



## EVOLUTION OF 'INDIGENOUS' MEDICAL PRACTICES IN TAMILAGAM (UP TO 16<sup>TH</sup> CE): A HISTORICAL STUDY

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### ABSTRACT

The present paper attempts to understand evolutionary pattern of indigenous medical practices in Ancient Tamilagam which comprised present state of Tamil Nadu and Kerala. Indigenous medical 'systems' such Ayurveda and Siddha evolved differently in different regions based on the political, social, cultural and environmental milieu. They transformed from herbal medical practices to complicated Rasayana therapies. Various medical practices of other regions also contributed to the development of medical practices in the region. Thus, the present paper tries to trace the trajectories of evolution of indigenous medical practices up to 16<sup>th</sup> century which indicates the entry period of Western medicine. Besides, the present work also analyses impact of political and social patterns on indigenous medicines in Tamilagam.



**KEY WORDS:** Ayurveda, Siddha, Folk medicine, Ancient Tamil region and Medical evolution.

### INTRODUCTION

Every society on earth has developed its own particular methods for alleviating diseases, all of which evolved from magico-religious rituals to scientific medicine along with human progress. Even primitive humans developed rudimentary treatment methods either through instinct or by observing the behaviour of animals. Gradually, by conducting exhaustive experiments over a long period of time, a rational and scientific mode of treatment was evolved. In this manner, every civilisation on earth has developed methods of treatments collectively known as traditional systems of medicine. Ayurveda and Siddha are generally considered to be indigenous 'systems' of medicine in India with roots in the ancient past. They claim their origins from the Vedic and Sangam periods respectively and share the same fundamental principles and methods. According to them, the human body is composed of five elements (*PañcaBhūta*) viz. *ākāsa* (ether), *vāyu* (air), *tejas* (fire), *jala* (water) and *pṛthvī* (earth). Any part of the body, howsoever minute, is an inseparable combination of these elements. In the ancient texts, combinations of the elements are classified into three viz. *vāyu* or *vāta*, *māyu* or *pitta* and *valāsa* or *kapha*. Of these, *vāyu* is composed of *ākāsa* and *vāyu*, *māyu* is *tejas*, and *valāsa* is a combination of *pṛthvī* and *jala*. These three divisions of the

body matter are called the *tridhātu*. These are not only the building blocks and sources of sustenance of all the parts of a human body but also fulfil all biological functions of a living human being. Accordingly, *valāsa* is a combination of the materials used for structuring and sustaining the body, *māyu* is a combination of the materials that digest the food eaten and transform it into body constituents, and *vāyu* is that body constituent which generates power. Any imbalance in these three humours leads to diseases.<sup>ii</sup> Investigations are carried out in five stages: *nidana*, *samprāpti*, *pūrvarūpa*, *rūpa* and *upasaya*. Of them, *nidana* is the root cause of disease and the particular causative indiscretion, such as bad food, bad water, indulgences, excess and the like. *Samprāpti* is the determination of the effect of the *nidana* on the health of a patient and the probable disease or diseases resulting thereof. *Pūrvarūpa* refers to the early signs and symptoms of the diseases. *Rūpa* indicates the signs and the symptoms when the disease has progressed. Finally, *upasaya* is the stage at which the treatment has begun and the diagnosis is confirmed by the effects of the treatment.<sup>iii</sup> The physicians follow eight diagnostic techniques (*Asthāparikshaor Eṣvāgaitērvu*) to detect diseases and disorders: *nāḍi* (Tamil for pulse diagnosis), *jihwa* (*nāḍku*: examination of tongue), *malam* (examination of stool), *mōttiram* (examination of urine), *sabdham* (*oli*: examination of voice), *parāḍam* (*Toḍal*: examination of skin), *dḍik* (*kaḍ*: examination of eyeball) and *akḍiti* (*uḍal*: examination of physique). The pharmacopeia of indigenous medicines comprises of herbal as well as mineral medicines though it varies from region to region. For example, ayurvedic medicines in Kerala region have much more herbal contents whereas in other parts of India these comprise of both herbal and mineral medicines. The medical knowledge was codified in manuscripts in various languages from early time onwards. A large number of medical texts were written, compiled and transmitted from region to region and physician to physician. At the same time, non-classical medical traditions also travelled along with the classical traditions, and even collaborated with them from time to time.

