.¹⁸² “The petty Rajahs subordinate to rajah of Cochin must thus show their respect to him and they must remove their upper garment in his presence and remain bare

¹⁷⁷Bathuta;(William Boulting), refers to some other people around on the Indian ocean region, presumably tribals in Malaccan island. The men were generally naked and walked around like that while women dressed in handful of leaves. He was very positive when he explains the health and hygiene consciousness of the people of Malabar. However he was highly critical about the people living in other part of the Indian ocean. He expresses his disliking toward these people saying that they got “doglike faces.” He also talks about the brutality of the punishment over these regions completely different from the coastal area. Bathuta was told that a man might be the husband of 30 or more of these beauties. “Adultery was severely punished, the male offender being hanged, unless he could find a friend or a slave willing to suffer in his place; the woman being trampled to death and her body cast into the sea.”p.147

¹⁷⁸Bathuta, op.cit, 165

¹⁷⁹Barbosa, CUP, 2009 “In all this said country of Malabar there are a great quantity of Moors, who are of the same language and colour as the gentiles of the country. They go bare like the nairs, only they wear, to distinguish themselves from the gentiles, small round caps on their heads and their beards fully grown. So that it appears to me that these people are a fifth part of all the inhabitants that there are in this country. They call these Moors Mapulers, they carry on nearly all the trade of the seaports: and in the interior of the country they are very well provided with estates and farms. So that if the King of Portugal had not discovered India this country would have had a Moorish king : because many of the gentiles turned Moors for any offence which they received amongst one another: and the Moors did them great honour, and if they were women they immediately married them. These people have many mosques in the country in which they also unite in council.”

¹⁸⁰ Seiroku Noma, *Japanese Costume and Textile Arts*, Weather Hill, 1974, pp.9-11; Heather Colyer Ross, *The Art of Arabian Costume: A Saudi Arabian Profile*, Arabesque Commercial, 1981.p.137.

¹⁸¹Ferishta, *History of Deccan from the First Mahummedan Conquests*, (trans) by Jonathan Scott, Vol-1, London, 1794, p.44

¹⁸²Cantor Visscher, *Letters from Malabar*, 1862, p.87

shoulders till he gives them permission to resume it.”¹⁸³ On the other hand it should also be understood why the lower class and caste population had little around their body as they engaged in the laborious work on the field and other related activities.¹⁸⁴ Later documentists do corroborates the unbearable tropical nature of the Indian climate and the heat.¹⁸⁵

During the summer seasons, Malabar merchants did not prefer to remain in the heat of the city which would make them vulnerable to seasonal diseases.¹⁸⁶ Humidity, over heat and possible smoke concentration in the medieval Malabar cities such as Calicut must have forced laborers and common people to retire to their gardens along the river or sea shore and construct the huts over the water.¹⁸⁷ By covering the side of the hut by green leafs they could beat the heat usually blow from nine in the morning to the 12 forenoon. But death was still a common menace on the ground of suffocation and impeded respiration. Whenever a threat of heat wave was perceived they used to sink in the water till it goes away. Persistent perspiration throughout the year; rain and humidity; prevented people from wearing the tight cloths which could have been the breeding ground for bacteria and rashes.

Undergarments for men were made of cotton which was generally called *langoti*, a lengthy cotton undergarment wrapped beneath *dhoti* (mundu) that was mandatory for the *Kalari* practitioners.¹⁸⁸ This unique dress is also found mentioned by Abdurazaq who visited

¹⁸³Ibid,p.87

¹⁸⁴T.K.G.Panikkar, *Malabar and its Folk, Asian Educational Services*, New Delhi, 1995, pp.137

¹⁸⁵Climate condition was very humid and it rains only specific time of the year. People stayed in the muddy houses which were tethered with coconut leaves in a different way. Says John of Monti Corvino who traveled in Malabar during the year between 1292 and 1293. Velayudhan (passim), op.cit, p.117.

¹⁸⁶Arthur Newton, “Travel and Travelers of the Middle Ages” In *The History of Civilization*, General Editor, C.K.Ogden, Routledge, New York, 1996, , p.140

¹⁸⁷Marco Polo, op.cit, 41; Ibn Bathuta, op.cit, p.167

¹⁸⁸ Feiseen, (1436) in his *Sing Sheng Lan* describing the dress pattern of the Srilanka, where Feiseen stayed a considerable time in understanding the society, he gives a complete different picture. People covered their body as much as they could unlike people from Malabar. Men and women used cotton cloths to cover their body and kept a cloth on the head and waist. Velayudhan, op.cit, p.199

Calicut in 15th century as *Lankoutah*.¹⁸⁹ Only Muslim and upper caste women were allowed to cover the entire body while many other sections were prohibited from doing so.¹⁹⁰ This condition prevailed till the last stages of 18th century when Tipu Sultan by law gave permission in Malabar for every section of the society to cover the body as they liked.¹⁹¹ Upper caste women used to cover their breast with *rouka* / *mulakkai* or *mulaikkili* (bodice). However, they had to remove these garments before the temple idols and caste superiors as their physical preservation should not become a hindrance to the superior ritual hygiene these elements represented.¹⁹² Any violation of this ritual hygiene based on ritual ranking for the sake of physical hygiene was taken very seriously and often meted with severe punishments.¹⁹³ Muslims on the Malabar Coast tried to imitate the Arab merchants by appearing in expensive apparel and other things like deodorant in their own clusters due to higher ranking in the social circle for their economic prosperity.¹⁹⁴

Generally food was taken by hands and cooked in the earthen pottery made of laterite clay. However the elite sections had preferred brass vessels especially for the bigger community gatherings through which they expressed the prosperity and power they wielded.¹⁹⁵ Many of the erstwhile royal families still use the same vessels which were known

¹⁸⁹ Mehrdad Shokoohy (ed), *Muslim architecture of South India: The Sultanate of Ma'bar and the Tradition of Maritime Settlers on the Malabar and Coromandal Coast of Tamilnadu*, Routledge, 2003.p.144

¹⁹⁰ Virendra Prakash Singh, *Community and Caste in Tradition*, Common Wealth Publishers, 1992, p.15

¹⁹¹ C.K.Kareem, *Kerala under hydar Ali and Tipu Sultan*, Kerala History Association, 1973, pp.182-187; Medieval towns supplied dress materials and other items for Muslims such as *shirts and rouka* which were generally worn by caste Hindus, Rajagopalan, op.cit, p.72

¹⁹² Payyannurpattu, p.32, line-104; ananthapuravarnanam,p.30,lines-66

¹⁹³ K. Thulaseedharan, *Community and Caste in Tradition*, College Book House,1977, p.35; Kathleen Gough, op.cit, 327

¹⁹⁴ Abdu Razzak, op.cit, p.144; Jeyaseela Stephen, *Literature, Caste and Society; The Masks and Veils*, Kalpaz Publication, Delhi, 2006,p.354

¹⁹⁵ "There is an abundance of silken stuff s, namely, velvets of various colors, satins, damask, taffetas, brocades worked in gold, scarlet cloth, brass and tin ware. In fact, all these things are to be found in abundance, and it is my opinion that the cloths worked in gold and the silks are brought there from

for durability and special significance. By this time availability and accessibility of expensive metals made upper strata in the society to use vassals of tin, brass, copper, cinnabar, lead and so on.¹⁹⁶ Food was eaten and served in the same metal vessels generally while common people had their food mostly from the leaves.¹⁹⁷ Ruling and social elites also had improvised storage systems that they used to keep pickles and jam made out from the seasonal fruits and vegetables.¹⁹⁸ They generally kept these items in *bharanis* or ceramic bottles or *Cheeni*

Cairo.” Girolamo Sernigi’s First Letter to a Gentleman at Florence. This first letter was written sometime around 10 July 1499 after the return of Coelho’s ship, the Berrio, and based on his conversations with the crew. Cited in Em Nome De Deus, p.146; Brass utensils had been continuously used by cooking, serving and preserving food well up to 18th century. Francis Buchanan, *A Journey from Madras through the Countries of Mysore, Canara and Malabar*.p.130.

¹⁹⁶Philippus Baldaeus, *A True and Exact Description of the Most Celebrated East-India Coasts of Malabar and Coromandel and Also of the Isle of Ceylon With Their Adjacent Kingdoms & Provinces*, First Publication, Amsterdam, 1672, reprinted, AES, New Delhi, 2000,p.622

¹⁹⁷It was practice all over the region during medieval times. Bathuta talks about Ceylonese people who “would bring it (food) in their pots and sit at a distance from us. They would also serve us with rice which is their principle food on banana leaves and then go away and what we left over was eaten by dogs and birds.”Ibn Bathuta, 2005, p. 96

¹⁹⁸Prohibition of the cow/beef eating was strictly executed in Malabar as most of the local kings were claimed to be *Kshatriyas* or *Samantha kshatriyas*. This was also formed the main aspects of the strong moral hygiene of the upper caste Hindus of the period which witnessed a strong revival tendencies. Al Idrisi, Velayudhan ,op.cit, p.107 ‘Cow and bulls were venerated and considered holy and not to be killed’ reports John of Monti Corvino who traveled the region between 1292 and 93.p.117; The Kovilakam(palace) and related places in Calicut was cleaned by the mixture of cow dung and water and sprinkled it occasionally. They were washed everyday with these things and the cleanliness in the temples around the city was properly maintained. As we have mentioned earlier, Mahuan also mentioned the cow dung *bhasmam* which was applied by the people with the Hindu belief and used after taking bath. Muslims did not use this as they had a different pattern of cleaning. They generally cleaned with water only and before the prayers they cleaned themselves from the tank inside the mosques in Calicut which around thirty at that time. Velayudhan,op.cit, p.194; These was strictly followed by Namutiris who “do not eat flesh nor fish, they are much revered and honoured by the Indians, and they are not executed for any offence which they may commit.”says Barbosa, op.cit, p.121; The King of this city of *Chalichut* eats neither of meat nor fish nor anything that has been killed, nor do his barons, courtiers, or other persons of quality.....and it is a great thing that they should be able to support themselves without eating meat or fish. The common people eat meat and fish, but they do not eat oxen or cows, for the hold these animals to be blessed (benedetto), and when they meet an ox on the highway they touch him, and afterwards kiss their hand, as a sign of great humility.”Em Nome de Deus, op.cit, p.148

Bharanis which were major exports from China during the period.¹⁹⁹ Chinese also traded in the musk, hemp-silk, colored silk taffeta, blue porcelain dishes, and bowls in gold and silver.²⁰⁰ The interesting part of this preserving method was, most of the *cheeni bharani* found, were having an imperfect shape with their lids broken in order to get tax reductions on the ports where unbroken and perfect pieces attracted more taxes.²⁰¹ These utensils were washed with ash powder of burnt wood and coconut peel. The high carbon contents in these materials gave shining looks to the brass and iron utensils. Ash was also used for *kalam*s (clay pots) for removing the smelly left over of the food which would in turn results in the bacterial functions and health problems. These carbons contents easily absorbed the impurities of the oil and food and retained original sheen and look. They also used juices from some plants which still common in many part of the Malabar.²⁰²

There are scanty evidence to suggest that there was some kind of standard hygienic practices in the preparation of the food and serving especially among the common people. Lower caste groups dwelled far away from the roads and the vicinity of the affluent that “pass

¹⁹⁹This was the time the trade relation between India and china established as such especially during the period of Sug dynasty from 960 to 1279 AD. Gold, Silver, Iron, Chyilyam, Akil, Rihnosers Horn, Kavidi, Salt, Cotton, Silk were the major items of trade. Says Chau-ju-Qua visited Kerala in 12th century; Kumar Suresh Singh, *People of India: Volume 27, Part 1, Anthropological Survey of India*, 2002, p.72; The cheena bharani (a big jar made of China clay, also introduced by the Chinese) was a popular jar among the higher castes.; *Cheena Chatti, CheenaBharani*, Cheena Crackers, Cheena fence, Chinese wires, China bazaar in Quilon, etc., prove the intimate contacts between China and Kerala, says G. Krishnan Nadar, *Historiography and History of Kerala*, Learners’Book House,2001, p.43

²⁰⁰Ma-Huan, cited, in Ian Blanchard, *Mining, Metallurgy, and Minting in the Middle Ages: Continuing Afro-European supremacy, 1250-1450*,2005, p.1300

²⁰¹Josef W Meri, Jere Lbacharach, *Medieval Islamic Civilization*, Routledge, New York, 2006,p.817

²⁰²Fryer Jordhanus, “People use coconut tree for many different purposes of which house construction was very important. They take the trunk of the tree for pillars and beam while use the leaves to have the tope part of the house. The construction and the style of the houses and other buildings in kraal very much affected by the availability of the material and the way climate functioned in the region.”Velayudhan,op.cit, p.150

their lives in poverty.”²⁰³ However, the available evidences are enough to suggest that, in relation to the affluent sections, especially in the Kovilakams and the *Tharavadus*, careful preparation of the food were monitored and taken care for political and ritual reasons.²⁰⁴ Barbosa reports the presence of Brahmin cooks in the royal court of Samutiri.²⁰⁵ No lower caste people were allowed to enter the kitchen for cooking or taking food and if that happened they were severely punished.²⁰⁶ Kovilakams had specific rules and regulation for kitchen which was actually worked as place for socialization in the sufficient physical space it offered for entertaining large number of people. There had been architectural structures suggesting that sanitation and ventilation of the kitchen were properly maintained and preserved.²⁰⁷ “Some of the Nambutiri houses are immense structure, almost palatial, while hard by is the temple, an adjunct of the house. At the eastern side of the compound is the gate entrance, sometimes almost a small house in itself (*patippura*) always kept scrupulously clean.”²⁰⁸ Thus architectural designs of the medieval period took into consideration the physical hygiene of the occupants inside the structure by ensuring air circulations and room for easy movements. The awareness regarding the food borne disease and food poisoning was very strong among upper sections of the people and the proper care was taken. *Illams, Mana*

²⁰³Barbosa, op.cit, p.65; “he (Barbosa) mentions that some of the lower classes in that region were very poor, some bringing wood and grass for sale in the city, others living on roots and wild fruits covering themselves with leaves and eating the flesh of wild animals.” Says William Harrison Moreland, *India at the Death of Akbar: An Economic Study*, Elibron Classics, 2006, p.267

²⁰⁴Josef W Meri, Jere Labacharach, op.cit, p.294; Annemarie Schimel, Burzinek Waghmar, *The Empire of Great Mughals, History, Art and Culture*, Reaction books Ltd, London, 2004, p.189; S.R.Bakshi, *Advanced History of Medieval India*, Anmol Publications Pvt Ltd, New Delhi, 2003, p.318.

²⁰⁵“The kings make great use of these Bramans for many things, except in deeds of arms. Only Bramans can cook the king's food, or else men of the king's own family, and so all the king's relations have this same custom of having their food cooked by Bramans.” Barbosa, p.123

²⁰⁶Sainuddhin Makhdum, Since the caste system was very prevalent implemented stringently to enter the upper caste house was impossible for lower caste people., p.42

²⁰⁷Koka Sandesam, uses the term *kilivathil* for ventilation. op.cit, p.97, lines-77

²⁰⁸F. Fawcett, Florence Evans, Edgar Thurston, *Nambutiris*, pp.43-44 “in Malabar, the house of the Zamorin and of many another grandee is called Kovilakam, meaning in a kind of way, palace; the abode of the Nambutiri is an Illam, that of the Namutirippadu a “Mana” or “Manakkal”. ibid

and *Kovilakam* constructed special spaces for cleansing, modified versions of which could still be seen at many places in Malabar.

This and *Adukkala Ovara* were used (*kitchen drainage*) for washing utensils and plates. These *Ovaras* were unique features of the medieval hygiene technique and was meticulously followed in affluent families depending upon the availability and the demand of the situations. These houses had *overas* carved out of granite stones and made by the expert masons who were generally from the lower castes.²⁰⁹ These *Ovaras* were rectangular in shape and had enough space to accommodate large cooking vessels which required lots of care as most of them were imported and very costly.²¹⁰ Plates and utensils were kept upside down for protecting those from dust and dirt of community hearths and kitchen.

Many textual and traditional references to points out a general understanding on the contamination of the food especially if it kept open and hence they were kept in dry pits.²¹¹ Generally people kept the food such as milk, butter, lemons, citrons, and limes, dates; fresh and dried²¹² which were abundant for “haves” in vassals tightly closed with wooden, ceramic lids and sometimes even used leaves especially of the banana.²¹³ Indigenously made lids, jars and pots are discovered from many places even from iron period onwards from places such as Kaladi which shows that this tradition has had a long history in Medieval Kerala.²¹⁴ Apart

²⁰⁹ J.L.Goff, *Medieval Civilization*, pp.212-220

²¹⁰ Padmanabha Menon, op.cit, p.55

²¹¹ Francis Buchanan, op.cit, 102

²¹² Payyannu Pattu; *Em Nome de Dues*, p.148

²¹³ John D Marignolli, “People ate from the leaves generally and on the special occasion they eat on the banana leaves. He feels that there is no bigger leaves on the planet than banana leaves (*vazhayila*) and it was sufficient enough to serve many people but surprisingly only one person takes food from it. This practice was done to ensure the proper eating and the food parcels from other plates do not enter in to the others plate.”; Girolamo Sernigi, op.cit, p.148

²¹⁴ This is found during an archaeological excavation by the team members of Kerala University and found by Ramesh, from Kannur University. The urns were excavated by a team of researchers led by B. Ramesh, Director of the Research Centre at Sree Sankara College in Kalady. "Three types of earthen urn burials and some pots were found in a single day's excavation. Due to heavy downpour, the contents were severely affected. The biggest urn is 4.5 feet high and 2.75 ft in diameter," Dr.

from physical hygiene aspects, principles of ritual hygiene were strictly practiced in the kitchens also. “The children of inferior mothers are never brought into the *Taravad* of the superior fathers...they may live there (in exceptional conditions). And where they do so, they cannot enter the *Taravad* kitchen or touch the women while they are eating.”²¹⁵ One of the reasons could be the prescription of the Indian legal texts about the contamination of the food through the touch of inferior castes and *mlechchhas* (‘impure’/‘unclean’) in medieval times.²¹⁶

Social hygiene was monitored through social boundaries in which caste groups had to keep certain physical distance from Brahmins. By this time, society structured in to confinement of different castes groups when *jati* formula established its articulation on cultural life.²¹⁷ *Nambutiris* and *Nairs* became very predominant in the graded hierarchy of the caste structure which was based on different principles of social and ritual hygiene.²¹⁸

Varthema gives a clear picture of this as he talks of the low caste;

“These two last classes of people, that is to say, the *poliar* and *hirava* may not approach either *naeri* or the Brahmins within fifty paces, unless they have been called by them and they always go by private ways through the marshes. And when they pass through the said places they always go crying out with a loud voice and this they do in order that they may not meet the *naeri* or the Brahmins....for should

Ramesh said. He said that its lower half had a height of 2.75 ft. The height of the upper half cannot be ascertained due to the damage that has occurred to it over the years. This was found 2.5 feet beneath the surface. It is a handmade red-and-black ware having a shape similar to that of an egg, with an ovoid lid. A prominent rim is seen on the middle part that joins the two halves. <http://www.hindu.com/2006/07/31/stories/2006073108810400.htm>

²¹⁵F.Fawcett, op.cit, p.189

²¹⁶Alakananda Bhattacharya, *The Mlechchhas in Ancient India: Their History and Culture*, 2003, p.102

²¹⁷Kesavan Veluthat, *The Early Medieval in South India*, OUP, New Delhi, 2009, p.93

²¹⁸Zainuddin Makhdum, 2006, pp.43-44

they not be crying out.... the above mentioned *naeri* may kill them without incurring any punishment.”²¹⁹

The original manners and habits of hygiene of the Nambutiris were preserved on the Malabar Coast till Nineteenth century.²²⁰ Brahmins kept all lower caste groups in utmost distance. Caste such as “Nair (who) could approach a Nambutiri but must not touch him. A *Tiyya* must stand at the distance of 36 steps, and a *Pulayan* should stand at the distance of 96 feet. If any chance should touch, him he must expiate the pollution thus contracted by instantly bathing and spending lot of time reciting the holy scripts.”²²¹ Pollution principles and Taboos regarding food; cooking, eating and serving were much prevalent well up to 19th centuries.²²² Food, which was touched by someone, was considered polluted or *echil* and taking it by the man had demanded certain ritual cleansing in the same way if someone happens to eat before washing their hand whose social position was demoted.²²³

Religion and cultural norms thus restrained possible socialization and hence society was under an imposed burden of multiple hygiene hierarchy;

“There is salvation for him but in fleeing from one place to another place where no one knows his circumstances. Otherwise, the chief of the town takes him and sells him to one below him in rank in the event that he is a youth or a woman. Or else he comes to us and converts to Islam or becomes a *yogi* or a Christian. In this way they do not permit

²¹⁹Varthema, op.cit,p.142

²²⁰Baskaranunni, op.cit

²²¹David Brewster, *The Edinburg Encyclopedia*, Vol-13, William Blackwood, London, 1830, p.287; “On the outskirts of the village, in separate small hamlets lived the very low castes of Parayas and pulayas...pulayas were until 1850 the agricultural serves of nayars, temple servants and Brahmins. As highly polluting castes, *pulayans* and *parayans* were theoretically forbidden to approach the high castes within a distance of sixty four feet. They might not enter the good area of the village or walk the main paths”Cathleen Gough, op.cit, 331

²²²Fred Fawcett, Florence Evance, Edgar Thurston, *Nambutiris*, 1900, AES, New Delhi, pp.48-50

²²³Barbara Metcalf, *Islam in South Asia in Practice*, Princeton University Press, New Jersey, 2009, p.406

the superior to consume food cooked by the inferior, for eating outside of his rank entails the above mentioned consequences.”²²⁴

Thus, the principles of social hygiene and ritual purity and pollution were strongly at work Eight Century onwards in Malabar.²²⁵ The centrality and pervasive nature of purity concept in the region also facilitated different social frameworks and cultural norms such as *parayappedi* and *pulayappedi*.²²⁶ *Pulayanas* are one of the original sections of the population in Malabar who were considered as “praedial slaves” and was considered to be causative for unhygienic social situation and pollution at all levels; physical, social and moral.²²⁷

Concepts of pollution, purity and hygiene worked in the life of Malabar at two different level; instrumental and expressive. At the instrumental level there were conspicuous actions to influence other’s actions and while at the expressive level, belief systems could reinforce social pressures. These patterns could be seen in the etiquette of eating procedures in the region. Mouth and hands were washed after every meal and it was obligatory on part of the Islamic community.²²⁸ After their meal people generally poured water though the lips, keeping the glass on top of the lips for the fear of defilement.²²⁹ It became a common practice in Malabar among non-Brahmin upper castes to eat the leftover food of Nambutiri in plantain

²²⁴Zainuddin Makhdum, cited in Barbara Metcalf, 2009, op.cit, p.406.

²²⁵Andre wink, *Al-Hind, The Making of the Indo-Islamic World*, Vol.1, p.73 “equally problematic was the need to accept food from impure hands and pollution resulting from contact with *mlecchas*”p.73

²²⁶M.N.Srinivas, *Social Change in Modern India*, “the structural distance between various castes is defined in terms of pollution and purity. A higher caste is always “pure” in relation to lower caste, and in order to retain its higher status it should abstain from certain forms of contact with the lower.”p.127

²²⁷S.N.Sadasivan, *A Social History of Kerala*, A.P.H. Publishing Corporation, New Delhi, 2000, p.359

²²⁸ “They were very different in terms of food culture and the way of eating. They don’t eat *roti* or wine like in Europe and eat with hand not spoons.” John of Monti Corvino, op.cit, p.118

²²⁹Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, Routledge, 2003 “The process of eating is potentially polluting, but the manner determines the amount of pollution. Saliva – even one’s own, is extremely defiling. If a Brahmin inadvertently touches his fingers to his lips, he should bathe or at least change his clothes. Also, saliva pollution can be transmitted through some material substances. These two beliefs have led to the practice of drinking water by pouring it into the mouth instead of putting the lips on the edge of the cup...through the hand so that they never directly touch the lips.”p.34

leaf for good luck, better health and divine blessings. Even ruling families made arrangements for Brahmin feast and consumed the leftover food primarily for material reasons.²³⁰

In the chapter concerning the pattern of eating of the political elite of the region Varthema delves in some interesting aspects. “Four of the principle Brahmins takes the food which the king is to eat and carry it to the devil ...and then the said Brahmins carry that food to the king.”²³¹ During the same period, foreigners who generally considered as being *mlechas* were not given food and water but only in the plates or bowls as the very touch of an outsider would result moral pollution.²³² Hence they were given food and drink in their hand. Mandates for having individual plates and exclusive hygienic/ritual space called *agrashalas* (food court) also ensured desired physical distance of one from another in feasts which were integral part of the medieval temple centric culture of Kerala.²³³

Land owning castes like Nambutiris²³⁴ and Nairs constructed houses with many amenities and comforts in their *Illams* and *Kovilakams*. They maintained luxurious bath rooms

²³⁰Sadasivan, op.cit, p.264 .“A man who has periodically paid money to Brahmins chiefly of the nambutiri caste is said to have be saved.every family regularly makes a point of observing feasts and feeding Brahmins and paying them money and receiving their blessings.”T.K.G.Panikkar, op.cit, p.196

²³¹Lodovico de Varthema, op.cit, p.139

²³²Andre Wink, op.cit, p.253; ‘The process of eating is potentially polluting, but the manner determines the amount of pollution. Saliva-even one’s own-is extremely defiling. If a Brahmin inadvertently touches his fingers to his lips, he should bathe or at least change his clothes. Also, saliva pollution can be transmitted through some material substances. These two beliefs have led to the practice of drinking water by pouring it into the mouth instead of putting the lips on the edge of the cup, and of smoking cigarettes . . . through the hand so that they never directly touch the lips.Eating of any food-even drinking coffee-should be preceded by washing the hands and feet.’; Mary Douglas, *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*, Routledge, New York, 1966p.35

²³³*Ananthapuravarnanam*,op.cit,p.56,lines- 133

²³⁴Lemerclinier Genevieve, *Religion and Ideology in Kerala*, D.K .Agencies, New Delhi, 1984, pp.132-134

and toilets in their spacious bedrooms inside houses constructed in teakwood broadly.²³⁵ Barbosa describes the large houses and servants employed for the maintenance of the houses of rich in Malabar for bathing, eating, drinking, and sleeping till a paradigm shift after the emergence of the Portuguese on the coast.²³⁶ These bath rooms were having elaborate drainage patterns and were it released in to the common drainage outside the house compound. There were elaborate bathing rituals in every community on Malabar Coast, apart from the daily bath, such as ritual bathing related to marriages, puberty, and child birth and so on.²³⁷ We have to notice that foreign travelers were amused to see wide spread customs of various bathing by every section of the society for the reason that of middle age people in Europe were not particular in taking bath even among the nobles till Eighteenth century.²³⁸ Sometimes these ritualistic patterns attained the nature of social gatherings and communal functions in the confined wall of the traditional houses.

Debate over the relation of hygiene and dominance brings in an interesting area of royal hygiene practices of Malabar. The highest political authority in the region, Samutiri was very particular with his maintenance of hygiene; physical, social and ritual.²³⁹ The ritual hygiene of eating was preserved by keeping Brahmins around him to make sure that the

²³⁵George Fadlo Hourani, John Carswell, *Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times*, Princeton University Press, New Jersey, 1995,p.70; We can see it in many medieval palaces in Thripunithura in Ernakulam and Arakkal in Kannur districts. "In Malabar, the houses of the rich were built of teak wood and consisted of more than two storeys." Says Pran Nath Chopra, Baij Nath Puri, Manmath Nath Das (eds), *A Social, Cultural, and Economic History of India*, Macmillan India, 1974, p.154

²³⁶Barbosa,op.cit, 148

²³⁷ "People in Malabar were very particular about the cleanliness and the practices of the hygiene and were readily spent time and energy for the upkeepment." Says Al-Beruni, p.102

²³⁸Norman Roth, *Daily life of the Jews in the Middle Ages*, Greenwood publishing house, US, 2005, p.64

²³⁹It should be noted that European monarchs and nobility did not consider personal hygiene as some thing very important from Carolingian time (8th century onwards). Carolingian aristocrats changed cloths and bathed at least once a week, on Saturdays...to monks bathing more than once a week seemed an unnecessary luxury; to aristocrats, it often seemed desirable." Jackson J. Spielvogel, *Western Civilization*, Words Worth, Boston, 2011, p.249

sacredness of the 'king's body' was maintained.²⁴⁰ His social legitimacy and hygiene was ensured through numerous elaborate rituals in which *ariyittuvazhcha* attained a major place. *Tirumuti Pazhayari Carttu*, another name of the same ceremony, conferred on the king the absolute power by Vedic Brahmins who concluded the ceremony with a ceremonial showering of the sacred rice on his head.²⁴¹

The king was constantly accompanied by a servant who keeps a *kolambhi* (a pot which has a big mouth) which was made of gold. The king spits into that and carefully avoids it going out of it since saliva was considered to be extremely unhygienic and polluting. The golden pot was supplemented with a golden tumbler with water filled. He keeps a big golden plate which comprises many things and from which he takes some leaves and keeps chewing. This was very common in the region and king does it every day all the time. The king was to be given bettle leaves (*murukkan*) by ritually hygienic Brahmin *Nambuhiri*, whose constant presence around the king was ensured. This must have been a political strategy of the ruler to show that the political authority could always be powerful than social hierarchy with the power he wielded and hence the mutual dependency should be respected.²⁴² Notwithstanding

²⁴⁰Varthema, p.140 "when the king has finished his meal, the said Brahmins take that food which the king did not require and carry it into a court yard and place it on the ground. And the said Brahmins clap their hands three times and at his clapping a very great number of black crows come to this said food and eat it."

²⁴¹K.K.N. Kurup, *India's Naval Traditions: The Role of Kunhali Marakkars*, 1997, p.67. Through this social hygienic process, "sovereign status is conferred upon the Zamorin by a group of Vedic Brahmins along with a long process of ritual which is concluded with ceremonial showering of the sacred rice on the head of the newly created King."

²⁴²Em Nome De deus, op.cit, p.78, "He (the king Samutiri) held, in his left hand, a very large golden cup, with the height of a half jug, and the width of two palms at its mouth, and it appeared very heavy. Into this cup he threw the husks of a certain herb which the men of this country chew for its calming effect, which they call *tambor*. On his right side stood a basin of gold, so large that a man might just encircle it with his arms, in which these herbs were kept, and many silver jugs, and the canopy above was all gilt". John Pinkerton, *A General Collection of the Best and Most Interesting Voyages and Travels in Various Parts of Asia*, Vol. 2, 1989, p.76; "Natives of India (Malabar), are addicted to the custom of having continually in their mouth the leaf called *tembul*; which they do partly from habit and partly from the gratification it affords...Persons of rank have the leaf prepared with camphor and

the bettle chewing habit for “good looking” and healthy,²⁴³ the sacredness and the hygiene of the royal chamber was ensured, by prohibiting spitting and sneezing in the royal court. And punished, if anyone found guilty, accordingly whoever did it from any caste background.²⁴⁴

Barbosa describes that kings of Cochin did not have the right to keep *oudu*, a roof material made of clay, to save him from the usual torrential rain during the monsoon season which generally cause seasonal diseases, on his *Kovilakam*.²⁴⁵ Denial of a basic material for the upkeepment of physical hygiene founded on the superior sense of ritual hygiene Samutiri held, for virtue of being the *Raksha Purushan* as already mentioned.²⁴⁶ It shows that superior ritual hygiene and social purity facilitated an exclusive political right during medieval period. The same exclusivity again refused Cochin kings the rights to mint coins and keep umbrella along the paraphernalia, as long as was he under the political tutelage of the Calicut rulers. He did not even have the right to wear the crown which was a symbol of the political sovereignty as we seen in the Mughal political culture later.²⁴⁷ Whenever he distracted from this practice, was he met with an immediate admonishment. Due to the political actions based on the senses of ritual hygiene made the king of Cochin feel that the arrival of Portuguese in 16th century was a golden opportunity to come by. He was thus subsequently gifted a Golden Crown by the early colonial masters who found an ally in him in the fight against Samutiri.²⁴⁸ He was also to keep earlier, the sword of the Samutiri as the token of the obedience to

other aromatic drugs and also with a mixture of quick lime.” Marco Polo, *The travels of Marco Polo: The Venetian*, Thomas Wright (ed), London, 1854;

²⁴³Abdul Razaq, p.218

²⁴⁴Ibid, p.218

²⁴⁵Barbosa, op.cit, pp.156-157,”the king of Calicut observed this as a law and the king of Cochin used to give him a tribute of elephants, and so returned to Calicut. And the king of Cochin could not coin money, nor roof his houses with tiles under pain of losing his state.”

²⁴⁶Barbosa, p.241

²⁴⁷Daud Ali, *Courtly Culture and Political Life in Early Medieval India*, CUP, UK, 2004, p.16; S.Bakshi, *Advanced History of Medieval India*, Anmol Publications, New Delhi, p.376

²⁴⁸Pius Malekandathil, *Maritime India: Trade, Religion and Polity in the Indian Ocean*, Primus, 2010, p.96

him. This was the time Portuguese arrived and naturally was received by the Cochin kings who was deeply wounded with multiple humiliations.²⁴⁹

By 16th century king of Calicut started taking much care about his appearance after the emergence of the different traders on the coast. He wanted to change the appearance and to show the wealth and magnitude of the power he wields. New dressing pattern with turban and polished shoes, hygiene materials now evolved into a different political language itself.²⁵⁰ The change in the dress pattern reflected in the changing political landscape of medieval Malabar, where we witness contestations and efforts to dominate each other in the subsequent centuries.²⁵¹ Malabar rulers were never bothered about the appearance or dressing pattern when Arabs and Chinese appeared on the coast.²⁵² However, after the appearance of the Portuguese, there was a conscious effort from them to change look and appearance and proper care was taken to maintain body and living environment. Still, bathing remained most important ritual in the morning as far the hygiene was concerned. This was accompanied by the application of turmeric, sandal, and *chenninayakam* (dried leaves of aloe vera) properly mixed with rose water.²⁵³ Kings used to sit on the elevated wooden *thinna*s which were extremely polished and clean. This place was daily cleaned with the cow dung and kings used to receive all delegates sitting on the elevated platform on which he dictated policies and observed special hygiene practices to please the people of power and authority.²⁵⁴

Hygiene practices, especially ritual hygiene, did not stop with the death of the political authority. *Samvatsara Pareeksha*, a particular ritual was practiced after the death of

²⁴⁹ Barbosa, op.cit, p.241; Clayton J Drees, *The Late Medieval Age of Crisis and Renewal, 1300-1500: A Biographical Dictionary*, (ed) Greenwood Press, 2001, US, p.177

²⁵⁰ Daud Ali, op.cit, p.144; S.R.Bakshi, op.cit, p.380

²⁵¹ Elisha P.Renne, From *kaki* to *Agbada*: "Dress and Political Transition in Nigeria" in Jean Marie Allman (ed) *Fashioning Africa: Power and the Politics of Dress*, Indiana University Press, Bloomington, 2004, p.125

²⁵² Barbosa, op.cit, p.36

²⁵³ Ibid, p.242

²⁵⁴ Barbosa, p, 242

medieval Malabar kings. This was by and large observed by the kith and kin of the deceased. Sometimes it was extended to his political dependence in order to save kings' soul and his domine from ritual pollution.²⁵⁵ "This King of Calicut, and also the other kings of Malabar, when they die, are burned in the country with much sandal and aloes wood; and at the burning, all the nephews and brothers and nearest (*male*) relations collect together, and all the grandees of the realm, and confidantes of the king, and they lament for him and burn him."²⁵⁶ The diseased body was buried after three days and no one shaves their body except non-Hindu believers. It was applicable to even to the new born baby.²⁵⁷ Betel chewing was banned for 13 days and if anybody found doing it would be definite that his lips would have been cut off. People were banned from fishing and eating non-vegetarian foods. After 13th day except for the next king everybody was free to eat and drink.²⁵⁸ Newly appointed king was to get along with the same ritual for one year and was not to cut his hair, beard and nails. It was shown that to have a perfect purity ritual and the successful travel of the diseased soul, people were banned from keeping the actual personal hygiene in the medieval period.²⁵⁹

²⁵⁵ Barbosa, p.107 " And before burning him they keep him there when dead for three days, waiting for the assembling of the above mentioned persons, that they may see him if he died of a natural death, or avenge his death if any one killed him, as they are obliged to do in case of a violent death. And they observe this ceremony very rigidly. After having burned him, all shave themselves from head to foot, excepting the eye lashes, from the prince, the heir to the throne, to the smallest child of the kingdom: that is, those who are Gentiles, and they also clean their teeth, and universally leave off eating betel for thirteen days from that time; and if in this period they find any one who eats it, his lips are cut off by the executioner. During these thirteen days the prince does not rule, nor is he enthroned as king, in order to see if in this time anyone will rise up to oppose him; and when this term is accomplished, all the grandees and former governors make him swear to maintain all the laws of the late king, and to pay the debts which he owed, and to labor to recover that which other former kings had lost."

²⁵⁶ Barbosa, *ibid*

²⁵⁷ John Nieuhoff, *A Collection of Voyages and Travels*, Vol-2 (ed) John Churchill, Asian Educational Services, p.140

²⁵⁸ *Ibid*, John Nieuhoff, the Dutch man travelled extensively in Malabar at various times from 1653 and 1670 and gives some interesting pictures of rituals and caste distinctions in the region says Edward Farley Oaten, *European Travellers in India: During the Fifteenth, Sixteenth and Seventeenth Centuries*, AES, New Delhi, 1991, p.246

²⁵⁹ Barbosa, *Ibid*, p.244

Barbosa also gives some details of the significance of the ritual hygiene practices which were directly associated with the king and his coronation. When a new king had to be thronged on the crown, he had to enter the city from the River Kallai side at Calicut via *Ambadi Kovilakam* which was a very powerful royal associate under the control of Arakkam Patta family. When the king had to enter his own Kovilakam, it had to be cleaned properly and made as shining as the crown as there would have been many people of prominence to witness the entire function. Thus, a practice of ritual hygiene could also ensure the political legitimacy and alliances. The people who were appointed to do the cleaning job were called as *akahuparishakal* as reported by Calicut *Grandhviri*. Once the entry was over, he had to go to the palace through the Tali Temple.²⁶⁰ However, the ruler himself was not permitted to enter the temple as he was ritually polluted during the travel as many people from different case would have seen him despite him being the very guardian of the temple and all temples in his political domain.²⁶¹

Sprinkling water for ritual purification had always been a custom in Kerala as reported by En Nome De Dues. "They threw holy water over us and gave us white ashes which the Christians of this country are in the habit of putting on their foreheads, breasts, around the neck and their upper arms. They performed this entire ceremony on the Captain, and gave him the ashes to put on."²⁶² Even king had to stand at the eastern gate of the temple for the purification by sprinkling sacred water by *vendiyammamar*.²⁶³ As the king gets polluted and the ritual hygiene was broken by the travelling for the coronation ceremony, he was not supposed to visit the Tali temple and Valayanatukavu²⁶⁴. He would enter the court

²⁶⁰*Kokasandesam*, op.cit, p.82, lines-52. The lake, associated with the temple, was known as *sarvadityncchira* during the period under study; The *Splendours of Kerala*, 1979, p.146. This temple could be dated back to 12th -13th centuries.

