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MEDICINE IN THE BEGINNING

The history of medicine in Nepal may be considered to be fairly long. From the *Ramayana* one learns that Hanuman was told to bring the *Sanjeebini* from the mountains in the Himalayas. Without arguing whether the actual mountain transported to Lanka was from India or Nepal one can say that many herbal medicines were in use then in these lands. The fact is that most of the medicinal plants used in Sri Lanka are similar to the ones used in India and for that matter in Nepal. Perhaps it is this sameness which “may have given rise to the popular legend that certain forested hills, (of Sri Lanka) e.g. Doluwakanda and Rumassalankanda, from which drug plants are often collected, are only fragments of a part of the Himalayas that was carried over to Ceylon by the mythical monkey-king Hanuman, to provide drugs for the wounded in the Rama-Ravana battle.” (1) It is these same magical herbs with their healing properties, which sustained the people of Nepal in the past.

Lord Buddha (563-477 BC) is said to have attended regularly to all the sick disciples in his camps. His teachings which said “to be born is to suffer, to die is to suffer, and to fall sick is to suffer” motivated his followers to look after the sick. Buddhist hospitals in India existed before the invasion of Alexander the Great. “It is to Gautama and his followers that we owe, apparently the hospital idea.” (2) The same authority states “Lord Buddha in his day enunciated the *vinaya* or disciplinary rules for the monks. These rules touched all aspects of their life and included guidelines on healthy living.” (1) Buddha laid down five essential qualities that a person attending to the sick, should: -

- i. be able to prescribe,
- ii. know what is good from what is not good for the patient,
- iii. attend to the sick out of love and not greed,

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- iv. not revolt at removing excreta, saliva or vomit,
- v. administer religious consolation to the patient from time to time. (3)

One of Buddha's disciples, King Ashok is credited to having established charitable hospitals for both men and animals (4).

It is the Ayurved, or "the science of life" system of medicine that is found in this part of the world. A WHO publication (5) has described it as one of the oldest formulated system of medicine, based on doctrines which takes into account the physical, chemical, biological and spiritual dimensions of life. Its various faculties include internal medicine, paediatrics, psychosocial medicine, otorhinolaryngology, ophthalmology, surgery, toxicology, geriatrics and eugenics.

It has been recorded that *Arogyashala* or ayurvedic hospital existed in Nepal during the reign of Amshu Verma (605-620 AD) of the Lichchavi period (6). These facilities were extended in the reigns of subsequent rulers

. Mention of these health institutions is not found again till the time of Pratap Malla (1641-1674) who established an ayurvedic dispensary in the Hanuman Dhoka Complex, which then was the residence of the ruler. It is believed that the Singha Durbar Baidyakhana was established during this period. (Ibid)

Nepal being a multi-ethnic society, it is no surprise that the various groups have their own concepts of disease, various methods of warding it off and also for dealing with illnesses.

As is done all over the world, the Nepalese too pray to various deities for protection, not only at times of stress but for comfort and well being in future years. There are even specific deities to whom special offerings and requests can be made. Thus in the valley, or in the greater Kathmandu area, there are specific temples where worship can be done for a particular purpose.

<i>Sital Mai</i>	In the Pashupati area to protect against smallpox.
<i>Kandeutathan</i>	At Kupondole for ear ailments.
<i>Bhatbhatini</i>	For children when frightened by spirits.
<i>Way Sya Dyo</i>	At Bangemuda for toothache.
<i>Swayambu Ajima Sarati Maya</i>	For wellbeing of children.
<i>Santaneswar Mahadev</i>	For infertility.
<i>Gyaneshwar Mahadev</i>	For infertility.
<i>Kumbeshwar</i>	Water pot god of Lalitpur has an accompanying <i>Naag</i> and the spring water coming out is said to cure several skin diseases including leprosy.

There are also existing in Nepal the various forms of traditional healing by such practitioners of the art such as *Dhamis*, *Jhankris*, *Jharphuks*. Accepting the fact that *dhami-jhankris* exert a lot of influence regarding health matters, some research work has been done in using them for health education, family planning and treatment of diarrhoeal diseases. One particular study has estimated that there were then in 1978/79 between four and eight hundred thousand faith healers in Nepal (7).

Prof. Macdonald in the introduction that he has written for CJ Miller's book (8) states, "the *jhankri* is a caste and social free-wheeler. ...the *jhankri* is, to some extent, prior to the official arrival of Hinduism, the creator and the maintainer of certain forms of religious centralisation in the Nepalese hills."

