

Integral Study of the Silk Roads: Roads of Dialogue

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Ancient Monastic Hospital System in Sri Lanka

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The economic pursuits of the adventurous traders of the past, both from the East and the West, resulted in travel by people for cultural and political pursuits as well and this exercise which caused a gradual synthesis of lifestyles narrowed down the physical boundaries of nations. Thus, while trade developed direct economic benefits, diverse aspects of culture and civilization were brought into closer diffusion as an indirect consequences. Religious philosophies, beliefs and practices, health and hygiene, modes of dress, food habits and many other things which had their own indigenous beginnings were gradually brought together in a unique synthesis. The study of the Buddhist Monastic Hospitals in Lanka no doubt would throw some light into the significant results caused by such communications in the field of health sciences that existed in the past. It is in this context that we propose to bring out here only the salient facts of the subject necessary for a deeper study.

‘Arogya parama labha - Santutthi paramam dhanam’ - so says the Buddha. It means "Health is the greatest gain and contentment the greatest wealth that a person born to this world can possess". These two aspects - physical health and contentment of mind are the two primary factors of physical and mental wellbeing of a person that would help to maintain a balance of judgement in all empirical and spiritual matters.

Thus, realizing this fact, Buddha organized his own philosophy centering round the Ayurvedic medical norm existing at the time in India, viz., (a) disease (b) cause of disease (c) cure of disease and (d) way to the cessation of suffering, which is the Middle Way in the avoidance of extremes in life. Pali canons, especially the Sutta Pitaka and the Vinaya-Pitaka abound in references wherein the Buddha not only promulgated the ways and means of attending to the sick monks, but also demonstrated his advice by deed and practice as well. The story of Putigattha tissa thero, a leper monk tended by Buddha himself is a well-known example. Ever since the establishment of the Mahasangha, the community of monks, and the gradual expansion of the Buddhist-Order, the physical wellbeing of the monks was given

significant importance. The British medical journal (1928) Editorial, records that it is to Gotama (Buddha) and his followers that we owe apparently, the idea of hospital. Buddhism was not averse to the study of medicine. Vinaya Pitaka contains many such references. Monks could learn medicine and attend on the sick, but could not practice for their own gain. According to Asanga of the Yogacara school, the art of healing is one of the subjects the noble one had to learn and it constituted one of the five requisite subjects of learning to gain omniscience.

The monasteries that were established for the Buddha and the Order of Monks no doubt has contained institutionalized areas and buildings set apart for attending on sick monks.

The literary evidence that could be culled out from such data would provide a fair picture of the activities of health and hygiene practiced in ancient times. The technical texts of a subsequent date provide further evidence. The Buddhist Silpasastra text, Manjusri-bhasya – vastusastra, discovered in Sri Lanka, refers to the establishment of a hospital (rogalaya) in a specific quarter on the respective monastery types designed in the form of a ‘Mandala’. The tradition of establishing hospitals of a general or a specific nature by the Sinhala kings from the inception of the capital city of Anuradhapura in the 4th century B.C. is well attested by the Pali chronicles of Sri Lanka. In the Mahavamsa and the Culavamsa several instances are recorded where the kings themselves practiced the science of healing. One of the kings named Buddhadasa, who ruled Sri Lanka in the 5th century A.D., according to the chronicles; was a reputed medical practitioner, a great surgeon who used to carry his surgical instruments during his sojourns in the countryside and even operated on animals. According to one lore, a cobra with a festering wound on its coil, is said to have kept this part of the coil exposed outside, while it remained immobile having its mouth with venomous fangs inside the hole of the anthill. The king, realizing the state of the animal, operated on the wound and the cobra moved inside comfortably afterwards. This is just an episode displaying the morale of kindness that goes with a physician. Similar stories are told of the great ruler Parakramabahu I of the twelfth century who ruled in the second great capital of Sri Lanka, Polonnaruwa. The former king Buddhadasa is also credited with the compilation of the great compendium of medicine in Sanskrit, the Sararthasamgraha. He is said to have put up series of village hospitals assigning one physician to every ten villages. Such grades of hospitals may be comparable to the modern rural hospitals manned by medical practitioners. A widespread network of medical institutions would suggest the existence of colleges attached to hospitals

for training medical personnel. An Indian authority, H.D. Sankaliya, refers to the existence of such a medical seminary at Nalanda, and there is no doubt that such institutions were organized in ancient Lanka as well. King Upatissa II in the 5th century had established nursing shelters for cripples, women in labor, for the blind and the sick. In the 10th century King Mahinda IV is said to have distributed medicine and beds to all the hospitals in the island, which indicates the existence of a large number of medical institutions in the country.