²⁶¹Duarte Barbosa, Fernão de Magalhães, op.cit, p. 21

²⁶²*En nome de dues*, op.cit, p.76

²⁶³Barbosa, op.cit. p.21

²⁶⁴*Ibid*, p.247

hall next day and nobody was permitted to make sounds or loud breathings as it would affect the health and ritual purity the king obtained in order to sanitize his political authority. The paramount ritual hygiene he represented was visibly expressed by over a thousand sweepers; *pularivazhi vellatti* at his palace.²⁶⁵ They were kept also to “show the power and strength as well as the wealth of the king” who was considered to be the biggest in his time.²⁶⁶ Barbosa says that as far the palace and the court was concerned; fifty sweepers were enough to do the daily demand.

The procession of the king was a major ritual event by which he could show the aura and the magnitude of the socio-ritual authority and purity to his counter parts as well as his own subjects. Throughout in the procession, certain hygiene practices were adopted as a symbol of ritual exclusiveness and the wealth. He would have orderlies on his right with a golden *Kindi* and on the left a silver *kindi* filled with water.²⁶⁷ *Kindi* was prominent cleansing item of trade in the regions such as *Keechilpattanam* and *Trishivaperur* during 14th to 16th century.²⁶⁸ Third person accompanied would stand behind the king with a Turkish towel, by which he could well convince his associations with outside world, though it was actually used for constant cleaning of his face in the scorching and humid condition of the Malabar Coast. By continuously taking water from the exclusive gold and silver *Kindis* shown the subjects and foreign emissaries the wealth and exclusivity he possessed.²⁶⁹ Another two people were to stand on the left of the *Kindi* holders keeping with them gold and silver *Kolambis* which were meant to be the spit bins of the king. Another pair holding two water vessels, which contained Holy Water, ensured the visibility of the ritual purity and sacerdotal space on which the ruler stood.

²⁶⁵ *Kokasandesam*, p.93, lines-71, it uses the word *pularivazhi vellatti* (sweeper at dawn).

²⁶⁶ Barbosa, op.cit, p.247,

²⁶⁷ Ibid

²⁶⁸ *Payannurpatu*, op.cit, p.32, lines-103-104.

²⁶⁹ *Ananthapuravarnanam*, op.cit, p.32, lines-73 elaborates the active and vigorous gold markets in medieval Kerala. It was dealt with an active trading group called *ponvaniyar*, pp.32-33, lines-73-81

Many wide spread customs and rituals in pre-colonial Kerala concerning the ritual purifications; bathing, fire, exclusion, excommunication, quarantine, restrictions and avoidance had dual purposes to serve. One was exclusively for ritual purity and moral fitness while the other one was ensuring social control and hygiene hierarchy. These purposes were satisfied through the power of isolation, punishment and branding as permanently degraded.²⁷⁰ These practices were also strongly influenced by the practices on the land in a largely agrarian economy. Nambutiri *Janmi* who could control the life and death of other caste people had certain privileges and discretion to impose social closure for subordinate castes by using the tools of ritual hygiene.²⁷¹ The displeasure of the dominant had impacted directly on the hygiene practices of the affected who would be subjected to the enmity of the hamlet/region. This practice was called *Desa Virodham*, or *Swajana Virodham* or the enmity of own caste groups.²⁷² People who were subjected to these treatments were prohibited from observing basic hygiene practices such as shaving, bathing and washing as the “excommunicated people were not served by village barbers, their women (were) denied of purificatory cloths, clothes after confinements, their presence prohibited in temples or bathing tanks.”²⁷³

There were two dimensions to this particular practices of the hygiene, one used to be controlled by the ‘law’ sanctioned by the religious authorities, while other one is sanctioned by the manners and executed by the social consciousness.²⁷⁴ Generally hygiene principles were directly associated with prohibitions and ‘negativism’ which were very prominent in the

²⁷⁰Carole Lansing, *Power&Purity: Cather Heresy in Medieval Italy*, OUP,1998,pp.145-146

²⁷¹P Radhakrishnan, *Peasant Struggles, Land Reforms and Social Change: Malabar 1836-1982*, p.20; Return to An Order, Dated 22 April 1841, Copy of the Dispatch from the Governor-General of India in Council to the Court of Directors of the East India Company, Dated the 8th Day of February, 1841, p.127

²⁷²P.Radakrishnan, op.cit, p.20

²⁷³V. V. Kunhi Krishnan, *Tenancy legislation in Malabar, 1880-1970: An Historical Analysis*

²⁷⁴*Kokasandesam* shows that physical and social process of hygiene were to be in accordance with religious and moral principles of medieval Kerala as in the case of worshippers in Guruvayur Temple in 14th Century.op.cit, p.75,lines-37

entire functioning of hygiene rituals.²⁷⁵ These taboos were attained a religious sanction in all the communities at work and applied in matters like food, proximity, dress, water, by categorizing as ‘harmful ‘and ‘polluted’ as means of asserting moral and social power.²⁷⁶

Ritual and social hygiene customs followed by the Hindus were termed as “strange” by Sainuddin and “not to be found anywhere in the world.” The death of the relatives was mourned by the year long “abstinence” from “unhygienic” things and “action” which would invite the wrath of *priths* and spirits.²⁷⁷ These practices were similar in patriarchal and matriarchal castes in medieval Kerala.²⁷⁸ Therefore, many rituals were to be followed in this strenuous period of abstinence and shown a complete sense of detachment from the worldly affairs.²⁷⁹ Taboos were making inroads to the daily life of people as it encompassed cutting the hair or nail, eating fish or meat, chewing betel leaves or having sexual intercourses with any women.²⁸⁰ Society at large never deviated from these accepted norms for the fear of deceased spirits affecting them permanently, as the practices otherwise believed to have brought in blessing.²⁸¹

²⁷⁵Carol Lansing, op.cit, p.86

²⁷⁶Tony McEnery, *Swearing in English: Bad Language, Purity and Power from 1586 to the Present*, Routledge, New York, 2006.p.229

²⁷⁷Many rituals were observed by the family members of the diseased and the fate of the wife was pathetic as she was not allowed to get marry or to have kids. She was to be virtually excommunicated from all social gatherings and functions. Says John of Monti Corvino, p.118

²⁷⁸Zainuddin Makhdum, op.cit,40; Fryer Jordhanus was the first foreigner who recorded the matriarchal systems among the Nairs of Kerala. He visited Malabar in 1321 and stayed here for 5 years. p.147

²⁷⁹F.Fawcett,op.cit,p.277

²⁸⁰Zainuddin Makhdum, p.40

²⁸¹Ibid.40,Makhdum says that many such practices were observed by Muslim community as well. “They read Quran they learn it by heart; they recite it beautifully; they acquire religious learning; they perform prayers and other from worship; yet it is extremely strange and surprising that this custom prevails among them.” This was a reference to the prevailing customs among the mappila who inherited it from the Hindu community. This cultural similarity is seen in many other fields as well especially in the hygienic practices.

Sheikh Sainuddin explains a strange custom prevailed in the man-women relationship within the native cultural practices.²⁸² Only eldest in the Brahmin community was entitled to marry as his brothers had to satisfy themselves “as rule” with the illicit relationship with next immediate caste women²⁸³ called *Sambandham* keeping the ‘superior and ritual purity at bay.’²⁸⁴ At the same time “physical” and ritual hygiene were maintained among the higher caste groups by banning the sexual intercourse with inferior caste especially in the *anuloma* intercourse (a man having sex with a lower caste female). The man or women from the higher caste was caught red-handed while committing the prohibited, they were forced to abandon their respective castes and leave the place. But Brahmins were exempted from this as till 19th century the practice of *Sambandham* was much prevalent in the region.²⁸⁵ There was no question of out casting them as they were the main authority of the defining and explaining Veda and other religious scriptures in accordance with their personal and communitarian interests. Therefore Nambutiri caste could arbitrarily regulate the social intercourse of all castes in medieval Malabar.²⁸⁶

These rules were strictly followed by the committed community who considered this as their moral responsibility. Compositions of these taboos were actually the work of priestly castes which had considerable authority and charisma of “superiority.” This was ensured with

²⁸²Ibid,pp.41-43

²⁸³First Travancore Nair Act was enacted in 1913; It recognized *Sambandham* as a legal marriage and allowed wife and children of a Nair, dying intestate one half of his self acquired property. says C.J.Fuller, *The Nayars Today*, CUP, 1976, p.134, for the detailed discussion of the system of medieval *consortage* see Chapter- 5 titled “The Traditional Nayar Marriage System” pp.99-123; J, Devika, *Modern Asian Studies*, Volume 39, Cambridge University Press., 2005,p.476

²⁸⁴Zainuddin Makhdam, op.cit, p.41 “the children born of them by Nair women thus are not entitled to inherit their father’s wealth.”; “In Kerala only one member of a Brahmin *Tarawad* shall marry. The eldest son shall marry in preference to others. It is not necessary that the females of *Samanthams*, Sudras and others observe the rule of chastity. But the rule of chastity should be observed by the Brahmin females only.” Edith Jemima Simcox, *Primitive Civilizations: Or Outlines of the History of Ownership in Archaic Communities*, 2010, p.464

²⁸⁵Baskaranunni, op.cit, 12; P.R.Parameshwaranpilla, *Pracheena Likhithangal*, pp.366-367

²⁸⁶T.K.G.Panikkar, op.cit, p.12

the visible support of political hierarchy who were seeking the legitimacy in the hands of the Brahmin community.²⁸⁷ Generally ritual cleanliness and law had nothing to do with the actual physical health of human body or general sanitation of the surrounding environment. This imposed hygiene customs to a large extent facilitated the dominance of the affluent as it were social customs ruled the medieval social life rather than laws.²⁸⁸ These taboos in turn affected the smooth functioning of the society and banned people from upper layers from effortlessly mingling with the people in inferior boundaries. It is certain that these taboos generally helped the upper caste from contagious diseases such as cholera, leprosy, and other diseases generally associated with working class/caste for their strict adherence to the socio-hygienic and ritualistic impositions; personal, domestic and public. However, it created a social structure which decided enclosures and boundaries for associations and affiliation in the medieval Malabar in the social functioning.²⁸⁹ Personal and public morality along with the application of the hygiene observation were largely a direct fall out of the territory based caste hierarchy and the notion of “superior” and inferior”.²⁹⁰

This particular functioning style was perpetuated by the upper echelon of the caste hierarchy, in precedence starts with *Nambutiri*, *Nairs*, polluted castes such as *Tiyyas*, *Paniyan*, and lastly *Pulayas*, *Parayas* and so on.²⁹¹ With their overwhelming power; economically, politically and socially, first two casts could dictate the elements of public and private rituals of cleanliness in the medieval Kerala.²⁹² Higher caste groups promulgated this

²⁸⁷P.K.Gopalakrishnan, *Keralathinte Samskarika Charitram*, State Institute of Languages, Trivandrum, 2000, p.240

²⁸⁸E. M. S. Namboodiripad, *History, Society, and Land Relations: Selected Essays*, Left Word Books, 2010, New Delhi, 2010, p.151

²⁸⁹Eric J Miller, “Caste and Territory in Malabar”, *American Anthropologist*, New Series, Vol. 56, No.3, June, 1954.

²⁹⁰Upinder Sing, op.cit, 2009, p.293

²⁹¹Francis Buchanan, *A Journey from Madras Through the Countries of Mysore, Canara, and Malabar*, Asian Educational Service, 1988, Delhi, p.410; Barbosa, Op.cit, p.66

²⁹²Filippo Osella and Carolina Osella’s work shows that there has not been much change regarding the pollution attitude among the upper caste population in entire Kerala. There have been instances of

power of segregation with “superior knowledge and ritual “exclusiveness” and persistent assistance from the royal patronage.²⁹³ With the strong assistance of the Nairs who were to take care of the normativities of the socio-cultural order of the time, Nambutiri caste could execute the hierarchy based hygienic and unhygienic practices of the region.²⁹⁴ And the “polluted” and unhygienic castes were prohibited on the public road and places of congregation while higher caste people always got a wider mobility and greater spatial range in terms of socialization.²⁹⁵

The notion of hygiene; ritual, moral and physical was maintained by the strict deference of the caste system.²⁹⁶ It was not violated by any caste; individually or as a community, as everybody was very convinced with their notion of hygiene and related perception of the health. Brahmins and other dominant castes maintained hygiene; ritual and physical; by indulging themselves in an expansive and elaborate ritual bath.²⁹⁷ This bath was obligatory on their part when they conduct any physical contact or vicinity with polluting or lower caste people. This purity was strictly maintained by dividing inhabited area for different caste and prescribed geographical/ sacred distance for the same.²⁹⁸

brutal violence for *Ezhava* caste being dressed, instances of rape for attending school, and beating up for taking bath in temple ponds. Osellas', *Social Mobility in Kerala: Modernity and Identity in Conflict*, Pluto Press, London, 2000, pp.222-223

²⁹³Eric J Miller, “Caste and Territory in Malabar”, *American Anthropologist*, New Series, Vol. 56, No.3, June, 1954.

²⁹⁴F. Fawcett, *Nayars of Malabar*, Asian Educational Services, New Delhi, 1985, p.190

²⁹⁵Ibid, p.411; “Araya (fisher folk) community of the Malabar during the 15th century were not allowed to rise the hut more than three foot (which was obviously an exaggeration) and required to bow their head and lay on the flour(*dandana niskaram*) if they come across the upper sections like Nairs or Chettis. They were to be in the same position till the person disappear from his scene” as to ensure the social hygiene was kept properly otherwise executed” Mahuan,(Velayudhan.Passim),op.cit, p.193

²⁹⁶Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, Routledge, 2003,p.145

²⁹⁷Zainuddin Makhdam, op.cit, p.42

²⁹⁸Randall Collins, *Weberian Sociological Theory*, CUP, 1986, Cambridge,p.301

Lowest of them were “excommunicated” and “accursed.” Pulaya (*cherumar*), lowest caste in the region has to “live in swampy fields and places where respectable people cannot go : they have very small and abject huts, and plough and sow the fields with rice, they use buffaloes and oxen. They do not speak to the Nairs, except from a long way off, as far as they can be heard speaking with a loud voice. When they go along the road they shout, so that whoever comes may speak to them, and that they may withdraw from the roads, and put themselves on the mountains. And whatever woman or man should touch these; their relations immediately kill them like a contaminated thing: and they kill so many of these *pulers* until they are weary of it, without any penalty.”²⁹⁹ Thus people who were perceived to be “contaminated” could be executed in order to maintain the sacerdotal principles of socio-ritual hygiene without inviting any punitive action from state.

Moral hygiene was maintained in the offerings, taking food and bathing in medieval times.³⁰⁰ Caste Hindus were degraded from his rank which sometimes also resulted in excommunication if they took food before the obligatory bath. The process of excommunication was very stringent and pain staking for a person who violated the order.³⁰¹ Once the excommunication was done, he/she had to leave the place and settle in some remote place, detaching completely from the community they belonged.³⁰² Any second violation of the imposition would cost him the life or the freedom as the violatory rules were executed by the writ of the local ruler who was the actual authority of the ritual purity with the help of Brahmins.³⁰³ Sometimes the violators were sold as slave or to a person to the inferior rank as the punishment of violating the ritual hygiene. As an anti- climax, sometimes the violator was

²⁹⁹Barbosa, op.cit, p.143

³⁰⁰Makhdum,op.cit,p.42

³⁰¹ibid

³⁰²ibid

³⁰³Ibid,p.43

also left with options of embracing other religions that did not have taboo rules as stringent as in the original religion.³⁰⁴

Makhdum talks about the hierarchy and the notion of superior hygiene and inferior hygiene in accordance with the caste. Even the Brahmins themselves were classified in to different groups for the hygiene ladder, highest among them were being *Nambutiris* as they were known in medieval literatures such as *payyannurpattu*³⁰⁵ These ritual hygiene status was thus preserved by the systematic assignment of the job/profession³⁰⁶ The ritual purity of women was also strictly maintained in the higher caste with the strict rules and regulations. If she was seen or touched, by the lower caste persons or any polluting objects at some particular nights, she had to forgo the caste and remained in the rest of the life as lesser caste in the hierarchy.³⁰⁷ In order to avoid this particular contingency, she had to be accompanied by an able bodied male from the family. Lest, it happens yet again, she had to be converted in

³⁰⁴Ibid

³⁰⁵Brahmins were divided along the line of different traits and their place of origin. There were *Tulu* Brahmins, Tamil Brahmins or *battar* and *Saraswat Brahmins* or *Konkanis*. Nambuthiri Brahmins were the most dignified among them and ritually most pure. They were the upholder of the spiritual and temporal needs of the people around. *Tulu* Brahmins from South Canara were largely confined to the temple related activities while Tamil Brahmins were considered to be the early migrants from the Cola and Pandya region of the Tamil Nadu. *Konkani* Brahmins were largely involved in trade and related activities and they have their own set of rules and regulation.

³⁰⁶Makhdum, op.cit, pp.42-44. Nambutiri women were not completely secluded as explained by Makhdum as there evidences show that they were participated in many rituals in the temple with the company of the Nair women. They also had social and personal contact with their relatives in the family and community. But again the fear of losing the moral hygiene was intact and they preserve that by covering the entire body and the head by dress and *marakkuda* (indigenously made umbrella). They wrapped the entire body with the lengthy sheet of cotton or silk cloth. 'Mara' means mask or cover which used to cover the face.

³⁰⁷Barbosa, op.cit,143 "These low people during certain months of the year try as hard as they can to touch some of the Nair women, as best they may be able to manage it, and secretly by night, to do harm. So they go by night amongst the houses of the Nairs to touch women, and these take many precautions against this injury during this season. And if they touch any woman, even though no one see it, and though there should be no witnesses, she, the Nair woman herself, publishes it immediately, crying out, and leaves her house without choosing to enter it again to damage her lineage."This tradition was called *Pulappedi and Parayappedi*.

to Islam, Christianity or to become a yogi, keeping away any worldly pleasure from the life.³⁰⁸

Hygienic taboos sometimes even caused diplomatic bottle necks as *Nambutiris* considered sea traveling would cause damage to his moral hygienic practices since he had to take food from the hands of *mlechas*.³⁰⁹ With the new vigor in the implementation of the taboos, Brahmins in Kerala did not participate in the maritime activities which were the main stay of the coastal economy.³¹⁰ They restored ritual purity and social hygiene by excluding the unheeded fellow caste person by declaring them *apankteya* or not qualified enough to be in the same row with other Brahmins in feasts.³¹¹ Thus heedfulness to hygiene principles believed to have led to the physical hygiene which makes people ritually pure and maintains the public health and social order through decisive and punitive disciplinary measures.³¹²

There were still close relationship between some common practices like washing hands, dressing pattern and avoiding dead bodies and ill health persons which is relevant even today. Religious scripts and literatures prohibit the associations with dirty dresses, contact with dead bodies, certain animals, banning the flesh of certain animals and birds. Washerman community, *manatamar* as Barbosa describe them had to take care of the cleaning job of the upper Kerala though they were ‘unhygienic’ and pollution.”³¹³ This caste

³⁰⁸Zainuddin Makhdum, op.cit, p.44

³⁰⁹Andre Wink, op.cit,p.73

³¹⁰Ibid, “The same maritime are in evidence in the 16th century. When often created unique diplomatic difficulties for the Portuguese. At Calicut, at instance, in the year 1500, Pedralvares Cabral decided to retain some Hindu notables as hostages on board of his ships while attending the return of his Portuguese men from ashore. The Zamorin demanded their immediate return however ‘because they were gentil hommes and could neither eat nor drink on board.’”

³¹¹Ganesh Vasudeo Tagare, *The Skanda Purana*: Volume 18, 2003, p.1257; Andre Wink, op.cit, p.73; Geneviève Bouchon, *Inde Découverte, Inde Retrouvée, 1498-1630: Études D'histoire Indo-Portugaise*, Fundação Calouste Gulbenhian, Centre Culturel Calouste Gulbenkian, 1999, p.30

³¹²Nicholas Terpstra, *The Politics of Ritual Kinship: Confraternities and Social Order in Early Modern Italy*, Press Syndicate of the University of Cambridge, UK, 2000, p.125.

³¹³Barbosa, 2009, op.cit,p.136 “they serve all with cleanliness, and they all gain their livelihoods very

was not supposed to touch or nor associate with any one nor do let others do the same. Interestingly, their precarious condition was perpetuated by associating them with certain sacred duties such as providing *mattu*; “purifying change of cloths’ to all higher castes especially Nairs even though their touch polluted.³¹⁴

Hygiene and pollution rules were also laid for menstrual periods, child birth, pregnancy etc.³¹⁵ Failure of purify the body with the cloths given by *mannan* females, during ceremonies such as *Thirandukalyanam* or death pollution, created sufficient premise for outcasting a Nair woman.³¹⁶ Even lower caste *Chaliyar* women were very particular about the ritual quarantine called *pula* which was strictly observed for forty one days, the culmination of which was marked by a common feast for the caste people.³¹⁷ This normative practice of hygiene shaped to a large extent in the social functioning of Christians as well. However, St.Thomas Christians imbibed the practice of untouchability and inducted ritual hygienic practice such as *Pula*, *Pulakuli* and *Sradham*, related to birth and death.³¹⁸

Control over women; physically, socially and ritually was determined by vigorous application of hygiene principles. Imposition of the many purification rituals and rules of bathing was commenced on them on many occasions of ritual significance. Strong arsenals of socio-cultural control of Brahmins were also used in the subordination of women’s social life. Female body was seen more prone to the pollution for different physical and reasons. Women, even if they were equal in ranks were causative for pollution at certain times such as

Sufficiently. Their lineage does not mix with any other, neither can any other with theirs ; only the nays can have mistresses from amongst the women of this lineage, with the condition that each time that they approach them, they have to bathe themselves and change their garments before entering' their houses.

³¹⁴Joseph Puthenkalam, *Marriage and the Family in Kerala: With Special Reference to Matrilineal Castes*, University of Calgary, 1977, p.57

³¹⁵Payyannurpattu, op.cit

³¹⁶T.K.G.Panikkar, op.cit,p.183

³¹⁷ Payyannurpattu,op.cit, p.7,lines-18

³¹⁸Pius Malekandathil, *Maritime India: Trade, Religion and Polity in the Indian Ocean*, Primus Books, New Delhi, 2010, p.48

menstruation and it was in practice even among the lower caste. “A newly confined woman has to stand at a distance of eighteen feet and a menstruating woman at twelve feet; hence the necessity in all respectable houses for special buildings set apart for special use by the women.”³¹⁹ They were ritually secluded in many occasions like puberty, menstrual circle and delivery to maintain hygiene in the entire house hold.³²⁰

Puberty rituals started at the onset of menstruation. A woman who had not undergone the initiation or *talikettu* ceremony was to be “polluting, a witch and dangerous for a man to marry because her sexuality would be out of his control.”³²¹ Through this ceremony a social construction of sexual differences, necessity of heterosexuality and patriarchy were established during the medieval time in Malabar. Men’s psychology, hidden power equations and hierarchies were at function in these ceremonies.³²²

Women in normal time were removed from public eyes and everyday social contacts while being shielded from external contacts. They were to be protected from lower caste groups during certain months of the year. Nur Yalmon analyses it as a deliberate strategy to preserve caste hygiene.³²³ “If a women has sexual contact with lower caste male not only she and her future offspring but her caste could be polluted.”³²⁴ On the other hand lower “caste groups could try as hard as they could to touch some of the Nair women preferably by night, to do harm. So they go by night amongst the houses of the Nairs to touch women, and these take many precautions against this injury during this season. And if they touch any woman, even though no one see it, and though there should be no witnesses, she, the nair woman

³¹⁹William Logan, op.cit, p.118

³²⁰Fawcett, op.cit, p.277

³²¹Susan Lipshitz, (Ed), *Tearing the Veil: Essays on Femininity*, Routledge & Kegan Paul, London, 1978, p.48

³²²Kathleen E Gough, “Female Initiation Rites on the Malabar Coast” *Journal of the Royal Anthropological Institute*, 85, 1955, 45-80

³²³Nur Yulman, “On the Purity of Women in the Castes of Cylon and Malabar”, *Journal of the Royal Anthropological Institute*, Vol. 93, 1963, 25-58

³²⁴Karen Paige, Jeffery M. Paige, op.cit, p.112

herself, publishes it immediately, crying out, and leaves her house without choosing to enter it again to damage her lineage. And what she most thinks of doing is to run to the house of some low people, to hide herself, that her relations may not kill her as a remedy for what has happened, or sell her to some strangers as they are accustomed to do. And touching is in this manner, that even if there is no contact from one person to another, yet by throwing anything, such as a stone or a stick, if the person is hit by it, he remains touched and lost. These people are great charmers, thieves, and very vile people.”³²⁵ This moral hygiene rituals were often reflected the extreme form of protectionism and dominating behavior of a masculine centric society.³²⁶

Girls who were undergoing puberty were vulnerable to the extra human powers who tried to violate the social hygiene of the dominant castes.³²⁷ Male dominance was again reflected in social custom like *talikettu kalyananm*, a ceremonial marriage however farce, in which the bride would probably not see the groom longer than the duration of the ceremony. But unfortunately she had to observe the death pollution rite for her marriage with the man, generally a *Nambutiri*. Interestingly the practicality of the alliance between the Brahmin and Sudra Nair did not go beyond a socially accepted concubinage without any responsibilities on the Male part involved.³²⁸

³²⁵Barbosa, op.cit,p.143

³²⁶*Sex and Society*, Vol-3, Marshal Cavendish Corporation, 2010, New York, p.744

³²⁷ “The need for effective sexual control over (such)women to maintain not only patrilineal succession (a requirement of all patriarchal societies) but also caste purity, the institution unique to Hindu society.The purity of women has a centrality in Brahmin patriarchy”, says Uma Chakravarti, “Conceptualizing Brahmanical Patriarchy in Early India; Gender, Caste, Class, and State,” in Manoranjan Mohanty, *Readings in Indian Government and Politics, Class, Caste, Gender* (ed), Sage Publications, New Delhi, 2004, p.272

³²⁸A.Sreedhara Menon, op.cit, p.85

Chapter-4

Social Perceptions of Diseases and Healing in Medieval Kerala with Special References to Malabar

In medieval Kerala, Malabar was a cultural hot spot¹ with the existence of constellation of beliefs, knowledge streams, varied practices, facilities and resources. These together organized different structure in which many socio-cultural groups developed their own tradition of healing. These treatments were indigenously evolved within the given cultural settings with multiple interactions with other culture areas, which in turn provided great physical and mental relief to the people.²

Thus, this chapter aims at looking in\to intricacies of the medical knowledge; ideas and practice among different sections during the period under consideration with special references to Malabar. Domains of various beliefs, political functioning, religious moorings, and various temporal institutions, consciously or otherwise involved in the making of these traditions.³ Therefore, this endeavor necessitates into research, an inclusive methodological framework by which the history of healing practices could be seen, through the backdrop of vibrant socio-cultural-politico-economic situations that arose in the crowded waters on Malabar Coast.

Medical/healing traditions in Malabar region reflected the plurality and dependence of the different cultural frameworks, which constituted whole gamut of knowledge in the region till the last decade of sixteenth century.⁴ Concepts of illness and healing were predominantly constructed through religious-cultural consciousness of the people as in the cases diseases

¹M.G.S.Narayananan, *Cultural Symbiosis*, Kerala Historical Society, Trivandram, 1972,p.ix

²Abdur Rahman, *Science and Technology in Indian Culture: A Historical Perspective*, National Institute of Science, Technology & Development Studies, 1984, pp.143-147

³Engseng Ho, "Custom and Conversion in Malabar", in Barbara Daly Metcalf (ed), *Islam in South Asia in Practice*, Princeton University Press, Princeton, 2009, p.404

⁴Horacio Fábrega, *History of Mental Illness in India: A Cultural Psychiatry Retrospective*, Motilal Banarsidas, Publishers, 2009, p.125

such as smallpox, chickenpox and elephantiasis. Therefore, this thesis is also an effort to explore the common psyche during the period under consideration in relation to the binding factors of religion, illness and healings apart from looking at the prevalent practice among the dominant social forces.

In medieval Kerala, Ayurveda, the humor based healing tradition existed along with magico-spiritual practices, that were based on the common beliefs in the supernatural, were very predominant between the Fourteenth and Sixteenth centuries.⁵ Rituals and festivals created psychological togetherness and nearness with divine beings such as *Kodungallur Bhagavati* and *Cheranellur Durga Devi* who were considered to have caused many diseases and cures.⁶ If the offers and votives were not fulfilled by the believers, *Bhagavati*, the incarnation of the *Kali*, was believed to have caused small pox or chicken pox by transmogrifying into the more violent form of *Badrakali* on ritual occasions.⁷ Small pox, a highly infectious disease was very common and generally took its ugly turn during monsoon season in Medieval Kerala.⁸ Infectious people were experienced acute social isolation in which the situation goes to the worst instance at times when parents were afraid to reach their children who were infected.⁹ “Doors and windows are shut, that the patients may not be exposed to the smallest breath of cool air, and heating things alone are given to them.”¹⁰

⁵P. Hymavathi, “Religion and Popular Medicine in Medieval Andhra”, *Social Scientist*, Vol. 21, No. 1/2, 1993, p.37; Hymavathi P. “Health and Hygiene in Medieval Andhra and the Remonstrance by Vemana.” *BIIHM*, Hyderabad, 1986,16:11-8.

⁶*Koka Sandesham* (Trans-Malayalam), Prof.Gopikkuttan, , Current Books, Trichur, 1996, p.104,lines-92; M.J.Gentes, “Scandalizing the Goddess at Kodungallur”, *Asian Folklore Studies*, Vol-51, No-2, 1992, pp.310-312, Hymavathi, *History of Ayurveda*, Bhargava publishers, Warangal, 1993, pp.327-329;

⁷ Sarah Caldwell, *Oh Terrifying Mother: Sexuality, Violence and Worship of the Goddess Kali*, OUP, 2001, p.46

⁸Fra Paolino Da San Bartolomeo, *Voyage to the East Indies; Observations Made During A Residence of Thirteen Years Between 1776 and 1789 in District Little Frequented by the Europeans*, (Trans) by William Johnston, p.411

⁹*Ibid*,pp.411-412

¹⁰*Ibid*

The violent nature and social stigma attached with these diseases forced common people to retort to the divine intervention for healing. Therefore, the preventive elements for such contagious health disorders and epidemics were incorporated in religious festivals such as *Mutiyettu*, to alleviate the violent whims of divine beings such as *Puthenkavu Bhagavati* by ‘little traditions’ such as blood sacrifice.¹¹ *Cheranellur Bhagavati* was considered as *Mahishasuramardhani* and venerated even in the Fourteenth century for physical and mental diseases.¹² Interestingly, these religio-magical healing became a tool by which dominant communities such as *Nair* and *Nambutiri* could induce fear into common people for the virtue of being the custodians of the expressed space of sacred beings. By this they could make lower groups to follow the regulations and norms conducive to perpetuate the exclusivity of the dominant culture area out of fear.¹³

Superstitions regarding illness and remedies were extraordinarily prevalent among all sections in the medieval time and Malabar population was not an exception.¹⁴ People believed in different local divinities such as *Ayyappan*, who was considered to be protecting them from animal related diseases and attacks, *Chattan*, invoking him was believed to have given the power of causing physical and mental problems for the enemy of the invoker, *Yakshis*, whom the strength of relieving of epilepsy attributed in medieval Malabar as believed by great physicians like *Susruta* himself.¹⁵ They also got mileage out of the entrenched fear of people in supernatural powers whose possessions was believed to have

¹¹Bryan S. Turner, *The Body in Asia*, Berghahn Books, 2009, p.163; F.Osella C.Osella “Migration and Commoditization of Ritual: Sacrifice and Contestations in Kerala India”, 2003

¹²*Kokasandesa*, op.cit, p.104, lines-92

¹³Wayne Ashley, “The Teyyam Kettu of Northern Kerala”: *The Drama Review*, TDR, Vol-23, No.2, Performance Theory, South Asia Issue, June, 1979, pp.99-112

¹⁴Quazi Muhamad, *Muhyiddin Mala*, (1606), Reprinted by Thirurangadi Book Stall, Calicut, 2000,p.112; Abdu-al-Razaq(1442), *India in the Fifteenth Century : Being a Collection of Narratives of Voyages to India, in the Century Preceding the Portuguese Discovery of the Cape of Good Hope*, (trans & ed), H. Major, Hakluyt Society, London, p. 42

¹⁵T.K.G.Panikkar, *Malabar and its Folk*, Asian Educational Services, New Delhi, 1995, p.209; *Susrutha*, *Susrutha Samhita*, (trans), Kaviraj Kunja Lal Bhishagratna, Calcutta, 1911, p.481

been causative for incurable diseases which were considered to be the consequence of being possessed or bewitched. Michael Geddes in a Seventeenth Century church document shows that, the Malabar Christians, who established as powerful community by this time, were also engaged themselves in the belief of spirits.¹⁶ The objectified worships of the natives or the “*Heathens*” as the text addresses them, considered to be curing the illness; physical and psychological.¹⁷ Christians went to witches “when they are sick, that they send for such people to perform some ceremony whereby they hope to have their health restored; and at other times to help them to children (*fertility prayers*), and to discover thefts, and for several other purposes; all which are things repugnant to the Christian religion.”¹⁸

Patients in medieval Kerala were also insisted on taking themselves to holy places, make votives or *nerchas* and offerings as divine people were associated with illness and cure.¹⁹ People and families associated with the murder of St. Thomas, the apostle, was believed to have begotten with Elephantiasis (*aanakkal* or *manthukal*), hence Portuguese came in sixteenth century termed this disease, *Pejo de Santo Thome*.²⁰ “Christians of India still go there as pilgrims and carry away thence as relics some little pilots of earth of the tomb

¹⁶Michael Geddes (trans), *The History of the church of Malabar, From the Time of its Being First Discovered by the Portuguese in the Year 1501*, London, 1694, p.393; Duarte Barbosa (1500-1516), *A Description of the Coast of Africa and Malabar in the Beginning of the Sixteenth Century*, (trans&ed), Henry E. J. Stanley, The Hakluyt Society, London, 1865, Reprint, CUP, 2009,p.154

¹⁷Michael Geddes,ibid,p.394

¹⁸Ibid

¹⁹*Rifayee Mala*,(1781), Reprinted by Thirurangadi Book Stall, Calicut, 2000,p.72

²⁰Yule, *Book of Ser Marco Polo*,p.335, footnote, 12; John Nieuhoff, *Voyages and Travels in to Brasil and the East Indies, In a collection of voyages and travels*, 11, (ed), A. Churchil London, 1752, 198; “The disorder always begins with a fever which they here call the raging fever, which sometimes causes delirium, and as the strength of the malady increases, great pain is felt in the legs or in the other parts attacked. the fever then settling in the suffering parts causes it to swell in a frightful manner.”Says Jacob Canter Visscher (1717-1723), *Letters from Malabar,(1743) tr.: to Which is added An Account of Travancore, and Fra Bartolomeo’s Travels in that Country*, Heber Drury, Madras, 1862,p.13

of this blessed apostle.”²¹ People from Malabar during the medieval times undertook travel to various sacred geography of Christianity, the Catholic Church, *Signora de Sauda* or “Our Lady of Health” about six miles from Tranquebar.²² Everybody, irrespective of their belonging or religious consciousness, believed in the healing capacities of the holy person there, irrespective of the fact that it was a Christian personality with a complete different world view. They were given clay pots, holy water and written notes to carry and to be fastened to their arms as well as around their necks.²³ Hindu community also undertook their sacred travels to the Pazhani in Tamilnadu, the land of God Subrahmanyam for many dreaded illnesses such as epilepsy, taking along with him *Kavadi* and wearing strings beads round his neck and right arm.²⁴

People attributed disease and curing to many gods and goddesses at many of the temple complexes in Malabar region. *Devis* (goddesses) at places such as Kodungallor and Chottanikkara temples, traces their origin to the early medieval period were worshiped and entertained to ward off the evil influences of *Masuri*, Chicken Pox, and possession.²⁵ Muslims, Christians and Hindus occasionally converged during the sixteenth century and before at *Chottanikkara*, for the removal of *unmadam* and other serious psychological problems.²⁶ Rich Freeman explain that, oracles and oracle dances in Malabar, in order to cure and diagnose, has had a history of two millennium.²⁷ Bartholomaes Ziegen Balg, The Dutch

²¹Duarte Barbosa, op.cit, , p176

²²Niklas Thode Jensen, “The Medical Skills of the Malabar Doctors in Tranquebar, India, as recorded by Surgeon T L F Folly, 1798”, *Medical History*, 2005: 49, p.503

²³Ibid,p.504

²⁴F. Fawcett, *Nayars of Malabar*, Asian Educational Services, New Delhi, 1985, p. 270

²⁵Kodungallor temple is considered to be a former Buddhist centre for learning and worshiping by many historians. V.T.Induhudan, *The Secret Chamber*, The Cochin Dewaswom Board, Trichur, 1969, p.56

²⁶Frederick M. Smith, *The Self Possessed: Deity and Spirit Possession in South Asian Literature*, Columbia University Press, New York, 2006, p.547

²⁷J.R.Freeman, “Gods, Groves and Culture of Nature in Kerala”, in *Modern Asian Studies*, Vol, 33, no.2, 1999;pp.32-37; Rich Freeman, “The Teyyam Tradition of Kerala”, in Gavin Flood, *The Blackwell Companion to Hinduism*, Blackwell, 2008

Missionary who stayed on Malabar Coast in 1713 elaborated about the “devil dancers” on the coast who were believed to have been possessed healing prowess.²⁸ Medieval *Sandeshakavyas* talk about Mother Goddesses like any other *Manipravala* literatures existed during this period.²⁹

The tradition of associating disease and healing deities continued and followed by other communities as well. Subsequently, people started worshipping their holy figures and *Sheikhs* at respective places of worships such as Idiyangara.³⁰ *Idiyangara Sheikh Masjid*, which was constructed in 1551, gives a peculiar picture of healing, where any kind of disease was cured when the patients offered *appam* (baked sweet rice cakes) to the saint. The appam offered for this purpose was to look like the body/ organ part that was affected.³¹ The Church at Malayattur in Ernakulam was believed to have been constructed by St. Thomas in early Common Era.³² Large number of people who are affected with health related issues used to gather to get quick relief from the malice of wrong deeds.³³ The “miraculous” water spring at the top of the mountain is considered as a powerful object to heal all illness.³⁴ Correspondingly, some temples in Medieval Kerala also offered to worshipers

²⁸ Bartholomaeus Ziegen Balg, *Genealogy of the Malabar Gods*, 1713

²⁹ *Kokasandesham*, Lines-16-3

³⁰ N.V.K.Varier, *Ayurveda Charithram*, Kottakkal Arya Vaidya Sala, 2002, p.486

³¹ Ziyaud-Din A. Desai, *A Topographical list of Arabic, Persian, and Urdu inscriptions of South India*, Indian Council of Historical Research, 1989, p.103

³² Frier Jordanus (1324), *Wonder of the East*, Hakluyt Society, London, 1885; (trans-Malayalam), by Velayudhan Panikkassery, Current Books, Kottayam, 2007, pp.148-149

³³ Calcoen: *A Dutch Narrative of the Second Voyage of Vasco Da Gama to Calicut*, Printed at Antwerp, Circa 1504, (trans), J. Ph. Berjeau, London, 1874.cited in Em nome De Deus, p.168; “Six days from Coloén is a town called Lapis, and nearby is Saint Thomas in the sea. It is there that for a fortnight about the time of his festival the sea may be passed on foot, and they give the sacrament to all who are worthy to receive it, and refuse it to the unworthy. And this place is four days distant from the great city of Edissen,28 where he built the large palace. But this above-mentioned town of Lapis is for the most part ruined, and the Christians inhabit it on condition of paying a tribute, and everybody, including the king and the queen, walk naked, with the exception of their loins, which are covered”says Kenneth Parry, *The Blackwell companion to Eastern Christianity*, Black well publishing, Oxford, UK, 2007, p.311

³⁴ Maya George, *Faith & philosophy of Christianity*, Kalpaz Publications, New Delhi, 2009, p.296

prasadam for the speedy recovery of health. Medicinal milk offered for lunatic patients at Thiruvizha temple in Alappuzha³⁵ and Trikkangode *Randu Murthi* show that of a tradition which cut across population who probably did not really benefit from the dominant tradition of humor based healings. *Trikkangode Randu Murthi temple* is unique in itself for having both Shiva and Vishnu as *murthis* for people who have been affected by fits.³⁶

Prasadam was given as medicine at Thiruvizha temple at Cherthala which was believed to have been an effective remedy against mental disorders.³⁷ Chronic diseases like leprosy, dropsy were treated with *Valiyenna*; medicated oil at a Sastha temple at Thakazhi in south Kerala.³⁸ This oil was made out of eighty four *Angadi Marunnu* (bazaar medicines) and sixty four green herbs. This oil was considered very effective and capable of curing all kinds of illness.³⁹ *Turmeric prasadam* of the *Cheemeni Mundaya* temple was considered to be a panacea of all health problems by devotees. Interestingly, some scholars suggests that healing practices associated with these temples represent the forceful conversion into the Hindu culture area of medieval Buddhist *Viharas/pallis*, as Hindu temples traditionally offer no treatments for any diseases inside its sacred complexes.⁴⁰ Nevertheless, temples where Vedic teachings were held with patronage of Nambutiri/Nair combination promoted, to a large extent, *Ashta Vaidya* families during the period. Meanwhile temple centered treatments such as ‘healing-*prasadam*’ could re-strengthen the already existing dominance of higher caste population who was patronized by the state.⁴¹ Emotion, fear psychosis and cultural moorings

³⁵Emily Gilchrist Hatch, *Travancore: A Guide Book for the Visitor*, OUP, 1939, p.39

³⁶C. K. Kareem, *Kerala District Gazetteers: Palghat, Kerala* (India), Superintendent of Govt. Presses, 1976; Census of India, 1981: Vol. 1-2. Special Tables, Director of Census Operations, Kerala

³⁷S. Jayashanker, *Temples of Kerala*, Directorate of Census Operations, 1999, p.306

³⁸Emily Gilchrist Hatch, *Travancore: A Guide Book for the Visitor*, OUP, 1939, p.39

³⁹*Ibid*

⁴⁰P.K.Gopalakrishnan, *Keralathinte Samskarika Charitram*, State Institute of Languages, Trivandrum, 2000, p.255

⁴¹Sarat Chandra Roy and A. K. Bose, *Man in India*, Volume 82, 2002, p.327; Gilbert Slater, *Some South Indian Villages*, OUP, 1918, pp.150-158; K. K. N. Kurup, K. K. N. Kurup, *Modern Kerala: Studies in Social and Agrarian Relations*, Mittal Publications, 1988, p.102

were used to keep under control the largely illiterate and ignorant mass through the spectrum of ritual purity.