Lediard, co-author of another work goes on to state in the introduction, "the specialists who can best care for Nepal's major ailment are those who are administering daily to most of the health needs in the village: the faith healers - the *dhamis* and *jhankris* of Nepal." (7) Other investigators have mentioned traditional healers such as *aamchis* who have the background of Tibetan medicine and bring in concepts of the body becoming hot or cold as a result of eating hot or cold food. In the same system of medicine other practitioners such as *lamas* gave the concept of *lu*, said to be inhabiting

watercourses and when offended then leading on to afflictions such as skin eruptions or even insanity. This investigator felt that allopathic medicine rather than displacing the traditional healing practices tended instead to be integrated in into a network thus creating a pluristic form of health care being practised in the country (9).

Though Judith Justice mentions also *jharnes* and *fuknes* she found in her investigations that the ill generally “waited in the house to get well.” The next recourse was to use herbal and dietary remedies (10). Lediard and Shrestha estimated that there were between four to eight hundred thousand faith healers in rural Nepal. This by all accounts is a fantastic statement and is perhaps dependent on what is one’s definition for the term. Other workers have quoted this and whilst looking at the types of practices conducted in and around Kathmandu, have noted interesting points. There are what the authors have termed as “popular healers” and one criterion for their classification was that patients had to wait a long time to see them! The brief consultation, routine and quick treatment by an unknown practitioner in a new locality were the other features (11). These “popular healers” could be a *jhankri* or spirit-medium, a *tantrik* or healer practising tantrism or even a *deuta* i.e. healer possessed by a mother goddess. This investigator Skultans commented on the fact that some of these traditional healers made, “somewhat eccentric use of a stethoscope” in their practices.

Thus in the case of Nepal the lot of the Nepalese, especially those in the rural areas is that they first seek treatment from the system/form near at hand. Shrestha in listing these, states that the Sherpas of the Everest region usually applied the paste from the *Sharma guru*, whilst the Jyapooos of Kathmandu valley used a preparation from the *Ghod Tapre* to heal their cuts and wounds (12). In the first instance this means the use of herbs by the herbalists. This has existed since time immemorial and traditional healers such as *dhamis* and *jhankris* also use plants as their means of cure. Then there are the other healers such as *gubaju*, *jhar phuke* and *sudeni*. Besides the ones enumerated above, there are also the ayurvedic practitioners and of late, the Tibetan medicine men.

C.J. Miller SJ did research on the *jhankris* of Dolakha and in the introduction to his book feels that the role of this traditional healer is complementary to both priest and doctor (8). He goes on to write, "I believe that a closer look would reveal to him (doctor) that, at least according to the world-view of his villager patients, he the doctor is treating symptoms while the *jhankri* is getting at causes. There is room, and need, for both. The doctor will certainly realise that a shared world-view between patient and physician can be a powerful factor leading to a cure; he should also realise that his modern medical education, based on a secular view of the world, has deprived him of this advantage which the *jhankri* continues to possess."

The practitioners of the different traditional systems of medicines being practised in Nepal can be called the "barefoot doctors" of the country.

INTRODUCTION OF ALLOPATHIC MEDICINE

One is prompted to presume, with some confidence, that the Allopathic or to all intents and purposes, the western system of medicine has been practised from about 1740 AD (1797 BS). Records show that one de Recanti had received permission from Raja Ranjit Malla to preach, teach and convert to their religion, the people "without violence and of a free will". Raja Jayaprakash of Kathmandu also issued a *sanad* in 1742 AD and renewed it in 1754 AD allowing the missionaries to enter Kathmandu.

One of the earliest visitors to Nepal was Father Greuber, an Austrian Capuchin monk who on his return journey from China to Europe, passed through Nepal. In 1624 both he and a Father Dorville met Pratap Malla at Kantipur and were allowed by the king to preach and teach plus also to run health and education services in Kathmandu. Around this period various other Fathers of the religious order were expelled from Tibet and consequently they all came and congregated in Kathmandu. (6).

Grueber must have been greatly disturbed by what he saw for he went on to write:

“There is another custom in this country of monstrous cruelty. If a sick man is near to death and no further hope of his living is entertained, they take him outside away from his house into the fields, and there throw him into a ditch already full of dying men. He there remains exposed to the inclemencies of the weather, without consolations of religion nor pity they leave him to die; afterwards his corpse is given to birds of prey, wolves, dogs, and other similar beasts to eat. They are convinced that the only monument of a glorious death is to find a resting place in the belly of living animals(13).”

Whilst Nepal’s quest for health has been going on for a long time, the first reference to the modern system of medicine or to allopathic practitioners in this country occurs in an account of the siege of Kirtipur by King Prithvi Narayan Shah in 1766/67. Chaudhari (14) mentions that it was Swarup Ratna, the King’s brother, who had been cured of a wound by one Michael Angelo, a Capuchin monk. Other sources identify the one wounded as Prince Pratap Shah of Gorkha. Landon too, mentions this and states that the health care provider was Michelangelo of Tabiago.

