

GENERAL KNOWLEDGE

PREVENTIVE MEDICINE IN ANCIENT INDIA

By

A. LAL, Ph.D., M.A., (Econ), L.M.S.H., Delhi

The genealogical bases of 'Preventive Medicine' in India are the following:—

1. **Archeological Surveys:** Excavations at Harappa, Taxilla, Sarnath, Nalanda, Mohenjodaro and ruins of Vijaynagar are examples of such sources.
2. **Travellers' Account:** They are mainly recorded by such men of eminence from China and Greece as Magasthens, Huen Tsang, Ihsang and Fa-Hian.
3. **Ancient Cults:** They relate to personal cleanliness, environmental sanitation and dietetics with a pro-religious leaning.
4. **Scriptural Testimony:** Centuries old scriptures like: Atharva Veda, Rig Veda, Manusmriti, Arthasastra, Shishu-Bhritya, Kama-sutra, Charaka-sutra, and Ashtanga-sutra and many other scriptures do throw light on the ancient Indian public health practices.

A detailed treatment of each of the above sources is attempted in the following lines:—

Archeological Surveys: Archeological excavations in different parts of India, which take us back to the remote past, testify the hoary antiquity of the sublime advance of preventive aspects of medicine in India. What remains of the old cities of Harapa, Taxilla, Sarnath, Mohenjodaro and Vijaynagarum where Indian civilization once had its hay day, is enough to imprint on the modern 'scientific mind' the achievements of Indian sanitary science with its many ramifications. "Public health samitaria, well built houses with their bath rooms and their own wells, extra-ordinary well-developed system of Intra-mural and extra-mural drainage, hygienic water supply, paved streets provided with covered drains connecting with larger outfall drains in side streets and a host of other practical applications of the science of health can only go to affirm the great antiquity of preventive medicine in India".

2. **Travellers' Accounts:** Another source through which we get into touch with the status of public health in ancient India is the wandering exploits of the Chinese and Greek travellers who visited India from time to time in the past. It transpires from these accounts that there was a network of wellorganised public services in every nook and corner of the state.

Fa Hian (405-411 A. D.), for example, describing the charitable dispensaries of the city of Patliputra says, "The nobles and the households of this country have founded hospitals within the city, to which the poor people of all communities, the destitute, the crippled and the diseased may repair". Another king *Budha Das* ordained a physician for every ten villages on the high road and built asylums for

the crippled, the deformed and the destitute. His son also built hospitals for the cripples for pregnant women and for the blind and the diseased.

Huen Tsang and *Itsing* who visited India in the seventh century A. D. during the reign of *Harsha* have also recorded the high sanitation and public health practices of India in their respective works.

Magasthens, the Greek ambassador at the court of *Chandragupta Maurya* refers to the six committees in charge of the cities. One of these committees took charge of the foreigners when they were sick and arranged for their burial if any one of them died. Another committee concerned itself with the births and deaths registration. In his description of Patliputra he observes that building laws and regulations were more recommendatory than statutory. There were specific instructions for the construction on festive occasions. The indifference to civic sense was punished in the manner of modern punitive legal measures. For example, "Whoever throws dirt in the street should be punished with a fine of 1/8 of a pana; if he causes water to collect in the street he should be fined 1/4 of a pana".

3. *Ancient Cults*: Other sources pointing to the widespread dissemination of preventive medicine in India are the 'then-in-vogue' practices relating to ritual purification of bodies through immersion in bath or natural stream, disposal of dead bodies, fresh or wholesome food for nourishment, active sports for invigorating body, use of refreshing sleep to promote and maintain health and ward of disease.

Water was held in great esteem and looked upon as God or "*Narayana*" the very root of existence. Numerous ordinances were promulgated for preserving the purity of water. Health *Niyamas* (*Swasth Rules*) carved by the great Manu in his 'Manusmriti' prescribed a bath for purification if a person became impure by touching a 'Chandalaka', menstruating woman, in child-birth, a corpse, etc. Taking bath in running water was recommended. Taking water from joint ponds was forbidden. Whoever excreted faeces in places of pilgrimage, reservoirs of water and temple was to be punished. Forbiddings of the day warned the populace. "Don't stay in an epidemic village", "Don't use others' personal articles", "Biting, nails is prohibited", "Don't take food given by a sick person", "Sneezed at is tabooed" and so on.