The extensive distribution of different venomous snakes such as *Moorkhan* (Cobra), *rajila* (Krait), *Venthiran* (Viper) which medieval Malabar famous for,⁴² inspired folk medicine there to address supernatural beings in order to create the space for hope in survival.⁴³ While Jewish tradition and Moses figured snakes as a symbol of health, Babylonians venerated the *Sachan* snake as a curing deity.⁴⁴ Malabar Hindu population adopted many rituals and constructed temples for cobra snake, one of the ferocious kinds.⁴⁵ “When the king of Calicut learns where the nest of any of these brutal animals is, he has made over it a little house on account of the water. If any person should kill one of these animals, they would immediately be put to death.”⁴⁶ Serpents, for them, represented the spirit of God personified.⁴⁷

This had become a whole tradition by itself by evolving as a ritual, *Sarppam Thullal*, across the region from the twelfth century itself. Apart from these metaphysical treatments, people also developed indigenous methods of driving snakes away by frequently burning strong smelling substances that produce great deal of smoke and vapor. Snakes abode mainly in places where little attention was paid to cleanliness.⁴⁸ Malabar snakes such *vellikkettan*,

⁴²Santhosh.P.S, “Paramparya Vishachikitsa”, in Dr.Hafeel (ed), *Natarivukal: Natuvaidym*, DC Books, Kotayam, 2007

⁴³Ludovico Di Varthema, (1503), *The Travels of Ludovico Di Varthema in Egypt, Syria, Arabia Desert and Arabia Felix, in Persia, India, and Ethiopia, AD 1503 to 1508*, Translated from original Italian Edition of 1510, by John Winter Jones, London, 1863

⁴⁴M. Gaborieau, “The Cult of Saints Among the Muslims of Nepal and Northern India” in S. Wilson (ed.) *Saints and Their Cults*, Cambridge: Cambridge University Press, 1985, pp. 302-309; In certain regions like Nepal and Punjab, for instance, Muslim saints were specialized in certain treatments such as Sakhi Sarwar for eye complaints, Makhdum Sahib for eye diseases and exorcisms, Shaikh Saddu for Melancholy, Guga Pir and Madar Shah for snake bite, Pir Jahaniya for leprosy, etc.

⁴⁵Varthema, op.cit, 173

⁴⁶Ibid,pp.173-174

⁴⁷Ibid,p.174

⁴⁸Bertolomeo,op.cit, p.249

anali/mandali, ettadimoorkan, iruthalakkuzhali, rudhiramandali, Karuvela, were the most dangerous yet venerated by the people in the region as the symbol of life and death.⁴⁹ Yet, metaphysical understanding of the poison and snakes were properly supplemented with scientific understanding of the symptoms and various treatments according to types of poisons in the classical tradition of Ayurveda in the region.⁵⁰

Invoking Saints for curing diseases were a wide-spread cultural construction among all religious people in medieval Malabar.⁵¹ Some of the Muslim believed to have specialized in particular diseases but reached nowhere in variety and sophistication as it did in Christian tradition.⁵² Saints were gifted with abundant gifts and were praised in many ecclesiastical establishments. The cults of many saints in Malabar from the medieval periods are still prevalent and this shows the efficacy of the saints-protectors.⁵³ Prayers to Sheikh Rifayee and St. Thomas were conducted to build up a capacity to stir-up the individual suggestive potentials for milder and major sufferance including intoxications.⁵⁴ They were also invoked even to enhance the individual defense mechanisms.⁵⁵ It was possible that, the advantage and the positive suggestive effects of the saintly cult influenced the survival rate of the injured

⁴⁹Ibid,250 “during my residence at Verapole I found snakes everywhere not only in gardens but also in the houses...people therefore must be always on their guard and keep everything neat and clean.” Ibid,p.251

⁵⁰*Mahasaram*, (compilation of 33 medieval texts by an unknown person in the beginning of 1800), M.K.Vaidyar, (ed), Government Oriental Manuscript Library, Madras, 1951,op.cit, pp.3-6

⁵¹Amir Muzur, Ante Skrobonja, Vlasta Rotschild, Ante Skrobonja Jr (eds), “Saints-Protectors from Snake Bite: A Short Overview and a Tentative Analysis”, *Journal of Religion and Health*, Vol. 44, No. 1 (Spring, 2005), pp. 31-38

⁵²E.F, Frey, *Saints in Medical History*, Clio Medica 14: 35-70. 1979

⁵³Edward Gibbon, *The History of the Decline and Fall of the Roman Empire*, Cincinatti, France, 1844, p.144; *The History of the Church of Malabar; From the Times of its Being Discovered by the Portuguese in the year 1501, Giving an Account of Persecutions and Violent Methods of the Roman Prelates to Reduce them to the Subjection of the Church of Rome*, (trans&ed) Michael Geddess, London, 1694, op.cit,130; Susan Bayly, *Saints, Goddesses and Kings: Muslims and Christians in South Indian Society*, CUP,1989, p.99

⁵⁴*Rifayeemala*,op.cit, p.73

⁵⁵Shamshad Husain, “Mampuram Palliyum Annavam”, in Leena.M.A (ed) *Natarivukal Natubhakshanam*, DCB, 2007, p.130

with the addition of the popular-medical misinterpretations of coincidence. This could explain the survival of the cults of the saints-protectors from snake bite up to our days.⁵⁶

Existence of numerous proverbs with regard to snakes reflected the predominant consciousnesses within the culture area about snake bites and poisons. These proverbs also do reflect the composition of the affected sections; poor and lower castes who directly came in contact with wild as forest dwellers or peasants.⁵⁷ Proverbs such as “Alamuttiyal Cherayum Kadikkum” (*even rat snake may bite as a last resort*), “Novichu Vitta Moorkhan” (*released the harassed cobra*), “Neerkkolikum Vishamo” (*even water snake carries poison?!), “Keeriyum Morkhanum Pole” (like the cobra and mongoose), “Chanbhoomikku Muzham Pampu” (a yard of snakes for one feet land), Aloru Pampa (behaves like a snake), “Veliyilulla Pampine Tholilittu” (like shouldering the snake lying on the fence), “Theyyane Thacchapole” (like the beaten teyyan snake), “Aleriyal Pampu Chavilla” (too many people can’t kill a snake), convince us the strong sense of fear and reverence among the people and the way this fear crept into the popular psychology.*

Problems of infertility, impotency and skin disorders were attributed to the wrath of ubiquitous Serpent Goddesses that were worshiped across Kerala from early medieval times.⁵⁸ Majority of the sacred groves in Malabar were/are centers of serpent deities. Certain medieval temples even had *nagas* (serpent) as “subsidiary deity” along with presiding deities.⁵⁹ Childless couples used to conduct prayers and special offerings at *Karippal Kavu* in Malabar where *Theyyams* of *nagarajavu* (serpent king) and *nagakkanni* (serpent queen)

⁵⁶ *Rifayee Mala*, op.cit, p.73; Amir Muzur, op.cit, p.37

⁵⁷ Varthema, op.cit,167 “in my time one of these serpents entered in to a house during the night and bit nine persons, and in the morning they were all found dead and swollen. And when the said pagans go on a journey, if they meet any of these animals they receive it as a good augury.”p.174

⁵⁸ Frederick J. Simoons, *Plants of life, Plants of death* University of Wisconsin Press, Wisconsin, 1998,p.86

⁵⁹ Susan Bayly,op.cit, p.32

observed every year.⁶⁰ These sacred medicines, administered at temples or groves represent the holistic nature of the traditional ways of healing.⁶¹ Certain temples in medieval Malabar always had practices healing associated with it. Hence, boundaries of medicines, healings, sciences and religion got shrunk in which people failed to realize the temporal and non temporal causatives and curative processes.

The everlasting presence of different snakes in the day to day affairs of Malabar population helped the growth of many *Vishaharis* (poison destroyer) and Vaidyans (physician) who specialized in different stage of treatments. These *vishaharis*, a term which was prevalent in Indian tradition, found its way into the royal courts and rich men's houses that lived with the constant fear of poisoning; natural or artificial.⁶² These *vishaharis* insisted on sprinkling *kayam* (asafetida) in and around of their residence in order to thwart off the entry of the venomous snakes into human habitants.⁶³ This practice is carried out even today by all sections of people.⁶⁴ A medieval *kavu* (sacred grove) for goddess *Badrakali* situates in the medieval port town of Kollam, was exclusively sought after for the protection from the snakes and is called *pishari kavu*, a term derived from its medieval origin *Vishahari Kavu*.⁶⁵ Medieval texts such as *Narayaneeyam*, *Uddhisham*, *Ulalpam*, *Hara Mekhalam*, *Lakshanamritha*, *Ashtanga Hridayam*, *Kalavanchanam* gave ample space for dealing with

⁶⁰ T. Madhava Menon, *A Handbook of Kerala*, Volume 2, International School of Dravidian Linguistics, 2002, p.447

⁶¹ By Charles Frederick Oldham, *The Sun and the Serpent: A Contribution to The History of Serpent-Worship*, 1988, p.153

⁶² Manasa, the sister of Vasuki was known as *Vishahari* who was invoked for the protection from snakes. Says Katherine M. Ball, *Animal Motifs in Asian Art: An Illustrated Guide to their Meanings and Aesthetics*, Dover Publication, US, 2004, p.167

⁶³ Asafetida (*kayam*) was traded extensively on Indian Ocean and found its presence on Malabar ports and *theruvus* markets. K. N. Chaudhuri, *Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, CUP, UK, 1985, p.205; M. T. Narayanan, *Agrarian Relations in late Medieval Malabar*, ICHR, New Delhi, 2003, 74

⁶⁴ *Chikitsamanjari*, op.cit, p.620

⁶⁵ T. Madhava Menon, *A Handbook of Kerala*, Vol.2, International School of Dravidian Linguistics, 2002, p.621

poisoning cases.⁶⁶ Many works have been written later on based on these books among which *Vishachikitsa* is very important.⁶⁷

“Manthra”, a form of treatment existed amongst all sections of the society during the period under consideration. Kanippayyur Shankaran Nambhoothirippadu has compiled in early nineteenth century, many texts dealing with magico-religious practices of “curing”. Some of them are titled as *Yanthraavidhikal*, *Manthraprayogangal* and *Dhyanananglum Manthrangalum* that established the fact that *Boothavidya* (“Knowledge of Possessed”) was prevalent from time immemorial in the cultural landscape of Kerala.⁶⁸ In Medieval Malabar, common people believed in the harmful effects of *Jinni*, *Satan*, *Kuttichathan*, *Yakshi* and *Yakshan*, *Bhagavathi* and many others.⁶⁹

“Manthra” is one of the major healing methods in *Ahstavaidya* tradition as well.⁷⁰ Prevalence of it as *sanmanthravadam* (positive *manthra* healing) and *durmanthravadam*⁷¹ during medieval time found its counterpart in Kerala as well.⁷² Medieval Eastern India attained certain notoriety especially in Orissa and West Bengal for magico-religious practices like sorcery and black magic.⁷³ *Mathra* as a healing practice had been mentioned in all standard text books of Ayurveda. Susrutha in his Samhitha talks about it in “Uttarasthanam” (*amanushheeyam*) section, while Charaka Samhitha deals with it in *Unmada Chikitsa* section. Susrutha sees psychological disorder as a consequence of the possession of *Bhuthas* in the

⁶⁶ *Mahasaram*, op.cit, p.xiv

⁶⁷ *ibid*

⁶⁸ M.V.Vishnu Namboodiri, *Natoti Vijnaneeyam*, D C Books, Kottayam, 1996, pp.132-137

⁶⁹ *Fee Shifau Nnasi: Ithu Orumichu Koottappetta Pazhaya Upakaram Tarjama Kitab*, (“This translated compilation contains remedies for people”) compiled in 1885 by Ahmad Bava Musliar., reprinted at C.H.Muhammad Koya and Sons, Thirurangadi, 2001.p.60; *Kokasandesham*, op.cit.p.84

⁷⁰ *Mahasaram*, op.cit, p.xvi

⁷¹ Vishnu Nambutiri, 1996, op.cit, p.133

⁷² *ibid*

⁷³ S. P. Arya, *A Sociological Study of Folklore*, 1975; M.V.Vishnu Namboodiri, *Mantrikavidyayum Mantravadappattukalum*, National Book Stall, Kottayam, 1979, pp.8-14. .

patients.⁷⁴ “Manthra” as a form of treatment lost its credibility in medieval times itself as many practitioners and quacks used it indiscriminately for monetary purposes and powerful positions by influencing the rich and powerful with their knowledge of this art.⁷⁵

Kalavanjana Saram, a medieval treatise on *Visha Chikitsa* talks about how to achieve the power to master the knowledge of *Manthra* for scholar/physicians.⁷⁶ “The person should observe 3 years long *japa*, which was an essential part of Hindu population according to Maropolo.⁷⁷ The affected patient had to neglect all these issues and has to carry out the mission and he would definitely attain the bliss of *Manthra* power.⁷⁸ Once he attains the bliss, he has to remain with *japa* and *puja* for another three years otherwise would he lose whatever he attained. There are some symptoms for attaining the blissful health and prosperity as it is said “he would get the aura of sun; would lose sleep and hunger; onlookers don’t feel like taking back their eyes from him for his absolute beauty, attractiveness and perfect health; he acquires the power of controlling the highest provocation and combination of a imposing character”⁷⁹

People had strong belief in the causative effects of spirits that inhabit in certain trees such as *Pala* or *Aal*, water sources etc.⁸⁰ These beliefs were invariably exchanged from generations to generations as the fear of supernatural elements is not out question in twenty

⁷⁴“This elixir or *Rasayana* covers within its therapeutic range such affections of the body as coetaneous diseases such as *Kushtha*, chronic fever, epilepsy, insanity, and the diseases due to the effect of poisons and to the evil influences of ghosts and malignant spirits.” says *Sushruta Samhita*, Kaviraj Kunja Lal Bhishagratna, Calcutta, 19II, p.526

⁷⁵Vishnu Narayan Nambutiri, *Naattoti Vijnaneeyam*, D C. Books, 2007, pp.132-141

⁷⁶*Mahasaram*, op.cit,p. xiv

⁷⁷Marco Polo, op.cit, p.331

⁷⁸*Mahasaram*, op.cit, p. xix; *Upakaram*, op.cit,pp.70-71

⁷⁹“Swathejasa soorya saame:Kshanam Nidrakshudham Kshaya:Ramayatharogya Gambeerya: Ma bhava:Krodha Lobhaya:Evamadhineechihnadhee:Yadha Pashyadhee-Manthraavid:Siddhimmanthrasya Janeeyathu: Bhevathaya:Prasannatham. *Mahasaram*,” *Mahasaram*, op.cit, p.xix

⁸⁰Jacobus Canter Visscher, op.cit, p.145-147; Shaila Desouza, “Health Practices and People’s Identity Re-Locating Identity”, *Lusotopie* 2000, p.459

first century as well.⁸¹ The beliefs in the spirit and supernatural reflected in the ubiquitous tradition of evil eye in medieval times.⁸² The evil eye was perceived as one of the most dangerous forces that can interfere in the life of any person. This was one of the major reasons why people invested much energy in worshiping and taking blessings from various ‘spirits’ to counteract it.⁸³

People thronged to *Bhagawati kavus* to escape from the evil eye and other problems as stated above.⁸⁴ *Manthra* such as “I prostrate myself to *Bhagavati*. When Sri Paramesvara and Parvati went hunting, Sri Parvati was under the influence of the evil eye. Sri Paramesvara put away this influence. Do though unto this case of evil eye likewise. My oath is on my guru” was chanted at Kavus in Kerala of medieval origin to escape from this problem.⁸⁵ Social and personal problems such as envy, bad luck and misfortune were explained as a result of evil eye in many social circumstances. They tried to remove this by keeping chanted object or *Molikas* as JacobusCanterVisscher described it.⁸⁶ “If the eye of the person, possessed of a malign aspect, falls on this object, it is robbed of all power of working mischief either to plants or to anything else.”⁸⁷

Evil eye was believed to have caused impairment of sexual activity, impotence, sterility, disorder in menstruation, problems in pregnancy and childbirth, deficient breast

⁸¹Byron J Good, *Medicine, Rationality and Experience : An Anthropological Perspective*, Cambridge, Cambridge University Press.1994; R.L, Lynch, (ed), *The Cross-Cultural Approach to Health Behaviour*, Dickinson University Press, New Jersey, 1969.

⁸²*Upakaram*, op.cit, 230; M.V.Vishnu Namboothirippadu, 1979, op.cit, p. 34 and p.59

⁸³“A man to his grave, and a camel to the cooking pot”; a Bedouin saying regarding the uncertain conditions of the desert environment.

⁸⁴Alan Dundes, *The Evil Eye: A Casebook* , University of Wisconsin Press, Wisconsin, 1992, p.59

⁸⁵*Ibid*

⁸⁶Jacobus Canter Visscher, op.cit, p.145 “they are in the habit of setting up a *molik* or figure in their fields, young plantations, and houses and particularly in their roads, not for the purpose of scaring the birds as it is done Europe, but to act as a charm against the evil eye. This *molik* can be the image either of an idol, a man, or an ape or sometimes it is merely some kind of painted vessel.”

⁸⁷*Ibid*, “there was a Mocqua (fisherman) chief living there whose countenance was supposed by the natives, to be endowed with this pernicious influence; so that he was entreated never to enter fields when the plants were in bloom, lest he should injure them; which request he observed.”

milk, mastitis, a baby's refusal to suckle, and so on.⁸⁸ People believed that the ones who were most vulnerable were that the very young men, the wealthy folk and the beautiful women.⁸⁹ The common word used for evil eye was *kanneru dosham* which was remedied by magico-religious medicines like *kannetu manthravada ppattu* by the lower caste community of *Malaya* rather than treatments, based on humoral theory.⁹⁰ *Parayan* women in medieval period used *Takudu*; a charmed flat plates of copper to remove from the baneful result of the evil eye.⁹¹

Muslims seems to have followed the Arab tradition of the evil eye and believed that the principles of evil eye were compatible with the texts of Islam.⁹² As an established community, with proper functioning of the mosques and attached schools, where *hadith* tradition and Quranic lessons were thought, they were quite acquainted with scriptural principles of Islamic medicines and healing.⁹³ Medieval *otthupalli* and *dars*; Islamic learning centers; were dealing with principles of Islamic jurisprudence, history and *hadiths* compiled by Imam Bukhari and Imam Muslim. One such *hadith* reported by Ninth Century Scholar Imam Muslim Ibn al-Hajjaj says “Prophet said: The evil eye is true, and if there were anything in the world which would overcome fate, it would be an evil eye”⁹⁴

The Prophet’s own belief that, invoking God could be a guard against the evil eye⁹⁵ was resonated in the Muslim practices during the period under study.⁹⁶ Evil eyed persons

⁸⁸Aref Abu-Rabia, “The Evil Eye and Cultural Beliefs among the Bedouin Tribes of the Negev, Middle East”, *Folklore*, 116(3):241-254, The Folklore Society, 2005

⁸⁹F. Fawcett - 1915, op.cit, 307

⁹⁰Vishnu Nambhutiri, *Satya Guru Vachanam* 1979, op.cit, p.59-62

⁹¹A.C. Clayton, C.K. Menon (eds), *Paraiyan and Legend of Nandan: Some Agricultural Ceremonies in Malabar*, Vol.5.No.2, Madrass Government museum, 2004, p.86

⁹²*Upakaram*, op.cit.p.81

⁹³Quasi Muhammad, op.cit, p.42, lines-69 and 95

⁹⁴Ahmad Shams al-Din, (ed.), *Sahih Muslim. Dar al-Kotob al-Ilmiyah*, Vol. 3, Sahih Muslim. Lebanon Publishing House, Beirut, 1998, p.422

⁹⁵ In his Book of Medicine, Al-Bukhari (810–72 AD) recorded that the Prophet one day saw a servant girl with a *sa'fa* (or *sufa*, a black or brown mark or excoriation) on her face, and said: “Recite incantations for her, for the ‘glance’ is on her” (Sahih al-Bukhari 1974, 426). It was said that she was

were believed to have represented impurity of mind and body with which they could provoke real, perceptible damage to the envied person, animal or property.⁹⁷ They believed that the evil eye conveyed the *nafs najsiah* (“impure spirit”), as opposed to the *nafs tahira* (“pure spirit”) of saints and healers.⁹⁸ Protection from the negative effects of the evil eye was achieved through different kinds of prayers and seeking refuge with Allah.⁹⁹ Even God told the Prophet to take refuge with him from the evil of the envier.¹⁰⁰

Muslims in medieval Kerala generally considered that two *Suras* (chapters) in Quran, known as *Al-Mu ‘awwadhateyn*, could be the supplication for refuge and protection from the health related problems.¹⁰¹ These chapters had been in use from the seventh century and were suggested by the prophet to be recited to protect and treat from the evil eyes and the witchcraft of feminine “blowers upon knots”.¹⁰² Many other references were also found as

suffering from an evil eye inflicted by the stare of the *jinn*s, whose piercing gaze is more deadly than the points of spears. Al-Jawziyya (1292–350 AD) argued at length about the logic behind the belief in the power of the evil eye. He insisted that the power rests not with the eye of a person, but rather with the spirit (*nafs*) working through it Al-Jawziyya, 1957, pp.127–36.

⁹⁶ *Upakaram*, op.cit, p.80

⁹⁷ *Upakaram*, op.cit, p.80; Narrated 'Aisha, “The Prophet ordered me or somebody else to do *Ruqya* (if there was danger) from an evil eye.” In Vol. 7, Book 71, Number 634, Bukhari; Narrated Um Salama, “that the Prophet saw in her house a girl whose face had a black spot. He said. “She is under the effect of an evil eye; so treat her with a *Ruqya*.” Volume 7, Book 71, Number 635 Bhukhari; Narrated Abu Huraira, “ The Prophet said, “The effect of an evil eye is a fact.” Volume 7, Book 71, Number 636 Bhukhari.

⁹⁸ Aref Abu-Rabia, op.cit, p.245, *Najsiah* derives from *najasa*, which means “pollution,” “dirt,” “obscenity,” “defilement,” “contamination” or “filth.”

⁹⁹ Narrated 'Abdul 'Aziz, “Thabit and I went to Anas bin Malik. Thabit said, “O Abu Hamza! I am sick.” On that Anas said, “Shall I treat you with the *Ruqya* of Allah's Apostle?” Thabit said, “Yes,” Anas recited, “O Allah! The Lord of the people, the Remover of trouble! (Please) cure (Heal) (this patient), for You are the Healer. None brings about healing but You; a healing that will leave behind no ailment.” Volume 7, Book 71, Number 638.

¹⁰⁰ *Upakaram*, op.cit, p.82, “And lo! Those who disbelieve would fain disconcert thee with their eyes when they hear the Reminder, and they say: Lo! He is indeed mad” (Quran 68: 51). One can seek protection by saying the prayers called the “Throne Verse” (Ayit al-Kursi) and the two *Suras*: “The Daybreak” (al-Falaq) and “Mankind” (al-Nas) (Quran 2: 255, 113: 1–5 and 114: 1–6).

¹⁰¹ *Upakaram*, op.cit, p.81

¹⁰² *Upakaram*, op.cit, p.81, Holy Quran, Sura, 113:4 (Falaq-The Day Break); 114:4 (Naas-Mankind); Blowing upon Knots was a common form of witchcraft in the Arabian Peninsula, where women were

‘healers’ for affected persons at harmful occurrence.¹⁰³ Another treatment for the evil eye suggested by the prophet was the *ruqya* (charm) that the angel named Jibril said for the Prophet.¹⁰⁴ The evil eye was one of the most dangerous diseases of which pregnant women and small children were the most vulnerable to. They were advised to use *rudraksha* or *urukku* from the saints or spiritual leaders according to their beliefs.¹⁰⁵ Muslims also resorted, in order to get rid of the impairment of *ayn*, to hanging amulets and charms on the body, writing verses from the Quran, taking vows, visiting the tombs of saints.¹⁰⁶ Measures were taken to outwit the evil eye by carefully following rules of behavior, religion and hygiene.¹⁰⁷ Muslims classified *ayn* in to two such as that of *insiya* (humankind) and that of *jinniyah* (the *Jinnis*) like the Arab tradition of evil eye classified this phenomenon.¹⁰⁸ *Ayn* was normally associated with personal enmity, envy and the effect of it was transmitted by conscious stares, body touch or verbal communication and so on.¹⁰⁹ Evil eyed persons were believed to cause dangers habitually, even deliberately; while some of them may do it accidentally and unconsciously. It caused sudden sickness, loss of temper and vigor and even grief.¹¹⁰

said to tie knots in a cord and blow upon them, while uttering a curse. This practices found references in Quran as well in 113:4

¹⁰³Upakaram, op.cit, p.81

¹⁰⁴Al-Munjid, *Fi Al-Lugha Wal-‘Alam*, Dar El-Mashreq Publishers, Beirut, 1975,p.498.

¹⁰⁵M. D. Raghavan, *India in Ceylonese History, Society, and Culture*, Asia Pub. House, 1969,p.170; *Anathapuravarnanam*, lines-44

¹⁰⁶Aref Abu Rabia, op.cit, p.247

¹⁰⁷Upakaram,op.cit,p.83

¹⁰⁸In the chapter entitled *kannerine thadukkanulla Asmaukal* (Countering Evil Eyes), *Upakaram*, the Medieval Medical treatise elaborates these concepts. *Upakaram*, op.cit, pp.81-83

¹⁰⁹Frederick T Elworthy, *The Evil Eye: An Account of this Ancient and Widespread Superstition*, London, John Murray, 1895, pp.22-26

¹¹⁰Upakaram,op.cit.pp.82-83

Mappila Muslims in medieval Malabar, who by this time became a practicing South Asian Islamic community with strong beliefs in *Hadith* and Quran,¹¹¹ believed that both health and illness were in the hands of God who sends diseases through natural and supernatural powers created by Him.¹¹² The ideas and healing principles in *Arabic-malayalam* literatures suggest that, illnesses were considered to be a direct punishment for their sins by Allah, who acts through the mediation of human beings.¹¹³ This causative element was believed to have contained through proper administration of basic rules of hygiene, religious practices and respecting norms of behavior.¹¹⁴ These concepts were expressed, for example, in abstaining from eating carrion, spoiled food and drinking contaminated water, and avoiding places where there is danger of disease, particularly where contagious diseases occurred.¹¹⁵

The evil eye was considered to be a social punishment by the God himself to the person possessed for making him “discontent with his lot.”¹¹⁶ Evil eyed person was socially and morally isolated and avoided generally and was also “empty-souled”.¹¹⁷ The envious person becomes harmful, whenever he casts a glance of the eye. Smearing the forehead of

¹¹¹Zainuddin Makhdum, *Tuhfathul Mujahideen fee Ba-a-Si Akhbaril Burthukhaliyeen*(1583), translated as “A Gift to The Warriors with Information about Portuguese.” Written in Arabic (trans-Malayalam), C.Hamsa, Al-Huda Book Stall, Kozhikode, 1999; English(trans), S.Muhammad Husayn Nainar, Other Books, Calicut, 2006, pp.39-49

¹¹²*Muhyidheen Mala*, op.cit, pp.124-125

¹¹³*Upakaram*,op.cit,pp.43-65, *Paropakaram*, op.cit.pp.65-79; Narrated 'Aisha, (the wife of the Prophet) that she asked Allah's Apostle about plague, and Allah's Apostle informed her saying, "Plague was a punishment which Allah used to send on whom He wished, but Allah made it a blessing for the believers. None (among the believers) remains patient in a land in which plague has broken out and considers that nothing will befall him except what Allah has ordained for him, but that Allah will grant him a reward similar to that of a martyr." Volume 7, Book 71, Number 630 Bhukhari.

¹¹⁴*Nafeesth Mala*, Noorul Islam Press, Tirurangadi, 2004, p.4

¹¹⁵Narrated 'Aisha, The Prophet did not do that (i.e., forbade the storage of the meat of sacrifices for three days) except (he did so) so that the rich would feed the poor. But later we used to keep even trotters to cook, fifteen days later. The family of Muhammad did not eat wheat bread with meat or soup to their satisfaction for three successive days, Volume 7, Book 65, Number 349

¹¹⁶Clinton Bailey, *Bedouin Religious Practices in Sinai and the Negev*, Anthropos, 1982: 77,p.79

¹¹⁷*Ibid*, p.6

new born baby with different herbs was a customary practice among the Mappilas.¹¹⁸ The application of kohl to blacken the baby's eyelids or dimple for medicinal purposes, as well as protection against the evil eye became part of *Mappila* life in Malabar as done by their counterparts in Arabia. They believed that the effects of evil eye were varied and could result in illness and suffering of different kinds, behavior changes and even financial losses.¹¹⁹ It was also believed that certain persons like *odiyans*¹²⁰ ranging from lay persons to Sufis had the power to get rid of this evil eye and it can be done by prayers, dried red chili, salt, burnt hair, onion skins, broomstick etc.¹²¹

Extra-human power or super natural aetiology (folk aetiology) was attributed to all health problems in medieval Kerala and magico-religious remedies were employed in treating them.¹²² Certain places in medieval Malabar had strong traditions of 'cure-deity' worship. At Payyannur, the *Kavu* was attributed to Mother Goddess, *Cheerma* whose unhappiness and wrath caused small pox and other epidemic diseases, draws a large number of lower caste population from medieval time. Outbreak of small pox was believed to have been contained by the *Komaramas* (oracles) of the *Cheerma*. They used to visit houses in the localities which were under the sacred authority of the respective deity and blessed the devotees by sprinkling turmeric powder.¹²³ *Cheranellur Durga*, who was venerated as *Mahishasura*

¹¹⁸Upakaram,op.cit,p.84

¹¹⁹Bruce Kapferer, *The Feast of the Sorcerer: Practices of Consciousness and Power*, University of Chicago Press, London,1997, p.313

¹²⁰M. Paul Dare, *Indian Underworld*, Kessinger Publishing, 2003, p.77; Fawcett, 2004,op.cit,p.311

¹²¹Nafeesath Mala, op.cit, p.4; Hobsbawm, E. & Ranger, T, (eds), *The Invention of Tradition*, Cambridge University Press, Cambridge, 1983, p.465; Lynch, R.L., (ed), *The Cross-Cultural Approach to Health Behaviour*, New Jersey, Fairleigh Dickinson University Press, 1969

¹²²Muhyiddin Mala, op.cit;p.47-49, Upakaram, op.cit;pp.32-46 Mahasaram, op.cit, pp.87-88

¹²³P. S. Ramakrishnan, K. G. Saxena, U. M. Chandrashekara,(eds),*Conserving the Sacred: For Biodiversity Management*, Science Publishers, 1998, p.200; K. K. N. Kurup, *Aspects of Kerala History and Culture*, College Book House, 1977,p.27

Mardhini was considered to be the cure of all diseases in medieval Malabar.¹²⁴ One of the lower caste groups *Chakliya* worshiped another mother goddess *Mariyamma* during medieval period as described by Barbosa.¹²⁵

Another magico-ritual practice associated with healing was the performance of *Chamundi Theyyam*, a medieval art form to please the deity *Chamundi* to get off the brutality of small pox.¹²⁶ Here, the performers from the lower castes conduct a ritual walk through big heaps of burning charcoal.¹²⁷ Temple at Meenkulam which was constructed around a sacred grove (*kavu*) was known to have cured skin problems of patients, if the sacred fishes and Indian flap shell turtles in these ponds were fed by worshipers.¹²⁸ *Thoovakkadi*, a skin disease was believed to have cleared with obeisance when given to Goddess *Thoovakkali*. The Goddess was believed to be another form of *Kali*, the quintessential mother goddess of the wrath and anguish.¹²⁹ The traditional solution for this disease is to administer tender coconut to the body and offer the same to the deity. These along with sorcery were prevalent in cultural life of medieval Kerala and this was known as *theyvammattu* in medieval literature.¹³⁰ People also prayed to specific Gods/Goddesses for securing cure and to begot children.¹³¹ Medieval Kerala believed that those villages surrounded by evil spirits such as *Yakshis*, *Chathan*, *Kuttichathan* and *Otamulachi* (single breasted spirit) should have their

¹²⁴Koka Sandesham,op.cit, lines-92; Ralph W Nicholas, "The Goddess Sitala and Epidemic Small Pox in Bengal", *The Journal of Asian Studies*, Vol.41, No-1 (Nov 1981), pp.21-44; Babagrahi Misra, "Sitala" The Small Pox Goddess of India", *Asian Folklore Studies*, Vol.28, No-2, 1969, pp.133-142

¹²⁵Barbosa, op.cit,1996, p.115

¹²⁶K.K.N.Kuruppu, "Theyyam-A Vanishing Ritual Dance of Kerala", in *A Panorama of Indian Culture: Professor A. Sreedhara Menon Felicitation Volume* (ed) K. K. Kusuman,1990, K.M.Mittal, New delhi,pp.126-138

¹²⁷Unnikrishnan, E, *Materia Medica of the Local Health Traditions of Payyannur*, Discussion Paper No. 80, Kerala Research Programme on Local Level Development, Centre for Development Studies, Thiruvananthapuram, 2004, p.18

¹²⁸*Records of the Zoological Survey of India*, Issues 1-2,Volume 102, Zoological Survey of India,2004

¹²⁹T. Madhava Menon,op.cit, p.451

¹³⁰*Anathapuravarnanam*, op.cit, lines-94;Barbosa,op.cit,pp.59-60

¹³¹*Anathapuravarnanam*, lines-143

images worshipped at temple complexes.¹³² Presence of these dread spirits created a parallel culture about body, medicine and healings in the entire region of Malabar.