Later however, following the conquest of the Kathmandu Valley by King Prithvi Narayan Shah, the Capuchin fathers withdrew in 1770 from the valley and proceeded to the mission home in Bettiah. The missionaries were perhaps prompted to take this step because of the atmosphere then in existence. It is aptly summed by a saying then current in Nepal, viz. *“With the Bible comes the Bayonet, and with the Missionaries comes the Musket”*. However the missionaries were supposed to have returned to Kathmandu at the request of King Pratap Singh Malla when he suffered from and ultimately died from smallpox in 1777 (6). Thus ended the first chapter of the Western or modern system of medicine in Nepal. The practice of this form of medicine by the missionaries was not to be resumed till the 20th Century.

The first reference to diseases occurs in the account of Father Georgian Estonian, a monk who passed by Makwanpur in the middle of the 18th Century. He had noted the dangers of *awal* plague and says that windows must be closed at night, and that the only chance of escaping the curse is to climb high enough upon the mountains to avoid the miasma that

bathed their feet. He writes, however, that whatever precautions are taken and however quickly a man may seek a kindlier climate, he often carries with him the seeds of the *awal*, which will not fail to attack him at a later date. Kirkpatrick, who toured Nepal in 1793 and has written an account has stated that “*owl*” or malaria, as we know it, was present in the lowest valleys and the Terai. The prevalence of this disease is also confirmed by the fact that no less a person than the Senior Queen died in 1841 from malaria contracted in the Terai.

Kirkpatrick had also noted the presence of “guttural tumours” (? goitre) being present at Deopatan and Kaurigaon, within a few miles of Kathmandu. This tumour, he mentions was thought by the natives to be “produced by a certain insect generated in the water usually drunk by the inhabitants of goitrous places” (15).

The next reference to disease in Nepal occurs in the Papers of Brian Hodgson (16), published in 1857 (1914 BS). He mentions that the epidemics of the plains hardly ever reached the Himalayas. He instances the case of cholera, which though prevalent in India most of the time, had only occurred twice in Nepal. Hodgson goes on to mention that the Terai region of Nepal was notorious as a malarious region.

After this, the next reference to the modern system of medicine in Nepal occurs in Dr. H.A. Oldfield’s book “Sketches in Nipal” (17). Dr. Oldfield had initially served as a surgeon in the Bengal Army and was transferred to the British Residence in 1850. He stayed in Nepal till 1863 and as his duties were mainly medical, he gives some accounts of diseases seen in Kathmandu, and the treatments practised. He mentions that parts of Kathmandu were dirty and because of the common custom of throwing garbage in the central courtyard, it was likely for one to get various fevers and diseases:

“There is an utter absence in all the cities of any system of drainage; nearly stagnant gutters on each side of the street, running immediately below the house-fronts, do the duty of sewers, and into them most of the filth and refuse of the adjacent buildings find their way.”

Oldfield was allowed to go to different parts of the country. He not only wrote of what he saw, but also pencilled drawings of various places. The doctor states that the air and water of Kirtipore was very healthy and pure and that goitre was not seen in the inhabitants of Kirtipore.

Writing about malaria, he states, “The Nipalese profess that *awal* sets in Nayakot at the same time as it does in the Terai, viz 15th March. It probably commences about a month later. The great festival in honour of Devi at Devi Ghat does not take place till the middle of April (beginning of Baisakh), and at it thousands of persons from Nipal are always present with impunity. The Nipalese account for this by saying that through the intervention of the deity, the *awal* is “suspended” to all who go to worship her during the time the festival lasts. But that it sets in again as soon as the festival is over.’.....” They say that the day after the festival closes the goddess lets out the spirit of the savage and destroying monarch of the forest, who disguised as the “*awal*” fever seizes and feeds upon all those whom he finds trespassing upon his domain, the jungles.”

Oldfield had noted too that some tribes of Nuwakot, such as Darris, Kumhals, Manjhis, Bramus and Denwar, enjoyed some sort of immunity and did not suffer from malaria. This finding of Dr. Oldfield is confirmed by Sir Richard Temple (18) who in the account of his tour through Nepal in May 1876, states, “The feverish jungles of the Terai again, are inhabited in Nepal, as elsewhere by the primitive tribes, called there generically as Awalias whose position is peculiar, in that they dwell with impunity in places where the terrible *Awal* or malarial fever is sure to destroy the rest of their kind and that quickly.”

Oldfield in his journals gave other information about Nepal. His estimate of the population of the country was four millions or an average of about 66 inhabitants per square mile. The valley was sparsely populated too, having barely a quarter of a million people but still the conditions of living were terrible as has already been stated.