### INDIGENOUS MEDICAL TRADITION

Medicine is not only a science but an art as well. The development of art or culture depends on the cultural heritage and environmental conditions of a region. Further, the systems of medicine would evolve by the impacts and influences of other cultures also. Ancient Tamilagam comprised present day Kerala and Tamil Nadu. The earliest reference to the advent of a tradition of medical treatment in Tamilagam is in the heroic songs i.e. Sangam literature which provide scattered references about medical practices. They talk about different diseases and various herbal applications to cure them. Commonly herbs and parts of trees were used as medicines as there is no reference to using metals and minerals for treatment. The basic principles and methods of surgery like incision, excision, separation, anastomosing, suturing, application of bandages, cauterisation and amputation were known and practised by the surgeons. At the same time, they used amulets and spells in their practices.<sup>iv</sup> For example, in Kerala region, *Pālakkompezhunnalikkal* is a ceremonial reception with the branch of a *pāla* tree in the *Ayyappaḍviḍakku* festival. *Pāla* is a significant tree with many healing properties and is a good remedy for many types of fevers and diseases that are caused due to the vitiation of blood. Customs like decorating hair with *dasapushpa* and *pathirapu* etc., are associated with the medical use of herbs along with the religious ceremonies.<sup>v</sup> The *Velaḍs*, traditional healers in the far south, practised healing techniques consisting of magical rites (*veḍiyāḍal*) and herbal medicines.<sup>vi</sup> Thus the medical traditions of that period comprised of empirical knowledge along with magical traditions.

Every culture or society reacted in various ways when it came into contact with new cultural practices. It may sometimes absorb, adopt or adapt the new cultural practices and then refine or redefine them to suit its own socio-cultural milieu leading to the emergence of hybrid cultures at every stage of evolution of societies. Likewise, a number of cultural waves from other regions influenced medical traditions of the ancient Tamil region from time to time and attained new forms at every stage. Buddhist and Jain missionaries, along with cultural contacts with North India and outside the subcontinent, were responsible for the next stage of development in the medical practices of Tamilagam. The local Tamil medical tradition came under the influence of the Prakrit tradition of heterodox groups. In North India, the earliest phase of ayurvedic science is, as a rule, traced to Vedic hymns which contain numerous references to a medical lore mixed with myth, magic and miracles. These medical aspects evolved into 'empirico-rational medicine' during the Buddhist period, especially in the Buddhist Viharas and this 'empirico-rational practices' were taken along with Jain and Buddhist missionaries to the Tamil region. Inscriptional sources of subsequent periods at various places in the Southern parts of Tamilagam say that the Jain ascetics and teachers in different parts of Tamil South were engaged in imparting knowledge to the local students in medical science.<sup>vii</sup> Significantly, the Tamil medical texts such as *Thirikaugam*, *Nāmaikkōvai*, *Ēlādi* and *JēvagaCintāmaṭi* are attributed to this period and reflect the knowledge of information gathered from the Prakrit or Sanskrit texts of Northern India. According to M.R. RaghavaVarier, this period was the first stage of transition in the indigenous medical practices in South India.<sup>viii</sup> Further, during this period, the theory of *tridoṣa* and *PañcaBhūta* concepts were established in the Tamil medical texts. The term Ayurveda is first mentioned in *Silappadikāram*, a post-Sangam literary text, which indicates that Ayurveda (Sanskrit literatures) slowly crept into Tamil region and embraced the local practices.<sup>ix</sup>