Nerchas or celebration of divine personalities; birth/death anniversary; formed an tradition to seek the help for health issues in medieval Malabar.¹³³ During *Nerchas*, cutting across socio-cultural differences, people thronged at the sacred geographies of holy saints, singing hagiographical songs of which earliest one discovered is *Muhyiddin Mala*, written in early seventeenth century.¹³⁴ The word *nercha* is derived from the Dravidian root *ner* which denotes multiple meanings including ‘truth’ and ‘agreement’ means the act of taking a vow. Muslims in Malabar did not necessarily internalise the whole tradition of saint worshipping and healing at and *Nercha*, modeled on indigenous ceremonial patterns, as Stephen Dale argued.¹³⁵ The tradition of saint worship and seeking remedial measures from the holy persons had always been very much part of Islamic communities worldwide.¹³⁶ They believed that the saint’s “life does not end with his physical death for death simply means a new state for his holiness.” History shows that, martyrs and holy men, emerging as ‘saint healers’, who could benefit the believers through *karamath* (miracles), goes back to the early history of Islam in Arabia and India.¹³⁷

¹³²Narayana Menon, *The Performing Arts*, Humanities Press, 1983,p.48

¹³³Husain Raṣṣattāṣṣi, *Mappila Muslims: A Study on Society and Anti Colonial Struggles*, Other Books, Calicut, 2007,p.69

¹³⁴Joyce Burkhalter Flueckiger, “Narrative Voices and Repertoire at a Healing Crossroads in South India,”*The Journal of American Folklore*, Vol.116, No.461, Summer, 2003, pp. 249-272; *Muhyidheen Mala*, op.cit, line-75-85

¹³⁵Stephen Dale, Gangadhara Menon, “Nerccas”: Saint Martyr Worship Among the Muslims of Kerala:, *Bulletin of the School of Oriental and African Studies*, University of London, Vol.41, No-3, 1978, p.525

¹³⁶Beatrix Pfleiderer, *The Red Thread: Healing Possession at a Muslim Shrine in North India*, Aakar Books, Delhi, 2006,p.188

¹³⁷Josef W. Meri, Jere Lbacharach(eds), *Medieval Islamic Civilization*, Routledge, New York, 2006, p.689; Susan Bayly, *Saints, Goddesses and Kings: Muslims and Christians in South Indian Society*, CUP, 1989, p.140-141

By sixteenth century, Muslims in Kerala created for them their own niches of saint worship and also hagiographical literature such as *Muhyiuddin Mala*.¹³⁸ Saints such as Muhiyudin Abu Muhammad Abdal Qadir al-Gilani (1077–1166 CE), who was also known as *Ghaus-e-Azam* and Shiekh Rifayee were strongly venerated in the region.¹³⁹ Muslims in Malabar believed in their power of healing disabilities, child disease and many such chronic disorders.¹⁴⁰ Medieval Arabian tradition of Islam, practiced in Medieval Malabar, was very much in agreement with the worship of Holymen and their capacities of healing.¹⁴¹ The continuity of the tradition could be seen in the later works such as *Rifayeemala* written in 1781, and *nafeesathmala*, written in 1895 by Ponnani Nalakath Kunji Moideen Kutty.¹⁴²

Later period, with the emergence of new socio-political consciousness, changed the pattern of *nercha*, which was earlier functioned as a space for communion and healing complex for the believers. Nevertheless, many *nerchas* such as Kondotti *nercha* or *urs* (meaning death anniversary) remained as blissful place for health seekers who attributed their cure in the oils and cannons at Kondoti *Dargha*.¹⁴³ Carrying these ‘curative-guns’ is still considered auspicious and a help in curing ailments.¹⁴⁴ Even the traditional Hindus believe that the oil used for the guns have special medicinal properties.¹⁴⁵ *Appa Vanibha Nercha* (*urs* of bread offering) at Idiyangara, Calicut, also represents the medieval beliefs in the imaginary

¹³⁸ *Muhyiddin Mala*, op.cit.pp.56-65

¹³⁹ *Ibid*, pp.20-30; *Rifayeemala*, op.cit,pp.72-76

¹⁴⁰ *Muhyiddin Mala*, op.cit, lines-112-113

¹⁴¹ James R. Smart, G. Rex Smith, B.R. Pridham (eds), *New Arabian Studies*, Vol.3, University of Exter Press,UK, 1996, p.247; Henri Chambert-Loir, Anthony Reid (eds), *The Potent Dead: Ancestors, Saints and Heroes in Contemporary Indonesia*, 2002,Page 22; Howard M. Federspiel, *Sultans, Shamans, and Saints: Islam and Muslims in Southeast Asia*, University of Hawai Press,US, 2007, pp.26-27

¹⁴² Kunji Moideen Kutty, *Nafeestah Mala*, op.cit, p.5

¹⁴³ Dale, Menon, op.cit, p.531

¹⁴⁴ This statement is made based on my field work in the area, in order to understand the continuity of the medieval practices.

¹⁴⁵ Dale, Menon,op.cit, p. 531

healing power of divine personalities.¹⁴⁶ The offerings there, *appam* (bread) was considered to be healing in the blissful presence of *Auliya* or saint who constructed the Mosque in the sixteenth century. Such beliefs and practices had been a continuation of the pattern that all Islamic communities followed since Abbasid period.¹⁴⁷

People in medieval Malabar believed in the extra-personal causative elements like *jinn*, *shaithan*, and so on¹⁴⁸ Patients affected by them were advised to write certain Arabic letters in particular pictographic table along with specific numerals.¹⁴⁹ This had to be written in a *karthasil* and should be covered with black color tread and be burnt in the cow ghee which was subsequently kept in the head-side of the affected patient.¹⁵⁰ Medieval beliefs classified these causative elements as “good” and “bad” depending on the moralities of the *Jinns* who could be a “Muslim” or “*Kafir*” (unbeliever).¹⁵¹ This classification represents the similar beliefs in the superior and inferior *Jinns* in the medieval Islamic communities world over.¹⁵² Possession caused by *Kafir Jinns* and *Satans* were considered more harmful and was treated differently with more dominant symbols and letters.¹⁵³ These groups of *jinn*s were believed to have caused many specific health problems such as miscarriage or infertility among women which could be remedied by the invocation of particular saints such as Sheikh Muhiyiddin.¹⁵⁴ People also believed in his capacity to heal the poison, especially snake bite, as he was considered to be over and above the power of snakes.¹⁵⁵ The medieval Muslims also believed in the unbreakable healing capacities of the Sufi saints in the cause of snake

¹⁴⁶Husain Randatthani, op.cit, p.69

¹⁴⁷Howard M. Federspiel,op.cit, pp.26-27

¹⁴⁸*Muhyiddin Mala*, op.cit,lines-81-126;*Upakaram*, op.cit, pp.53-54

¹⁴⁹*Upakaram*, op.cit, p.53

¹⁵⁰*Ibid*.p.54

¹⁵¹*Ibid*,pp.52-56

¹⁵²Gustave Edmund Grunebaum, *Medieval Islam: A Study in Cultural Orientation*, University of Chicago Press, Chicago, 1971, pp.19-25

¹⁵³ *Ibid*.pp.55-56

¹⁵⁴*Muhyiddin Mala*,op.cit, lines-112

¹⁵⁵*ibid*

bites.¹⁵⁶ Muslims believed in the concept of *sihr* (black magic) which was prevalent even in the pre-Islamic Arabia.¹⁵⁷ Their concept of black magic, which makes anybody sick and vulnerable had gone hand in hand with the already existing tradition of Kerala among many communities.¹⁵⁸

Counter black magic also took a definite pattern during this time. Arabic Malayalam literatures suggest that the persons warding off the evil effects of the *sihr* should have extremely hygienic “*dehavum puthayum*” (body and cover) in order to become more effective.¹⁵⁹ This exercise was done by recital of exclusive chapters of the Quran which contains verses that deals with these issues.¹⁶⁰ Some section of the *ulemas* mastered the arts of “diagnosing” and “prognosing” different health problems by synthesizing Quranic verses with Arabic alphabets and numerals certain ways.¹⁶¹ These techniques were employed to examine pregnancy¹⁶² sex of the child,¹⁶³ even occurrence symptoms of the death and so on¹⁶⁴. Interestingly, sometimes they also conducted urine tests in order to understand the health condition of the patients.¹⁶⁵

Muslims in Kerala considered epilepsy (*grahani*) as “being possessed by non human elements.”¹⁶⁶ Like Ayurveda prescriptions, treating this non-human association of the disease

¹⁵⁶Ibid,lines-125

¹⁵⁷Quran-113;04.*upakaram*,op.cit,61

¹⁵⁸*Ananthapuravarnanam*,lines-94

¹⁵⁹*Upakaram*,op.cit,pp.60

¹⁶⁰Ibid,pp.59-61

¹⁶¹Ibid,pp.62

¹⁶²Ibid,pp.37 and 43-44. This was done by calculating the number of Arabi months, name of the pregnant lady and her mother with an addition of number twenty. If this calculation was falling under the category of *Lahv-ul- Hayathu*, the mother and kid would live. If bad luck makes the calculation falls under the category of *Lahv-ul-mamath* both of them would die.

¹⁶³Ibid, 60

¹⁶⁴Ibid,p.53

¹⁶⁵Ibid.p.48.

¹⁶⁶Ibid,p.57

went along with prescribing herbal medicines as well.¹⁶⁷ Herbs such as *murikkintholu* (skin of a thorny tree), *kayppavalli* (bitter guard plant), *kundirikkam*, *tippali* (long pepper) were recommended for the disease which was then known as *apasmaram* (*ummu sswibhiyan*).¹⁶⁸ But, medieval classical Ayurvedic practitioners looked at the issue more scientifically by exploring the intricacies of the humoral systems of Ayurveda depending on the imbalance in *dosas* (humour) such as *Vata* (air), *pitta*(bile) and *kapha* (phlegm).¹⁶⁹ They divided epilepsy into eighteen sections for variety of reasons like gender, symptoms, velocity, age and genetics and so on.¹⁷⁰

Kushtam (leprosy), a medieval menace, was considered a fall out disease for the wrath of God.¹⁷¹ In an exclusive chapter on leprosy, *Upakaram* combines Quran and herbs as a treatment for this disease.¹⁷² A whole gamut of herbals such as *kanjiram* (poison seed), *poovarash* (portia tree) and *karimjeerakam* (cumin seed) were suggested to deal with, with proper mixing of the divine words and *Karma*.¹⁷³ Patients were warned from socializing with non-affected as the disease is highly contagious.¹⁷⁴ Affected persons with diseases such as conjunctivitis, chicken pox were strictly prohibited from mingling with general public.¹⁷⁵ Tradition of quarantining also continued as the contagious disease spread across the region irrespective of the color and creed.¹⁷⁶ In eighteenth century, Dutch, with the help of doctors,

¹⁶⁷ *Chikitsa Manjari*, op.cit, pp.199-200

¹⁶⁸ *Ibid*,pp.57-59

¹⁶⁹ *Chikitsa Manjari*, op.cit,p.454

¹⁷⁰ *Mahasaram*, op.cit, p.15

¹⁷¹ *Chikitsa Manjari*, op.cit, p.334; *Rifayee Mala*,op.cit,p.72

¹⁷² *Upakaram*,op.cit, p.186

¹⁷³ *Upakaram*,ibid, *Chikitsa Manjari*, op.cit,p. 354

¹⁷⁴ *Upakaram*,op.cit,p.186

¹⁷⁵ *Upakaram*, pp.186-188

¹⁷⁶ A.Galletti, *The Dutch in Malabar*, Usha, Madras, 1911,pp242;p.82;p.34. “the asylum was erected in 1728...an asylum was previously maintained at castello. The site of new asylum was that of the old Portuguese fortress at paliport near the north end of the island vypeen looking on the backwater.it had passed to the dutch with other Portuguese enclaves when they took cochin in 1663.....it appears that

started a leper asylum in order to discipline the disease and patients.¹⁷⁷ These doctors had to visit the isolated patients on the island of Baypin.¹⁷⁸

Another socially despised disease *Vellappandu* (Albumin), was also prevalent among all communities during the period under study.¹⁷⁹ These problems were handled at the traditional families as well as *Masjid/Darsus* where most of the Islamic scholars operated from.¹⁸⁰ Though there were references to the Quranic-curing, the diseases were predominantly administered by the herbal plants.¹⁸¹ These plants were included *Neem leaves* (neem), *Velutha Muthalu* (white penny wort), *kayappa* (bitterguard), *velluthulli* (garlic), *Munthiri* (grape) and many other locally available plants.¹⁸²

Diseases such as *Sanivali* (nervous cramps), *Adisaram* (flex or dysentery), *Pani* (fever), *Tridoshagioram* (the fever with all dosas), *Malampani* (fever occasioned by a certain wind from Gauts), *Prameham* (diabetics), *aadram* (hemorrhoids) were reported to have been very prevalent in the region of Kerala during the period under concern.¹⁸³ People were also affected with *Mahodaram* (dropsy), *Kamala* (jaundice), *Sanni* (Phrensy combined with convulsions), *Velupa* (*kushtam*), *Astrisava* (inflammatory disease which affects the whole body and consumes the marrow of the bone).¹⁸⁴ Diseases like *Ciardhi* (vomitting), *Masuri* (small pox), *Ciori* (*chori*/itch), *Arbuda* (cancer), *Sannivadham* (apoplexy), *Engal* (asthma), *Ciuma*

the site, formerly that of a “Saracen” pirate strong hold was granted to Portuguese by the king of cochin in 1600 as a reward for driving out pirates.” Ibid.

¹⁷⁷ ibid

¹⁷⁸ ibid

¹⁷⁹ *Chikitsa manjari*, op.cit, p.291; *Rifayimala*, op.cit, p.72

¹⁸⁰ *Chikitsa Manjari*, op.cit, p.291

¹⁸¹ *Upakaram*, op.cit, p.188

¹⁸² Ibid, p.189; *Chikitsa Manjari*, op.cit, pp.292-295

¹⁸³ Fra Paolino da San Bartolomeo, *Voyage to The East Indies; Observations Made During a Refidence of Thirteen Years Between 1776 and 1789 in Districs Little Frequented by the Europeans*, (trans) by William Johnston, London, p.405

¹⁸⁴ Ibid

(cough) were the major diseases that took heavy toll among the common population during the period.¹⁸⁵

Midwifery, as a prevalent tradition in Medieval Kerala, was associated with village therapies. *Peretuppu*, as it was known, is now completely extinct in the cultural canvas of Kerala.¹⁸⁶ Midwife or *petti* was required to function at the house of pregnant lady till the delivery was done.¹⁸⁷ Mostly, women from lower caste *Malaya* community acted as midwives, who could be reciting *Manthra* and songs. These songs believed to have ensured smooth deliveries and healthy babies.¹⁸⁸ *Pettis* observed *Maleyankettu*: a peculiar ritual to stop premature abortions and subsequent death of expecting mother. Elite women were assisted by the subordinate castes in many rituals, such as *anchamneer* (ritual bath). Pregnant women also sought divine blessings from local deities such as *peroorayyan* who resided at *perunmkavu* (grant sacred grove) with long prayers.¹⁸⁹

¹⁸⁵Ibid;*Chikitsa Manjari*,op.cit,pp.15-46

¹⁸⁶*Payyannurpattu*,op.cit,lines-17

¹⁸⁷Ibid,pp.10-11

¹⁸⁸M.V.Vishnu Nambhutiri, “Malayarude Chikitsa Paramparyam”, in Dr.Hafeel (ed), op.cit, pp.96-97

¹⁸⁹*Payyannurpattu*, pp.9-10,

Chapter-5

Physicians, Treatments and Medicine Markets in Medieval Kerala

Existence of different medical traditions was not a unique characteristic of the medieval culture in Kerala.¹ Nevertheless, the unique ways in which various healing traditions operated is an interesting area to be expounded with. Not sticking to a monolithic practice and set of principles, this society had offered many alternatives to the patients and health seekers. These multi-layered alternatives derived their origin from different cultural, political and philosophical traits that existed in the region during the period under consideration.

The presence of Ayurveda as one of the traditional methods of treatment was prevalent in medieval Malabar before the establishment of a Brahmin centric social functioning.² In the initial stages, medicine was practiced by the Buddhist monks who had settled around their *Viharas* and lower caste communities such as, *Tiyya*, *Velan* and *Mannan* castes that were associated with them.³ Yet, changes happened in the social formation from twelfth century onwards facilitated the growth of Brahmin settlements across the region.⁴

¹By Kenneth G. Zysk , *Religious medicine: the history and evolution of Indian medicine*, transaction publishers, New Jersey, 1993; P.V.Sharma, *History of Medicine in India, From Antiquity to 1000 A.D*, Indian National Science Academy, 1992; Seema Alavi, *Islam and healing: loss and recovery of an Indo-Muslim medical Tradition, 1600-1900*, Palgrave Macmillan, 2008; By Poonam Bala , *Medicine and Medical Policies in India: Social and Historical Perspectives*, Lexington Books, UK, 2007

²P.K.Gopalakrishnan, *Keralathinte Samskarika Charitram*, State Institute of Languages, Trivandrum, 2000

³Abdu-al-(1442), *India in the Fifteenth Century : Being a Collection of Narratives of Voyages to India, in the Century Preceding the Portuguese Discovery of the Cape of Good Hope*, (trans & ed), H. Major, Hakluyt Society, London, p.34; Zainuddin Makhdum, *Tuhfathul Mujahideen fee Ba-a-Si Akhbaril Burthukhaliyeen* (1583), translated as "A Gift to The Warriors with Information about Portuguese." Written in Arabic (trans-Malayalam), C.Hamsa, Al-Huda Book Stall, Kozhikode, 1999; p.59

⁴Sachau, Edward, *Alberuni's India : An Account of the Religion, Philosophy, Literature, Geography, Chronology, Astronomy, Customs, Laws and Astrology of India*, Low Price, Delhi, 1989; (trans-Malayalam) Velayudhan Panikkassery, Current Books, Kottayam, 2007.pp.101-104

Nevertheless, Brahmins or *Nambutiri* as they were called by fourteenth century⁵ were the predominant social force that practiced Ayurveda.⁶ But, they were not hesitant to continue the tradition of the Buddhist practices of the early medieval period.⁷ Buddhist influences forced the dominant forces in the healing to move beyond the practice of classical texts such as *Susrutha Samhita* and *Bhela Samhita* and write their own treatise on Medicines.⁸ This brought in many new Sanskrit texts in the region.⁹ Buddhist influence is also reflected the predominant presence of *Ashtangahridaya* of Vagbhadanatha, who was extensively influenced by Buddhism-its notion of body, illness and healing.¹⁰

Apart from Vagbhadanadhan, Bhelan also made immense contribution to the Knowledge of medicine and its application from early medieval times. Unfortunately, *Bhelasamhitas* as his work was known, could not get strong foothold in the north Indian Ayurvedic tradition due to its complex nature. However, the responses from the medical practitioners of Kerala were tremendous. Many scholars and practitioners wrote interpretations to his work which was noted for the treatments he meted out for the children till the age of twelve. He also talks about “impure blood”, lunatics, who were treated according to the traverse of the moon on its trajectory. He would start his treatment on the new moon day along the course of the moon and finishes off with the “*amavasi*”. It is interesting to note the opinion that even *Bhelan* was of a lower caste origin probably from the shepherd or the fisherman community as his name indicates the meaning of either “goat” or

⁵Payyannur Pattu, (ed) by P.Antony, Tuebingen University Library, Malayalam Manuscript Series, General Editor, Dr.Scaria Zacharia, DC Books, Kottayam, 2000

⁶M. S. Valiathan, *The Legacy of Caraka*, Orient Longman, Hyderabad, 2003, p.3

⁷P.C.Alexander, *Buddhism in Kerala*, Annamalia University, Chennai, 1949,p.31

⁸Susrutha, *Susrutha Samhita*, (trns), Kaviraj Kunja Lal Bhishagratna, Calcutta, 1911

⁹K.P.Pisharoty, *Indian Historical Quarterly*, Vol.vii.p.324; C.V.Narayana Ayyar, *Origin and Early History of Saivism in South India*, p.147

¹⁰*Astanga Hridayam*, cited in N.V.K.Varier, *Ayurveda Charithram*, Kottakkal Arya Vaidya Sala, 2002, p.xxvii; A. Sreedhara Menon, *A Survey of Kerala History*, 1967, p.427; Murkot Ramunny, *Ezhimala: The abode of the Naval Academy*, Northern Book Centre, New Delhi, 1993, p.13

“boat”.¹¹ He would have been neglected as we see him to be in the north Indian tradition for his low caste origin unlike in Kerala where the medical practice by lower caste was quite common from early medieval times.¹²

Medical practitioners in Malabar also tried their best to keep the ties of their practice with explored capacities of their medicines along with the existing religious thoughts.¹³ Ayurveda practitioners in Kerala had another duty as well-a responsibility to preserve the moral framework of the patients as they were more involved with the works of Vagbhata, the author of *Ashtangahridaya* who induced moral and spiritual senses in his philosophy of medicine.¹⁴ Alongwith scientific methods of diagnosis and prognosis within the framework of *tridosas-vata* (air), *pita* (bile), *kapha* (phlegm), they had also prescribed propitiatory and customary rites such as *dana* (donation), *homa* (religious rites), *japa* (adoration), *niyama* (rules of conduct) and so on as reported by Marco Polo with regard to customs and manners of Nambutiris in Malabar.¹⁵

However, these healing practices of medieval Malabar were not confined to any exclusive creed, caste or religious grouping. Islamic medical practitioners acquired a significant name for their commitment towards the profession as reported by Alberuni.¹⁶ Lower castes such as *Ezhavas* also developed their methods of Ayurveda though largely different from the classical tradition.¹⁷ Along with , indigenous groups such as *Kaniyan* and *Malayan* perceived illness differently from other groups such as Muslims and Christians and

¹¹Ayurveda Charithram, op.cit, p.553

¹²Ibid.

¹³Henry R Zimmer, *Hindu Medicine*, The Johns Hopkins Press, Baltimore, 1948, p.36; B.V.Subbarayappa, “The Roots of Ancient Medicine: An Historical Outline,”*J. Biosci*, Vol.26, No.2, June, Indian Academy of Sciences, 2001, 138

¹⁴M.S.Valiathan, *Legacy of Vagbhata*, Universities Press, Hyderabad, 2009, pp.12-2120

¹⁵Marco Polo, Sir Henry Yule, *The book of Ser Marco Polo, the Venetian*, Vol.2, - 1875, p.331

¹⁶Alberuni, Velayudhan, op.cit, 103

¹⁷Manilal, K. S., *Hortus Malabaricus and Itty Achuden: A Study on the Role of Itty Achuden in the Compilation of Hortus Malabaricus*, (in Malayalam), Mentor Books, Calicut/P.K. Brothers, Calicut, 1996

imbibed the methods of sorcery and black magic as Duarte Barbosa reported, though they had their own tradition of *material medica*.¹⁸ All streams of medicine, Ayurveda, Islamic healing traditions, folk medicines, were used by people and they remained as open choices in the pluralistic society of Malabar. Nevertheless, Ayurveda, based on classic Sanskrit texts was handled predominantly by a particular professional practitioners, *Ashtangavidhyas*, the term derived for their mastery of all eight branches of Vagbadanandha tradition, such as *Kaya* (general medicine), *Baala* (paediatrics), *Graha* (astrological), *Urdwanga* (above neck), *Shalya* (surgery), *Dhamshtra* (toxicology), *Jara* (longevity), and *Vrusha* (infertility).¹⁹ Insistences on the textual Ayurveda by these privileged practitioners, who sprang across the region of Malabar, limited the growth of this tradition to an extent.²⁰ They were also strongly patronized by the rulers as in the cases of Vaidya Matham who was the chief physician in the medieval *Yajnas* conducted by many rulers such as Samutiri. Vayaskara Mooss was the court physician of the Raja of Tekkunkur while Chirattaman Mooss was serving as the chief physician of Tiruvitamkur Kingdom. Pulamanthole Moos was the chief medical man of the Samutiri the king of Calicut during the period under study.²¹ Therefore, as in the case of medieval China, tradition of knowledge remained in its exclusive form in the hands of privileged who were directly associated with the political authorities and non temporal institutions.²²

¹⁸Duarte Barbosa (1500-1516), *A Description of the Coast of Africa and Malabar in the Beginning of the Sixteenth Century*, (trans&ed), Henry E. J. Stanley, The Hakluyt Society, London, 1865, Reprint, CUP, 2009,pp, 61-66 “ They (*paneens*/Malayans in Malabar) openly commune with demons who take possession of them and cause them to utter astonishing things. When the king is ill, he sends for these men and women, ten or twelve families of whom come, the best performers and the most approved of the devil with their women and children.”

¹⁹Amaresh Datta, *The Encyclopaedia Of Indian Literature (Volume One (A To Devo))*, Vol.1, Sahitya Academy, New Delhi, 2006, p.312

²⁰Adoor K. K. Ramachandran Nair, *Kerala State gazetteer*, 1986, vol.2, part.2

²¹*Ibid*

²²Paul Unschuld, *Medicine in China: A History of Ideas*. Berkeley: University of California Press, 1985

Classical tradition of Ayurveda in Malabar started with the settlements of Buddhist community as in the other parts of India.²³ Gradual decline of Buddhism from Malabar started about Eighth century and culminated its virtual demise by Fourteenth century. This process was paralleled with establishment of Brahmin communities, which assimilated an assortment of concepts related to treatments and illnesses into Ayurveda texts. This process had been reflected in the emergence of new texts such as *Alathurmanipravalam* and *Yogamritham*.²⁴ Apart from this, even Buddhist cults such as *pattini* were also converted into the cults of *Bhagavati*, whom we discussed in the last chapter, the goddess of disease and remedy.²⁵

Thus, contribution and influence of Buddhist healing practitioners facilitated a paradigm shift in the way disease and medicines were perceived in the medieval Kerala. This was the result of the major deviations from the classical texts, which was by supplemented with local texts.²⁶ Local sacred centers of Buddhism such as Madai,²⁷ that were visited by Buddhist pilgrims and physicians who stayed there at self constructed *munimadas* (abode of Buddhist monks), could have been functioned as the centers of Healing. *Theyyam*, a folk dance, which emerged as a lower caste reaction against dominant ritual supremacy,²⁸ used Kavu (sacred groves), to channelize the spread of intellectual curiosity of the lower caste groups, who gradually mastered various disciplines such as *Tharkka*, *Vyakarana*, *Jyothisham*,

²³N.V.K.Varier, op.cit,p. 551, John Powers, *A Bull of A Man: Images of Masculinity, Sex, and The body in Indian Buddhism*, 2009, p.126

²⁴K.P.Padmanabha Menon, *Cochirajyacharithram*, The Mathrubhumi Publishers, Calicut,1914, pp. 98-99;N.V.K.Varier, op.cit,p.494

²⁵*Koka Sandesham*, (Trans-Malayalam), Prof.Gopikkuttan, , Current Books, Trichur, 1996, p.84; Gananath Obeyesekere, *The cult of the goddess Pattini*, University of Chicago Press, London, 1984, p.523

²⁶Kunjikkuttan Thampuran, *Keralam Randam Sargam*, Slokam, 105

²⁷Murkot Ramunny, op.cit.p.12; Ezhimala, the nearby port was reported by Marco polo, Barbosa, Nicholo Conti, Ibn Bathuta Velayudhan, op.cit, pages..p.120, p.240, p.178, p.153 respectively.

²⁸ Rich Freeman, "The Teyyam Tradition of Kerala", in *Gavin Flood, the Blackwell Companion to Hinduism*, Blackwell, 2008

niruktam and *ayurveda*.²⁹ This catalyzed the emergence of many locally written Ayurvedic texts in the medieval times.³⁰ This “little traditions” such as *Theyyam* and *Poorakkali* were generally patronized by the *Tiyya/Ezhava* castes who were the traditional believers of Buddhism.³¹ This new tradition of Ayurveda had unique composition of medicines, herbs, practices, texts and raw drugs, greatly different from texts such as *Susruta Samhita* or *Ashtangahrdayam*.³² New medical practitioners used texts such as *Sahashrayogam* and *Sarvaroga Chikitsaratnam* in the place of *Susrutha Samhitha*.³³

Multiple religious and cultural creeds in medieval Malabar ensured a plural character to the practice of medicines and understanding of the illness.³⁴ There was no single minded understanding about the treatment or diseases or a homogenized way of looking at human body and cure as seen in the Arabic Malayalam literatures from sixteenth century onwards.³⁵ Though in the initial stage Ayurvedic practices in Malabar was actually concentrated around old Buddhist Viharas, which had *Salais* or schools for medical education such as *Tirumalapadam* and *Parthiva Shekapuram* as reflected in *Paliyam Copper Plates* and *Huzur Office Plate*.³⁶ These centers, such as *Srimulanivasam*, of medical education were later converted into temples and *matas* alongwith certain drastic socio-cultural changes.³⁷

²⁹Unnikrishnan , *Materia Medica of the Local Health Traditions of Payyannur*, Discussion Paper No. 80, Kerala Research Programme on Local Level Development, Centre for Development Studies, Thiruvananthapuram, 2004, p.8 Unnikrishnan, op.cit.14

³⁰Ibid,p. 14

³¹Bardwell L. Smith,op.cit,pp.31-32

³²N.V.K.Varier,op.cit,494

³³Unnikrishnan, op.cit,p.15-17

³⁴Susan Bayly, *Saints, Goddesses and Kings: Muslims and Christians in South Indian Society*, CUP, UK, 1989,PP.465-470

³⁵*Fee Shifau Nnasi Ithu Upakaram and Shuruthi Petta Ponnani Faropakara Tharjama*, C.H.Muhammad Koya and Sons, Thirurangadi, 2001.pp.20-25

³⁶Adoor K.K.Ramachandran Nair, Kerala Gazatteer, 1986

³⁷P.K. Gopalakrishnan, *Keralathinte Samskarika Charitram*, State Institute of Languages, Kerala, TVM, 2000, p.253; Madhava Menon, *A Handbook of Kerala: International School of Dravidian*

Practitioners such as *ashtavaidyans*, were generally from the Sanskrit learned section of the Brahmins.³⁸ Nevertheless, dominant cultural and social power of these professional groups did not try to monopolize the gamut of knowledge as reflected in the existence of many *Ezhava Vaidhyans* and *Vannans* on the coast of Medieval Malabar.³⁹ One of the reasons could be the stratification within the community itself. Brahmin community in Malabar was also stratified in relation to the ritual and purity hierarchy which led to the emergence of different superior and inferior groups such as *Nambidis*, *Elayadds*, *Embranthiri*, *Mussaths* who had generated their own ways of medical practice and exclusive functional areas.⁴⁰

Having had the advantageous positions with the political patronage of the local rulers at their respective places, *Ashtavaidyans*, who were stratified according to their ritual superiority and hygiene, could practice medicine according to the original classical texts and could write their own interpretations depending on the local, social and climatic conditions. A prominent scholar from Pulamanthol *Ashtavaidya* family in Malappuram district, whose family took legitimacy for being “entrusted by *Parsurama*” to undertake medicinal practices, made some significant contribution in this regard.⁴¹ This treatise termed as “*Brihad Padyom*,” a commentary on the existing practices from early medieval times.⁴² This interpretation has also been called *Pulamanthol Padhyam*. Another member of the same family has written a more simplified interpretation of the same book using all the existing

Linguistics, vol.2 - 2002, p.440; P. C. Alexander, Buddhism in Kerala, Annamalai University, 1949, p.172

³⁸Elamkulam Kunjan Pillai, *Janmi Sambradayam Keralathil*, Sahithiya Pravarthaka, C.S. Ltd, Kottayam,1959, pp. 28-35; Johnsy Mathews, *Economy and Society in Medieval Malabar (A.D.1500-1600)*, St. Mary’s Press and Book Depot, Changanacherry,1996, p. 108

³⁹Cyriac K Pullapilly, “The Izhavans of Kerala and Their Historic Struggle, For Acceptance in the Hindu Society, in Bardwell L. Smith, op.cit, p.31

⁴⁰William Logan, *Malabar Manual*, Asian Educational Service, New Delhi,1951,pp.120-121

⁴¹Jayashanker, *Temples of Malappuram District*, Directorate of Census Operations, Kerala, 2004, p.45

⁴² Ibid, 46

interpretations and this simplified interpretation is called *lalitha padhyam* which means 'simplified interpretation' among many Samhitas of Ayurveda.

The tradition of writing Ayurveda texts continued with different kinds of socio-political patronage. *Dhaara Kalpam* was written in Eighteenth Century during the time of Raja Marthanda Varma, the king of Tiruvitamkoor, about *Dhara* treatments which was a medieval contribution of Kerala to the tradition of Ayurveda.⁴³ This deals with the system of *Dhara*, an exclusive health practice in Kerala. *Alathur Manipravalam*, another medical treatise is considered to be written during in the beginning of *Manipravala* period by one of the Alathur Nambhis. This text lights not just health and medicine, but is also considered important to understand from the language point of view as this was referred in one of the medieval texts; *Leelathilakam* of Forteenth century.⁴⁴ Other texts such as *Sahasrayogam*, *Chikitsakramam*, *Yogarathna Prakashika*, *Vaidya Manjari*, *Chikitsa Manjari*, *Chikitsa Nool*, *Sannipaththa Chikitsa*, *Netrarogha Chikitsa* were also written in medieval period.⁴⁵ These texts were expensively popular in Kerala Ayurvedic tradition despite having no takers outside the region. *Chikitsa Manjari* is also known as *Valiya Manjari*, is still quite popular among the Ayurvedic practitioners of the region. Though the author is still in question, many scholars believe a *Namboothiri* from Perinchellor to be the author of the same.⁴⁶ He is believed to have lived in the seventeenth century. Texts such as *Ashtangahrudayam* (Sanskrit), *Susrutasamhita* (Sanskrit), *Charakasamhita* (Sanskrit), *Ashtangasamgraham* (Sanskrit), *Kasyapasamhita*, (Sanskrit), *Sarngdarasamhita* (Sanskrit), *Baishajyaratnavali* (Sanskrit), *Chakradattam* (Sanskrit), *Sahasrayogam* (Malayalam), *Jotsnika* (Malayalam), *Sarvarokachikitsaratnam* (Malayalam), *Yogamrutam* (Malayalam), *Yogaratnapradeepika*

⁴³P.S.Vaidyar, *Chikitsa Samgraham*, Mathrubhumi, 1991, 172-183

⁴⁴ *Kokasandesham*, Sloka 13-20; Sandesha Kavyas referred to Alathur Tharavadu.

⁴⁵ Ibid

⁴⁶ N.V.K Varier, op.cit, p.495

(Malayalam), *Asavarishtamanjari* (Malayalam) were also used by the medical practitioners of Malabar.⁴⁷

This period also witnessed the emergence of many texts dealing with exclusive health problems of man and animals. Some of these texts were *Narayaneeyam*, *Uddhisham*, *Ulpalam*, *Haramekhlam*, *Lakshanamritham*, *Ashtanga Hridayam*, *Kalavanjanam*, *Pakshi Prayoga Saram*, *Manthrasaram*, *Yanthra Saram*, *Huline Kalpam*, *Kakshi Kalpam*, *Yakshi Kalpam*, *Swayam Vara Kalpam*, *Thripura Kalpam*, *Durgga Puranam*, *Halaswa Puranam*, *Garuda Puranam*, *Dakshina Murthi Samhitha*, *Vamana Puranam*, *Uddhisha Tanthram*, *Uddhamara Thanthram*, *Shankara Samhitha*, *Lalitha Rahasyam*, *Thanthra Samuchayam* and others.⁴⁸ These texts were dealing with toxics, children, birds, and magico-religious treatments. They also deal with job, friend and foes, theft, rise and downfall of individuals, omens and so on. Some of the medieval and later medieval texts still in circulation and widely practiced are “*yogamritham*”, “*yogasaram*”, “*manjari*” and “*Sarvarogha Chikitsa Manjari*”.⁴⁹ Most important of these is *Mahasaram*, a later compilation of the medieval medical knowledge from thirty three already existant texts on the subjects.⁵⁰

A deeper exploration finds out that indigenous and vernacular texts were more popular among the non-Brahmin medical practitioners during the period under consideration. Due to the mighty and licentious caste rules, it was impossible for caste such as *Ezhava* to attain proper training in the Sanskrit medical knowledge through formal ways. Formal education and trainings during this period were generally associated with temples and *salai*, where lower caste people denied entry till the twentieth century. In a socio-cultural situation where social relations were founded on the principle of ritual hygiene, lower caste,

⁴⁷Unnikrishnan, op.cit, p.14

⁴⁸Ibid, p.13

⁴⁹Mahasaram, (compilation of 33 medieval texts by an unknown person in the beginning of 1800), M.K.Vaidyar, (ed), Government Oriental Manuscript Library, Madras, 1951

⁵⁰ Ibid, p.13

untouchables and other religious people could not break into the centers of higher learning which were generally attached with temple complexes and family institutions like *Illams* and *Kovilakams*.⁵¹

Being untouchable and unapproachable, the low caste population could not really acquire formal training in medicine. However, they were able to acquire this from Buddhist educational institutions till twelfth Century.⁵² Vedic learning institutions called *calai/salai* were attached to these temples. One of the *sandehsa kavyas* of the fourteenth century explains the composition of the students who were also taking courses in these *Salais*.⁵³ Medieval rulers such as Cheras and Cholas took great pride in associating and patronizing these *Salais* such as *Kalanthur Salai* for being gifted with legitimating title “*kalanthur salaiyil kalamarutha*”.⁵⁴ These students, who were called *cattas* were expected to study a wide varieties of subjects from *bahattas* (scholar Brahmins) in Vedas including grammar, philosophy and probably medicine.⁵⁵ With strong patronage from the royal authorities, Brahmins could dominate the entire formal education scenes of the Malabar region in Kerala.⁵⁶ Therefore, the period under study, which is called the “age of nambudiris” as Elamkulam Kunjan Pillai suggests, did not offer formal education in the medicines for people in lower hierarchy and other creeds.⁵⁷ It was only by the late sixteenth century that the Sanskrit literature trickled down from Brahmins to Sudra groups such as Nair and

⁵¹Ibn Battuta(1346), *Kitabu-ur-Rahla*, (trans&ed) by William Boultong Kegan Paul, Trench, Trubner & Co., Ltd., New York : E. P. Dutton & Co;p.231

⁵²M.V.Vishnu Nambutiri, “Malayarude Chiktsa Parampariyam” in Dr.Hafeel (ed), *Natarivukal: Natuvaidym*, DC Books, Kottayam, 2007.p.98

⁵³*Ananthapuravarnanam*, Travencore University Language Publication, No.81,Trivandrum, 1953, lines-108;Hartmut Scharfe, op.cit, p.175

⁵⁴*Ananthapuravarnanam*,op.cit, p.44,lines-107

⁵⁵M.G.S.Narayanan, *Aspects of Aryanisation in Kerala*, Trivandrum, 1973.p.23; *Ananthapuravarnanam*, op.cit, p.59,lines-139

⁵⁶Kesavan Veluthat, *The Early Medieval in South India*, OUP, New Delhi, 2009 the early medieval in south india, pp.136-137

⁵⁷M. T. Narayanan,op.cit, p.48

subsequently to *Tiyyas* alongwith the development of *kilippattu* form of Malayalam literature, a deviation from highly Sanskritised Manipravala *Sandesha Kavyas*.⁵⁸

However, though Nambutiris “monopolized much of the land and virtually controlled the law courts, centers of learning”⁵⁹ they could not hold the proliferation of the practical aspects of learning due to the inherent weakness of the system in itself.⁶⁰ Also, the growing number of low caste population and their social presence demanded more of medical practitioners, who could see, touch and cure diseases among the non-privileged and socially excluded groups in Medieval Kerala. Therefore, *Tiyya/Ezhava* caste practitioners, who generally did not belong to the traditional family of practitioners,⁶¹ mastered the techniques of treatments and intricacies of medicine for their proximity with other dominant castes. This was also happened out of necessity on the part of dominant practitioners who were not permitted in the wildness for gathering medicines. At the same time some the traditional families from the lesser privileged groups could carry on the earlier Buddhist tradition of medicine continued to flourish in the region in 16th century.⁶²

Constant association with prominent physicians and staying with them as their helpers and assistants at close proximity gave the lower castes greater understanding about scientific as well as metaphysical concept of therapies. They could access the prescription handed over to them in order to collect medicines and get the preparation done with ease because they

⁵⁸Kathleen Gough, “Literacy in Kerala,” in Jack Goody (ed), *Literacy in Traditional Societies*, CUP, UK, 1968, p.134

⁵⁹Ibid,p.142

⁶⁰Walter Hamilton, A Geographical, Statistical, and Historical Description of Hindostan and the Adjacent Countries, 1820, p.296 he says that “These Namburies (alvangeri Tamburacul) will neither eat or drink with the brahmins of other countries.”