These and other numerous evidence provides useful information on the types of medical institutions, grades of staff, diseases treated, training facilities, etc. Apparently there had been residential hospitals both for the worshipers and the clergy, maternity hospitals, outdoor dispensaries and veterinary hospitals. The categories of staff associated with hospitals included physicians, surgeons, pediatricians, pharmacists, nurses, attendants and other similar personnel. The types of diseases and ailments treated included, paralysis, eye ailments, insanity and other psychiatric illness, complications in pregnancy, children's diseases, bowel diseases, etc. Surgery apparently played a major role in medical treatment.

The chronicles also refer to a leper king of the eighth century (King Aggabodhi VIII), who was cured of the disease through magical power of Avalokitesvara, a Bodhisattva of the Mahayana pantheon who is described as a curer of diseases. Two Nepalese Manuscripts, one in Cambridge and the other in Calcutta, refer to 'Sihaladvipe Lokeshvara' or Avalokitesvara of the Hospital of Sihaladvipa i.e. Sri Lanka). The well-known Bodhisattva statue carved out of rock at Weligama, an ancient trading port in South Sri Lanka is popularly known as "Kustaraj" meaning "leper king" and the figure is believed to be the representation of either the king himself or Avalokitesvara who cured the king.

The tradition of worship of Avalokitesvara-natha in his "Bhaisajyaguru" aspect literally means the "medical sage" was continued in Sri Lanka till the last century in Kandy. The Natha Devale, a fourteenth century shrine contains the figure of Natha Avalokitesvara as the main object of worship. It was the tradition that at the beginning of the New Year in April, the first bath is to be taken by the applying a preparation of herbal medicine on the head and this herbal medicine was prepared at the premises of the Natha Devale and distributed to the various villages through their respective Buddhist monasteries.

The worship of Avalokitesvara in his Bhaisagyaquru aspect and associated hospital activities are also available in Cambodia and Thailand. Inscriptions with almost the same text have been found at Prasat Prakhan in Cambodia , Prasat Tamuan and Dan Prakham both in North East Thailand. According to the texts, the arogyasala (hospital) were built in such sites where the main building enshrined the image of Bhaisagyaquru. The inscriptions are significant that they refer to the numbers of physicians and nurses, beds, the herbs and their quantities used in the preparation of medicines. The hospital shrines were built in the reign of Jayavarman VII of Cambodia in the 12th century when certain parts of North -East Thailand came under his rule.

The layout of the buildings as found in the remains appear to be a couple of structures, namely, the shrines of Bhaisagyaquru and possibly a long room meant for treatment of patients enclosed by a laterite wall. Further exploration and investigations would reveal details of these sites. The hospitals were apparently used by lay men and women as well as the Mahayana Buddhist clergy.

In spite of the availability of references in the chronicles and other records, the archaeological remains do not indicate the existence of even a single hospital edifice in Sri Lanka that could be identified as having been used purely for the masses. On the other hand, the archaeologists have been fortunate enough to excavate and expose a few hospital sites which were evidently located in Buddhist monastic complexes in Anuradhapura, Madirigivi and Polonnaruva. The site at Anuradhapura is located closer to the ancient lake known as Abhayavapi and the one at Mihintale (ancient Cetiya giri) about 8 miles east of Anuradhapur. The site at Madirigiri (ancient Mandalagiri) is located on the periphery of the sacred edifices such as the circular caitya shrine and the image house. The hospital structure at Polonnaruva is located at the lowermost south terrace of the Alahana Parivena monastery between the Baddhasima -pasada chapter house and the RankothVehera stupa. Of these three sites, the structures at Mihintale (8th century) and the one at Polonnaruva (12th century) are significant for the study of this discipline. These evidently draw a parallel to the tradition followed by the medieval christian churches in Europe in that it was customary to build a separate infirmary for the aged and the sick priests, in both these traditions.

The basic ground plan of the Mihintale hospital consists of two courts. One forming a typical sangharama with a centre courtyard surrounded by small cells around. The open courtyard in

the center consists of a brick built image shrine of the Buddha. One of the corner cells is occupied by a medicine-trough (Sin: Behat-Oruva) cut out of stone in the shape of a human being. The second court adjoining the living area consists of the refectory and the hot-water bath-house (Jantaghara).