During the medieval times, there were references to small dispensaries in villages and hospitals in towns and details about medicines and medical education in temples and maths. Chola inscriptions mention dispensaries and hospitals as *ātulasālai* or *vaidyasālai*<sup>x</sup>. There are a large number of inscriptions which speak of such establishments such as Tiruvisalur, Vempathur, Tirumukudal, Tiruppugazhur, and Srirangam<sup>xi</sup> etc. The physicians of these institutions were appointed hereditarily and the expenditures were paid in cash and kind by the government and in gifts as well. Tax-free land also was assigned to Vaidis for their services called as *Vaidyakkāni* or *Vaidyavrtti*.<sup>xii</sup> Hospitals were also attached to the residential colleges run by the temples and maths. The temples and maths acted as educational institutions where medicine also was taught. One such important temple is VenkatesaPerumal temple in Tirumukkudal. An inscription in the temple belonging to King ViraRajendra (1069 A.D.) provides details about hospitals and the associated administration. The temple campus comprised of a Vedic college, a hostel and a hospital. The hospital was named as *ViraCholaĀtulasalai* after ViraChola and it had outpatient and inpatient facilities for which there were fifteen beds. One general physician, one surgeon (*Salliyakriyaipaṭṭuvaṭ*), two attendants, two nurses, one barber and one water man were employed in the hospital for service. It mentions as many as twenty drugs that were available in the hospital along with their preparations and applications to various diseases.<sup>xiii</sup> These medicines mostly were herbal in nature like *haritaki* and *lavaṭa*. It is very important to note that mineral medicines were absent during this period. Another fundamental aspect is that there is a clear distinction between a physician and a surgeon. These types of well-equipped institutions were also available in other parts of the empire. Next to temples, Maths also played a prominent role in

delivering medical services and education. An inscription of Tiruvaduturai Matt (1120 A.D.) has a reference to medical education provided by the Matts. *AṅgāgaHridayam* of Vagabhata and *CarakaSamhita* of Caraka were taught to students in the medical field along with *Vyākaraṇa* and *Rūpavatāra*.<sup>xiv</sup> These developments indicate that there was a well-developed medical education, and a medical 'system' was practised; and at the same time, Rasa Siddha tradition was not popularly practised.

After the twelfth century, developments in the field of medicine took different directions in Tamil and Kerala regions of South India. The difference was due to socio-political transformations which had a bearing on medical evolution in these regions. Though the influence of Sanskrit medical knowledge in Kerala region had begun much earlier, the rise of new intellectual cultures around the temple paved the way for the evolution of *Aṅgāvaidyā* tradition between the 13<sup>th</sup> and 17<sup>th</sup> centuries. A fertile intellectual milieu developed around temples, and with generous royal and individual patronage in Kerala, especially in the Nila valley region in Malabar, there was a great push towards progress of scholarship and scientific research on medicine, mathematics and astronomy. The *Aṅgāvaidyā* culture evolved in this environment, blending the Ayurveda of *AṅgāgaHridayam* with the knowledge and practices of local healers.<sup>xv</sup> According to Leena Abraham, in Kerala, the medical practices were named generally as *vaidyam* during the pre-revitalisation period which covered a range of specialised medical practices like *vishavaidyam* and *bālavaidyam*. Even *Aṅgāvaidyās* also were considered as Vaidis and their textual authority was also shared by other caste Vaidis such as Ezhavas. The *vaidyam* of Kerala region was a blend of classical and regional practices like *ñavarakkīli* and *irovasti*. But during the revitalisation period, the Kerala Ayurveda was created as a legitimate 'system' out of the heterogeneous medical practices. Furthermore, the heterogeneous medical practices (*vaidyam*) were delegitimised in the process of building a pan-Indian Ayurveda, in tune with the national identity. The institutionalisation of this new identity paved the way towards the decline of the various specialised *vaidyams* and reduced their status to that of 'folk medicine'.<sup>xvi</sup>

In the Tamil region, emergence of Rasa Siddha tradition, migration of people from Andhra and Karnataka region during the 14<sup>th</sup> and 15<sup>th</sup> centuries due to the foundation of the Vijayanagara empire along with the rise of a new literary culture led to the advent of new forms of medical practices which comprised blending of herbal and mineral medicines. Though the mineral and metallic medicines were mentioned in the early classical texts such as those of *Caraka* and *Sushruta*, their usage was very minimal. The development of *Rasa Sāstra* was always related to the development of Natha and Rasa Siddhas. Natha and Rasa Siddhas are religious mendicants in South India.<sup>xvii</sup> They professed a yogic exercises to attain a strong physical body with the help of which they gained supernatural powers. The methodology of attaining it included the use of mercurial drugs and strengthening the body through yogic exercises. Even though the popularity of Natha and Rasa Siddhas can be dated to a period between the 7<sup>th</sup> and the 16<sup>th</sup> centuries, this tradition was systematised during the late 12<sup>th</sup> and early 13<sup>th</sup> centuries.<sup>xviii</sup> Traces of Natha and Rasa Siddha influence can be found in the methodology of Tamil Siddhas. The research conducted by KamilZvebil indicates that Tamil Siddhas were very similar to the North Indian tantric Siddha yogis in terms of basic components and features i.e. they share the pursuit of a perfect state of health reaching into immortality within their lifetime; a concern with alchemy and medicine; the basic techniques of Hatha Yoga; and the development of occult powers called siddhis. Therefore, it can be concluded that the Tamil Siddhas are not a unique and singular set of thinkers but are a part of