⁶¹“They are traditionally toddy tapers who hierarchically standing below Nairs in Malabar. They brew alcohol from extracts of the coconut trees” Makhdum, op.cit, 59

⁶²Many Ezhavas educated in Sanskrit and later in Malyalam, astrology and Ayurveda without enjoying any social higher status like the Nairs and the Nambutiris. And for them Sanskrit and Ayurveda learning was the legacy of Buddhism not the *matham* oriented formal learning from 12th century. M. S. A. Rao, *Social Movements and Social Transformation: A Study of Two Backward Classes Movements in India*, 1987, 65-70

were the gardeners and menial workers in the estates and also because of their hereditary attachment with the Nair families.⁶³ Physicians of these sorts made valuable contributions in the later period as well by compiling the time tested validity of many medicines and their applications.⁶⁴

The tradition of low caste medical concepts and healing practices in medieval Kerala was also connected with sacred groves or *Kavus*. Kavus represented the social and intellectual public space of low born people in Malabar where different non-elitist ritual performances like *Teyyam* and *Poorakkali* were performed by the same social groups.⁶⁵ Kavus and related deities became part of the health and life of people of Kerala between fourteenth and sixteenth centuries.⁶⁶ *Theyyam*, after the establishment of the Nambutiri-Nair dominance in Malabar, became the visible expression of the low caste group protests, especially of *Tiyyas/Ezhavas*, against established practice of moral and ritual hygiene concepts in the given cultural sphere.⁶⁷ This space of community building was generally owned by the low caste Hindus in the medieval period such as *Maniyani* and *Thiya* communities.

This unique low caste social space facilitated intellectual debates for varied topics like philosophy, logic and medicine and it was called '*marathukali*'.⁶⁸ This was an intellectual debate where various aspects of traditional philosophy such as *tharka*, *vyakarana*, *ayurveda*,

⁶³Kathleen Gough, op.cit, 149

⁶⁴H. Y. Mohan Ram, "On the English edition of Van Rheede's Hortus Malabaricus by K. S. Manilal (2003)," *Current Science*, Vol. 89, No. 10, 25 November 2005, p.1667

⁶⁵ Wayne Ashley, op.cit, p.101; Vishnu Namboothiri, *Naatoti Vijnaaneeyam*, D C Books, Kottayam, 2007, 109-110

⁶⁶*Unnuneeli Sandesham*, Sloka,-Poorvam-114

⁶⁷J.R.Freeman, "Gods, Groves, and the Culture of Nature in Kerala", *Modern Asian Studies*, Vol-33, No-2, May, 1999. p.285

⁶⁸Sarat Chandra Roy, *Man in India*: Vol.82, 2002" In connection with the festival 'Marathukali', cultural activities and meeting of scholars, etc., are organised to make the festival more attractive and popular. In majority of the sacred groves, special functions are arranged during onam and vishu".p.332; A. Sreedhara Menon, *Cultural Heritage of Kerala: An Introduction*, East West Publications, 1978, p.75

jyothisham, niruktham, vaiseshikam, yogam etc... were discussed in Malayalam under the leadership of caste groups whose leaders were called Tharayil Karanavar.⁶⁹

Theyyams, the ritual dance of the lower caste, derived during the medieval time, are live records of the concerned communities: past, constituencies and healing.⁷⁰ This tradition induced in to the common people a strong feeling for their vegetation and instilled that with different aspects of sacred bodies and divinity.⁷¹ Destroying the vegetation was considered as disturbing the spirits of the dead in the trees who in turn could unleash havoc of diseases over the region.⁷² They also believed in *Yakshis* who resided in trees, cutting down of which could lead to infesting pregnant women to feed on their foetus and kill the baby.⁷³ Medieval traditional medicines were closely tied with religion with worship of the godlings in sorcery.⁷⁴ From ancient times, the forest has been connected to the sources of powerful magical potions and also connected to sorcery and black magic.⁷⁵

There were also *Theyyams* of untouchables castes such as *pulaya* who were the patrons of some exclusive *kavus* or grove for their benefit in terms of education and socialization.⁷⁶ “Low caste masters of jungle pharmacopoeia (were) seen as trafficking in the noxious supernatural beings powers and substance of forest which sometimes led them being

⁶⁹P.Bhaskaranuni, *Pathompatham Nootandile Keralam*, Kerala Sahitya Akademi, Trissur, 2000, p.363; Unnikrishanan, op.cit, p.12

⁷⁰Rich Freeman, “The Teyyam Tradition of Kerala”, in Gavin Flood, *The Blackwell Companion to Hinduism*, Blackwell, 2008, p.310

⁷¹William Dalrymple, “The Dancer of Kannur” in *Nine Lives: In Search of the Sacred in Modern India*, Bloomsbury Publishing, London, 2009

⁷²Kathleen Gough, “Cults of the Dead Among the Nayars”, *The Journal of American Folklore*, Vol.71, No.281, Traditional India, Structure and Change, July-Sept., 1958, pp. 446-478

⁷³M.V.Vishnu Nambootiri, *Mantrikavidyayum Mantravadappattukalum*, Kottayam, 1979, p.22

⁷⁴S N Kothare and Sanjay A Paian, *Introduction to the History of Medicine*, pp.12-16; Michael Pearson, “Hindu Medical Practice in Sixteenth-Century Western India: Evidence from the Portuguese Records,” *Portuguese Studies*, XVII, 2001, pp. 100-13

⁷⁵Freeman, op.cit, p,272

⁷⁶J. J. Pallath, *Theyyam: An Analytical Study of the Folk Culture, Wisdom, and Personality*, Indian Social Institute, 1995, pp.60-65.

suspected accused and executed for practicing sorcery. If they hunted, booty was to be presented to the concerned local deity to ward off her/his wrath.⁷⁷

Ayurveda witnessed a drastic spreading that cut across different territories along with new religious ideas from eighth century onwards.⁷⁸ Arab merchants who became part and parcel of Malabar's cultural geography had, by this time⁷⁹ collected Ayurvedic herbs and medicines from the coastal areas and *theruvus* of Malabar to export to many European countries.⁸⁰ Pepper and cardamom from Malabar was the major medical ingredient that showed a prominent presence in Spain and Germany in the fifteenth Century.⁸¹

However it was the Brahmins who actually controlled the classical traditions of the healings. *Nambootiris* appropriated *Vaidya Sashstram* or medicine from Buddhists, the way they appropriated other streams of knowledge as well.⁸² After the decline of the Buddhism in Kerala, this was propagated and assimilated by the Brahmins who also appropriated all learning centers of Buddhists attached with their *pallis* or monastery.⁸³ By this time, Buddhist believers were classified as polluted and degraded community.⁸⁴ As long as the polity, statecraft and ecclesiastical functioning and its endowment were traditionally inseparable in medieval Malabar,⁸⁵ it was not possible to break the dominance of the Brahmin community.⁸⁶

⁷⁷M.V.Vishnu Namboothiri, 1979, op.cit, pp.41-48

⁷⁸S.N.Sen, "Influence of Indian Science on other Culture Areas", *Indian Association for the Cultivation of Science*, 32, Vol.5, No.2, p.335

⁷⁹Richard M. Eaton, *Essays On Islam And Indian History*, Oxford, 2000, p, 176. He reminds us that Calicut was the only real non European city mentioned by Thomas More in his book, *Utopia*, published in 1517, in which he says 'this (Calicut) was the 15th century India's busiest port.

⁸⁰S.K.Misra, B.R Bhatia, P.S.N.Bhat and R.B Dwivedi, "Idea of Integration as a Process of Evolution of Indian System of Medicine in the Medieval Period", *Indian Journal History of Science*, 16 (1) 36-40, May, 1981.

⁸¹Jean Andrews, *Peppers: the Domesticated Capsicums*, University of Texas Press, US, 1995 p.5

⁸²P.K.Gopalakrishnan, op.cit, p. 320

⁸³Kenneth R. Hall, *Trade and Statecraft in the Ages of Colas*, Abhinava Publications, New Delhi, 1980; P. C. Alexander, *Buddhism in Kerala*, Annamalai University, 1949, pp.168-168, pp.25-26,

⁸⁴Gopalakrishnan, Ibid, p. 284

⁸⁵Barbosa, op.cit, p.104

⁸⁶Genevieve Lemercinier, *Religion And Ideology in Kerala*, D.K. Agencies, New Delhi, 1984, pp.132-

From the eighth century onwards, Kerala temples attained the status of a social centre, determining social stratification in the locality and supra-local connections.⁸⁷ It was through temple festivals and related rituals that the Brahmans and Nairs enforced political and ritual superiority over cultivators and pastoralists. Subsequently, Brahmin ideas of the world-order and divinity seeped into the very different religious landscape of Malabar which had strong presence of male and female divinities who specialized in the different phenomenon of the nature. These divine beings were considered as protectors from suffering, such as illness or natural disasters, and as 'criminal' gods of destruction and terror.⁸⁸

Nairs actual military power translated into actual ritual prestige and authority with the strong association with Nambutiris.⁸⁹ Temples, being repositories of power and plenitude, also became holy sites where the invisible and visible worlds took account of each other. This military-religious nexus and political association were instrumental for the domination of warrior-ecclesiastical alliance and their legitimization for the expansion and their claim to new territories and conquests. These conquests and angularities snatched all the centers of medical and other subject learning centers from the Buddhist and Jainist believers. In the following centuries, local elites and rulers wanted to incorporate as many as 'little kingdoms' and their gods and goddesses of domination in the dominion in order to enhance the political and sacred landscape and acquire immunity from the health issues from their anger.⁹⁰

State did not generally control the activities of the medical practitioners nor regulated it in Malabar. In the meanwhile, north India was undergoing changes by new Muslim rulers taking great initiatives to hospitals and employing different kinds of physicians in political

134; T. K. Krishna Menon, *Progress Of Cochin*, Ernakulam, 1932, p. 130

⁸⁷M.G.S. Narayanan, op.cit, p..3

⁸⁸V Ines G. Zupanov, *Disputed Mission: Jesuit Experiments and Brahmanical Knowledge in Seventeenth-Century India*, OUP, New Delhi, 1999, pp.19-20

⁸⁹Margret Frenz, *From Contact to Conquest: Transition to British Rule In Malabar, 1790-1805*, OUP, New Delhi, 2003, p.14

⁹⁰V Ines G. Zupanov, op.cit, p.20

establishments.⁹¹ Later stage, in north India we see the direct patronage by the king to write medical treatise such as *Madanul Shifa – Sikandarshahi (The Mine of Medicine of King Sikandar)*, by Miyan Bhowa, who started in fifteenth century.⁹² Lack of a centralized state in Malabar and states with fluid boundaries in Kerala with many regional kingdoms possibly could not have controlled or monitored the activities of medical practitioners.⁹³ This lack of monitoring/regulating agencies have facilitated the widespread emergence of quacks and charlatans.⁹⁴

Classical Ayurveda in medieval Malabar predominantly practiced by certain families of practitioners collectively called *Ashtavaidyans*. They were Brahmins by caste and specialized in the eight branches of Ayurvedam.⁹⁵ They were not called *Ashtavaidyans* because they were eight in numbers as Edgar Thurston and some other historians describe them.⁹⁶ Original number of Ashtavadyans were eighteen. They are now reduced to handful few such as *Pulamanthole, Alyathiyur, Kuttanchery, Thikkadu, Elathattu, chirattamon, Vayaskara, Vellode, Mezhathur*. They were by tradition entrusted by Parasurama to ensure medical care for the Brahmin villages he created in Malabar.⁹⁷ These families had very cordial relation with the local elites and rulers such as Kavalappara in Malappuram. A close

⁹¹ A.L.Basham, “The Practice of Medicine in Ancient and Medieval India” in Charles M. Leslie (ed) *Asian Medical Systems: A Comparative Study*, University of California Press, California, 1976, pp. “hospitals were established by both rulers and noblemen from the beginning of the Muslim rule.” Ibid, p.40

⁹² Suresh Chandra Ghosh, *History of Education in Medieval India, 1192 A.D.-1757 A.D*, Originals, 2001, p.46.

⁹³ A. P. Ibrahim Kunju, *Studies in Medieval Kerala History*, Kerala Historical Society, TVM, 1975, 40-45

⁹⁴ Gilbert Slater, *Some South Indian Villages*, OUP, 1918, p..159; Edgar Thurston, *Castes and Tribes of Southern India*, Vol.4, Government Press, 1909, p.501

⁹⁵ N.V.K.Varier, “Ayurveda in Kerala”, *Souvenir: Indian History Congress*, Indian History Congress. Session - 1976, Calicut University, p.64

⁹⁶ Edgar Thurston, *Castes and Tribes of Southern India*, Vol.1, p.166; R. Leela Devi, *History of Kerala*, Vidyarthi Mithram Press & Book Depot, 1986

⁹⁷ Amaresh Datta, *The Encyclopaedia Of Indian Literature* (Volume One (A To Devo), Vol.1, p.312

observation shows us that they were either settled across the medieval space trade routes or in the vicinity of the city otherwise in the vicinity of the royal power.⁹⁸

Every Brahman settlement in medieval period had its own physician from any of these Ashtavadya families. *Keralolpatti* hints keeping Brahmin villages with people who were learned persons in *Vedas*, *Siddhanta* and *Shastra*.⁹⁹ These *vaidyans* had to keep good health of the Brahmins who were to lead the social life in the medieval Malabar. They dealt with *Virechanam* (purging), *Vasti* (for Vata dominated patients), *Sirovasti* (Vasti for head), *Snanam* (Bath) and so on.¹⁰⁰ Therefore, these professional groups of practitioners were called *Poornnavaidyans* (Perfect physicians), a term which brought enormous visibility and reach for them.¹⁰¹ Among eighteen *Ashtangavaidyans* in Kerala, Mezhatthur family occupies a significant position for having been granted the entitlement of *shalavaidyar*. This title ensured the chief physician in the family to get the ritual right to be present in the *Yagnasalas* or sacrificial hall of the kings. Local gentry respected this family physicians for the virtue of being related to the progeny of *Vararuchi*, the great Brahmin saint and priest.¹⁰² Hence Mezhatthur family established themselves as one of the significant *ashtavadyans* who could cause immense damage if they felt such. They were consulted by all the kings and lords in the medieval times as the only Vaidyans who held the power to sit around the *Yagnasala* during its course. They were to take care of the health of *Yagnapurushan* and the other Brahmins

⁹⁸K. K. N. Kurup, *Modern Kerala: Studies in Social and Agrarian Relations*, Mittal Publications, 1988, p.13

⁹⁹William Logan, *Malabar Manual*, AES, New Delhi, 1951, p.143, Velayudhan Panikkassery, *Keralolpathi*, Current Books, Kottayam, 2008, p.31. Lord Parashurama kept physicians in all 64 Brahmin villages in north Malabar.

¹⁰⁰P.U.K.Warrier, *Chikitsa Sangraham*, Arya Vaidya Sala, Kottakkal, 1991, pp.169-181

¹⁰¹N.V.Krishnan Kutty Varier, *Ayurvedacharitram*, Aryavadya Sala, Kottakkal, 2002, pp.488-489

¹⁰²K.K.N.Kuruppu, op.cit, p.13; V. T. Induchudan, *The Golden Tower: A Historical Study of the Tirukkulasekharapuram and other temples*, Cochin Devaswom Board, 1971, p.154. the legend of Vararuchi can not be substantiated with documentary evidences but existence of a prominent priest called Vararuchi is beyond doubt. Horace Hayman Wilson, *Works of the Late Horace Hayman Wilson*, [ed. by E.R. Rost], London, Trubner & Co, London, 1865, pp.175-180 ;

who executed *pujas* and performed related tasks. Another important difference with this family is that their deity is Dakshina Murthy while other *Ashtangavaidyans* keep Danwanthary as theirs.¹⁰³

Strict endogamy system prevailed among the *Ashtavadya* families and lack of political patronage from late fifteenth century caused disappearance of most of them, of which very few mentioned earlier remain, from the cultural canvas of Kerala in medieval times.¹⁰⁴ Only the eldest son in the family had to by rule, practice medicine. Whenever the first born baby happened to be female, it became difficult on the part of the concerned family to carry forward the tradition as they could not marry from other castes or the same caste inferior to them.¹⁰⁵ Children from *sambantham* were not supposed to take up the sacred tradition of the families who continued with Makkathaayam (inheritance in father's line) in a patriarchal and patrilocal social system of the physicians.¹⁰⁶ With strict custom of only eldest son getting married and strict celibacy of unmarried women among the community for the reasons for purity where younger brothers remained unmarried, the tradition of practice faced real problem of continuation.¹⁰⁷ Along with it, different taboos, such as dissecting animals reduced the growth potential of these medical practitioners who were otherwise acquainted with the nature of plants and "their different properties" for the reasons of religion and

¹⁰³Vaidyamadam Cheriya Narayanan Namboothiri, *Chikitsanubhavam*, 2004, p.xii

¹⁰⁴Ghanshyam Shah, *Caste and Democratic Politics in India*, Permanent Black, New Delhi, 2003,p.41; Interview with Mezathur Vaidyamathaom Nambutiri, on 30/7/2009

¹⁰⁵Ibid,on 30/7/2009

¹⁰⁶Ibid, on 31/7/2009; *Ayurveda Charitram*,op.cit, p.487; Monika Böck, Aparna Rao, *Culture, Creation, and Procreation: Concepts of Kinship in South Asian Practice*, Berghahn Books, 2000, p.187

¹⁰⁷ Marion Den Uyl, *Kingship and Gender Identity: Some Notes on Marumakkathayam in Kerala*, Berghahn Books, 2000,p.187; "in the nambudiri patrilineal extended family only the eldest son was permitted to marry (with vedic rites) within his caste and beget children for his family.younger sons had recognized liaisons with women of matrilineal castes whose children belonged to their mother's caste and lineage by matrilineal decent. These hypergamous unions were were redarded by Brahmins as socially acceptable concubinage for the union was not initiated with vedic rites, the children were not legitimized as Brahmins and neither the women nor her child was accorded the right of kin."Kathleen Gough, op.cit, p.320

hygiene observes Fra Bartolomeo in 18th century.¹⁰⁸ Yet, medieval Malabar physicians were in general acquired greater proficiency and efficiency in simple treatments with plants unlike their European counterparts.¹⁰⁹

Marginalized into the periphery of social process, medieval communities such as *Pulaya, Malayan, Velan, Vannan, Pulluvan, Kuravan, Valluvan* and *Chakliyan* as mentioned by Barbosa¹¹⁰ developed their own traditional health practices and medicine. This development was a forced social action as the upper caste and lower *Ezhava* physicians refused to attend to the patients among them as untouchability and unseeability were the order of the day.¹¹¹ Since the accessibility of the knowledge in Sanskrit or even *Manipravala* texts and later developed Malayalm texts, they depended much on the oral tradition and resorted to religio-magical tradition which was considered ‘devilish’ by Varthema.¹¹² “when a merchant, that is, a pagan is sick and in great danger, the above mentioned instruments and aforesaid men dressed like devils go to visit the sick men; and they go at two or three O’clock in the morning and the said men so dressed carry fire in their mouths; and in each of their hands on their feet they wear two crutches of wood, which are one pace (passo) high, and in this manner they go shouting and sounding the instruments, so that truly if the person were not ill he would fall to the ground from terror at seeing this ugly beast.”¹¹³

Their kind of believes in the ‘spirits’ and magical healing power of divinities existed extensively in the medieval region including upper castes who believed in *velichappadu*

¹⁰⁸Fra Bartolomeo, op.cit, pp.412-413

¹⁰⁹ibid

¹¹⁰Barbosa, 1989, pp.65-71

¹¹¹Koramangalam Narayanan Nambothiri, “Natu Vaidyathile Vannan Paramparyam”, pp.80-89; M.V.Vishnu Nambutiri, “Malayarude Chikitsa Paramparyam”,pp.98-103 in Dr.Hafeel (ed), *Natarivukal: Natuvaidym*, DC Books, Kotayam, 2007.

¹¹²Varthema,p. 167;

¹¹³Ibid,p. 168

(oracles) and *sathanas* (demons).¹¹⁴ They were not allowed to enter the centers of learning and the cities in usual time as their very presence polluted the entire social order of the medieval period. Hence, they were secluded. With the complete isolation from the outside world and the total negation of the socio-political patronage, they had to develop some model of self sustenance for themselves, lest, an epidemic or contagious diseases broke out. They developed their own healing therapies keeping themselves based in the negotiating space of sacred groves or *kavus* of which Duarte Barbosa called *Pagoda*; shrines of *Bagavathi*. Most of these were abode of disease mothers such as *Aryakkara Bhagavati*.¹¹⁵ People avoided visiting houses in which they believed the possession of *Durdevathas* through *Theyvammattu* which made men sick and imbalanced, was existing.¹¹⁶ When diseases such as convulsions and spasms affect women, they resorted to the God and used to break into dance or *Thullal* in order to get the instant cure.¹¹⁷

Some of these communities were specialists in certain areas of the health care, such as *Vannan* community in pediatrics, their women as obstetricians, *Malayan* as professional sorcerers.¹¹⁸ *Velan* as expert washermen who kept the high caste people clean and hygienic for being the community of washermen,¹¹⁹ and *Pulluvar* who were attributed to have the

¹¹⁴Edgar Thurston, *Omens and Superstitions of Southern India*, CIE, 1912, 310;Varthema,op.cit, 170

¹¹⁵Barbosa,op.cit, p.57; K. K. N. Kurup, *Aryan and Dravidian Elements in Malabar Folklore: A Case Study of Ramavilliam Kalakam*,1977.p.19 ;

¹¹⁶*Ananthapuravarnanam*,op.cit, p.39,lines-94; Medieval Arab world had established mental asylums for the patients who becomes violent and harmful. Insane people were imprisoned at “Darul Maraphtan” in which they were locked up all those insane persons who are met with particularly during hot season, everyone of whom is secured by iron chains until his reason returns when he is allowed to returned to his home. For this purpose they are regularly examined once in a month by the kings officers appointed for that purpose and when they are found to be possessed of reason they are immediately released.” Rabbi Benjamin, op.cit,p.99

¹¹⁷Fra Bartholomeo, op.cit, pp.405-406

¹¹⁸Gavin D. Flood, *An Introduction to Hinduism* CUP, UK, 1996,p.195

¹¹⁹Kumar Suresh Singh, *People of India: Vol.27, Part 3, Anthropological Survey of India* - 2002,p.1492

power against snake bites with *Pambin Thullal/Pulluvan Thullal* (snake Dance).¹²⁰ They mastered in the treatment of snake poison as they had very close living relation with medieval forests in Malabar which was very famous for its poisonous snakes “as large as a great pig and which has a head much larger than that of a pig” for which king of Calicut built houses.¹²¹

Medieval medical practice was marked by its importance with specialties. Some practitioners mastered in some sections of the treatments, depending upon the medical/familial lineage they belonged to; texts they mastered; and the locality and environment they accustomed. Specialist fields such as *hridroga chikitsa* (cardiac), *athisara chikitsa* (cholera), epilepsy (*grahani*), *arsharoga chikitsa* (piles), were practiced by *ahtavaidya* families.¹²² *Vishachikitsa* (poison treatment) was one of the main branches of Ayurveda tradition in Malabar.¹²³ Topographical and climatological specialty of the region facilitated umpteen numbers of wild and poisonous creatures in the human inhabitants and their attack required immediate medical attention.¹²⁴

Low castes like *Malayans* and *Kuravas* also specialized in treating snake bites. They acquired the specialization through the constant social association with Buddhist *bikshus* in Malabar.¹²⁵ Traditional *vaidyans* had a well developed sense of understanding the minute details of each poisonous animal with adequate methods of treating them.¹²⁶ Poisons and poisonous animals were classified as *vyagravisha* (tiger poison), *nakravisha* (crocodile poison), *Vrishika* (scorpion), *Nakala* (mongoose), *Vaanaravisha* (monkey poison),

¹²⁰Edgar Thurston, *Castes and Tribes of Southern India*, op.cit, p.228

¹²¹Unnikrishanan, op.cit.p.14; T.K.G. Panikkar, *Malabar and Its Folk*, 1995, p.148; Varthema, Winter Jones, op.cit, p.173

¹²²*Chikitsa Manjari*, op.cit, pp.20.25

¹²³*Mahasaram*, pp.5-24

¹²⁴Gabriel Dellon, (17th Century), *A Voyages to the East Indies*, Black Swan, Printed at London, 1698,p.61-90

¹²⁵V.M.Kuttikrishna Menon, “Keraleeya Visha Chikitsa”, in Dr.Hafeel (ed) *Natarivukal: Natuvaidym*, DC Books, Kotayam, 2007.p.44

¹²⁶*Mahasaram*, op.cit, p.12-15

sarppavisha (snake poison) and so on.¹²⁷ They strictly followed the methodological attitude of *ashtangahridaya* and developed well researched medicines along with magical spells and puja as in the case of any society in medieval period.¹²⁸ They also consulted texts like *Narayaneeyam*, *Kalavanjanam*, *Lakshanamritham* etc... in order to supplement the findings of the main text. *Ashtavaidyas* of Mezathur family had been specialists in the *Vishachikitsa* and interestingly they lived in medieval times nearby a major forest on the Western Ghats which was full of wild animals and poisonous snakes as reported by Varthema.¹²⁹ *Vishachikitsa* classify poisons of animal and plant origin as *Jamgama Visham* and *Sthavara Visham* as sub categories. However, in any traditional poison treatments give emphasis on snake poison.¹³⁰ This was a well developed area in the healing tradition of the region and they treated it with herbals such as roots of *Alpam* (*apama siliquosa leamk*) became very important.¹³¹ A proverb in Malabar says “As soon as the *alpam* roots enter the body, the poison leaves it.”¹³²

¹²⁷Ibid, pp.18-24

¹²⁸Amir Muzur, Ante Skrobonja, Vlasta Rotschild, Ante Skrobonja Jr, “Saints-protectors from Snake Bite: A Short Overview and a Tentative Analysis”, *Journal of Religion and Health*, Vol. 44, No.1, 2005, pp. 31-38

¹²⁹Varthema, op.cit.pp.173-174; P.Baskaranunni, op.cit, p.156

¹³⁰There were two distinct streams in the *Vishachikitsa*; *Visha Vaidyam* and *Visha Vidya*. The first one was natural and the latter was supernatural. Until the first half of the 20th century it was the supernatural stream that had the prominent presence in Malabar. *Upakaram*,op.cit, p.,245. Interestingly in the category of *Visha Vidya*, traditional *Vishavaidyans* also attributed castes to the poisonous snakes. Snake’s caste was identified by the description of the messenger of the snake bite; if he would speak to the Vaidyar in the front the snake was considered the Brahmin; if the messenger happens to speak to him from the south corner, the snake was to be Kshatriya; if he was talking to him in the north the snake was taken as Vaishya; if the messenger was talking to him from behind it was identified as Sudra. Santhosh,P.S, *Paramparya Visha Chikitsa*, in Dr.Hafeel (ed), Natarivukal: Natuvaidym, DC Books, Kottayam, 2007, p.27. One of the main prerequisites to be conferred as a *Vishavaidyans* was his ability to identify the caste of the snakes. *Vishavidya* was held with mantra and other sacred ingredients.

¹³¹H. Panda, *Medicinal Plants Cultivation & Their Uses*, Asia Pacific Business Press, Delhi, 2000,p.500

¹³²Bartolomeo, op.cit.p.416.he reports the proverb as “*Alpam Irangatte Visham Porette* (let the alpam get in to let the poison get out).”ibid

Mappila community sought help against poison from the Quranic/Hadith textual traditions as well.¹³³ The author of *Upakaram*, an *Arabic-malayalam* compilation of medieval healing practices of Muslims in Malabar suggests that certain verses of Quran could act like pesticides and insecticides against snakes, rodents, ants, beetles and other flies and insects.¹³⁴ These verses seemed to have had the power of preventing the attack on the crops, if the method was administered properly.¹³⁵ Snakes were prevented from entering home by smoking the mixture of *navasaram*, *kadukka*, *gandhakam*, *corriandar leaves*, *egg shells*.¹³⁶ It could also be done by flaming *kayam*, jasmine leaves, and ginger in proper proportion.¹³⁷

One of the major traditions established during these centuries was *Kalari*, generally understood as a martial arts form in Kerala. Persian traveler Abdu- Rasack is considered to be the first foreigner who noticed the prevalent custom of *Kalari* in Kerala.¹³⁸ He reported that ‘These devils were all black and naked, having only a piece of cloth tied round their middle, and holding in one hand a shining javelin, and in the other a buckler of bullocks hide.’¹³⁹ Subsequently Barbosa who visited Kerala during the period under study referred *kalari* as a unique martial art and treatment tradition.¹⁴⁰

“In general, when these *nairs* are seven years of age they are immediately sent to school to learn all manner of feats of agility and gymnastics for the use of their weapons. First, they learn to dance, and then to tumble, and for that purpose they render supple all their limbs from their childhood, so that they can bend them in any

¹³³ *Upakaram*, op.cit, p.123

¹³⁴ *Ibid*, op.cit, p.120

¹³⁵ *Ibid*, p.125

¹³⁶ *Ibid*, pp.123-124

¹³⁷ *Ibid*, p.124

¹³⁸ Abdu Razak, op.cit, p, ixxi

¹³⁹ *Ibid*

¹⁴⁰ Duarte Barbosa, *A Description of the Coast of Africa and Malabar in the Beginning of the Sixteenth Century*, (trans), Henry E. J. Stanley, The Hakluyt Society, London, 1865, p.128

direction. And after they have exercised in this, they teach them to manage the weapons which suit each one most.”¹⁴¹

Kalari practices and associated treatment patterns became very important in a fragile political of the medieval Kerala, where people fought for political power, for keeping a healthy army with proper administrations of medicines and physical exercise.¹⁴² Masters cum physicians who practiced and transmitted this knowledge were known as *Panickers*”.¹⁴³ Strong tradition of *kalari* thus became a medium to realize the human body. It also trained its students in different techniques to prepare for any eventualities and the treatments when any problem occurs to physical body.¹⁴⁴

Initially, this tradition was carried out by the dominant Nairs group to keep them fit and agile for the imminent skirmishes with different Rajas and Lords.¹⁴⁵ Influential families in medieval Malabar had established *Kalari Thara* (Podium of Kalari), which during the course of time became the symbol of power and prestige.¹⁴⁶ Local Rajas and Samutiri of Malabar, between fifteenth and sixteenth centuries, kept many *Kalari Tharas* around their

¹⁴¹ Ibid

¹⁴² T.Sridharan Nair, *Kalaripayattu*, Kannur Printing works, Kannur, 1963,pp.15-20

¹⁴³ Duarte Barbosa,op.cit, p.128 “these are captains in war. Panikkars “when they enlist to live with the king, bind themselves and promise to die for him ; and they do likewise with any other lord from whom they receive pay. This law is observed by some and not by others; but their obligation constrains them to die at the hands of anyone who should kill the king or their lord.”ibid

¹⁴⁴ Apart from the above mentioned travelers, many others also have written about *kalari* practices in Malabar such as Johnston, Verhema, Pairas De Lavel, Lingoston, and many talk about the martial tradition of the region. Donald F Lach, *Asia in the Making of Europe*, Vol-1, Chicago University Press, Chicago, 1965, p.347

¹⁴⁵ Padmanabha Menon, *History of Kerala*, Ernakulam, 1924. However there are some scholars who have seen Kalari tradition as an art form or an acrobatic exercise which influenced many art and dance for of the Malabar region. Kapila Vatsyayanam, *Traditions of Indian folk Dance*, Indian Book Company, New Delhi, 1976; Philipppo Zareli, Kathakali Complex, Abhinav Publications, Delhi, 1985; Vijaya Kumar., *Kalaripayatt The martial Art of Kerala*, Dept.of Public Relations, Government of Kerala.

¹⁴⁶ M. S. A. Rao, *Social Change in Malabar*, Popular Book Depot, 1957,p.173

palaces in order to train and treat the army that had been at war constantly.¹⁴⁷ Samutiri had established his training cum treatment centre in his palace compound at Kotappuram.¹⁴⁸ *Kadathanadu* Rajas, who were the rivalries of the Samuthiris, had number of *Kalaris* in the region of which, the one at Kuttipuram Kotta was very predominant.¹⁴⁹

Most of these practices were controlled and patronized by dominant families and local rulers such as Tacholi family at Kadathanatu and confined to few individuals and communities.¹⁵⁰ However, all these traditions made use of many medicinal plants, which were endemic in the region.¹⁵¹ Mostly, the knowledge-base of this tradition was kept strictly within the family circle but failed to hide from the others eyes for the inherent drawback of the tradition itself.¹⁵² Knowledge, experience and practice were transmitted and transfused gradually, which resulted in the lower caste groups such as *Tiyya* community started practicing the medical and physical tradition of the medieval martial art form.¹⁵³

Marma Vidya, a treatment system strongly associated with the *Kalari* tradition was given a mysterious and divine stature to the people who practiced it.¹⁵⁴ *Kalari Asans* (masters) discovered all the intricacies of the human body and physiology and examined all focal points (*marma*) numbered hundred and seven; 11 *marmas* on each arm and leg, 3 *marmas* on *koshatam*, nine in chest area, fourteen on shoulders, forty seven *marmas* on neck and head.¹⁵⁵ They had understood the number and the basic ideas of the *marmas* from

¹⁴⁷N.M.Namboodiri, *A Study of Place Names in the Calicut District*, Unpublished Ph.D Thesis, Calicut University, 1988

¹⁴⁸Ibid

¹⁴⁹Adoor K. K. Ramachandran Nair, *Kerala State Gazetteer*, Volume 2, Part 2, 1986, pp.286-308

¹⁵⁰Bartolomeo, op.cit, pp.417-422

¹⁵¹K.Vijayakumar, *Kalarippayattu Keralathinte Sakthiyum Soundaryavum*, Department of Cultural Publications, Govt.of Kerala, Thiruvananthapuram, 2000,p.192

¹⁵²Aparna Rao, Monika Böck, op.cit, p.181

¹⁵³Thomas A. Green (ed), *Martial Arts of the World: An encyclopedia. R - Z*, Vol.2, ABC-CLIO, California, 2001, p.176

¹⁵⁴ Phillip B Zarilli, *When Body Becomes All Eyes, Paradigms, Discourses and Practices of Power in Kalarippayattu, A South Indian Martial Art*, OUP, 1998, p.155-156

¹⁵⁵*Mahasaram*, op.cit, p.86

Ashtangahridaya which was still prevalent in the medieval period.¹⁵⁶ Kalari treatments also detailed the location of each *Marma* on every parts of the body which by itself developed in to a new epistemology.¹⁵⁷ There were exclusive treatments for *Marma* related ailments such as the usage of *murivenna*; a mixture of betel leaves and a locally available hedge plant; which emerged from the local demand and medicinal practice.¹⁵⁸ These exclusive treatments were not referred in any of the standard texts prevalent in other parts of India.¹⁵⁹

Kalari tradition found its way to deal with problems like wounds, fractures, blood clotting, ligaments dislocation, immobility and so on.¹⁶⁰ They also entertained people with hepatitis and conjunctivitis; two dismaying diseases of highly contagious nature.¹⁶¹ These treatments were administered with locally available plants and herbs such as *manjal* (turmeric), *puliyila* (tamarind leaves), ginger, pepper, *Kotamalli* (coriander), *veppu* (neem), *ilaneer* (tender coconut) and *shatavari* (asparagus). *Marma* and *nadi* (Nerve System) became the foundations of the *Kalari* treatments which did not depend wholly on the *Ayurvedic* humourol theory.¹⁶² Kalari practitioners in a way ensured instant remedies for general accidents, like the ones that happen in the war situations, which required immediate attention.