As the Residency doctor acted as a family physician to Maharaja Jung Bahadur, Dr. Oldfield was required to make weekly visits to Thapathali Durbar. The first reference to these visits is in 1850. Jung Bahadur was apparently a great believer in vaccination and had the children of the Royal Household, his nephews and nieces and all his own children vaccinated. When Jung Bahadur was in England, Oldfield vaccinated his eldest boy in 1850 and received for his services the sum of Rs. 500. Oldfield also gives an account of the vaccination of the Mahila Sahib’s (king’s brother’s) daughter in 1851 (1908 BS).

Though Jung Bahadur accepted being treated as per the allopathic system of medicine he did not forsake the use of traditional

remedies. This is confirmed by Jung Bahadur's action in 1850 when he took along Kaviraj Chakrapani Vaidya as his personal physician during his visit to England. Jung's feeling was that it was an opportunity for him to learn. He came back with new ideas, one of which was to sell opium to the Chinese and make quick money. He had seen the trade of the British viz. opium for teas and silks from China (19). However his visions of a shrewd investment and quick returns for his money did not succeed as he had hoped.

In November 1851 Oldfield mentions his being summoned to see the youngest wife of Bam Bahadur, who happened to be the younger brother of Jung Bahadur. She had recently given birth to a child, but her own condition was serious. Jung Bahadur wanted Oldfield to treat her but the patient felt that she would much rather die than allow an European to see and treat her. She died 8 days later.

Dr. Oldfield is the first author to mention about a hospital in Nepal. He states that an enclosure for deer, built by Jung Bahadur in 1852 AD, was very near the Residency.

In November 1852 on one of these weekly visits, Dr. Oldfield was asked to see a "lady of rank", who later turned out to be Jung Bahadur's sister. She was married to the Raja of Jumla and had been ill for eight months. She had lost weight, and had a bad cough with lots of expectoration. After examining her, Dr. Oldfield felt that she was a case of consumption in a poor state of health and that she was a hopeless case. Oldfield told Jung Bahadur the bad prognosis and was advised by the latter not to treat her, lest the blame fall on him. She died four months later of this tubercular infection.

In August 1854, Dr. Oldfield lanced an abscess on one of Jung Bahadur's wives — a daughter of the ex-Raja of Coorg, a principality in India. Jung Bahadur apparently had great faith in European surgical skill but as far as medical cases were concerned, he told Oldfield that the Nepalese doctors (baidyas) understood this treatment much better than the Europeans. That he patronised ayurvedic medicine is proved by the fact that the *Vaidyakhana* set up at Hanuman Dhoka during Malla times was shifted to Thapathali (20).

Oldfield records the excision of a small fatty tumour on a man's neck by Jung Bahadur. On various other occasions he also gave treatment for slight injuries. Jung Bahadur's enthusiasm to do surgery

probably started after his visit to England and France. During his visit to England, Jung Bahadur had been taken to Edinburgh to see the castle, Holyrood Palace, the University and the College of Surgeons (21). Jung Bahadur probably brought along some surgical instruments for we come across a statement by Oldfield to the effect, "I have found it exceedingly convenient to be able to borrow some of his instruments when our hospital was deficient in them (17)."

Writing about another occasion in 1854 when he treated a wife of Jung Bahadur, Oldfield states, "I opened a large abscess on her right side, much to Jang's delight and the astonishment of his own two native doctors, who were present. On her being a little faint, I told them to give her a little water; while she drank it, I had to stand looking into the court so that my feet might not touch the drugget, or any part of the furniture directly or indirectly connected with her bed, although two minutes before there was no objection to my feeling her pulse, and etc examining and lancing her side – a regular case of swallowing the camel and straining at the gnat." Such an attitude was usual not only in those days but even up to the middle of the twentieth century as it was based on the caste system and foreigners were after all *malekshas* !

Jung Bahadur apparently dispensed medicines too, for Oldfield writes, "He has a sort of laboratory in his garden where he prepares constantly a large quantity of a particular sort of medicine in which he has great faith. Its composition is a profound secret; he says it contains the precious metals, even diamonds and pearls. He considers it very valuable, and, I suspect derives a profitable trade by selling it in small quantities to his brethren and family and others when sick. As a compliment to him, and to please him, they will willingly take it, and pay well for it too, whatever faith they may have in its real efficacy."

From various sources, Landon (22) also confirms this, for writing about Jang Bahadur, he states, and "He had an inveterate liking for medical treatment The medicines he used were Nepalese, not European, but he occasionally called in the professional services of Dr. Wright".