The hospital at Polonnaruva is the latest structure of this type to be unearthed in Sri Lanka. The Alaha Parivena monastery is one of the largest monasteries established by Parakramabahu I in the 12th century, thus coinciding with the date of the foundation of hospital shrines in Cambodia and Thailand mentioned above. The structure is rectangular in plan and, like the one at Mihintale, consists of two complimentary sections. The northern section is oblong in plan and consists of an open center –court surrounded by cells. The open court contains four rows of short- stone pillar stumps. This feature indicates the existence of an image house built on the stumps. However, it differs from the image house of the Mihintale, which had been built of brick at the ground level. Yet the purpose of building an image house in the courtyards of both hospitals remains same which was to help the ailing monks in attending their daily religious observances in the shrine.

The southern section of the structure too indicates the existence of an open center-court but was surrounded by oblong and square cells. An attached bath-cum-toilet has been added to this section, almost at the joining of the section to the dwelling section. The square cell at the south-eastern corner occupies the large stone medicine trough beautifully cut in the shape of a human being. This whole section appears to have been used for the purpose of treating the patients and preparing herbal medication as indicated by the large number of grinding stones with two types of pestles, vertical and horizontal, and sherds of Chinese jars of the Sung period, found scattered in the area.

Unlike the other sites referred above, in the excavations of the Polonnaruva site, which is being conducted under a joint UNESCO-Sri Lanka Programme, we were fortunate in discovering some of the unique artifacts which will help us in studying the medical system in the country during the ancient times. These constitute both medical and surgical equipment.

The stone medicine trough has been hollowed out in the shape of a human being with its circular head section carved out in such a way that the patient's head rests above the level of the body. The interior hollow which is 6ft 10 inches long is comparatively narrow in width.

This expedient has been deliberately devised in order to economize on the oils and herbal juices used, as the pressure exerted by the body of the patient naturally raised the level of the liquid to its required quantity. The Sung jar fragments, some of which contained seals or stamps of manufacturers, were obviously used for storing the oils and herbal juices. The grinding stones with their pestles were used in making herbal preparations.

In addition to these medical equipment, one of the rarest objects discovered was the part of a bronze scale or balance, the horizontal rod with its balancing shaft still worked. The length of the rod was not more than 2.5 inches and can be reckoned as the smallest of such equipment so far unearthed. Two tiny holes at both ends indicate that two small pans were hung from these. The dimensions would indicate that the balance had been used for weighing the smallest quantities of rare chemicals like mercury or metals like gold in the preparation of valuable medicines.

Bronze Collyrium probes into the shape of cotton-buds, which were found at the site indicates their use for the application of medicinal pastes in the eyes, ears, etc ...

The surgical equipment discovered included forceps, knife blades, internal probes and scissors. The forceps with short heads and long handles were possibly used to extract bone material and teeth. The knife blades were either round-edged or blunt and somewhat long end pointed, indicating their use for various purposes during operations. The probes were comparatively long and appear bent at edges indicating again their having been used internally in orifices. The scissors too were varied in shape and size, their circular handles being wider in dimensions and the blades either short or long.

The instruments when compared with those illustrated by the ancient Indian surgical treatise of Susruta bear a great similarity to each other. At the same time, they have their parallels with the ancient Middle Eastern surgical instruments some of which we were able to examine at the Wellcome Foundation Museum in London, thus indicating the continuity of a common cultural tradition. We may even be able to perceive the gradual development of these instruments in modern surgery as well.

John Marshall who excavated Taxila in the Gandhara region was able to discover a few instruments on this Buddhist site. However, there were no indications of the existence of

structures as in Sri Lanka, which have been specifically used as hospitals. Yet the traditional use of surgical instruments and their discovery would clearly testify to the existence of the science of surgery in curing ailing clergy at this well-known Buddhist University monastery.

The system of Ayurvedic treatment of medicine and surgery is evident from the availability of the two great ancient Indian treatises, Caraka-Samhita (treatise on Medicine) and Susruta-Samhita (treatise on surgery) named after their exponents Caraka and Susruta respectively. The practice of the same science in ancient Sri Lanka is well exemplified by the availability of a number of treatises written by ancient Sinhalese scholars almost from the 5th Century A.D. onwards as evidenced by such texts as Saravathasangraha, Besajjamanjusa, Yogarnava, Yogaratnakara etc.. There is no doubt that Buddhist monks in ancient times practiced the art of healing in their respective monasteries with the munificence bestowed on them by the rulers time and again. The continuity of this tradition is seen today in Sri Lanka, where Buddhist monks exercise themselves in the treatment of specific diseases and some even continue to maintain hospitals on their own.

The discovery of a stone medicine trough at each of the ancient hospital sites cited above indicate the well-established practice of treating patients for specific diseases such as arthritis and snake-bites in medical baths. In such situations, the patient was immersed in baths of oils or herbal juices for specific periods. In the case of arthritic patients, the exercise was continued for several days intermittently, while in the case of those with snake-bites were kept for a few hours until the patient woke up from the coma caused by the venom. It is interesting to note that this kind of treatment is practiced even today in Sri Lanka by the native physicians, who use a trough made out of timber for the purpose.