Kalari tradition thus became indispensable part of the medieval cultural moorings in the villages and city centers such as Calicut.¹⁶³ *Marmachikilsa* was a gamut of medication

¹⁵⁶ *Mahasaram*, op.cit, p.25

¹⁵⁷ *Ibid*, op.cit, 87

¹⁵⁸ Vijayakumar, 2000, op.cit, p.193

¹⁵⁹ *Mahasaram*, op.cit, pp.36-37; Phillip B Zarilli, "Doing the Exercise: The In-body Transmission of Performance Knowledge in a Traditional Martial Arts", *Asian Theatre Journal*, Vol.1, No.2, Autumn, 1984, pp.191-226

¹⁶⁰ Zarilli, op.cit, pp.162-163

¹⁶¹ T.M.Balakrishnan Vaidyar, "Marmmam, Odivu, Ellu Chiktsa"; Ranjith Kumar P, "Kalarivaidyavum Kamalayum" in Dr.Hafeel (ed), *Natarivukal: Natuvaidym*, DC Books, Kotayam, 2007, p.129&31

¹⁶² *Mahasaram*, op.cit, p.87

¹⁶³ Chelangat Achutha Menon, *Ballads of North Malabar*, Vol-1, (mal), University of Madras, Madras, 1956, p.48; K.S.Mathew, op.cit, pp.53-54; Barbosa, op.cit, p.129

and physiotherapy to treat physical damages occurring during the practice of Kalari.¹⁶⁴ Soldiers and guards who were generally from the lower or Sudra castes were treated in *Kalaris* as they were not able to access the Nambutiri physicians who observed the stringent principles of ritual hygiene. Consequently, most of the untouchable castes also created their tradition of Kalari and related treatments through *Thiyyakkalari*, *Pulayarkalari* and *Kaniyan Kalari*.¹⁶⁵ This shift had been represented in lower caste rituals such as *Teyyam* and *Poorakkali*.¹⁶⁶

All these traditions used different kinds of herbs and oils for straightening out dislocated joints and for loosening damaged tendons and muscles by soft massage. Bone fractures which were very common in a war fed society, were treated with green drugs and herbs.¹⁶⁷ Kalari *Asans* used locally available materials and herbs for treatments such as *Odayar Valli* (*Rhaphidophora*) *Mukkannan Peruku* (*Allophyllus serratus*), *Uppilam* (*Asystasia chelanoides*), *Elluketty* (*Lytsia* sp), *Irachiketty* (*Hydyotis auricularia*) for different prognosis in medieval Malabar treatment tradition.¹⁶⁸ Thus, Kalari treatments represent a unique healing pattern in which patients and treatments became inclusive and decentralized. The inclusivity and outreach of this system was a result of a persistent patronage by the political authorities during the medieval times in Kerala.¹⁶⁹

However, Ayurveda in medieval times also gave equal importance to the divine elements to the curing of most of the diseases.¹⁷⁰ Epilepsy patients were suggested to wear *shivayantra* along with certain *bali karma* at the fall of the dusk.¹⁷¹ Patients were also

¹⁶⁴David Frawley, Avinash Lele, Subhash Ranade (eds), *Ayurveda and Marma Therapy: Energy Points in Yogic Healing*, Lotus Press, Wisconsin, 2009,p.9

¹⁶⁵Vijayakumar,2000,op.cit,p.62

¹⁶⁶Shovana Narayan, *Folk Dance Traditions of India*, Shubhi Publication, 2004,p.36

¹⁶⁷Zarilli,op.cit, p.164

¹⁶⁸Unnikrishnan,op.cit, p.18

¹⁶⁹Vijayakumar, 2000, op.cit,pp.62-64

¹⁷⁰*Mahasaram*,op.cit,p.88

¹⁷¹*Ibid*,p.89

recommended to entertain *yanthra* and *mantra* of *Varaha* incarnation of Vishnu for a steady and faster recovery.¹⁷² This also reflects the methodological approach of the Ayurveda practitioners to entertain both *Shaivate* and *Vaishnavaites* patients as these two sects had had strong presence in Medieval Kerala as reported in *Payyannupattu*.¹⁷³ *Mahasaram* also show that seeking divine intervention was followed by the proper management of the available medicinal herbs with strict administration of the diet.¹⁷⁴ This shows, as R.C. Majumdar points out “it is also concerned with harmonizing secular conduct and spiritual pursuit through a realization of true relationship between the complex of body, mind, soul and the eternal universe”, the holistic attitude of the medicinal practices in the region.¹⁷⁵

Kerala tradition of Ayurveda developed a unique system of child care.¹⁷⁶ Most of the treatments were based on original Sanskrit texts.¹⁷⁷ *Balavaidyam* (child care) stands out of the specialized treatments during the period where premature/death at births is believed to have been very high.¹⁷⁸ Apart from the textual practice, ‘village therapeutic system’ as R.S. Khare called it¹⁷⁹, was also in existence under specialist hands of the lower caste community, *Vannans* who specialized in child care treatments.¹⁸⁰ They were mostly called for the treatments of bronchitis, epilepsy as they treated the patients with many articles like medicated ghee prepared with rare and powerful medicinal plants.¹⁸¹ This community

¹⁷²*Mahasaram*, op.cit, pp.88-89

¹⁷³*Payyannurpattu*, lines-57-63

¹⁷⁴*Ibid*, p.18-20

¹⁷⁵R.C.Majumdar, “medicine” in D.M.Bose, S.N.Sen, B.V.Subbarayappa (eds) *A Concise History of Science in India*, INSA, Delhi, 1971, pp.212-272

¹⁷⁶*Chikitsa Manjari*, op.cit,p.442

¹⁷⁷*Ibid*

¹⁷⁸*Muhyiddin Mala*, op.cit, lines-112

¹⁷⁹R.S.Khare, “Folk Medicine in North Indian Village; Some Further Notes and Observation” in Giriraj Gupta. (ed), *The Social and Cultural Context of Medicine in India*, New delhi, 1987, pp.286-280

¹⁸⁰Koramangalam Narayanan Nambhutiri, “Natuvaidyahile Vannan Paramparyam”, in Dr.Hafeel (ed), *Natarivukal: Natuvaidyam*, DC Books, Kotayam, 2007, pp.80-89.

¹⁸¹*Ibid*,p.82

adopted mantra along with medicine for issues like poison, eyes, small pox and so on.¹⁸² The unique characteristic of this community was that they induced the power of *Manthras* into the treatments in a cultural situation where common people sold their children out of poverty.¹⁸³

Issues related to opium consumption were plenty in the region as is understood in the writings of Bartolomeo.¹⁸⁴ People often consumed opium, mixing it with lemon juice which made them crazy and uncontrolled.¹⁸⁵ However, due to the habit of cleanliness and hygiene, as reported in the last chapter by many foreign scholars and *Sandeshakavyas*, venereal diseases as compared to other issues were less in medieval Malabar.¹⁸⁶ Eating foods for easy digestion, washing the body parts thrice, and adhering to the strict code of socio/moral hygiene reduced the occurrence of the disease among the population.¹⁸⁷ Nevertheless, in port areas, where there was a large surge of commercial activities conducted by different ethnic/cultural groups with negligence of physical hygiene practices, the prevalence of the disease was considerable.¹⁸⁸

Climate of the medieval Malabar caused many dreaded diseases such as *shani*; sort of viral fever.¹⁸⁹ From the beginning of October till the end of December, people generally suffered from cold and fever for the continuous heat wind blown to the land from sea.¹⁹⁰ This brought calamities and death resulted out of continuous pain and vomiting.¹⁹¹ Local tradition

¹⁸²Ibid,p.83

¹⁸³Barbosa,op.cit,p.180

¹⁸⁴Ibid, 407

¹⁸⁵Bartolomeo, op.cit, p.407 “nervous are accustomed in the morning to chew a little opium, which they say strengthens the nerves and promotes digestion. This custom, however, is really highly pernicious; for those who acquire a habit of chewing opium can never renounce it.”

¹⁸⁶Ibid, p.408

¹⁸⁷Ibid, p.408

¹⁸⁸Ibid,p.408

¹⁸⁹Ibid,p.409

¹⁹⁰Ibid,pp.409-410

¹⁹¹Ibid,

of the treatment was to consume *Droga Amara* which was plenty on the coastal region in medieval Kerala.¹⁹² *Veppu* (neem) was another remedy for the persistent fever.¹⁹³

There existed many views on the concept of insanity like “what constituted the “insanity” or “mental illness”.¹⁹⁴ Social attitude and the contexts broadly determine the bracket of “insanity” depending upon the time and space it operates.¹⁹⁵ Like any medieval society, they set the wide spectrum of human behavior and defined boundaries to what they believed to be acceptable or permissible. This judgment or consensus on *unmadam* (mental disorder), reached depending on the degree to which an individual's behavior is disturbed.¹⁹⁶ They classified *unmada* into six different types such as *vathonmadam* (air related disorder), *pittonmadam* (bile related disorder), *kphonmadam* (phlegm related disorder), *aadhiunmadam* (stress related disorder), *sannipathonmadam* (convulsion related disorder) and *vishasambootonmadam* (poison related disorder).¹⁹⁷ Ayurvedic and Islamic practices suggested varieties of herbs to reduce the trauma of being excluded from the accepted social/behavioral boundaries.¹⁹⁸ Nevertheless, hospitals and dispensaries we find in medieval

¹⁹²Ibid

¹⁹³Ibid

¹⁹⁴*Chikitsa Manjari*, op.cit.p.451

¹⁹⁵Ibid,456; “insanity may be defined as any behavior that is judged to be abnormal or extraordinary by a social group at a specific time and place. Within the wide spectrum of human behavior, members of any society set boundaries to what they believe to be acceptable or permissible. This judgment or consensus depends on the degree to which an individual's behavior is disturbed as well as on the attitudes of his or her social group toward those actions”. Michael W. Dols, “Insanity and its treatment in Islamic Society,” *Medical History*, 1987, 31: 1-14.

¹⁹⁶George Rosen, *Madness in Society*, Routledge & Kegan Paul, 1968, London, p. 90; “Thus access to churches was denied to madmen, although ecclesiastical law did not deny them the use of the sacraments. Ibid, p.10, “the expulsion of madmen had become one of a number of ritual exiles.....access to churches was denied to madmen, although ecclesiastical law did not deny them the use of the sacraments.....which interpret madness as the manifestation in man of an obscure and aquatic element, a dark disorder, a moving chaos, the seed and death of all things, which opposes the mind's luminous and adult stability” says Foucault, *Madness and Civilization: A History of Insanity in the Age of Reason*, Routledge, UK, 2002, p.10

¹⁹⁷*Chikitsa Manjari*, op.cit.p.451; *Upakaram*, op.cit.pp.184-186

¹⁹⁸Ibid,452; *Upakaram*, op.cit, p.189

Arabia for the treatment of lunatic did not have its counter parts in medieval Malabar region.¹⁹⁹

Islamic medical practitioners presented a unique way for recovering memory and to strengthen the same.²⁰⁰ A vigorous combination of metaphysics and herbals were suggested for the treatments of the patients.²⁰¹ The mixture of Quranic verses, rain water and honey was suggested for the remedy.²⁰² They also suggested wheat, dried grapes, *saith (olive)* oil, *Iratti madhuram*, sugar, honey and saffron along with some verses of Quran for a faster recovery.²⁰³ Lunatic problems were treated with great amount of locally available herbs such as *Mutthalu*, (Indian penny wort), *keezhar nelli* (phyllanthus niruri), *kadaladi*, (rough chaft) *shatavari*, (asparagus), *chandanam* (sandal), *arinjeerakam*, and so on.²⁰⁴ Interestingly, they were also suggested to take the ash remains of *kafir* (non-muslim) from his crematory and mixing it up with the ash of old clay pot then could it be used on the eyes of the Muslim patients who becomes mad for the possession of *satans* named such as *bishadan* and *samudhan*.²⁰⁵

Medieval Medicine Markets

Trading in the medicinal plants and products was well established in the medieval Malabar, till well up to late nineteenth century.²⁰⁶ People exchanged different herbals such as cardamom, ginger, pepper, turmeric, aloe wood, dry chillies, cloves, bettle nuts, *tutia* (a kind of medicine for eye complaints), *addividigan* roots, *ammekoron* roots (*physalis flexuosa*),

¹⁹⁹Peter E.Pormaan, Emilie Savage-Smith, *Medieval Islamic Medicine*, Georgetown Univerisyt Press, Washinton, 2007, pp.98-100

²⁰⁰*Upakaram*, op.cit, p.63

²⁰¹*Upakaram*, p.61

²⁰²*Upakaram*, op.cit, pp.60-63; *Koka Sandesha* describes honey as *madweevindu* (honey drops) to describe the beautiful women.

²⁰³*Upakaram*, op.cit, Ibid, p.64

²⁰⁴*Ibid*, p.185

²⁰⁵*Ibid*, p.186

²⁰⁶F. M. Hunter, *An Account of the British Settlement of Aden in Arabia*, Franc Cass and company limited, London, 1877, p.97

trilocalapaconna roots, (*convolvulus turpethum*), *kadukarohini* (*helleborus nizer*), arête roots (*cassia fistula*). They also traded in finished medicines such as *saleb* (arab medicinal tuber) with produce from other regions in Europe and Asia.²⁰⁷ Malabar exchanged medicinal plants such as *Sappanam* (sappan wood /red dye wood), *pulenjicca* beans (soap berries), iris roots, garlic, raw wax, different kinds of areca with different commercial groups on its water.²⁰⁸ Ibn Bathutha, traveler in the fourteenth century gives a live picture of the towns and commercial transaction of Malabar which he describes as the country of “Black Pepper.”²⁰⁹

By 15th century, Muslims became a very dominant force in the socio-economic activities of the region and many towns had Muslim leaders to look after the trade, including drugs.²¹⁰ Trading centers in Malabar during this period exchanged herbal commodities to the traders from Middle East and China. This international exchange of commodities was possible for the constant supply ensured by the local merchants from places such as *Abu-Saru* (South Canara), *Fakkannur* (*barkur*), *Mancharur* (Mangalore), *Heeli* (Ezhimala), *Jarfathan* (Karippath), *Badafathan* (Valapatanm), *Dahfathan* (Dharmmadam) *Fanthareena* (Panthalayani) *Kalikuth* (Calicut)²¹¹. With the absolute freedom provided by the political establishment regarding the practice and preaching of the religion as well as the patronage by the successive political authorities on the coast of Malabar, Muslims here could establish a very strong hold in the markets of herbs and medicines.²¹²

Traders from Yeman and Persia exclusively traded in drugs and herbs during the period. Bathuta gives a special place for *Mancharur* (Mangalore) as it was one of the main

²⁰⁷Dutch in Malabar, op.cit, p.219, Ibid.p.122

²⁰⁸Ibid, p.220

²⁰⁹Ibn Batuta, 1829,op.cit, p.166

²¹⁰André Wink, *Al-Hind: The Making of The Indo-Islamic World*, Brill Leiden, Boston, 2004, pp.203-204; Zainuddeen Makhdoom, op.cit, 1999, p.54

²¹¹“In the kingdom there is a great abundance of the of pepper and also ginger, besides cinnamon in plenty and other spices, turbit and coconut”, Marco Polo, *The Travels Of Marco Polo*, (tr) Roland Latham, Penguin Books, England,1958, p. 290

²¹²Adriaan Moens, op.cit,p.198

centres of pepper trade in the region.²¹³ Pepper and Ginger travelled all over Europe and Africa and became an indispensable ingredient even in the medieval European pharmacology.²¹⁴ Bathuta says that traders from Srilanka, China, Maladwip also traded in these commodities across the region. These places were under the direct control of the Samuthiri, whose importance in the trading and the security of the region was reflected in the medieval *Sandesha Kavyas* as well.²¹⁵ Total controlling and monitoring of the trading in the herbal/medicines, in the rban areas, were under the control of Ibrahim Shahbandar who was an Arab Muslim from Bahrain.²¹⁶

Foreign merchants, especially Arabs and Chinese traded in great variety of medicinal ingredients such as *kasthuri*, camphor, sandal, dried ginger, cardamom, rose water, *kayam*, *tippali*, *gandhakam* and saffron. Some of them even reached hands of apothecaries in medieval Europe who sold it to the common people.²¹⁷ *Kunkum* was used by people and was known as *kashmiram*²¹⁸. In Malabar, these herbal commodities were exchanged for Chinese pots, silverwares, ivory, pearls, swords and many other items that the foreign merchants could offer them.²¹⁹ Radix from China, coriander and white dry areca nut from Rajputana were very much sought after herbs for the preparation of medicines in the region.²²⁰ The medicinal plants exported to Arabian peninsula also included sandalwood, cardmom, *chukka*

²¹³Ibn Batuta, (tr), William Boultong, *Mohammed Ibn abd Allah, Ibn Batuta, The Greatest of Moslem Travellers*, A.D. 1304-77, Kegan Paul, Trench, Trubner & Co., Ltd., New York : E. P. Dutton & Co, p.138

²¹⁴Faith Wallis, *Medieval Medicine: A Reader*, University of Toronto, Canada, 2010.p.520.

²¹⁵*Koka Sandesham*, Sloka 51

²¹⁶Bathuta described the strong presence of Chinese merchants on the entire coastal region of Malabar in 14th century. He reflected on the maritime ships which carried the Chinese merchants on the Arabian sea. Some Chinese ships had more than 1000 crew members who were accommodated according to heir ranks.p.139

²¹⁷Lynne Elliott *Medieval Medicine and the Plague*, Crabtree Publishing Company, US, 2006,P.32

²¹⁸*Koka Sandesham*, op.cit, Sloka 18

²¹⁹Chau-Ju-Kue, op.cit, p.114

²²⁰Adriaan Mooens, "Memorandum on the Administration of the Coast of Malabar dated 1781", in *Dutch in Malabar*,op.cit,p.220

(dry ginger), *curcuma* (turmeric/curcuma long/*manjal*), eaglewood (incense), benzoin (incense), camphor, clove pepper and so on.²²¹ Trading and exchange of the medicines and herbs took place under the direction and supervision of the physicians who were seen in all major towns of Malabar in the fourteenth century.²²²

Several Indian products such as Indian sword, Indian spices especially of Malabar origin and aloes-wood were often found even in pre-Islamic poetry. Names of the Indian drugs such as Kafur (*Karpūra*), Misk(*Muska*), Zanjabil (*Srhgavera*) and Ud (*aguru*) and pepper (Falafel) found their places in the verses of Islamic and Pre-Islamic literatures such as poems of Imru-al-Qays who “compared the dry dung of the antelopes to the pepper corns.”²²³ Words such as *Faniz*, *Tütia*, *Narjil*, *Bish* and *Quff* (sandal) have probably derived from Sanskrit language, and probably from Malabar region which has had the longest and earliest trade relationship with the Arab world.²²⁴

A well organized channel of market for these medicines and herbs could definitely have existed in medieval Kerala as reflected in the literature of the period such as *Payyannurpattu*, the ballad of Payyannur, which was written in between thirteenth and fourteenth century.²²⁵ This ballad gives proper references to the herbal articles exchanged in the trade between Malabar and East Coast. This trade relation should have been a great assistance to the *Vaidyas* of the region to procure such raw drugs that were not available locally. These traders have received commercial assistance from the merchant guilds such as *Kolanchiyar*, *Valanchiyar*, *Anchuvannam* and *Manigramam* which had its existence from

²²¹Ibid, p.221

²²²Marco Polo, *The Travels of Marco Polo*, Manuel Komrpff, Norton and Company, 1930, p.167

²²³Asgharali Engineer, *Kerala Muslims: A Historical Perspective*, Ajanta Publications, 1995 p.158

²²⁴Varma. R. L, “Indian-Arab Relations in Medical Sciences”, in P.V.Sharma (Ed.) *History of Medicine in India*, New Delhi, Indian National Science Academy. 1992, pp. 465-484.

²²⁵*Payyannur Pattu*, (ed), P.Antony, Tuebingen University Library, Malayalam Manuscript Series, General Editor, Dr.Scaria Zacharia, DC Books, Kottayam, 2000, p.xIv

early medieval era.²²⁶ Names of some imported drugs suggest the way they got accommodated into the larger *meteria medica* of the local tradition. Drugs such as *Seemakottam* (Himalaya), *Cheenappavu* (China), *Bilathikonjan* (Arabia), *Arabikunthirikkam* (Arabia) reflect the place of their origin or the traders who brought them to the Malabar Coast.²²⁷

In some places of Malabar, raw drug market was monopolized by the Konkan Brahmins who arrived in this region much before the arrival of Portuguese.²²⁸ Konkan Brahmin traders who were also called “*payyari* Brahmins” supplied herbs and drugs in the northern Malabar markets as they could access to it for their geographical proximity with the region.²²⁹ Konkan Brahmins were well versed in the early Ayurvedic tradition for virtue of being associated with the script and commerce by which they could later help the Portuguese as well, especially in the pursuit of Ortha.²³⁰

Drug exports had its golden time during the period under study. Exports included were *tutiya* for eye related problems, *putjak* a fragrant leaf exported to China,²³¹ *addividigam* root, *tripcolpacconna*, *amukkuram* roots, *kadukarohani*, *aretha* roots for fistula,²³² and ²³³ *maramanjal*, got exported to Muscat.²³⁴ Articles such as camphor, rose water, clove (*patjapatt*), a well known perfume extracted from mint,²³⁵ *padermany* for many eye related problems from China,²³⁶ *radix china*, a herbal root of smilax genus from China, *saleb* an

²²⁶Ibid,pp.8-9, lines-22-24

²²⁷Ibid,pp.30-31, lines-97-103

²²⁸Anjana Singh, *Fort Cochin in Kerala, 1750-1830: The Social Condition of a Dutch Community in an Indian Milieu*, p.253

²²⁹R. J. Barendse, *The Arabian Seas: The Indian Ocean World of the Seventeenth Century*, East Gate Book, New York, 2002,p.251

²³⁰Unnikrishnan, op.cit, p.21

²³¹“Dutch Record”, no,13, in *The Dutch in Malabar*, op.cit, p.219

²³²Ibid,p.219

²³³Ibid,p.221

²³⁴Ibid,p.221

²³⁵Ibid,p.219

²³⁶Ibid,p.220

Arabic medicinal tuber from Arabia, *kayam* (asafoetida) and *kanjira* which was used as medicine for elephantiasis and an antidote for snake bites found their way in medieval markets in Malabar and was also exported to Srilanka and other regions in India as well.²³⁷

Magical talisman, locally termed as *Rudraksam*, *ilanji leaves*, *kasthoori*, (musk) *akil*, *kaneyenna* (cedar tree oil) *tippeliyenna*, (long pepper oil) for *Vatham* (rheumatism) were found in the daily transaction in the medieval *angadis*(market).²³⁸ *Chavarkkaram*, a major medicine used for diseases such as *vatham* (*rheumatics*) , cough, epilepsy, poison, was a major commodity in the markets of Malabar.²³⁹ *Aapakkaram* (baking soda), a chemical commodity was much sought after commodity in the market.²⁴⁰ Brass vessels for preserving medical components, *anjana* (collyrium) for colouring eyelids and lashes, *Jadamanji* (valerina root), a local herb which was extensively used by Arabs and Medieval Europe for issues such as insomnia, depression, migraines and central nervous system disorders, were also traded in some markets in Malabar during this period.²⁴¹ Boiled oil for hair and health massaging was very common and were demanded by Arab and Chinese merchants in medieval guest houses.²⁴² *Verukin Neyyu* (civet fat), extract from a wild animal from the celebrated forests, used for perfumes and fish oil, especially of shark, were also available in the *angadis* and were exported across medieval world.²⁴³ “They drive a great trade in this

²³⁷Ibid,p.221

²³⁸*Ananthapuravarnanam*,op.cit, lines-44

²³⁹Ibid, lines-46

²⁴⁰Ibid, lines-47; This variety of salt was extensively in use in Egypt during medieval times. Says Regina Seton, “Porridges, Gruels, and Breads: The Cereal Food Stuff of Early Medieval Ireland” in Michael A. Monk, John Sheehan (eds), *Early Medieval Munster: Archaeology, History and Society*, Cork University Press, Ireland, 1998, p.80

²⁴¹*Ananthapuravarnanam*, lines- 49; Daud Ali, Courtly Culture and Political Life in Early Medieval India, CUP, UK, 2004, p.63; *Vegetarian Times*, Feb, Issue, 198, 1994,p.89; Sue Hawkey, *Herbalism: Using Herbs for Stress Relief and Common Ailments*, Lorenz Books, 1999,p.45

²⁴²Ibid, Sloka, 54

²⁴³*Ananthapuravarnanam*,op.cit, lines,55-56; Gabriel Dellon, *A Voyages to the East Indies*, University of Michigan, printed at London, 1698. He divided his chapters such as “pepper,Cardamon,

commodity (civet oil) at Calicut but it is seldom to be got unfulfilled, unless one has the opportunity of taking it out ones self.”²⁴⁴ Shells and meat of *Nathu* (a salt water fish) was used by the people for mild health problems such as joint pains along with prescribed amount of *kolarakku* (lac) and *chayilyam*.²⁴⁵

Medical articles arrived from a variety of habitats such as mangroves, sacred groves, tropical forests, paddy fields,²⁴⁶ herbariums, laterite hills and so on.²⁴⁷ Extensive Cultivation of paddy in Malabar was reported by the medieval traveler Gabriel Dillon and *Kokasandesam*.²⁴⁸ Herbals grown there included; cultivated and wild plants; parasites, epiphytes, carnivorous plants, pteridophytes, thallophytes and gymnosperms belonging to different species and character.²⁴⁹ *Sandehsa Kavyas* and other travelogues give ideas about the extensive bio-diversity of the region during the period.²⁵⁰ They form the reflection of a high level of eco system consisting of variety of vegetation, natural world and inorganic substances such as air, soil, water, and minerals in the carto-topography of the medieval Malabar region.²⁵¹ Most of the species in the materia medica of Malabar were pointer variety of different clusters of microhabitats. Paddy fields acted as good natural flood reservoirs and produced medicinal varieties like *Chennellu*, *Navara*, *Illichennellu* and so on. Paddy fields also produced herbs such as *Kayyanni* (*Eclipta alba*) *Manga Nari* (*Limnophylla*),

Bethel”(chapter xxiii,p.66) and “The Elephants and Some other Animals of Malabar” (chapter.xxiv.p.71).

²⁴⁴Gabriel Dellon, op.cit, p. 83

²⁴⁵*Ananthapuravarnanam*,op.cit, lines- 57 and 63 respectively.

²⁴⁶*Ibid*, lines-32

²⁴⁷*Kokasandesham*, op.cit, lines-12-18

²⁴⁸*Ibid*, p.99, lines-82-83;Gabriel Dellon, op.cit, 62

²⁴⁹Unnikrishnan, op.cit, p.20

²⁵⁰*Kokasandesham*,op.cit, lines-25-47; *Ananthapuravarnanam*,op.cit, lines-15-28

²⁵¹*Kokasandesham*,op.cit, lines-12-18

Karingoovalam (Monochoria Vaginalis) etc.²⁵² Paddy field also housed water snails which are still in use as an effective remedy for fistula.²⁵³

Ponds, as we have seen in the last chapter, also functioned as physical repositories of many herbs such as *Thamara* (lotus flower).²⁵⁴ Plants like *Palmudhukku* (*Ipomea Paniculata*) and *Chethi* (*Ixora Coccinia*) grew on the banks of such ponds. The leech (*Hirudinaria*) that was found in the ponds and paddy fields were used for the blood purifying technique called *Rakthamoksham* in *Panchakarma*.²⁵⁵ Extensive mangroves along the shores of Malabar and numerous rivers, for which even modern Kerala is famous for, were other sources for medicinal herbs such as *Othalam* (*Cerbera Odollam*), *Puzhamunja* (*Premna Latifolia*), *Kaitha* (*Pandanus* sp.), *Adambu* (*Ipomoea Biloba*), *Samudrappazham* (*Barringtonia Racemosa*), used by elitist and lower ladder medical practitioners.²⁵⁶ They must also have collected their drugs and herbs such as *Thiruthali* (*Ipomoea separia*) *Muthil* (*Centella Asiatica*), *Neer koova* (*Lagenandra toxicaria*) from these water bodies.²⁵⁷ Marshy lands which got inundated by saline water in summer and fresh water in rainy season were ideal habitats for *Brahmi* (*Bacopa monieri*), *Meenankanni* (*Lippia nudiflora*), *Neeraral* (*Marselia* sp.)²⁵⁸

Sacred Groves, sacred land of wilderness conserved due to the perceived importance attached village deities as mentioned earlier.²⁵⁹ Medieval *Kavus* were breeding grounds for the rare medical plants such as *Eezhal* (*Embelia tjeramcottam*), *Kutaluchurukki* (*Morinda*

²⁵²This is the first among the *Brihath Panja Moolam* (a cluster of herbals), when others are being *Koombil*, *Pathiri*, *Palakappayyani*, *Munja*. This plant is an inevitable ingredient for many rituals at any Siva temple in Kerala from medieval times; VV Balakrishnan, *Chedikalum Avayude Oushadhagunangalum*, D C Books, Kottayam, 2007, op.cit, pp-228-230

²⁵³*Chikitsa Manjari*, op.cit, pp.167-180

²⁵⁴*Kokasandesham*, op.cit, lines-34

²⁵⁵Unnikrishnan, op.cit, pp.30-31

²⁵⁶*Ananthapuvannanam*, op.cit, lines-20; *Kokasandesham*, lines-14; Unnikrishnan, op.cit, p. 31

²⁵⁷*Muthil* was used to treat irregular menstrual cycle, amenorrhoea, leucorrhoea, bruise, anemia, and leprosy. V.V.Balakrishnan, op.cit, pp.126-129

²⁵⁸Unnikrishnan, op.cit, p.31

²⁵⁹J.R.Freeman, op.cit, p.287

Umbellataum), *Ilippa* (*Madhuka longifolia*), *Vellappain* (*Vateria indica*) which were in use for varied medical purposes. *Ankolam* (*Alangium salvifolium*), *Karimuthil* (*Geophila repens*), *Urithookki* (*Aristolochia indica*), *Valiya Orilathamara* (*Nervelia araguana*), *Nervelia*, were other species that grew at different *Kavus* of Malabar. It shows that most of the medicine and drugs used in the healing traditions in medieval Malabar were produced or collected locally for local need and requirements.²⁶⁰ Nevertheless, emergence of new ethnic groups and foreign merchants on the Malabar Coast demanded more different medicines for new health issues came along with the trade and commerce from Fourteenth century onwards.

²⁶⁰Richard Gove, op.cit, p.126

Chapter-6

Conclusion

The above chapters clearly indicate that society in Medieval Kerala could develop its unique ways of comprehending hygiene and medical practices. Varied, at the same time interwoven, elements of social structure eased to a paradigm where body and healing were seen not only as physical and practical objects, but also as a strong cultural construction. For them, water became an object of worship along with strong understanding of the material necessities. They considered water bodies not only as an object in the topography, but also an object of avoidance and bonding. Dresses were worn for the protection; so was the way it was removed for obeying command. Noted differences in relation to the hygienic principles, attitude and execution were constructed through the stringent prisms of creed/clan consciousness and were equally imposed from above by the dominant social forces with consolidated pool of resources.

Socially/religiously constructed principles and execution of hygiene were perpetuated by the ever willing political authorities, holding their eyes for moral legitimacy and desired attachment to the social creeds. These social creeds decided the intricacies in principles of hygiene and medicines in the region. Devising such tools was indeed necessary at a time when political survival was depended on the extent of powerful alliances one had. Here, the principles and practice of different forms of hygiene became an indisputable tool for disciplining the subjects and controlling them as well. Thus, hierarchy of the caste was deliberated through the hierarchy of profession and rituals which demanded certain continuation and inheritance.

Most of the travellers who travelled to Malabar noticed the common hygiene practices of the people during the medieval times. Travellers such as Alberuni and Al Masudi gave vivid picture of the way people kept excellent cleanliness even though “they were half naked”. Thick, black and long hair was considered to be the symbol of health and prosperity during the period. But, there was something very subtle happening behind pleasant face of the clean people; a boundary for immediacy, for touch, for interaction, dining together for the reasons of pollution and impurity. These boundaries were physically created and expressed in the form of waterbodies, caste based Bath Ghats, different ways of taking food etc... The social situation was so rigid that the lesser privileged did not even have the right to call their house a “house”. This was because, the term for the houses were given with regard to the position that people had on the hygiene hierarchy. Even rulers tried to project two bodies; a natural body, which was susceptible to pollution and disease and had to be taken care of by more ritually hygienic Nambutiris, and the unalterable political body, was maintained through adorning it with exclusive ornaments, exclusive dress for special occasions, and expensive hygiene equipments. He ensured the supremacy of his political body by keeping hygienically superior Brahmins at this court under his call. His natural body was under the regulative principles of the same dominant forces as we see in many rituals associated with coronation and the like.

It is known by now that there was certain level of understanding among the people in relation to diseases and hygiene. Classical tradition of Ayurveda benefitted immensely from the existing traditional healings. This is testified by the variation and differences in the Ayurvedic practices in Kerala by different families. Certain treatments such as *Marma Chikitsa*, not seen in the traditional Ayurveda texts elsewhere, was incorporated from these traditions into the Medieval Ayurvedic practices. These practices also demanded the

availability of different herbs and medicines that are not found in practice elsewhere. One such example was *ilaneer* (tender coconut juice), which is not found to have been mentioned in any other traditional texts, which was taken as major medicine in medieval Kerala. Important treatments like *Dhara* and *Navarakizhi* are considered to be the contribution of Kerala to the Indian Ayurveda System. This development also demanded a strong market for medicine and herbs. This facilitated number of markets for medicine and herbs for import and export as we noticed in the previous chapter. A close observation of the *meteria medica* in the medieval *bazaars* also shows the extensive character of tropical biodiversity. It reflects the diversity of plants and animals but also the diversity of practices and the richness of traditional knowledge that was accumulated as a result of continuous interaction between man and nature.

Existence of such deviations and verities in healing traditions were the fall out of the existing stringent socio-cultural norms that prevailed during the period under study. Elitist traditional Ayurveda displayed much creativity in inducing already existing principles of healing into practice along with classical texts in order to shape up that into a viable method for the local requirements. They applied moral principles of Hinduism and Buddhism through the avenues of treatment and approaches. They were also innovative in finding new herbs and cluster of new treatments such as *Marmavidya* as the socio-political situation demanded such modifications. As a professional group of physicians with strong touch in Sanskrit, legitimacy was acquired through exclusive legends and comparative dominance in the hygiene hierarchy. They could access corridors of medieval power relationship with others in the immediate social hierarchy. Unfortunate as it comes by, the elitist pattern of classical Ayurveda was trapped in the complex and overarching web of hygiene notions and practices founded on the principles of caste. Strict rules of endogamy and the disappearance of political

and social patronage paved the way for the gradual decline of the once dominant *Ashtavaidya* tradition. This decline of classical tradition and the professional families was to see through the spectrum of the socio-political function in the region. Stringent rules against the touching of certain living beings and taboos such as touching corpse, must have definitely reduced the scope of experimentations in the essential areas such as anatomy.

However, remnants of the rich legacy of traditional Ayurveda in the earlier centuries, made things easy for the lesser privileged to carry on healing methods per their requirements. The result was the emergence of lower caste healers from all communities. “Polluting” lower castes such as *Ezhava* developed out of social compulsion, a strong tradition of parallel treatment to take care of the sick from the lower steps of the ladder. By seventeenth century, there emerged some formidable practitioners from these communities who could establish themselves as alternative groups of physicians who could cater the needs of patients from ‘lesser’ social mooring as well. This development is given testimony by physician/pharmacologist Vaidyar Itty Achuthan, the Ezhava physician who in seventeenth century became instrumental in the making of Hortus Malabaricus. A serious perusal shows that Itty Achuthan owed much of his knowledge about the plants and its use to the pre-classical tradition of Ayurveda. Interestingly, his birth place, Codakkarapalli, in itself shows a strong association with Buddhism as the term *palli* had been used to point out Buddhist *viharas* or other structures, as many historians believe.

This trend was carried forward by subsequent generation of lower caste physicians such as Uracheri Gurikkal who was a strong associate of Lexicographer Herman Gundart. However, it should be noted that Buddhist tradition of healing and plant usages had been constructively incorporated by all communities in Kerala, including that of *ashtavaidyans* who never denied acknowledging the contributions. It should also be noted here for an

account of caution that this development did not occur in a linear way as one may think. It was in correspondence with the developments at the societal level without much confrontation, at least till late sixteenth century, as the rules and ladders were operating as socially accepted normative. This period also witnessed Muslim practitioners of prophetic medicine who creatively incorporated the local ideas and herbs in healing to match with the requirements of a different culture area. *Arabic-Malayalam* literature from the early seventeenth century shows us this psychological attitude of the people during the period concerned. Since *unani* medicine could not make any considerable presence in the cultural canvas of medieval Kerala, Islamic medicine, *Thibb-un-Nabi* as it was called, proliferated through *othupallis*, saints and local mosques. Absence of Muslims as administrators in the actual corridors of local kingdoms in Kerala during the period under discussion reduced the emergence of an organised humoral healing method as it happened in the case of North or some other parts of South India during the corresponding centuries.

Hiuen Tsang's account of South India gives testimonies to the direct association between the rulers and the patronage given to health care and physicians. His description about the hospitals across South India during Seventh century, when Buddhism was flourishing, had an immense potential to convince us about the deterioration of the hospitals in the subsequent centuries. However, none of the travellers to Kerala from the fourteenth to the seventeenth century, talks about the existence of hospitals or public healing centres anywhere in Kerala. The reasons could be the appropriation of the Buddhist centres of learning and treatments by the dominant forces. These forces by now domesticated and limited the practice of medicine into an exclusive household activity. Even though travellers such as Alberuni talks about Islamic physicians practicing as early as Eleventh century in the port towns such as present day Koylandi, we don't get any references to the existence of

hospitals in the region. It means that, the outreach of the classical tradition of Ayurveda was very limited and localised while professional Islamic medicinal men were largely practicing in the affluent port towns.

Therefore, common people who were anyway undergoing the cruelty of the caste and hygiene distances had to resort to more affordable and available channels. They took shelter with popular practitioners of healing, who alongwith medicines took the help of metaphysics. This was also supplemented with the worship of lesser Gods, Goddesses and *Shiekhs* who could be satisfied with whatever the common people could afford to offer them. If the present situation in Kerala is in any way an indication of what happened in the past, we would see that the 'little tradition' deities are mostly worshipped by lower and erstwhile untouchable castes. Divine beings such as lord *Muthappan* and Kodungallur *bhagawathi* were worshipped to bless the believers. Interestingly, most of the offerings given at this place are 'inferior hygienic' articles such as Cock, liquor and abusive songs.

In medieval Kerala, diseases brought isolation. Infected people, especially with leprosy faced a permanent isolation as the chances of getting cured were very thin. Patients faced temporary isolation in cases such as small pox, in which individuals or sometimes the village as a whole avoided contact with infected villages. In a situation where actual medical care was largely extended to powerful socio-political structure, the avoidance had been one of the few options for the people who believed in the extra terrestrial object to save them.

It shows that different communities perceived same health issues differently depending on their socio-cultural positions during the medieval period. But, as a matter of fact, it should be noted that no one was over and above of the superstitious beliefs regarding the diseases; be it the King, priest; militia or the common men. All tradition of treatments in Malabar attained their own methods of diagnosis using traditional and scientific tools. People

did not actually believe in the complete curing capacity of the humour based treatments such as Ayurveda. In the case of Ayurveda, large number of texts invoked many Gods alongwith the prescription of medicines. Same way, people believed more in prophetic and Islamic traditional practices of healing rather than resorting to the humour based treatment *Unani*.

After the advent of Portuguese, there heralded new beginning in perception of human body and the ways to keep it healthy though the old tradition continued. Portuguese, after the initial years of their arrival, benefited from the brisk medicinal market in the Malabar region. They built a big commercial network of medicinal plants on Indian Ocean. They, by the middle of sixteenth century extended the link towards West African, Caribbean and Brazilian region, which created a more global and accelerated exchange of medical commerce and biological information about tropical climate

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Glossary

All terms are Malayalam except those marked [A] (Arabic)

Angadi: market places in medieval Kerala

Angam: contest between individuals with prior notification of date and place.