the tradition covering the whole India.<sup>xix</sup> Moreover, a number of names of the Natha Siddhas are part of Tamil Siddha cult like korakker (Gorakhnatha), Matcha Muni (MatsyendraNatha), Baddiragiri (Bharthari). Thus, these evidences indicate the syncretic nature of the Siddha cult of the Tamil region which throws light on the nature and knowledge of Rasa Siddha medical knowledge. This medical knowledge emerged in India and was influenced by Buddhist Tantrism of Tibet and China;<sup>xx</sup> and this compound knowledge circulated without any regional or language barrier within India. By analysing Tamil Siddha medical texts, it was found that they were mostly dated back to the 14<sup>th</sup> and 15<sup>th</sup> centuries by historians like KamilZvebil and Venkataraman. At the same time, there is little evidence for influence of Rasa medicines during the period of the Cholas. By corroborating these two inferences, it may be conjectured that the Tamil Rasa Siddha tradition might have emerged during the 13<sup>th</sup> and 14<sup>th</sup> centuries when Rasa Siddha tradition attained its peak in Andhra and the middle parts of India during their cultural heydays and was widespread during the 14<sup>th</sup> and 15<sup>th</sup> centuries. Further, the knowledge of Rasa Siddha medical tradition fused with the then herbal medical practices along with migratory knowledge of other regions.

Rasa Siddha tradition of the Tamil region, called "Agastya tradition", might have emerged in the Tamil region which is mostly dominated by the mineral and metallic medicines that might have been used by the Siddhas to attain immortality but were later brought into society for treating diseases. In particular, the pulse examination was considered as the gift of the Tamil region to other regions because classical medical literature such as *Caraka* and *Sushruta* did not mention about it.<sup>xxi</sup> At the same time, preparation of arsenic and some aspects of *bhasmas* were taken from other regions as knowledge can also migrate along with human beings. During the medieval times, medical knowledge migrated from different regions not only by the movement of Siddhas, physicians and people but also through the diffusion of texts. For example, Sattai Muni reveals that alchemy methods and preparation of *kaṅṅpa* medicines were taken from Natha Siddhas. Moreover, Sattai Muni acknowledges the Natha Siddhas for their contribution of *bāshāṅṅam* (arsenics).<sup>xxii</sup> Bogar and Yacob (also known as Ramadevar) had taken some aspects of alchemical practices from China and Arab countries respectively.<sup>xxiii</sup> *AgatiyarKarisal*, a Tamil medical text attributed to Siddha Agastya, says that this treatise was compiled from the texts of *Vaidya Ratṅṅākāram*, *Rasa Cintāmaṅṅi*, *Rasa Suṅṅāmaṅṅi*, *Rasa Prakaraṅṅam*, *Rasamālai*, *Rasa Rasāṅṅgam* and *Vaidya Cintāmaṅṅi*<sup>xxiv</sup> which belonged to other regions. *Rasa Cintāmaṅṅi*, *Rasa Suṅṅāmaṅṅi* were written by Madanantadeva and Somadeva respectively<sup>xxv</sup> and *Vaidya Cintāmaṅṅi* was written by IndrakantiVallabhacharya who belongs to Andradesa.<sup>xxvi</sup> The folk medical practices of Andhra and Karnataka regions were found in the Tamil medical texts. So it seems that when people migrated into the Tamil region during the Vijayanagara times, they brought their cultural practices which fused into the Tamil tradition. Worshipping the goddess is an important part of yogic tradition; and Siddhas worshipped folk goddesses like Bommakka, Ellamma, and Nagamma apart from Sakthi (*Vālai*). These folk goddesses mostly belonged to Andhra and Karnataka regions<sup>xxvii</sup> which also indicates that there was a possibility of incursion of certain folk medical practices into the Tamil medical tradition.