The practice of acupuncture as a great healing art came from China during ancient times. A Chinese manuscript on acupuncture is known to exist from the 4th century A.D. This text was translated into Persian in the 13th Century A.D. and is preserved in Istanbul, Turkey. This art of acupuncture was known to Sri Lanka as well in ancient times, as known by the later copies of palm-leaf manuscripts from the 18th century. As in the case of Chinese text mentioned above, the Sinhala manuscripts too are illustrated marking points of the body for the application of needles for respective ailments. This medical practice no doubt would have been known to ancient monastic hospitals of Sri Lanka and indicates the diffusion of the science between South Asia and China.

The inscriptions as well as the chronicles provide much information on the day to day maintenance of hospital activities. We have already mentioned the availability of such information in the hospital inscriptions of Thailand and Cambodia. The tablets of king Mahinda in Mihintale speaks of the disciplinary codes to be followed by ailing monks recovering in the hospital. The rules prohibited the monks from entering villages indicates that this hospital was a residential establishment where all requisites were provided. The remains of the image of Buddha housed within the premises indicates that they could attend to their religious rituals too while being a resident of the hospital. The discovery of lime containers and arecanut-cutters at the sites also provide evidence of their using the hospitals in a residential capacity.

Further evidence of the efficiency with which the hospitals were run during the 12th century is provided by the great interest taken by the king himself. According to the chronicle, Culavamsa, the ruler, versatile in medical lore, would visit the hospital and having questioned the physicians and surgeons on the methodologies adopted by them in curing patients, showed them the correct method himself in administering medicines.

The preventive side of the medical lore too was emphasized upon. Maintenance of Sanitation as a preventive measure was practiced both by the inmates of a hospital and those who attended on them. The provision of baths, toilets, drains and water outlets and landscaping with medicinal plants such as margosa played a major role in this process.

The sanitational aspect of the hospitals were included in the architectural planning as well. The toilet and bath facilities were provided at close quarters in attached form as indicated earlier. While these were meant for the use by the ailing inmates, the extra toilets with ring-well pits in the periphery of the main hospital structure had been provided probably for the use by others in their service to the hospitals. The planning of bath and toilet in one unit under one roof was practiced by the Polonnaruva architects. Such a unit was discovered at the Alahana Parivena a couple of years ago in the excavation of a structure which turned out to be a well-conceived chapterhouse, not far from the hospital premises. It consisted of a double pit system placed on either side of the whole structure to allow water from the bath and toilet to enter separately. Apparently this type of provision was made in accordance with the requirements and the significance of the edifice.

The general layouts of the hospitals were determined to comply with the needs of a hospital environment. The hospital was located in an uncrowded space. The psychological aspect of the therapeutics was well understood by the ancients. The hospitals were positioned, both at Mihintale and Polonnaruva, alongside the wide path leading to the monasteries. Yet the premises were cordoned off by a surrounding wall leaving adequate space for the hospital premises. The premises themselves were free of extraneous structures. Latter structures were sparsely distributed beyond the boundaries of the hospital premises.

Thus, the existence of the monastic hospitals and their discovery is of prime significance to the study of the system of medical practice in Sri Lanka in particular and Asia in general. As mentioned above, the “Silk Roads” not only established trading centres between the East and the West. But also led to the diffusion of the lifestyle of people through the means of trade of travels, exchange of cultural ideals, religious concepts. Medical lore is no exception to this process.

Each nation has developed its own indigenous system of culture rooted in their respective origins. This is true of the practice of health science as well. Yet the influence exerted on each other in different degrees is quite discernible. For instance, as mentioned above, Sri Lanka which belonged to the same cultural complex of India follows the age-old Indian tradition of Ayurveda. This is true of other countries of South-East Asia as well where Indian cultural influences were felt. China to this day enjoys a long tradition of indigenous medicine. Yet, in ancient times, even China had been influenced by the Indian system of medicine. In retracing the ancient silk roads and the resulting dialogues of diverse disciplines, one hopes that the role played by the ancients in sustaining the physical health of the people will result in new dimensions of thinking and closer understanding of the discipline of health science among nations in the past.

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Further reading

Mahavamsa (English translation Wilhelm Geiger)

Culavamsa “ “ “ “

The Third and Fourth Archaeological Excavation Reports

Alahana Parivena, Polonnaruva, 1989,1990 (P.L. Prematileke)

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"Ancient hospitals of Sri Lanka : Built Environment and Surgical Systems".