Auliya: [A] a sacred saint who believed to have possessed extra human powers.

Chattan: devil spirit

Chira: big ponds/any such water body

Darul Muslimeen: [A] house of Muslims

Durdevathas: harmful female spirits/witches

Houz: [A] attached washing tanks in Mosques

Illams: house of nambutiri

Janabath: [A]ejaculation

Janaza: [A] Dead body

Jumaath; [A] Friday congregational prayers

Kinar: well

Kindi: water tumbler with an exit tail

Kolambhi: spit bins

Kovilakams: kings palace

Kulam: pond

Kulavaniyars: grain merchants

Lengotti: cloths worn wrapped around the hips and thighs

Mattu: purifying cloths for menstrual/pregnant women

Mihrabs: [A]semicircular arches form where prayers conducted in mosques

Mukkuvas: fishermen

Mulakka: bodice

Murukkan/ tambul: mixture of betel leaves, areca nuts, lime used for chewing

Mutiyettu: A form of ritual dance

Nambutiri: brahmans of Kerala

Othupallis: learning centres of Muslims generally attached to the mosques

Oudu: roofing material made from clay

Pananeer: rose water

Pandiyala: warehouse

Patippura: resting place at the gate for visitors at upper caste houses in Kerala

Rathnam: precious stones

Sambandham: socially accepted concubinage of Nair women by Nambutiri men

Sarppam Thullal: a particular custom to ‘appease’ snakes who could cause issues such as infertility

Shafi: [A] one of the four major sects/paths in Sunni Islam

Tharavadus: generally a Nair ancestral house

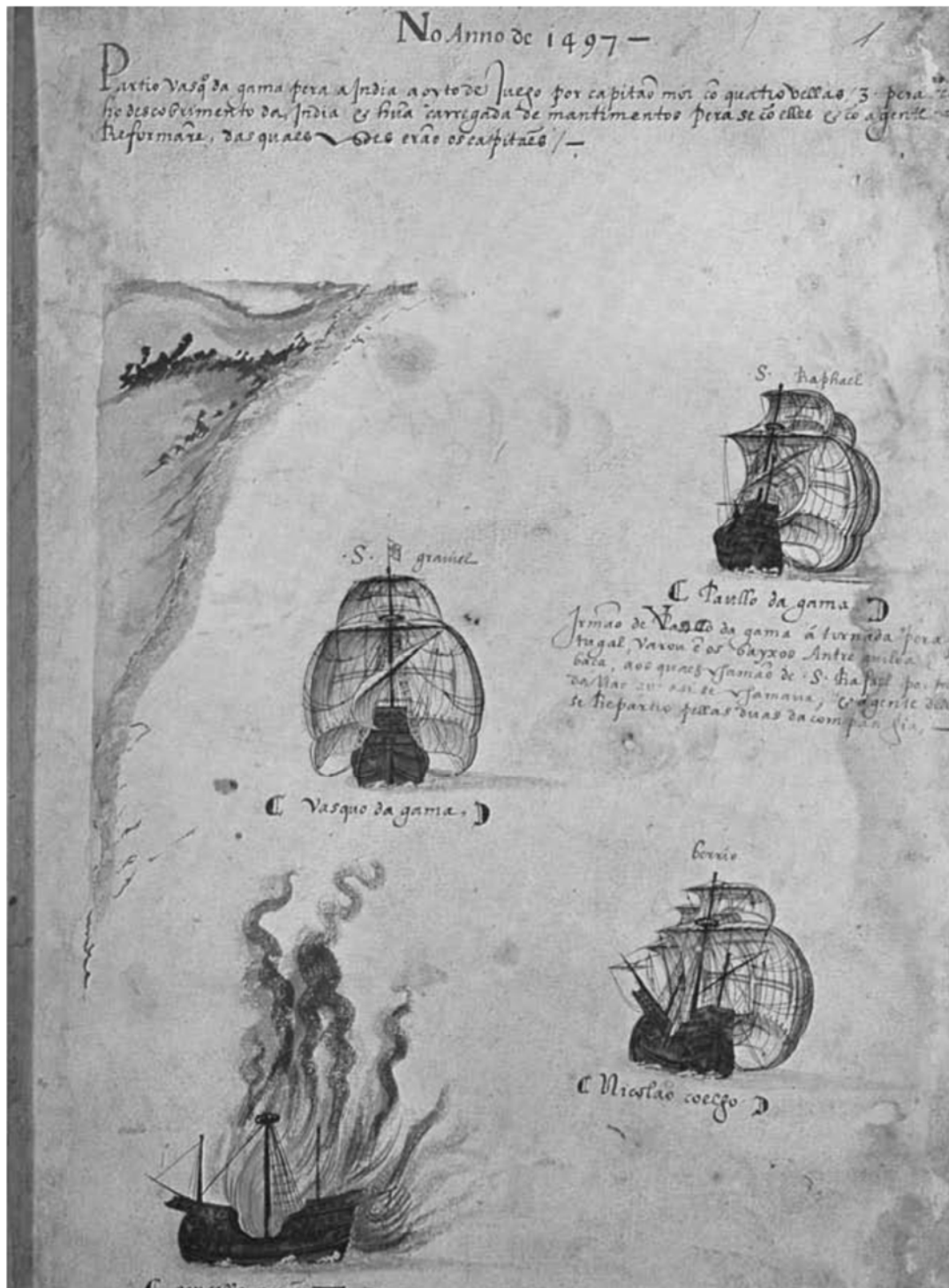
Vaniyams: market

Vudu: [A]ritual washing of Muslims before prayers

Plants	Latin Names	Diseases
Thengu	<i>Cocus-Nucifera</i>	Vomiting, Wounds, Urination Disorders
Chenjeera	<i>Spinicealoeracea</i>	Diabetics, Kidney Stones, Dental Care
Neer Maruthu	<i>Terminalia Arjuna</i>	TB, Diabetics, Cardiac Problems
Naruneedi	<i>Hemedesmus Indicas</i>	Fertility, Skin Diseases, Fever
Arya Veppu	<i>Azadirachta Indica</i>	Poison, Worms, Hepatitis
Kataladi	<i>Acheranthes Aspera</i>	Pregnancy, Liver Diseases, Asthma
Pulimaram	<i>Tamarindus Indica</i>	Fractures, Heat, Running Nose
Shatavari	<i>Asparagus Racemosus</i>	Rheumatics, Bleeding
Poovarash	<i>Thespesia Populnea</i>	Dandruff, Ringworm
Tippali	<i>Piper Longum</i>	Cough, Tonsillitis, Leprosy
Inji	<i>Zingiber Officinale</i>	Ulcer, Digestion, Piles
Vellulli	<i>Allium Sativum</i>	Ear Diseases, Blood Pressure
Aavanakku	<i>Ricinus Communis</i>	Pregnancy, Breast Swelling
Kurumulaku	<i>Piper Nigrum</i>	Epilepsy, Hysteria, Smallpox
Nochi	<i>Vitex Negundo</i>	Sneezing, Stomach Pain
Chandanam	<i>Santalum Album</i>	Skin Diseases, Rheumatics, Chicken Pox
Amukkiram	<i>Withania Somnifera</i>	Growth, Swelling, Poison
Ellu	<i>Sesamum indicum</i>	Hair Growth, Endurance, Menstrual Pain
Tottavati	<i>Mimosa Pudica</i>	Bruise, Diabetics
Elam	<i>Elethara Cardamom</i>	Constipation, Gaseous issues, Uterus

Kutakappala	<i>Holarrhena Antidysentrica</i>	Cholera, Piles
Mutthil	<i>Hydrocotyle Asiatica</i>	Skin Disease, Leprosy, Memory
Shankhu Pushpin	<i>Clethra Ternate</i>	Poison, Fertility, Excessive Sweating
Kotuveli	<i>Plumbago Zeylanica</i>	Piles, Headache, Cholesterol
Kanikkonna	<i>Cassia Fistula</i>	Fistula, Cardiac, Pregnancy
Maramanjil	<i>Berberis Asiatica</i>	Diabetics, Bruise, Cholera
Keezhar Nelli	<i>Phyllanthus Niruri</i>	Jaundice, Venereal Diseases
Atakka Maniyan	<i>Spaeranthus Indica</i>	Fistula, Piles, Kidney Stone
Nellu	<i>Oriza Sativa</i>	Fever, Vomiting, Rabies

Courtesy: *Fee Shifau Nnasi Ithu Upakaram and Shuruthi Petta Ponnani Faropakara Tharjama*, C.H.Muhammad Koya and Sons, Thirurangadi, 2001; *Ananthapuravarnanam*, Compilation and Commentary by K.Rathnamma, State Institution of Languages, Trivandrum, 1997; VV Balakrishnan, *Keralathile Sasyangalum Avayute Aushada Gunangalum DC Books*, Kottayam, 2007; *Mahasaram*, 1817; *Chikitsa Manjari*, (trans), Sriman Nambothiri, Vidyarambham Publishers, Alapuzha, 1990; Hendrik Adriaan Van Rhee tot Draakenstein; Hortus Malabaricus.



Ships in Search of Spices, Cosmetics and Drugs

15th Century Photo of Portuguese Trading Ships on Indian Ocean

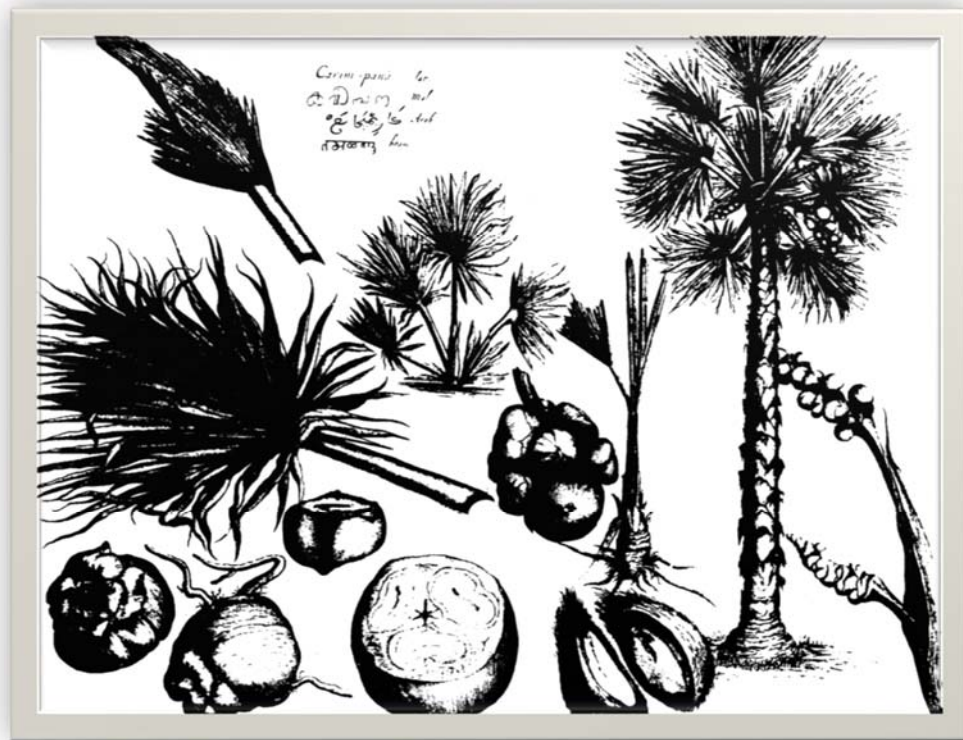
(Courtesy, *Em nome de Deus : The Journal of the First Voyage of Vasco Da Gama to India, 1497-1499* / translated and edited by Glenn J. Ames, Leiden, Boston, 2009, p.15)



Medieval Medicinal Plant in Malabar

Black Pepper, *Piper Nigrum*,

Hendrik Adriaan Van Rhee de Tot Draakenstein, *Hortus Malabaricus, Continens Regni Malabarici Apud Indos Celeberrimi Omnis Generis Plantas Rariores*.1693, (figure 12-vol. 7 of Hortus Malabaricus)



MEDIEVAL MEDICINAL PLANT FROM KERALA

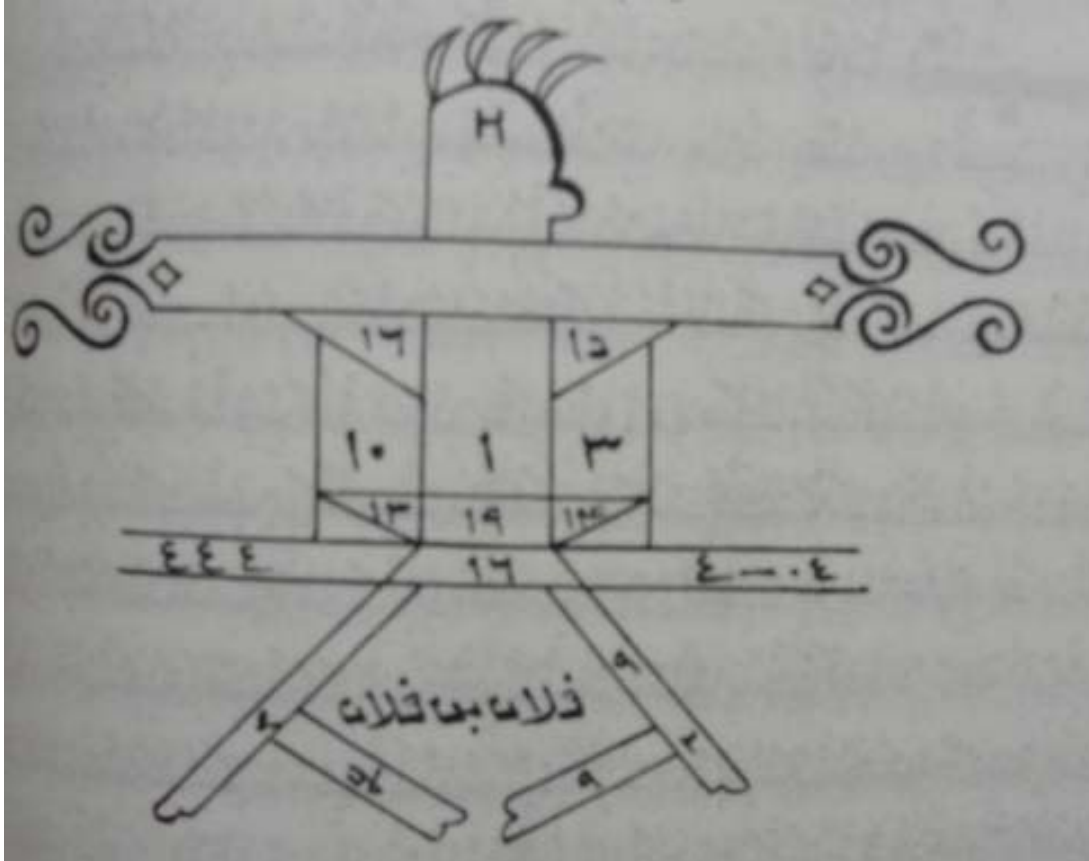
Palmyra Palm, Borassus

Hendrik Adriaan Van Rhee de Tot Draakenstein, *Hortus Malabaricus, continens Regni Malabarici apud Indos celeberrimi omnis generis Plantas rariores*. 1693, (Figure 9 in Vol. 1



Magical Table From Egypt (AD 1225)

Was used to get relief from all sorts of pain and poisonous bite (Courtesy, Peter E Pormaan,p.149)



Medieval Magical Table in Malabar

It is stated that if it is inscribed/pasted on the walls, possession by *Jinn*, *shaithan* and *roohani* could be avoided. This table contains exclusive magic numbers and letters arranged in a specific pattern. (Courtesy; *Fee Shifau Nnasi Ithu Upakaram and Shuruthi Petta Ponnani Faropakara Tharjama*, C. H. Muhammad Koya and Sons, Thirurangadi, 1995(p.54)



Magic Medicinal Bowl Made in 1160-1170 for Nur al Din Mahmud Ibin Zangi, Ruler of Damascus.

This was used for poison, women in labour, migraine etc. (Courtesy, Peter E Pormann, Emilie Savage-Smith, *Medieval Islamic Medicine*, Georgetown University Press, Washington, 2007, p.152)



'AANAKKAL'

ELEPHANTIASIS PATIENTS in MEDIEVAL MALABAR (Courtesy, 1614 edition of J. H. Linschoten's travels published in Amsterdam "Navigatio ac itinerarium Iohannis Hugonis Linscotani in Orientalem. "



People in Medieval Kerala

An Early 17TH Century Photo (Courtesy, Shanti Moorthy and Ashraf Jamal, *Cultural, Social, and Political Perspectives* (Ed), Routledge, New York)



VENTILATION IN 16TH CENTURY
MISHKAL MOSQUE, KUTTICHIRA



17th Century 'Adukkala Ovara'

Kitchen Drainage from Etavalam Kovilakam, Calicut



'Cheena Bharani'

15th Century Chinese Brass vessel; from Ayancheri Kovilakam, Calicut

People used these jars to preserve food items. Kovilakam authorities says that the broken lid represent a tax evading technique as the imperfect shapes attracted reduced taxes from the port authorities at Koyilandi and Calicut. These jars were one of the main imports from china during the centuries under study.



17th Century 'Sutrini'; An Exclusive chamber where expecting women were kept. From Etavalam Kovilakam, Calicut



15th Century Octagonal Pond at Kuttippuram Kovilakm

This pond is believed to have been constructed for the exclusive use of ruling family for their ritual bath before entering the temple nearby. The king had to take bath here after every procession he conducted for removing all possible polluting elements.



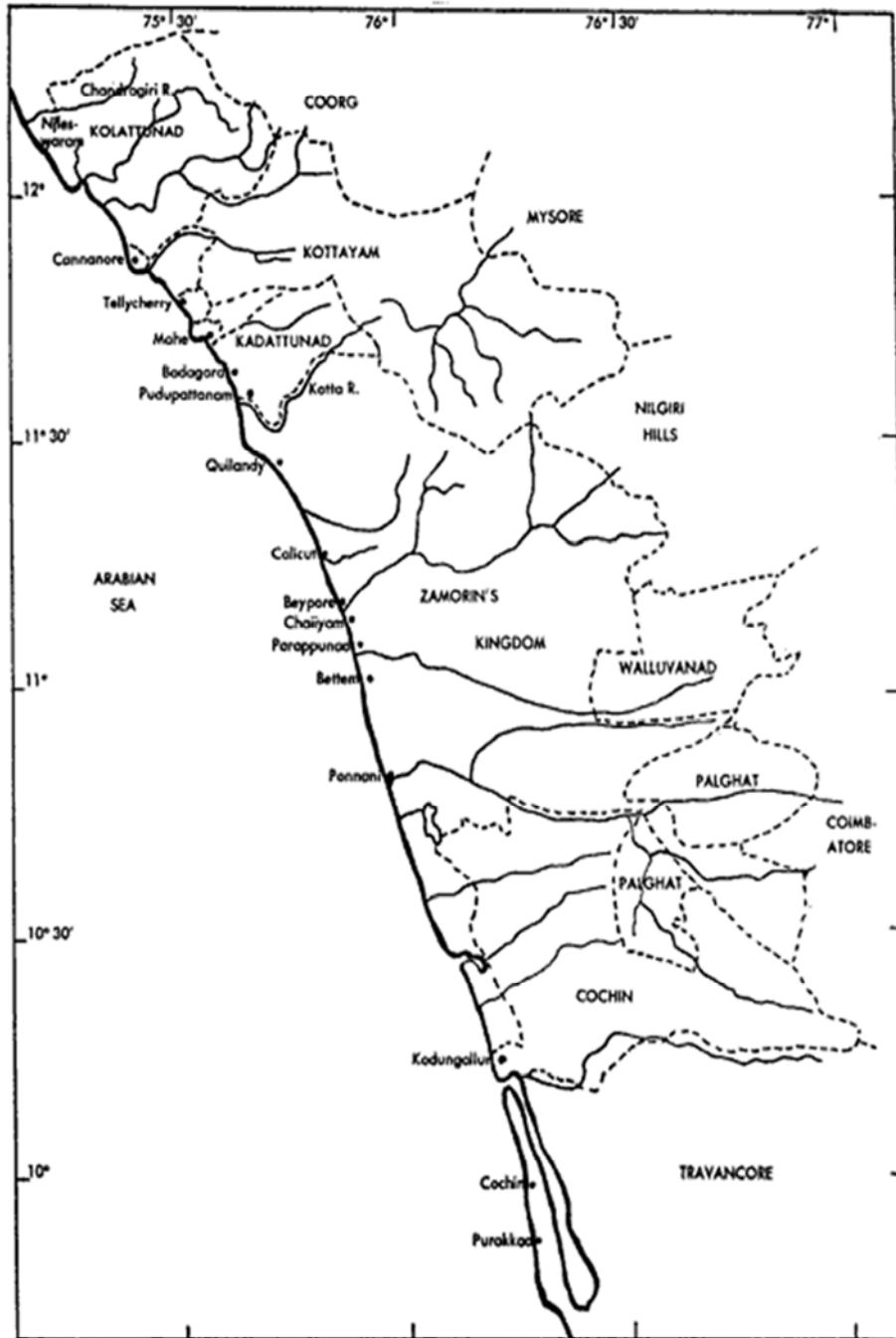
Hygiene Based 'Snan Ghats' at Kuttippuram Kovilakam, 16th Century

This pond was one of the major water bodies constructed by the Kuttippuram rulers during 16th century. The segregation seen in the photo is actually bath Ghats for different sections of people who were classified in terms of social and ritual hygiene. As far as the local oral history is concerned, Nambutiris, Nairs, King's Sisters, and their wives had to take bath in different Ghats according to their status in the ladder.



A Map of South India by Mathew Carey, 1811

Courtesy, Medical History, 2005, 49:489



Rough boundaries of the Kingdoms of Central and North Kerala in the mid-eighteenth century. (Adapted from C. A. Innes, 1908: 44–45.)

BIBLIOGRAPHY

Printed Primary Sources

Manipravala/Sandesha Kavyas

Koka Sandesham (Trans-Malayalam), Prof. Gopikkuttan, Current Books, Trichur, 1996

Ananthapuravarnanam, Compilation and Commentary by K. Rathnamma, State Institution of Languages, Trivandrum, 1997

Payyannur Pattu, (ed) by P.Antony, Tuebingen University Library, Malayalam Manuscript Series, General Editor, Dr.Scaria Zacharia, DC Books, Kottayam, 2000

Arabic Sources

Quasi Muhammad, *Al Fathhul Mubeen Li Ssamiriyilladhee Yuhibbul Muslimin*, (“Clear Victory for the Samutiri who Loves Muslims”) (1578), (trans-Malayalam) by Mankada Abdul Aziz, Al-Huda Book Stall, Kozhikode, 2000

Zainuddin Makhdom, *Tuhfathul Mujahideen fee Ba-a-Si Akhbaril Burthukhaliyeen*’ (1583), translated as “A Gift to The Warriors with Information about Portuguese.” Written in Arabic (trans-Malayalam), C.Hamsa, Al-Huda Book Stall, Kozhikode, 1999; English(trans), S.Muhammad Husayn Nainar, Other Books, Calicut, 2006

Arabic-Malayam Sources

Quazi Muhamad, *Muhyiddin Mala*,(1606), Reprinted by Thirurangadi Book Stall, Calicut, 2000

Badar Mala,(1779), Reprinted by Ashrafi Book Centre, Thirurangadi,1998

Rifayee *Mala*, (1781), Reprinted by Thirurangadi Book Stall, Calicut, 2000

Ponnani Nalakath Kunji Moideen Kutty, *Nafeesath Mala* (1895), Reprinted by Thirurangadi Book Stall, Calicut, 2004

Arabic-Malayalam Medical Treatise

Fee Shifau Nnasi: Ithu Orumichu Koottappetta Pazhaya Upakaram Tarjama Kitab, (“This translated compilation contains remedies for people”) compiled in 1885 by Ahmad Bava Musliar, Reprinted at C.H.Muhammad Koya and Sons, Thirurangadi, 2001.

Shuruthi Petta Ponnani Faropakara Tharjama, (“Translation of celebrated Ponnani Paropakaram” compiled in 188p by Ahmad Bava Musliar, Reprinted at C.H.Muhammad Koya and Sons, Thirurangadi, 2001

Ayurveda Texts

Chikitsa Manjari, (trns-malayalam), Sriman Nambothiri, Vidyarambham Publishers, Alapuzha, 1990

Mahasaram, (compilation of 33 medieval texts by an unknown person in the beginning of 1800), M.K.Vaidyar, (ed), Government Oriental Manuscript Library, Madras, 1951

Susrutha, *Susrutha Samhita*, (tr), Kaviraj Kunja Lal Bhishagratna, Calcutta, 1911

Malayalam Texts

Velayudhan Panikkassery, *Keralolpathi*, Current Books, Kottayam, 2008,

Travelogues and Foreign Records

Alberuni's India : An Account of the Religion, Philosophy, Literature, Geography, Chronology, Astronomy, Customs, Laws and Astrology of India trans,Sachau, Edward, Low Price, Delhi, 1989;(trans-Malayalam) Velayudhan Panikkassery, Current Books, Kottayam, 2007

Rabbi Benjamin of Tudela (1167), *The Itinerary of Rabbi Benjamin of Tudela*, (trans&ed) by A.Asher, A.Asher &Co, London, 1840

Chao-Ju-Kue (1178), (trans&ed-Malayalam) in *Sancharikal Kanda Keralam*, Velayudhan Panikkassery, Current Books, Kottayam, 2007

Marco Polo (1288), *The Travels of Marco Polo*, Thomas Wright (trans &ed), London, 1854; Marco Polo, *The Travels of Marco Polo: The Venetian*, (trans-ed) by Manuel Komrpff, Norton and Company, New York, 1930

Frier Jordanus (1324), *Wonder of the East*, Hakluyt Society, London, 1885; (trans-Malayalam), by Velayudhan Panikkassery, Current Books, Kottayam, 2007

Calcoen: A Narrative of the Second Voyage of Vasco Da Gama to Calicut, 1502, Selection from *Calcoen: A Dutch Narrative of the Second Voyage of Vasco Da Gama to Calicut*, Printed at Antwerp circa 1504, (trans), J. Ph. Berjeau, London, 1874

Ibn Battuta(1346), *Kitabu-ur-Rahla*, (trans&ed) by William Boultong Kegan Paul, Trench, Trubner & Co., Ltd., New York : E. P. Dutton & Co; *The travels of Ibn Batuta*, (trans&ed) by Smuel Lee, Oriental Translation committee, London, 1829

Abdu-al-Razaq(1442), *India in the Fifteenth Century : Being a Collection of Narratives of Voyages to India, in the Century Preceding the Portuguese Discovery of the Cape of Good Hope*, (trans &ed), H. Major, Hakluyt Society, London, 1874

Duarte Barbosa (1500-1516), *A Description of the Coast of Africa and Malabar in the Beginning of the Sixteenth Century*, (trans&ed), Henry E. J. Stanley, The Hakluyt Society, London, 1865, Reprint, CUP, 2009

Fa-Hsien(1436), *The Travels of Fa-Hsien*, Gile H.A.London, 1957, (trans-Malayalam), by Velayudhan Panikkassery, Current Books, Kottayam, 2007

Ludovico Di Varthema, (1503) *The Travels of Ludovico Di Varthema in Egypt, Syria, Arabia Deserta and Arabia Felix, in Persia, India, and Ethiopia, AD 1503 to 1508*, Translated from original Italian Edition of 1510, by John Winter Jones, London, 1863

Em nome de Deus:The Journal of the First Voyage of Vasco da Gama to India, 1497–1499, (trns), Glenn J. Ames, Brill, Leiden, 2009

The History of the Church of Malabar; From the Times of its Being Discovered by the Portuguese in the year 1501, Giving an Account of Persecutions and Violent Methods of the Roman Prelates to Reduce them to the Subjection of the Church of Rome, (trans&ed) Michael Geddess, London, 1694

Gabriel Dellon, (17th Century), *A Voyages to the East Indies*, Black Swan, Printed at London, 1698

John Fryer (1672-1681), *A New Account of the East India and Persia*, London, 1910; (trans-Malayalam), by Velayudhan Panikkassery, Current Books, Kottayam, 2007

Philippus Baldaeus, *A True and Exact Description of the Most Celebrated East-India Coasts of Malabar and Coromandel and Also of the Isle of Ceylon With Their Adjacent Kingdoms& Provinces*, First Publication, Amsterdam, 1672, reprinted, AES, New Delhi, 2000

Ferishta, *History of Deccan from the First Mahummedan Conquests*, (tra) by Jonathan Scott, Vol-1, London, 1794

John Nieuhoff, *Voyages and Travels in to Brasil and the East Indies, in a Collection of Voyages and Travels*, (ed) Churchil, London, 1752

Fra Paolino Bartolomeo (1776-1789), *Voyage to the East Indies; Observations Made During A Refidence of Thirteen Years Between 1776 and 1789 in District Little Frequented by the Europeans*, (trans) by William Johnston, London

Jacob Canter Visscher (1717-1723), *Letters from Malabar,(1743) tr.: to Which is added An Account of Travancore, and Fra Bartolomeo's Travels in that Country*, Heber Drury, Madras, 1862

Some Reports and Census

“Some Marriage Customs in Southern India”, Madras Government Museum, Bulletin, Vol.iv.No.3, 1903

“Some Village Deities of South India, Madras Government Museum, Vol.V, No.3, 1907

Census of India, Special Tables, India. Director of Census Operations, Kerala, v. 1-2, 1981

Records of the Zoological Survey of India, Zoological Survey of India, Issues 1-2, Volume 102, Zoological Survey of India, 2004

Articles from Journals

Basham, A.L, “The Practice of Medicine in Ancient and Medieval India”, in *Asian Medical Systems;AComparative Study* (ed), Charles M.Leslie, University of California Press, Berkeley, 1977

Muzur, Amir, Skrobonja, Ante, Rotschild, Vlasta, Skrobonja, Jr., Ante, “Saints-protectors from Snake Bite: A Short Overview and a Tentative Analysis”, *Journal of Religion and Health*, Vol. 44, No.1, Spring, 2005

Abu-Rabia, Aref, “The Evil Eye and Cultural Beliefs among the Bedouin Tribes of the Negev, Middle East”, *Folklore*, 116(3):241-254, The Folklore Society, 2005

Newton, Arthur, "Travel and Travelers of the Middle Ages" In *The History of Civilization*, General Editor, C.K. Ogden, Routledge, New York, 1996

Fuller, C.J., "The Internal Structure of The Nayar Caste", *Journal of Anthropological Research*, Vol.31, No.4, Winter, 1975

Beazely, Raymond, "The Colonial Empire of The Portuguese to The Death of Albuquerque," *Transactions of the Royal Historical Society, New Series*, Vol.8, 1894, pp.109-127

Dale, Menon, Dale, Stephen, Menon, Gangadhara, "Nerccas": Saint Martyr Worship Among the Muslims of Kerala:, *Bulletin of the School of Oriental and African Studies*, University of London, Vol.41, No-3, 1978, p.525

Arnold, David, "Cholera and Colonialism in British India", *Past and Present*, No.113, pp.118-151, 1986.

Dols, Michael W., "Insanity and its treatment in Islamic Society", *Medical History*; 31: 1-14, 1987

Kumar, Deepak, "Developing a History of Science and Technology in South Asia" *Economic and Political Weekly*, Volume. 38. No 23, June 07, 2003.

Frey, E.F., Saints in Medical History, *Clio Medica* 14: 35-70. 1979

Gough, E. Kathleen, "Cults of the Dead Among the Nayars", *The Journal of American Folklore*, Vol.71, No.281, July-Sept.,pp. 446-478,1958

Miller, Eric J., "Caste and Territory in Malabar", *American Anthropologist*, New Series, Vol. 56, No.3, June, 1954.

Fawcett, F., "Nayars of Malabar", *Madras Government Museum Bulletin*, Vol. III, No. 3, 1915

Klingbeil, Gerald A., "Bridging the Gap: Ritual and Ritual Texts" in the *Bible Bulletin for Biblical Research Supplements*, US, 2007

Habib, Irfan, "Pursuing The History of Indian Technology: Pre-Modern Modes of Transmission of Power", *Social Scientist*, Vol.20, No.3/4, March-April.,1992

Freeman, J.R., "Gods, Groves and Culture of Nature in Kerala", in *Modern Asian Studies*, Vol, 33, no.2, 1999

Mencher, Joan P., "Changing Familial Roles among South Malabar Nayars", *South Western Journal of Anthropology*, Vol.18, No.3, pp.230-245, Autumn, 1962

Flueckiger, Joyce Burkhalter, "Narrative Voices and Repertoire at a Healing Crossroads in South India", *The Journal of American Folklore*, Vol. 116, No. 461, pp. 249-272, Summer, 2003

Gough, Kathleen E. "Female Initiation Rites on the Malabar Coast" *Journal of the Royal Anthropological Institute*, 85, 1955

Gentes, M.J., "Scandalizing The Goddess at Kodungallur", *Asian Folklore Studies*, Vol-51, No.2, 295-322, 1992

Pearson, Michael, "Hindu Medical Practice in Sixteenth-Century Western India: Evidence from the Portuguese Records," *Portuguese Studies*, XVII, pp. 100-13, 2001

Dols, Michael W., "Insanity and its Treatment in Islamic Society", *Medical History*, 1987

Varier, N.V.K., "Ayurveda in Kerala", Souvenir: Indian History Congress, Indian History Congress. Session, Calicut University, 1976

Jensen, Niklas Thode, "The Medical Skills of the Malabar Doctors in Tranquebar, India, as Recorded by Surgeon T L F Folly, 1798", in *Medical History*, 49,2005,

Yalman, Nur "On The Purity of Women in the Castes of Ceylon and Malabar", *The Journal of The Royal Anthropological Institute of Great Britain and Ireland*, No.1 (Jan-June, 1963). pp.25-58

Zarilli, Phillip B., "Doing the Exercise: The In-body Transmission of Performance Knowledge in a Traditional Martial Arts", *Asian Theatre Journal*, Vol.1, No.2, Autumn, 1984, pp.191-226

Donkin, R.A., "Between East and West; The Moluccas and the Traffic in Spices up to the Arrival of Europeans", in *Memoirs of the American Philosophical Society*, Philadelphia, Vol.248, 2003

Nicholas, Ralph W., "The Goddess Sitala and Epidemic Small Pox in Bengal", *The Journal of Asian Studies*, Vol- 41, No-1 (Nov 1981), pp.21-44

Misra, Babagrahi, "Sitala" The Small Pox Goddess of India", *Asian Folklore Studies*, Vol-28, No-2, 1969, pp.133-142

Grove, Richard, "Indigenous Knowledge and the Significance of South-West India for Portuguese and Dutch Constructions of Tropical Nature", *Modern Asian Studies*, Vol.30, No.1, Feb., 1996

Porter, Roy, "The Patients' View, Doing Medical History From Below", *Theory and Society*, Vol.14, No.2, Mar,1985

Misra, S.K., Bhatia, B.R., Bhat, P.S.N., and Dwivedi, R.B. "Idea of Integration as a Process of Evolution of Indian System of Medicine in the Medieval Period", *Indian Journal History of Science*, 16 (1) 36-40, May, 1981

Dale, Stephen F., "Trade Conversion and The Growth of Islamic Community of Kerala, South India" *Studia Islamica*, No.71, 1990

Books

Slaczka, Anna A., *Temple Consecration Rituals in Ancient India*, Brill, Leiden,2007

Alan, Bewell., *Romanticism and Colonial Disease*, Johns Hopkins University Press, Baltimore, 1999

Alavi, Seema., *Islam And Healing: Loss And Recovery Of An Indo-Muslim Medical Tradition 1600-1900*, Palgrave Macmillan, 2008

Alexander, P. C., *Buddhism in Kerala*, Annamalai University, 1949

Ali Engineer, Asghar., *Kerala Muslims: A Historical Perspective*, Ajanta Publications, 1995

Ali, Daud., *Courtly Culture and Political Life in Early Medieval India*, CUP, UK, 2004

Anderson, Susan C., and Tabb, Bruce H., (eds), *Water, Leisure and Culture European Historical Perspectives*, Berg, Oxford, 2002

Andrews, Jean., *Peppers: The Domesticated Capsicums*, University of Texas Press, US, 1995

Appleby B, Andrew., *Diet in Sixteenth Century England: Sources, Problems, Possibilities*,

Arnold, David., *Colonising the Body: State Medicine and Epidemic Disease in Nineteenth Century India*. OUP, Delhi, 1993

Arnold, David., *Science, Technology, and Medicine in Colonial India*, Part 3, Volume 5, CUP, UK, 2000

Arya, S.P., *A Sociological Study of Folklore*, 1975

Ashley, Wayne., “The Teyyam Kettu of Northern Kerala”: *The Drama Review*, TDR, Vol-23, No.2, Performance Theory, South Asia Issue, June, 1979

Baber, Zaheer., *The Science of Empire: Scientific Knowledge, Civilization and Colonial Rule in India*, Delhi 1998.

Bagchi, Asoke K., *Medicine in Medieval India: 11th to 18th Centuries*, 1997

Bailey, Clinton., *Bedouin Religious Practices in Sinai and the Negev*, Anthropolos, 1982

Bakshi, Akhil., *Silk Road on Wheels: Travels Through Central Asia and Tibet*

Bakshi, S., *Advanced History of Medieval India*, Anmol Publications, New Delhi,

Bakshi, S.R., *Advanced History of Medieval India*, Anmol Publications Pvt Ltd, New Delhi, 2003

Bala, Poonam, *Medicine and Medical Policies in India: Social and Historical Perspectives*, Lexington Books, UK, 2007

Balakrishnan., VV., *Chedikalum Avayude Oushadhagunangalum*, D C Books, Kottayam, 2007

Balg, Bartholomaes Ziegen, *Genealogy of the Malabar Gods*, 1713

Ball, Katherine M., *Animal Motifs in Asian Art: An Illustrated Guide to their Meanings and Aesthetics*, Dover Publication, US, 2004

Ball, Katherine M., *Animal Motifs in Asian Art: An Illustrated Guide to their Meanings and Aesthetics*, Dover Publication, US, 2004

Barendse, R. J., *The Arabian seas: the Indian Ocean world of the seventeenth century*, East gate Book, New York, 2002, p.251

Basham, A.L., *The Wonder That Was India: A Survey of the History and Culture of the Indian Sub-continent Before the Coming of the Muslims*, Rupa&Co, New Delhi, 1965

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

Battuta, Ibn., *Kitabu-ur-Rahla*, by William Boultong Kegan Paul, Trench, Trubner & Co., Ltd., New York : E. P. Dutton & Co.