During the time that he was in power Jung Bahadur tried to dissuade the people from practising *sati* or the burning of widows on the funeral pyre of their dead husband. Oldfield records this as, "He says, and probably truly, that when the common people get accustomed to see that men

of rank die and their bodies are burnt without *sati*, they will of their own accord, gradually give up such an inhuman and unreasonable practice.”

It also needs to be noted that the first health institution to be set locally by Nepali authorities was the Khokna Leprosy Asylum in 1857. It must be noted that it functioned more as a detention centre rather than one for providing treatment (23).

At this time, just before and during the 1857 uprisings in India, considerable correspondence seems to have taken place between the officials at Fort William in India to Major Ramsey, Resident at Nepal (24).

Thus one sees that there has been some influence of British military medicine on the medical system that developed in Nepal.

Following Jung Bahadur's death in 1877 one finds a certain amount of scarcity regarding medical information. During 1883 (1940 BS), the army Commander-in-Chief Dhir Shumsher was unwell. One Bengali doctor Adar Nath treated him. However during the time that this treatment was being followed, a course of treatment by one Raj Baidya accompanied it. This consisted of *mantra*, which was to be pressed on different parts of the body wherever there was pain. Similarly the mantra written paper was to be waved over the painful part. Needless to say, after a little while the pain lessened over that area but passed to a different site. In course of time the pain shifted to the neck. Doctors said that a fish bone was lodged there, and the mantras did not afford relief. Ultimately Dhir Shumsher died.

The following year 1884 we find Dr. Adar Nath treating the then General Bhim Shumsher, successfully for colic. However Dr. Adar Nath must have had some difficulty practising medicine for we find that lay treatment for testicular swelling at that time was to wear scrotal support of tobacco leaves. How it worked was not known but its side effects, which appeared within half an hour, included bouts of dizziness and vomiting.

In 1886 (1943 BS) there is reference to vaccination of children by Raj Baidya. At that time they were probably vaccinated with non-attenuated strains and we find references stating that death occurred following vaccination in children.

Whilst gathering material it is interesting to note that Jai Prithivi Bahadur Singh of Bajhang had the foresight to establish in the early

years of the 20th Century the Satyvadi School, an iron industry and a dispensary. This “Khaga dispensary” had doctors on deputation from Calcutta Medical College, working there (25).

HEALTH CARE DEVELOPMENT DURING THE RANA DAYS

From the time of Jung Bahadur, the country was dependent on the largesse of the rulers and what the commoners got was what the defacto rulers, the prime ministers felt should be given. As soon as a new Rana became prime minister, he with all the trappings of power, had to start thinking immediately of his next step so that history would remember him for his good deeds.

Health facilities during the rule of the Ranas were instituted as a form of charity for the poor. The range of services was limited and very much dependent on the finances at hand. This finance in turn was from the income of the land, which had been set aside as *guthi*. The sum, so identified was very nominal and over the years its actual value decreased relatively. Over the course of years coupled with the non-payment of the actual dues by the people utilising the land, the process of financing the *guthi* became more complex.

Bir Shumsher, after he became Prime Minister in 1885 (1942 BS), was the first person to think of building and providing other supporting logistics in terms of a health institution. He probably felt that the small hospital established within the British Residency compound would no longer be able to cope with the increased demand for services. A number of health institutions, including hospitals came into being over the course of the century of Rana rule.

The first and the most important was the Prithvi Bir Hospital built in 1890 (1947 BS) at Kathmandu. The naming was so because the reigning monarch was King Prithvi Bir Bikram Shah Dev and the Prime Minister Bir Shumsher. Initially started at the North-Western corner of the Ranipokhari, at the present Rastriya Naachghar (National Theatre) site, it had both the male and female sections. The total number of beds was however only 30. The hospital was later shifted to its present site at the South-Western corner of the Ranipokhari.

The first document regarding this institution, is one from the *Nijamati Kitab Khana* dated 15th Asar, 1947 BS. In this document one

finds budgetary provision made to pay from the next financial year starting in a fortnight's time, for the services of a Dr. Ganguly from India (26). During his period of prime ministership, Bir Shumsher also invited to Nepal, for short periods of time a number of other well known doctors.

These years being the heyday of Rana rule, what was seen elsewhere was soon copied at Kathmandu. Thus it came about that buildings built in Nepal following the visit of Jung Bahadur to England, reflected the trends of Victorian architecture. Thus white massive columnar structures were not only the prototypes for official palaces or residences but some of the designs were also incorporated in the Bir Hospital of those days.

Besides this central hospital in the capital, a number of other hospitals were opened in administrative headquarters of a number of districts. These other health institutions, to be called Prithvi Bir Hospitals were set up at Birgunj, Jaleshwar, Hanumanagar (Rajbiraj), Nepalgunj and Taulihawa.