Hygiene never neglected the science of nutrition. Intoxicating drinks were forbidden. The religious practices were all conducive to good health, sobriety, cleanliness of person and apparel, ablution with pure water and prayer itself in which prescribed movements amounted to a series of physical exercise, yoga, the segregation of sufferers from 'unclean' diseases was also ordained.

The society functioned mainly on the strength of traditions and customs constituting 'Dharma' rather than by any express legislation. The concept of contagion was religious long before it was medical. "Whoever was to enter the temple of God was to be cleanly dressed in spotless clothes". Tanks and wells were dug and dedicated to the deities and religious rules comparable to modern legislation for preserving the purity of water and preventing pollution were in

vogue. The bathing fairs and festivals were principally meant for washing and cleaning the body especially in the season when people will not otherwise touch water or wash themselves i.e. in the winter months when bathing festivals mostly come off. '*Bhavprakash*' lays down that in order to have a healthy and long life, "one should get up in the Brahma Muhurta (early pre-sun-rise hours of the morning) and having cleansed himself internally and externally remember his God." (Cleanliness and hygiene were emphasised on such grounds also among the ancient Egyptians, Mesopotamians, Hebrews and other people.

Sex was accepted as a necessary adjunct of life and no sense of shame was woven around it (verily, there should have been very few cases of mental illness in the Freudian sense of inhibitory social censor). Temple inscriptions and architectural edifications of sex which appear lewd to modern mind were perhaps not censored as such by the society. One might even surmise that true to the means of education, for example the rock edicts of *Ashoka*, these were intended to impart sex education, especially so when one comes across the centuries old treatise of sex, for example, Vatsyayan's Kama Sutra.

4. *Scriptural Testimony*: Manusmriti, from which we have quoted earlier, enjoins clear instructions with regard to the maintenance of sanitation. Chapter IV, verses 45-46, for example, says: "One should not pass urine on a public place or dump or throw any article containing faeces in public places. If any one goes against these injunctions, the individual is to be fined two 'Karshapanas' and by forcing him to remove the offending matter, if he cannot pay the fine.

Shishu Bhritya and other ancient medical treatises contain a great deal about the care of infants.

Arthasastra of *Kautilya* refers to good arrangements for promoting general sanitation by means of provision of the pure water supply, drains for houses and employment of scavengers for sweeping the thoroughfares of the city. There were strict rules and regulations for prevention of nuisance and adulteration of foodstuffs, inspection of slaughter houses and for control of prostitution—all indicating an early attempt to enforce something like a public health act. Arthasastra also contains allusions to epidemics. The king is advised to avoid taking possession of any country which is harassed by epidemics.

Atharva Veda is the oldest literary monument of Indian Medicine. "Ayur Veda", (*Science of Life*) which is supposed to have directly come from *Brahma*—the fountain-head of all learning—compiled from the rudimentary fragments of existing manuscripts describes some specific references of the preventive aspect of medicine.

Charaka was a great physician and sanitarian of this age. His work is voluminous and is divided into 8 parts and contains 120 chapters. "Nations are built out of nurseries", he solemnly pronounced, and therefore accorded an immense importance to the care and the rearing of young children. "So minute

are his instructions on equipment in child's room, that he suggests a variety of toys to please the child should be at hand, which should be coloured, light, musical and beautiful and not sharp pointed". He advises that bedding, coverings and sheets be disinfected by steam and fumigation.

Susruta, another physician, suggests the fumigation of sick room with the vapours of resinous gums etc. to check the spread of infection to others. There was no sepsis in *Susruta's* labour rooms because he took care to use clean hands and boiled water thus anticipating aseptic surgery of modern times.