Bayly, C.A., *Empire and Information: Intelligence Gathering and Social Communication in India 1780-1870*, Cambridge, 1996

Bayly, Susan., *Saints, Goddesses and Kings: Muslims and Christians in South Indian Society*, CUP, 1989

Bhaskaranuni, P., *Pathompatham Nootandile Keralam*, Kerala Sahitya Akademi, Trissur, 2000

Bhattacharya, Alakananda., *The Mlechchhas in Ancient India: Their History and Culture*, 2003

Bhugra, Dinesh., *Psychiatry and Religion: Context, Consensus and Controversies*, Routledge, New York, 1996

Bijker, W E., Hughes, T P., and Pinch, T J., (eds), *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology*, Cambridge, Mass; 1987.

Blanchard, Ian., *Mining, Metallurgy, and Minting in the Middle Ages: Continuing Afro-European supremacy, 1250-1450*, 2005

Bose, D. M., Samarendra Nath Sen, B. V. Subbarayappa., *A Concise History of Science in India*, Indian National Science Academy, Delhi, 1971

Bouchon, Genevieve “Sixteenth Century Malabar And Indian Ocean” in *India And The Indian Ocean 1500-1800*, in Ashin Das Gupta and M. N. Pearson (eds), O.U.P. Calcutta, 1987

Brewster, David., *The Edinburg Encyclopedia*, Vol-13, William Blackwood, London, 1830

Buchanan, Francis., *A Journey from Madras Through the Countries of Mysore, Canara, and Malabar*, Asian Educational Service, Delhi, 1988

Caldwell, Sarah., *Oh Terrifying Mother: Sexuality, Violence and Worship of the Goddess Kali*, OUP, 2001

Carrin, Marine., (ed.), *Managing Distress: Possession and Therapeutic Cults in South Asia*, Anohar Publishers, New Delhi, 1999.

Carrington, Hereward., From *History Of Natural Hygiene*, 1996,

Catlos, Brian A., *The Victors and The Vanquished: Christians and Muslims of Catalonia and Aragon, 1050–1300*, Cambridge University Press, UK, 2004

Chahryar Adle, Irfan Habib, (eds), *History of Civilizations of Central Asia: Development in Contrast : From The Sixteenth to the Mid Nineteenth Century*, UNESCO, Turin, 2003

Chakravarti, Ranabir, “Seafaring, Ships, and Ship Owners: India and the Indian Ocean (AD 700-1500) in Ruth Barnes, David Parkin (eds), *Ships and the Development of Maritime Technology on the Indian Ocean*, Routledge Curzon, London, 2002

Chakravarti, Uma., “*Conceptualizing Brahmanical Patriarchy in Early India; Gender, Caste, Class, and State*,” in Manoranjan Mohanty, *Readings in Indian Government and Politics, Class, Caste, Gender* (ed), Sage Publications, New Delhi, 2004

Chambert-Loir, Henri, Anthony Reid, *The Potent Dead: Ancestors, Saints and Heroes in Contemporary Indonesia*, 2002

Châtel, Francesca De., *Water Sheikhs & Dam Builders: Stories of People and Water in the Middle East*, Transaction publishers, New Brunswick, New Jersey, 2007

Chaudhuri, K. N., *Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, CUP, UK, 1985

Chaudhuri, K. N., *Trade and Civilisation in the Indian Ocean: An Economic History from the Rise of Islam to 1750*, CUP, UK, 1985

Chaumont, Francois De., *A Manual Of Practical Hygiene*, J. & A Chuechill, New Buklington Street, 1878

Chaurasia, Radhey Shyam, *History of Medieval India From 1000 AD to 1707 AD*, 2002

Chopra, Pran Nath, Puri, Baij Nath, Das, Manmath Nath, (eds), *A Social, Cultural, and Economic History of India*, Macmillan India, 1974

Classen, Constance, David Howes., *Aroma; The Cultural History of Smell*, Routledge, London, 1994

Clayton, A.C, C.K. Menon., *Paraiyan and Legend of Nandan: Some Agricultural Ceremonies*

Collins, Randall, *Weberian Sociological Theory*, CUP, 1986

Corbin, Alain., *The Foul and the Fragrant: Odor and the French Social Imagination*, Berg Publications, New York, 1986

Dale, Stephen., *"The Hadhrami Diaspora in South Western India: The Role of Sayyeds of the*

Dalrymple, William., *The Dancer of Kannur, Nine Lives: In Search of the Sacred in Modern India* Bloomsbury Publishing, London, 2009

Dare, M. Paul, *Indian Underworld*, Kessinger Publishing, 2003

Datta, Amaresh., *The Encyclopaedia Of Indian Literature* (Volume One (A To Devo), Vo-1, Sahitya Academy, 2006

David Cliff, Andrew, Matthew Smallman-Raynor, *Infectious Diseases: A Geographical Analysis : Emergence and Re-Emergence*

Desai, Ziyad-Din A., *A Topographical list of Arabic, Persian, and Urdu inscriptions of South India*, I C H R, 1989

Desouza, Shaila., *"Health Practices and People's Identity Re-Locating Identity"*, Lusotopie 2000

Devi, R. Leela, *History of Kerala*, Vidyarthi Mithram Press & Book Depot, 1986

Dharampal., *Indian Science and Technology in the Eighteenth Century. Some Contemporary European Accounts*, Impex India, Delhi. 1971

Diver, Maud, *Royal India: A Descriptive and Historical Study of India's Fifteen Principal States and Their Rulers*, Hawthorn Books, US, 1942

-do- *Imperial Medicine and Indigenous Societies*, OUP, New Delhi, 1989

-do-Cultural Heritage of Kerala: An Introduction, East West Publications, 1978

-do-*Science and Technology in Indian Culture: A Historical Perspective*, National Institute of Science, Technology & Development Studies, Delhi, 1984

-do-*Social and Cultural History of Kerala*, Sterling, 1979

Douglas, Mary, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, Routledge, 2003

Dr.Hafeel (ed), Natarivukal: Natuvaidym, DC Books, Kotayam, 2007

Drees, Clayton J., *The Late Medieval Age of Crisis and Renewal, 1300-1500:A Biographical Dictionary*,(ed) Greenwood Press, 2001

Dundes, Alan., *The Evil Eye: A Casebook*, University of Wisconsin Press, Wisconsin, 1992

Dutt, U C., and King, G., *The Materia Medica of the Hindus*, Calcutta, 1922

E.Pormaan, Peter., Emilie Savage-Smith, *Medieval Islamic Medicine*, Georgetown University Press, Washinton, 2007

Eaton, Richard M., *Essays On Islam And Indian History*, Oxford, 2000
Edinburgh and London,

Elliott, Lynne, *Medieval Medicine and the Plague*, Crabtree Publishing Company, US, 2006

Elworthy, Frederick T., *The Evil Eye: An Account of this Ancient and Widespread Superstition*, London, John Murray, 1895

Ernst, Waltraud, and Harris, Bernard(eds)., *Race, Science and Medicine, 1700-1960*, Routledge, New York, 2001

Faas, Patric, *Around the Roman Table: Food and Feasting in Ancient Rome*, Palgrave Macmillan, New York, 2003

Fawcett, F., *Nayars of Malabar*, Asian Educational Services, New Delhi,1985

Fawcett, Fred., *Nambutiris*, AES, New Delhi, 1900

Federspiel, Howard M., *Sultans, Shamans, and Saints: Islam and Muslims in Southeast Asia*, University of Hawai Press, US, 2007

Filliozat, J., *La Doctrine Classique De La Medicine Indienne*, translated by Dev Raj Chanana, Delhi, 1964

Firth, Shirley, Dying., *Death and Bereavement in a British Hindu Community*, Peeters, 1997

Fleiderer, Beatrix P., *The Red Thread: Healing Possession at a Muslim Shrine in North India*, Aakar Books, Delhi, 2006

Flood, Gavin D., *An introduction to Hinduism*, CUP, UK, 1996

Foucault, M., *Madness and Civilization: A History of Insanity in the Age of Reason*, Routledge, UK, 2002

Foucault, Michel, *The Birth of The Clinic, An Archaeology of Medial Perception*, Vintage Books, New York, 1973

Frawley, David, Avinash Lele, Subhash Ranade., *Ayurveda and Marma Therapy: Energy Points in Yogic Healing*, Lotus Press, Wisconsin, 2009

Frederick Oldham, Charles., *The Sun and the Serpent: A Contribution to the History of Serpent-Worship*, 1988

Freeman, Rich, “*The Teyyam Tradition of Kerala*”, in Gavin Flood, *the Blackwell companion to Hinduism*, Blackwell, 2008

Frenz, Margret, *From Contact to Conquest: Transition to British Rule In Malabar, 1790-1805*, Oxford University Press, New Delhi, 2003

Fuller, C.J., *The Nayars Today*, CUP, 1976

Furdell, Elizabeth Lane., *Royal Doctors, 1485-1714, Medical Personal at the Tudor and Stuart Court*, University of Rochester Press, 2001.

Gaborieau, M. “*The Cult of Saints Among the Muslims of Nepal and Northern India*” in S.Wilson (ed.) *Saints and Their Cults*, Cambridge: Cambridge University Pres, 1985

Garcia-Ballester, Luis, *Medicine in A Multicultural Society: Christian, Jewish and Muslim Practitioners in the Spanish Kingdoms, 1222-1610* Aldershot, England, Ashgate Publishing, 2001
Genevieve, Lemercinier, *Religion and Ideology in Kerala*, D.K. Agencies, New Delhi, 1984

George, Maya, *Faith & philosophy of Christianity*, Kalpaz Publications, New Delhi, 2009

Gets, Faye., *Medicine in the English Middle Ages*, Princeton, Princeton University Press, 1998

Ghalioungui, P., Khalil, S.H., and Ammar, A. R., *On an Ancient Egyptian Method of diagnosing pregnancy and Determining Foetal Sex*

Ghosh, Suresh Chandra., *History of education in medieval India, 1192 A.D.-1757 A.D*, Originals, 2001

Gibbon, Edward., *The History of the Decline and Fall of the Roman Empire*, Cincinatti, France, 1844

Good, Byron J., *Medicine, Rationality and Experience : An Anthropological Perspective*, Cambridge, Cambridge University Press.1994

Gopalakrishnan, P.K., *Keralathinte Samskarika Charitram*, State Institute of Languages, Trivandrum, 2000

Gough, Kathleen, "Literacy in Kerala," in Jack Goody (ed), *Literacy in Traditional Societies*, CUP, UK, 1968

Green, Monica H., (ed & trns), *The Trotula, The Medieval Compendium of Women Medicine*, PENN, University of Pennsylvania, Philadelphia, 2001

Green, Thomas A. (ed)., *Martial arts of the world: en encyclopedia. R - Z*, Volume 2, ABC-CLIO, California, 2001

Grunebaum, Gustave Edmund., *Medieval Islam: A Study in Cultural Orientation*, university of Chicago Press, Chicago, 1971

Guiley, Rosemary, *The Encyclopedia of Magic and Alchemy*, Info Base Publication, New York, 2006

H, Mikkeli, *Hygiene in the Early Modern Medical Tradition*, 1999

Hall, Kenneth R., *Trade and Statecraft in the Ages of Colas*, Abhinava Publications, New Delhi, 1980

Hameed, Abdul., *Exchanges between India and Central Asia in the field of medicine*. New Delhi: Dept. of History of Medicine and Science, Institute of History of Medicine and Medical Research, 1986

Hamilton, Walter., *A Geographical, Statistical, and Historical Description of Hindostan and the Adjacent Countries*, 1820

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

Harrison, Mark, *Climates and Constitutions: Health, Race, Environment and British Imperialism in India, 1600-1850*, New York, OUP, 1999

Hatch, Emily Gilchrist ., *Travancore: A Guide Book for the Visitor*, Oxford University Press, 1939

Hawkey, Sue., *Herbalism: Using Herbs for Stress Relief and Common Ailments*

Hawkey, Sue., *Herbalism: Using Herbs for Stress Relief and Common Ailments*, Lorenz Books, 1999

Helena Sliwoski, Amelia., *Islamic Ideology and Ritual: Architectural and Spatial Manifestations*, State University of New York, Buffalo, 2007

Henry Buck, Albert., *A Treatise On Hygiene and Public Health*, Vol.2 *History and Society*, Cork University Press, Ireland, 1998

Ho, Engseng., “Custom and Conversion in Malabar: Zayn al-DinMalibaris’s Gift of the Mujahidin: Some Accounts of the Portuguese”, in Barbara Metcalf (ed), *Islam in south Asia in Practice*, Princeton University Press, Princeton, 2009

Hobsbawm, E Ranger, T., (eds), *The Invention of Tradition*, Cambridge University Press, Cambridge, 1983

Horacio. Fábrega., *History of Mental Illness in India: A Cultural Psychiatry Retrospective*, Motilal Banarsidass Publishers, 2009

- Hourani, George Fadlo, John Carswell., *Arab Seafaring in the Indian Ocean in Ancient and Early Medieval Times*, Princeton University Press, New Jersey, 1995
- Hudson, Dennis., *The Body of God, An Emperors Palace for Krishna in Eight-Century Kanchipuram*, OUP, New York, 2008
- Hughes, Sarah Shaver, Hughes Brady., *Women in World History, Reading from Pre-History to 1500*, 1995
- Hunter,V., *An Account of the British Settlement of Aden in Arabia*, Franc Cass and Company Limited, London, 1877
- Husain, Shamshad., “Mampuram Palliyum Annavam”, in Leena.M.A (ed) *Natarivukal Natubhakshanam*, DCB, 2007
- Hymavathi,P., *History of Ayurveda*, Bhargava publishers, Warangal, 1993
in Various Parts of Asia, Volum 2, 1989
- Induchudan, V. T., *The golden tower: a historical study of the Tirukkulasekharapuram and other temples*, Cochin Devaswom Board, 1971
- Induhudan, V.T., *The Secret Chamber*, The Cochin Dewaswom Board, Trichur, 1969, p.56
- Jaggi, O.P., *History of Science, Technology and Medicine in India*, Volume 10, Atma Ram, 1973
- James C Riley, *The Eighteenth Century Campaign to Avoid Disease*, Macmillan London, 1987
- Jayashanker, S., *Temples of Kerala*, Directorate of Census Operations, 1999
- Jayashanker, S., *Temples of Malappuram District*, Directorate of Census Operations, Kerala - 2004
- Jha, D.N., *Ancient India, In Historical Outline*, Manohar, New Delhi, 2001
- John T. Alexander., *Bubonic Plague in Early Modern Russia: Public Health and Urban Disaster*. Oxford, UK, 2003
- Kapferer, Bruce., *The Feast of the Sorcerer: Practices of Consciousness and Power*, University of Chicago Press, London, 1997

Kareem, C. K., *Kerala District Gazetteers: Palghat*, Kerala (India), Superintendent of Govt. Presses, 1976

Kareem, C.K., *Kerala under hydar Ali and Tipu Sultan*, Kerala History Association, 1973

Kenoyer, Jonathan Mark., "Cultures and Societies of the Indus Tradition", in *India: Historical Beginnings and The Concept of the Aryan*, National Book Trust of India, New Delhi, 2006

Kerala District Gazetteers: Palghat, Kerala (India), Superintendent of Govt. Presses, 1976; Census of India, 1981: Vol. 1-2

Khanna, Meenakshi *Cultural History of Medieval India*

Khare, R.S., "Folk Medicine in North Indian Village; Some Further Notes and Observation" in Griraj Gupta. (ed), *The Social and Cultural Context of Medicine in India*, New delhi, 1987

Kothare, S. N., and Paian, Sanjay A., *Introduction to the History of Medicine*

Krishnan, V. V. Kunhi, *Tenancy legislation in Malabar, 1880-1970: An Historical Analysis*

Kumar, Vijaya., *Kalarippayatt The martial Art of Kerala*, Dept.of Public Relations, Government of Kerala

Kunju, Ibrahim., *Studies in Medieval Kerala History*, Kerala Historical Society, Trivandrum, 1975

Kurup, K. K. N., *Aryan and Dravidian Elements in Malabar Folklore: A Case Study of Ramavilliam Kalakam*, 1977

Kurup, K. K. N., *Aspects of Kerala History and Culture*, College Book House, 1977

Kurup, K. K. N., *Modern Kerala: Studies in Social and Agrarian Relations*, Mittal Publications, 1988

Kurup, K.K.N., *India's Naval Traditions: The Role of Kunhali Marakkars*, 1997

Kuruppu, K.K.N., *Theyyam-A Vanishing Ritual Dance of Kerala*, in *A Panorama of Indian Culture*: Professor A. Sreedhara Menon felicitation volume (ed) K. K. Kusuman, 1990,

Kutumbaiah, P., *Ancient Indian Medicine*, Orient Longman, Mumbay, 1962

Lach, Donald F., *Asia in the Making of Europe*, Vol-1, Chicago University Press, Chicago, 1965

Lansing, Carole., *Power&Purity: Cathar Heresy in Medieval Italy*, OUP,1998

Lemercinier, Genevieve., *Religion And Ideology in Kerala*, D.K. Agencies, New Delhi, 1984

Leslie, Charles and Allan Young., (eds), *Paths To Asian Medical Knowledge, Comparative Studies of Health and Medical Care Series*, University of California Press, 1992,

Leslie, Charles M., *Asian Medical Systems: A Comparative Study*, University of California Press, Berkeley, 1976

Lindemann, Mary, *Medicine and Society in Early Modern Europe*, , *New Approaches to European History*, CUP, 1999

Lipshitz, Susan., (Ed), *Tearing the Veil: Essays on Femininity*, Routledge & Kegan Paul, London, 1978

Little, Lester K, *Plague and the End of Antiquity: The Pandemic of 541-750*. New York, NY: Cambridge University Press,2007

Logan, William., *Malabar Manual*, Asian Educational Service, New Delhi,1951

Lucero, Lisa J., *Water and Ritual, The Rise and Fall of Classic Maya Rulers*, University of Texas Press, Austin, 2006

Lucero, Lisa J., *Water and Ritual:The Rise and Fall of Classic Maya Rulers*, The University of Texas Press, 2006

Luijendijk, Dick, *Kalarippayat: The Structure and Essence of an Indian Martial Art*, CIP, Den Haag, US, 2008

Lynch, R. L, (ed), *The Cross-Cultural Approach to Health Behaviour*, Fairleigh Dickinson University Press, New Jersey, 1969

Lynch, R.L., (ed), *The Cross-Cultural Approach to Health Behaviour*, New Jersey, Fairleigh Dickinson University Press, 1969

Malabar Coast” in Ulrike Freitag, W.G.Clarence-Smith (eds) *Hadhrami Traders, Scholars and Statesmen in the Indian Ocean, 1750s-1960s* Leiden, Newyork, 1997

Malekandathil, Pius, *Maritime India: Trade, Religion and Polity in the Indian Ocean*, Primus Books, New Delhi, 2010

Mathew, K.S., *Society in Medieval Malabar: A Study Based on Vadakka Pāṭṭuka*, 1979

Mathews, Johnsy., *Economy and Society in Medieval Malabar (A.D.1500-1600)* St.Mary's Press and Book Depot, Changanacherry, 1996

McEnery, Tony., *Swearing in English: Bad Language, Purity and Power from 1586 to the Present*, Routledge, New York, 2006

Menon, Chelangat Achutha., *Ballads of North Malabar*, vol-1, (mal), University of Madras, Madras, 1956,

Menon, K.P.Padmanabha *Cochirajyacharithram*, Mathrubumi, 1989

Menon, K.P.Padmanabha *Cochirajyacharithram*, The Mathrubhumi Publishers, Calicut, 1914

Menon, Madhava, *A handbook of Kerala: International School of Dravidian Linguistics*, Vol. 2 2002

Menon, Narayana, *The Performing Arts*, Humanities Press, 1983

Menon, Padmanabha, *History of Kerala*, Ernakulam, 1924

Menon, Sreedhara A., *A Survey of Kerala History*, 1967

Menon, Sreedhara., *Social and Cultural History of Kerala*, Sterling Publishers, Trivandrum 1979

Menon, T. K. Krishna., *Progress Of Cochin*, Ernakulam, 1932

Menon, T. Madhava., *A handbook of Kerala*, Volume 2, International School of Dravidian Linguistics, 2002

Menon, V.M. Kuttikrishna., "Keraleeya Visha Chikitsa", in Dr.Hafeel (ed) *Natarivukal: Natuvaidyam*, DC Books, Kotayam, 2007

Meri, Josef W., Lbucharach, Jere., *Medieval Islamic Civilization*, Routledge, New York, 2006

Metcalf, Barbara., *Islam in South Asia in Practice*, Princeton University Press, New Jersey, 2009

Miller, Roland, *Mappila Muslims of Kerala, A Study in Islamic Trend* , Orient Longman, Madras, 1992

Mohammada, Malika, *The Foundations of the Composite Culture in India*, Aakar Books, Delhi, 2007

Mooens, Adriaan., *Memorandum on the Administration of the Coast of Malabar Dated 1781*,

Moreland, William Harrison., *India at the Death of Akbar: An Economic Study*, Elibron Classics, 2006

Nadar, G. Krishnan., *Historiography and History of Kerala*, Learners' Book House, 2001

Nair, T. Sridharan, *Kalarippayattu*, Kannur Printing works, Kannur, 1963

Nambhutiri, Vishnu., *Naatoti Vijnaaneeyam*, DC Books, Kottayam, 2007

Nambhutiri, Vishnu., *Satya Guru Vachanam*, compiled 1979

Nambiar, M. C. Appunni, *Vadakkan Pattukal*, Kottayam, 1983

Nambiar, M.C. Appunni, (ed), *Vadakkan Pattukal*, Kottayam, 1983

Namboodiri, M.V. Vishnu, *Malayarude Chikitsa Paramparyam*, in Dr. Hafeel (ed), *Natarivukal: Natuvaidym*, D.C Books, Kottayam, 2007

Namboodiri, M.V. Vishnu, *Mantrikavidyayum Mantravadappattukalum*, National Book Stall, Kottayam, 1979

Namboodiri, M.V. Vishnu, *Natoti Vijnaaneeyam*, D C Books, Kottayam, 1996

Namboodiri, N.M., *A Study of Place Names in the Calicut District*, Unpublished Ph.D Thesis, Calicut University, 1988

Namboodiripad, E. M. S., *History, Society, and Land Relations: Selected Essays*, Left Word Books, New Delhi, 2010

Namboothiri, Koramangalam Narayanan, "Natu Vaidyathile Vannan Paramparyam" in in

Narayan, Shovana., *Folk Dance Traditions of India*, Shubhi Publication, 2004

Narayana Ayyar, C.V. *Origin and Early History of Saivism in South India*

Narayanan Nambhuthiri, Koramangalam., “Natuvaidyahile Vannan Paramparyam”, in Dr.Hafeel (ed), *Natarivukal: Natuvaidym*, DC Books, Kottayam, 2007

Narayanan, M. T., *Agrarian Relations in late Medieval Malabar*, ICHR, New Delhi, 2003

Narayanan, M.G.S., *Aspects of Aryanisation in Kerala*, Trivendrum, 1973

Nelson, Sioban., *Say Little Do Much: Nursing, Nuns and Hospitals in the Nineteenth Century*, University of Pennsylvania Press, 2001

Noma, Seiroku., *Japanese Costume and Textile Arts*, Weather Hill, 1974

Oaten, Edward Farley., *European Travellers in India: During the Fifteenth, Sixteenth and Seventeenth Centuries*, AES, New Delhi, 1991

Obeyesekere, Gananath., *The Cult of the Goddess Pattini*, University of Chicago Press, London, 1984

Osella F. C.Osella Migration and Commoditization of Ritual Sacrifice and Contestations in Kerala India, 2003

Osella Filippo and Carolina Osalla., *Social Mobility in Kerala: Modernity and Identity in Conflict*, Pluto Press, London, 2000

Pallath, J. J., *Theyyam: An Analytical Study of the Folk Culture, Wisdom, and Personality*, Indian Social Institute, 1995

Panda, H., *Medicinal Plants Cultivation & Their Uses*, Asia Pacific Business Press, Delhi, 2000

Panikkar, T.K.G., *Malabar and its Folk*, Asian Educational Services, New Delhi, 1995

Parry, Kenneth, *The Blackwell Companion to Eastern Christianity*, Black well publishing, Oxford, UK, 2007

Paul, K. P., *The Eucharist Service of the Syrian Jacobite Church of Malabar: The Meaning and Interpretation*, Gorgias Press, New Jersey, 2003

Pillai, Elamkulam Kunjan., *Janmi Sambradayam Keralathil*, Sahithiya Pravarthaka, C.S. Ltd,kottayam,1959

Pilley, John J., *Hygiene The Principles Of Health*, Geo Gill and Sons, 1888

Pinkerton, John., *A General Collection of the Best and Most Interesting Voyages and Travels*

Porter, R (19880): ‘What is History of Science?’ in J Gardiner (ed), *What is History Today*, London, pp 69-71

Porter, R. Roy, and Bynum, W.F., (Ed) *Medical Fringe and Medical Orthodoxy 1750-1850*, Croom Helm, London, 1986

Porter, R., *Disease, Medicine and Society in England 1550-1860*, Cambridge University Press, Cambridge, 1993

Porter, Roy, *The Greatest Benefit to Mankind: A Medical History of Humanity*, Norton, 1997

Porter, Stephen., *The Great Plague*, Stroud, Sutton Publishing Limited, 2000.

Powers, John., *A bull of a man: images of masculinity, sex, and the body in Indian Buddhism*, 2009,

Prabhu, Balagopal T.S., “Kerala Architecture” in P.J.Chериан (ed), *Essays on the Cultural Formation of Kerala*, KCHR, Trivandrum, 2007

Pushkaran, T.K., “*Kalariyum Meyyazhukum*” in C.R. Rajagopalan (ed), *Soundaryathinte Nattarivukal*, DCB, 2008

Puthenkalam, Joseph, *Marriage and the Family in Kerala: With Special Reference to Matrilineal Castes*, University of Calgary, 1977

Radhakrishnan, P., *Peasant Struggles, Land Reforms and Social Change: Malabar 1836-1982*

Raghavan, M. D., *India in Ceylonese history, society, and culture*, Asia Pub. House, 1969

Rahman, A (ed), *Science and Technology in Indian Culture: A Historical Perspective*, NISTADS, New Delhi, 1984

Rahman,A., (ed)*History of Indian Science, Technology and Culture, A.D.1000-1800*, OUP, New Delhi, 1999

Rahman,A., *Science and Technology in Indian Culture: A Historical Perspective*, National Institute of Science, Technology & Development Studies, 1984

Rajagopalan, C.R., in *Natarivu* (ed).C.R.Rajagopalan, DC Books, Kottayam,

Raju, W. E Dhanakoti., *The Elements Of Hygiene On The Laws Of Health*, C Foster And Company, 1875

Ramachandran., K. K Nair., *Kerala State Gazetteer*, Vol.2, part.2, 1986

Ramakrishnan, P. S., Saxena, K. G., Chandrashekara, U. M. (eds), *Conserving the sacred: for biodiversity management*, Science Publishers, 1998

Ramunny, Murkot, *Ezhimala: The Abode of the Naval Academy*, Northern Book Centre, New Delhi, 1993

Ra□□attā□i, Husain., *Mappila Muslims: A Study on Society and Anti Colonial Struggles*, Other Books, Calicut, 2007

Rao, M. S. A., *Social change in Malabar*, Popular Book Depot, 1957

Rao, M. S. A., *Social movements and social transformation: a study of two backward classes movements in India*, 1987

Rawlcliffe, Carole., *Medicine and Society in Later Medieval England*, Sutton Publishing, England, 1995.

Renne, Elisha P., “From Kaki to Agbada: Dress and Political Transition in Nigeria”in Jean Marie Allman (ed) *Fashioning Africa: Power and the Politics of Dress*, Indiana University Press, Bloomington, 2004

Richman, Paula, *Questioning Rāmāya□as: a South Asian Tradition*, University of California Press, California, 2001

Rippin, Andrew., *Muslims: Their religious Beliefs and Practices*, Routledge, 2005

Risse, Guenter B., *Mending Bodies, Saving Souls: A History of Hospitals*, New York, OUP, 1999

Rosen, George., *A History of Public Health*, The John Hopkins University Press, Maryland, 1993

Rosen, George., *Madness in Society*, Routledge & Kegan Paul, 1968, London

Ross, Heather Colyer., *The Art of Arabian Costume: A Saudi Arabian Profile*, Arabesque Commercial, 1981

Roth, Norman, *Daily life of the Jews in the Middle Ages*, Greenwood Publishing Group, Westport, 2005

Roy, Sarat Chandra, and Bose, A. K., *Man in India*, Volume 82, 2002, p.327

Sadasivan, S.N., *A Social History of Kerala*, A.P.H. Publishing Corporation, New Delhi, 2000

Saliba, George., *Islamic Science and the Making of the European Renaissance*, MIT, Washington, 2007

Sallares, Robert, *Malaria and Rome, A History of Malaria in Ancient Italy*, OUP, New York, 2002

Santhosh, P.S, *Paramparya Visha Chikitsa*, in Dr.Hafeel (ed), *Natarivukal: Natuvaidym*, DC Books, Kotayam, 2007

Sarton, George., *Introduction to the History of Science: From Rabbi Ben Ezra to Roger Bacon*, the Williams & Wilkins, 1950; *The Appreciation of Ancient and Medieval Science During Renaissance (1450-1600)*, University of Pennsylvania Press, 1955; *The History of Science and New Humanism*, Harvard University Press, 1962.

Schimel, Annemarie., Burzinek Waghmar., *The Empire of Great Mughals, History, Art and Culture*, Reaction Books Ltd, London, 2004

Scott, Susan, and C. J. Duncan (2001). *Biology of Plagues: Evidence from Historical Populations*. Cambridge, 2001

Sen, S.N., *Influence of Indian Science on Other Culture Areas*, Indian Association for the Cultivation of Science

Seton, Regina, "Porridges, Gruels, and Breads: The Cereal Food Stuff of Early Medieval Ireland" in Michael A. Monk, John Sheehan (ed), *Early Medieval Munster: Archaeology*,

Sewell, Robert, (trns), *Forgotten Empire: Vijayanagar, A Contribution to the History of India*, The Eco Library, Middle Sex, 2006

Shah, Ghanshyam., *Caste and Democratic Politics in India*, Permanent Black, New Delhi, 2003

Shams al-Din, Ahmad (ed.), *Sahih Muslim. Dar al-Kotob al-Ilmiyah*, Vol. 3, Sahih Muslim. Lebanon Publishing House, Beirut, 1998

Sharma, P V., *History of Medicine in India*, New Delhi, 1992, Charles Leslie, *Asian Medical System-A Comparative Study*, Berkeley, 1976

Sharma, P.V., *History of medicine in India, from antiquity to 1000 A.D*, Indian National Science Academy, 1992

Sharma, Priya Vrat, (ed). *History of Medicine in India (from Antiquity to 1000 A.D.)*. New Delhi: Indian National Science Academy, 1992.

Sheard, Sally, Power, Helen J., *Body and City, Histories of Urban Public Health*, Ashgate, 2000

Sheriff, Abdul., *Dhow Cultures and the Indian Ocean: Cosmopolitanism, Commerce, and Islam*, Columbia University Press, New York, 2010,p.

Shiv Sharma, *The System of Ayurveda*, 1929

Shokoohy, Mehrdad, (ed), *Muslim architecture of South India: The Sultanate of Ma'bar and the Tradition of Martime Settlers on the Malabar and Coromandal Coast of Tamilnadu*, Routledge, 2003

Siena, Kevin Patrick, *Poverty and the Pox: Venereal Disease in London Hospitals, 1600-1800 England*, University of Toronto, 2001

Sigeriest, Henery E., 'Seminar' at California Academy of Medicine, March 11, 1940.

Sigerist, Henry E., *Land Marks in the History of Hygiene*, OUP, New York, 1956

Sigerist, Henry Ernest., *A History of Medicine: Early Greek, Hindu, and Persian medicine*, Oxford University Press, 1961

Sigerist, Henry., *A History of Medicine: Primitive and Archaic Medicine*, Oxford University Press, 1951

Silva Gracias, Fátima da, *Health and Hygiene in Colonial Goa, 1510-1961*, Concept Publishing Company, New Delhi, 1994

Simcox, Edith Jemima., *Primitive Civilizations: Or Outlines of the History of Ownership in Archaic Communities*, 2010

Simoons, Frederick J., *Plants of life, Plants of Death*, University of Wisconsin Press, Wisconsin, 1998

Sing, Upinder., *A History of Ancient and Early Medieval India*, 2009

Singh, Anjana., *Fort Cochin in Kerala, 1750-1830: The Social Condition of a Dutch Community in An Indian Milieu*,

Singh, Kumar Suresh, *People of India: Volume 27, Part 3, Anthropological Survey of India – 2002*

Singh, NK., Samiddin, A., Global (eds), *Encyclopaedic Historiography of the Muslim*, Vision Publishing House, Delhi, 2003

Singh, Virendra Prakash., *Community and Caste in Tradition*, Common Wealth Publishers, 1992

Singjee, Bhagvat., *Aryan Medical Science*, 1895, reprint, Delhi, 1993

Slack, Paul, “*Mortality Crises and Epidemic Disease in England: 1485-1610*”, 2003

Slater, Gilbert., *Some South Indian Villages*, Oxford University Press, 1918

Smart, James R. G. Rex Smith, B.R. Pridham., *New Arabian Studies*, Volume 3, University of Exeter Press, UK, 1996

Smith, Frederick M., *The Self Possessed: Deity and Spirit Possession in South Asian Literature*, Columbia University Press, New York, 2006

Smith, Virginia Sarah., *Clean: A History of Personal Hygiene and Purity*, OUP, Oxford, - 2007

Spielvogel, Jackson J., *Western Civilization*, Wordsworth, Boston, 2011

Squatriti, Paolo, *Water and Society in Early Medieval Italy, 400-1000*, Cambridge University Press, United Kingdom, 1998

Srinivas, M.N., *Social Change in Modern India*, 1987

Stephen, Jeyaseela., *Literature, Caste and Society; The Masks and Veils*, Kalpaz Publication, Delhi, 2006

Susrutha, *Susrutha Samhita.*, (tr), Kaviraj Kunja Lal Bhishagratna, Calcutta, 19II

Tagare, Ganesh Vasudeo., *The Skanda Purana: Volume 18*, 2003

Terpstra, Nicholas, *The Politics of Ritual Kinship: Confraternities and Social Order in Early Modern Italy*, Press Syndicate of the University of Cambridge, UK, 2000

Thulaseedharan, K., *Community and Caste in Tradition*, College Book House, 1977

Thurston, Edgar., *Castes and Tribes of Southern India*, Volume 4, Government press , 1909

Thurston, Edgar., *Omens and Superstitions of Southern India*, CIE, 1912

Toller, Steve Van, Dodd, G.H., *Fragrance: The Psychology and Biology of Perfume*, Elsevier Science Publishers LTD, Essex, England, 1992

Turner, Bryan S., *The Body in Asia*, Berghahn Books, 2009

Unnikrishnan E., *Materia Medica of the Local Health Traditions of Payyannur*, Discussion Paper No. 80, Kerala Research Programme on Local Level Development, Centre for Development Studies, Thiruvananthapuram, 2004

Unschuld, Paul, *Medicine in China: A History of Ideas*. Berkeley: University of California Press, 1985

Uyl, Marion Den, *Kingship and gender identity: some notes on marumakkathayam in Kerala*, in Monika Böck, Aparna Rao, (ed), *Culture, creation, and procreation: concepts of kinship in South Asian practice* Berghahn Bokks, 2000

Vaidyar, T.M. Balakrishnan., “*Marmmam, Odivu, Ellu Chiktsa*”; Ranjith Kumar P, “*Kalarivaidyavum Kamalayum*” in Dr.Hafeel (ed), *Natarivukal: Natuvaidym*, DC Books, Kotayam, 2007

Valiathan, M. S., *The Legacy of Caraka*, Orient Longman, Hyderabad, 2003

Valiathan, M.S., *Legacy of Vagbhata*, Universities Press, Hyderabad, 2009

Van Arsdall, Anne., *Medieval Herbal Remedies: The Old English Herbarium and Anglo-Saxon Medicine*, Routledge, New York, 2002

Varier, N.V.K., *Ayurveda Charithram*, Kottakkal Arya Vaidya Sala, 2002

Varier, N.V.Krishnan Kutty, *Ayurvedacharitram*, Arya Vaidya Sala, Kottakkal, 2002

Varier, P.S., (tran), Warriar, P.U.K., *Chikitsa Sangraham*, Arya Vaidya Sala, Kottakkal, 1991

Varma. R. L., “Indian-Arab Relations in Medical Sciences”, Sharma, P.V. (Ed.) *History of Medicine in India*, New Delhi, Indian National Science Academy

Vatsyayanam, Kapila, *Traditions of Indian folk Dance*, Indian Book Company, New Delhi, 1976

Veluthat, Kesavan, *The Early Medieval in South India*, OUP, New Delhi, 2009

Vijayakumar, K., *Kalarippayattu Keralathinte Sakthiyum Soundaryavum*, Department of Cultural publications, Govt.of Kerala, Thiruvananthapuram, 2000

Wallis, Faith., *Medieval Medicine: A Reader*, University of Toronto, Canada, 2010

Wear, Andrew., (ed) *Medicine in Society: Historical Essays*, Cambridge University Press, Cambridge, 1992.

Webster, Charles., (ed). *Health Medicine and Mortality in the Sixteenth Century: Cambridge Monographs on the History of Medicine*. Cambridge, CUP, 1979

Weiss, Sheila Faith., *Race Hygiene and National Efficiency: The Eugenics of Wilhelm Schallmayer* University of California Press, California, 1987

Wilson, Horace Hayman., *Works of the late Horace Hayman Wilson*, [ed. by E.R. Rost], London, Trubner &Co, London, 1865

Wink, André., *Al-Hind: The Making of The Indo-Islamic World*, Brill Leiden, Boston, 2004

Zareli, Philipp, *Kathakali Complex*, Abhinav Publications, Delhi, 1985

Zarilli, Phillip B., *When Body Becomes All Eyes, Paradigms, Discourses and Practices of Power in Kalarippayattu, A South Indian Martial Art*, OUP, 1998

Zimmer, Henry R., *Hindu Medicine*, The Johns Hopkins Press, Baltimore, 1948

Zupanov, V Ines G., *Disputed Mission: Jesuit Experiments and Brahmanical Knowledge in Seventeenth-Century India*, Oxford University Press, New Delhi, 1999

Zysk, Kenneth G., *Religious medicine: the history and evolution of Indian medicine*, transaction publishers, New Jersey, 1993