The Leprosarium at Khokana was also further built at that time with a capacity for 200 inmates. The British, who as always were monitoring events in Nepal, were not convinced that this institution was functioning properly (19). The Cholera Hospital, which became in succession the Infectious Diseases Unit of Bir Hospital, then the Infectious Diseases Hospital and finally the Sukra Raj Tropical and Infectious Disease Hospital was also initially built in 1890 (1947 BS). It was shifted to its present site at Teku in 1950 (2007 BS).

Browsing over old health records we find that Bir Shumsher, tried other forms of treatment besides the allopathic one. During the year 1899 he apparently vomited up 2 to 3 pints of blood and for this one Kacha Baba, a jogi from Benaras treated him with good effect. This vomiting of blood recurred from time to time and Bir Shumsher died on 5th March 1901 as a result of the bursting of an aneurysm (22).

Dr. Raj Krishna Mukerjee, more than likely came to Kathmandu during Bir Shumsher's time. Later, during Dev Shumsher's short premiership of 114 days, Dr. Mukerjee was appointed as lecturer at the Nepal Medical School. A news item in the then weekly issue of the *Gorkhapatra* dated 11th Jestha, 1985 BS reported that Dr. Mukerjee had dissected dead bodies and showed the various internal organs to the then prime minister Dev Shumsher and to a group of *vaidyas* or local practitioners. In retrospect such

an event was no less than the dissection demonstration of a cadaver by Andreas Vesalius at Padua in 1537 AD. We in Nepal were just a few centuries behind!

During King Prithvi Bir Bikram Shah Dev's reign from 1880-1913 (1937-1979 BS), Chandra Shumsher followed Bir Shumsher as Prime Minister in 1901 (1958 BS). One of the initial hospitals to be built was the Chandra Loka Hospital at Bhaktapur, which opened its doors in 1904. Chandra Shumsher experienced real contact with diseases during his trip to Simara in 1904. Arrangements had been made for a *Shikar*, when there was an outbreak of cholera. Some form of disinfection was tried by handling or smelling camphor. Some advocated "pill made of opium and camphor" as treatment for cholera. From all accounts this outbreak of cholera took epidemic form. Because of his personal experiences it is likely that Chandra was prompted to provide health facilities in different parts of the country. Another less kinder view suggests that these facilities came to be set up at places such as Dhankuta, Palpa, Doti and other places where ex-Prime Ministers, Commander-in-Chiefs and ambitious Generals were periodically banished during the course of the 104 years of Rana rule in Nepal. As such persons could not leave the district without permission, a hospital with a doctor or compounder and rudimentary health facilities was generally established at the administrative headquarters (19). It was more therefore to look after the health of the ruler's relatives rather than that of the people, which led to increase in health care institutions.

During Chandra Shumsher's time we find Dr. Raj Krishna Mukerjee, LMS became the Inspector of Hospitals in Nepal. It was this same Dr. Mukerjee who brought out a Textbook of Anatomy (*Shareer Tattwa*) in Parbatia (Nepali) in 1909 for use perhaps by health workers in service or for informal training (27).

Landon's opinion was that Chandra Shumsher was no less energetic than the preceding Prime Minister Bir Shumsher in spreading medical facilities in the country. The additional hospitals that he built made it easier to deal with epidemics. One of the greatest difficulties that advocates of modern medicine had encountered even in India was the natural preference of the inhabitants for their own Ayurvedic system of medicine. This view was also prevalent in Nepal and so facilities at an Ayurvedic School were improved. The preventive aspects were not neglected, for though vaccination was not compulsory, it was free to those who chose to avail themselves of

this protection against a disease that, though never attaining the gravity of an epidemic was rarely absent from Nepal.

King Prithvi Bir Bikram Shah Dev was succeeded by King Tribhuvan (1913-1955). Following this, Chandra Shumsher opened hospitals, which were named Tri-Chandra Hospitals at Palpa and Palhi (Parasi). Others followed at Jhapa (Bhadrapur), Sarlahi, Dhankuta, Doti, Bardia, Ilam, and Rangeli. To make medicines more freely available, the Chandra Sale Dispensary was set up at Bir Hospital in 1917 (28). Addition was made to the female wing of the Bir Female Hospital. Two new sections of Pathology/ Bacteriology plus also an X-ray department were started in the hospital. Whilst a number of health personnel were recruited from India, the specimens of signatures of medical practitioners were registered and kept at the Chandra Sale Dispensary so that there was no misuse of drugs. There were said to be a total of eighteen hospitals and fourteen dispensaries in various parts of the country (29). Dr. Siddhimani Acharya who graduated with the M.B. (Cal) in April 1921 was probably the first person to qualify with a degree in modern medicine, which declared him, to quote “competent and authorised to practise medicine, surgery and midwifery.”