In the reign of *Chandergupta* (44 B.C.) preventive medicine got a special attention. There existed a constitutional government with king at the head and ministers in charge of separate department. Municipal boards had a regular public health service. Every stranger in the capital had to be notified. The state controlled and regulated the medical profession. Every case of dangerous disease was to be notified by the attending physician, failing which he was liable for penalty. This foreshadows the existence of present Infectious Disease Act., (Notification) and is comparable to the provisions of municipal acts in the several states of present India. Measures were taken to ward off pestilence when physicians had to distribute medicines and priests carry out purificatory ceremonies (Mass Immunization). Extermination of pests like rats etc. was put into force. People afflicted with skin diseases regarded as contagious were segregated from the rest of the population. Special houses comparable to modern Infectious Diseases Hospitals were also built.

The Arabian period A.D. 66 to 1600 witnessed the slow eclipse of preventive medicine in India. From its glowing embers it has lighted the torch of Arabian Medicine and through it the medicine of Europe. Yet even during this period of fall the great works of *Charaka* and *Susruta* were held in high esteem and translated into Arabic under the royal patronage and the Hindu physicians were employed in different parts of the world.

The concept of 'preventive function of medical' as the preventive medicine was slightly different from its modern version. But on a liberal appraisal the issue boils down to the fact that Indian doctrine of preventive medicine was so comprehensive as to envelop the preventive idea to a degree not in any way inferior to the current notions of thesis. When civilization was in its infancy, magic held sway. Ignorance and superstition ruled and attributed the advent of a disease to the wrath of Providence and so supernatural forces were approached to ward off the disease. But even these magical practices were intrinsically nothing also but clear cut formulae and rules later on compiled into the present framework of Preventive Medicine Axioms. For "when this magic was practised on a community scale instead of being limited to the well being of a single individual, it may fairly be called public health practice within the limits of existing knowledge".

All things must change to some thing new, to something strange". Flux has come to be regarded as the fundamental reality. Right from the days of *Buddha* and *Heraclitus* upto *Henery Bergson*, flux philosophy has ever dominated the mind of man. But change always implies something to change for "something" cannot come out of "nothing". New techniques and notions are the offshoots of old potentialities. Old ideas and techniques never die. They may fade away but eventually they are bound to return. As things stand there is nothing new about them. So too is the case with the system of Preventive Medicine in India. Since the day of its glorious origin, the system has stood the test of time and has weathered many a storm. It has trailed through various stages of birth, infancy, childhood, youth, old age and death culminating into rebirth. The cycle is eternal. But things in this process of metamorphosis are so modified that they lose much of their real significance, and spiritual glow contained therein is nullified to a considerable extent. These appear to be divorced from their ancestral stem. When in the course of time magic and superstition gave away, it came to be increasingly recognised that there was no providential or supernatural connection with a disease. Preventive trends of medicine leaned towards a more coherent and compact shape. It became increasingly perceptible that disease is due to nothing but sheer negligence in observing the rules of health, which if all people honestly observe and know them intelligently, not only each individual will possess good health but the nation as a whole will be saved from the rapes and ravages of epidemics. These rules were verily the extensive ossifications of the former magico-religious practices evolved to rid the community of various diseases. Only these are effaced with a new stamp. Actually there is nothing new about them. The magical and religious practices embody the preventive idea of medicine which is in no way subordinate to the present Western concepts on the subject; the qualitative difference being that the force of religion so often used to preserve the purity and sanctity of water supply, foodstuffs and personal cleanliness, has been replaced by more specific legal enactments of the statute books. It thus appears that the preventive concepts of medicine in Ancient India were more human and more receptive to individual minds because of there being a pre-religious bias. What is now being aimed at by the force of law, sprang up as natural phenomenon from the religious experience of people. The adage 'cleanliness is next to godliness' befits-better in the natural setting of a religious mind. What legal force fails to secure in the realms of public health, formed a regular habit and was firmly beaded in the inner recesses of the personalities of the former inhabitants of India. The knowledge, that disease is not only curable but also preventable, has pronounced religious bias and in it is vested the superiority of the ancient system of preventive medicine in India.—Medical Digest Vol. 33 No. 5, 193-198.