Though the medical practices of Tamil region combined with the practices of other regions, they have some peculiar aspects in it. The role of *muppu* and its preparations are peculiar to Tamil alchemy and which is absent in Sanskrit *Rasa Sāstra*. *Muppu* (universal Salt) is a combination of three kinds of salts such as *pūniṅṅu* (mixer of carbonates), *aṅṅakkal* (calcium carbonate) and *kalluppu* (rock salt) which was used to transform base metals into gold and in the making of

mercury pills of exceedingly high potency intended to prolong life. In short, it served as a catalytic agent in the preparation of *kaṅpa* drugs. Further, as a catalytic agent, it was used in fixing and consolidating of certain kinds of volatile substances like mercury, sulphur, cinnabar, arsenic etc. that could not resist the action of fire. As a universal salt, it was highly regarded as a giver of potential energy in the calcination process of metals and minerals for administering as *kaṅpa* drugs leading to the rapid recovery from all degenerative diseases.<sup>xxviii</sup> Apart from *muppu*, the methods of calcination of mercury, minerals and metals also are slightly varied from the Sanskrit Rasa tradition.<sup>xxix</sup>

## CONCLUSION

The medical practices of Ancient Tamil region evolved from magico-religious practices to scientific tradition. The empirical methods of medical practices helped to develop further. Besides, the medical practitioners of Tamil region absorbed and adapted certain medical practices when they encountered other cultural. Though Tamil and Kerala regions belonged to same cultural setup during the earlier period, the medical practices of the regions diverted different directions during the medieval times. The politico-social and cultural roots of these regions impacted the evolution of the medical practices. The medical practices of the Tamil and Kerala regions were called generally as Ayurveda or *Āyurveda* until the early decades of the twentieth century even though the medical practices evolved varied ways.

## References

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- <sup>v</sup> Varier, N.V. Krishnankutty. *History of Ayurveda*. Kottakkal: Arya Vaidya Sala, 2012. pp 309-10.
- <sup>vi</sup> Varier, M.R. Raghava. "Transitional Stages in the Non Classical Traditions of Medical Practices in Kerala." In *Ayurveda in Transition*, by T.S. Muraleedharan and M.R. Raghava Varier, Kottakkal: Arya Vaidya Sala, 2010. pp55-163.
- <sup>vii</sup> Ibid.
- <sup>viii</sup> Ibid.
- <sup>ix</sup> Sampath, "Evolution and Development of Siddha Medicine." pp11-12.
- <sup>x</sup> Ātula or Vaidya means medicine and sālai means institution of charitable character.
- <sup>xi</sup> S.I.I Vol. XXII, XXIII No. 350, 351; A.R.E. 36/1898; E.I. XXI, No. 38; A.R.E. No. 97, 1927-28; E.I. XXIV, No. 12.
- <sup>xii</sup> Gurumurthy, S. "Medical Science and Dispensaries in Ancient South India as Gleaned from Epigraphy." *Indian Journal of History of Science* 5 (1) (1970).pp76-79; Kāni or vrtti means share of tax free land.
- <sup>xiii</sup> E.I. Vol. XXI, No. 38, pp220-250.

- <sup>xiv</sup> A.R.E. No. 159, 1925; Gurusurthy, "Medical Science and Dispensaries in Ancient South India" pp77-79.
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- <sup>xvi</sup> Abraham, Leena. "From the Vaidyam to Kerala Ayurveda." *The Newsletter*(2013).pp32-33.
- <sup>xvii</sup> Natha Siddhas are one of the sects of Siddha tradition in India and Ādinatha was its founder. They practiced yogic exercises to attain gnana. This tradition is mostly popular in North India. Rasa Siddhas who are another sect of Siddha tradition, professed alchemical drugs and yogic exercises to achieve siddhi.
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- <sup>xxi</sup> Krishnankutty, *History of Ayurveda*, pp300-301; Kumar, Deepak. "Probing History of Medicine and Public Health in India." *Indian Historical Review* 37 (2) (2010): pp259-273; Sampath, "Evolution and Development of Siddha Medicine," pp1-20.
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- <sup>xxix</sup> Anandam, S.S. "Siddha Vaidya Mu□aiyaipa□□iVaidyaratnamPanditha D. Gopalachariyāri□Virivuraiyi□Surukkam." *Maruthuva*□ 1, no.7 (1929).pp189-192.