The major hospital with which Chandra Shumsher set up was the sixty-four bedded Military Hospital completed in 1926. It was rightly reported in the press that this hospital was built as a memorial to Nepali soldiers who had lost their lives in World War I (30). This was a major event with active participation of the people. The opening on Thursday, the 9th of September was a day of rejoicing. PM Chandra Shumsher arrived first with the British Envoy Wilkinson. The actual inauguration started after the arrival of the King. In his speech on the occasion, the engineer went on to say, “The bronze statue of a Gurkha warrior which adorns the top of this building is the work of a local artist Ratna Bahadur and gives a graphic reproduction of the men in whose memory this monument is dedicated. I might also say that there is every reason for our gratification as this is the first attempt of its kind in Nepal” (31). The building was shaped as two “E”s, back to back. At the end of his speech Col. Kishore Narsingh Rana, went on to state, “With paternal solicitude Your Highness has not only established several allopathic dispensaries at the more important and populous towns and villages in the hills and Terai, but has arranged to start many Ayurvedic pharmacies in the far-off interior where up to now the nostrum from village quacks was all the medical help available to the people. To provide trained men for those pharmacies, Your Highness has opened Ayurvedic schools

under our own *kavirajas* who have come back after completing their full course of study and training in good and reputable Ayurvedic institutions in India...”

Subsequently, Chandra Shumsher in his speech stated that this hospital had been built with the aid of the friendly states in gratefulness to the Nepalese who had laid down their lives. PM Chandra went state that a sum of Rupees seven hundred thousand (or 7 lakhs) had been set aside to build a modern sanatorium for the treatment of tuberculous patients. Unlocking the padlock of gold by King Tribhuvan did the formal “opening” of the hospital. Provision had been made by way of an endowment fund of Rupees Twelve lakhs worth of Indian Government Promissory Notes. For the proper running of the hospital a board of trustees was formed with the Commander-in-Chief as head. The monthly rate of pay for a Nepalese doctor then was Rupees sixty. In the evening there was *deepavali* or illuminations with especially fixed lights. As was the custom then, *juwa* or gambling with miniature conch shells or *kaudi* was allowed for a period of sixty hours. The following day, the army was given the day off and all the *addakhana* or civil offices were closed (10). In his efforts to be humane, Chandra had done away with slavery. He also abolished *sati* in 1920.

The population of the country stood at 5.5 millions in 1925. A malaria survey was done at that time.

During this period was built also the Lalitpur Hospital in 1924 (1981 BS), Leprosy Department and Khokana Leprosarium in 1927 and the Ramghat Dispensary in 1929. Rumour had it that Prime Minister Chandra Shumsher was keen to have the TB Sanatorium built at Tokha as he himself suffered from the disease. After the starting of construction, Chandra Shumsher suddenly died. Thus 1929 saw Gen. Bhim Shumsher assuming the mantle of prime minister.

The hospitals built subsequently were at Bhairahawa, Butwal and Shivraj. Dispensaries like the one at Ramghat were opened at Sindulimadi, Ramechhap, Okhaldhunga and Pashupatinagar. (NB. These have all been converted in the subsequent years into Health Centres or hospitals. The Butwal Hospital has also been upgraded and was made into a 50-bedded hospital in 1966).

A report in the Times of 25th July 1931 mentions about the 68th birthday celebrations of Prime Minister Bhim Shumsher. It goes on

to mention that the PM had, “done much to deserve the gratitude of the people... The question of hygiene is also receiving his attention, the latest evidence of which is the new hospital opened near the shrine of Pashupati, for the benefit of the poor people of the locality. The hospitals already existing in Khatmandu have also been greatly expanded.”

Bhim Shumsher has been portrayed as a rather weak prime minister in that Chandra Shumsher his predecessor has overshadowed him. In fact giving justice where due, Bhim went to the extent of decreeing the tentative abolition of the capital punishment in the country, except in cases falling under military law and high treason, for a period of five years. Such a bold step prompted Mr. Morley of the British Residency to remark, “This experiment will be watched with great interest by Western countries which have not yet ventured to take the plunge.” The fact that some Nepali nationalists were subsequently hanged during the prime ministership of Juddha that followed is another matter. Bhim Shumsher fell ill following an infected gallbladder. The surgeon at the British legation had recommended immediate surgical treatment. There was delay in agreeing to the operation. During the course of that night of 1st September 1932 (1989 BS) Prime Minister Bhim Shumsher died.

Then in 1932 Juddha Shumsher became Prime Minister and had a hand in the opening of the Dharan Hospital. The Tokha Sanatorium was however built in 1931 with a personal endowment left by Chandra Shumsher. Following the inauguration of the new Tokha Sanatorium, an English doctor was appointed as the first Superintendent at the princely sum of Rs. 700/- per month. New Prime Minister Juddha was also keen that personnel working in Nepal should be well trained for we find a letter dated 28th Oct. 1932 stating:

“In order that the benefit of the latest improved surgical technique might be made available to the general public here, we are thinking of sending to Calcutta, Doctor Suresh Chandra Dass Gupta LMS to learn at the premier institution at that place. The doctor is the Chief Medical Officer of the Bir Hospital, Kathmandu, and is also known to the British Legation Surgeon as a good hand in surgery.”

The bed number of Bir Hospital was increased from 30 to 60 during the course of Gen. Juddha Shumsher tenure as prime minister. Lalitpur Hospital was upgraded. In the course of time the Lunatic Asylum at

Kathmandu and the Mulanga Lunatic Asylum were opened. So also was the hospital at Makwanpur.

In 1933 the Department of Health Services (DoHS) was established. Its responsibilities were for the promotion, regulation and management of facilities provided by the government. Between this period and 1951 when the new government was installed the facilities under the DoHS were:

Thirty three HMG hospitals.

Several Ayurvedic dispensaries.

Nepal *Rajakiya* Ayurved Vidyalaya established in 1990 B.S.(32).

Singha Durbar Baidya Khana.

Civil Medical School established in 1934 (1990 BS).

In August 1942, King Tribhuvan had his first heart attack and was treated by Col. Denham White, a British physician who subsequently returned to India via Birgunj in a Puss Moth, which was the first airplane to land in Nepal (19).

Though there were hospital facilities existing, it was not always possible to have the necessary investigations done. Even as late as 1945 it was not really possible to have good quality X-rays done to diagnose peptic ulceration and patients had to go to one of the Indian city hospitals (6).

After World War II, in the later years of Rana rule there were rumblings for change. It was in this context that the then Prime Minister Padma Shumsher decided in 1947 to introduce some reforms. These reforms were classified in five categories viz. social, agricultural, commercial, judicial and local self-government (33).

Under the local self government reforms the municipalities of Kathmandu, Patan, Bhatgaon (Bhaktapur), and Biratnagar were directed to do certain specific functions. These tasks for which they were responsible were to install water taps, record births and deaths, plus to popularise inoculation and vaccinations especially at the time of epidemics. Thus what this meant was that measures directed toward prevention of diseases were under local self government. As a result of this precedence, the

minister who had charge of this ministry was thus responsible for health matters in the subsequent years.

After Mohan Shumsher became the PM two eye camps, of which the first was at Butwal, were conducted. It is conjectured that because the PM also had some eye trouble that he was keen to do this. Some doctors came from the Eye Hospital at Sitamarhi in India, for this specific purpose.

During the course of 1949 a new Health Centre was opened at Sankhu. Later, a new building for Ramghat Dispensary and the Homeopathic Hospital was built. This was in fact a new site for the homeopathic dispensary which had been previously located near the Dharahara or Bhimsen's Stamba. Mr. Lila Nath Adhikari, then a fairly junior administrator at the health ministry, inaugurated both the Sankhu Health Post and the Ramghat Dispensary. The reason was that the higher up officials of the ministry were hesitant to do these functions because of the people's wrath against the Rana administration. This was later upgraded to a hospital in 1952.

Up to this time most of the health service personnel had been expatriates from Bengal. Facilities for investigations prior to treatment of disease were very limited. The training of Nepalese personnel in the far away England of those days was a radical concept. The fact that the new Prime Minister Mohan Shumsher had committed to give support to this from his personal funds was another matter but the upshot of all this was that Nepalese doctors were sent abroad for Diploma level studies in Pathology, Radiography and Chest Diseases. His personal physician Dr. Siddhimani is credited to having persuaded the Prime Minister in this regard. All of the three physicians so trained viz. Dr. DN Baidya, Dr. Raghubar Vaidya and Dr. Yagya Raj Joshi went on to become Director Generals of Health in course of time.

Though the Tokha Sanatorium had been opened nineteen years previously, 1950 saw a new chapter started in the history of the control of tuberculosis in Nepal. It was in the reign of King Tribhuvan and during Mohan Shumsher's premiership that the first Chest Clinic at the Bir Hospital was opened in 1951. As tuberculosis was and still is a major problem in Nepal, this was an attempt to control the disease in a cheap and effective manner. It was the start of the domiciliary form of treatment for tuberculosis in Nepal. With the advent of democracy in the country, greater efforts were

made and stronger measures taken to provide basic health facilities to the people. Subsequent years saw the opening of more health centres in different parts of the country.

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