



RESEARCH ARTICLE

Pandemic scenario in India: a review

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Abstract

The COVID-19 has made many a changes in daily livelihood of us. We are the present generation who has witnessed a pandemic in their lifetimes. In this context it is very much relevant to get an idea about any kind of remedial procedures were discussed or mentioned in literature down the ancient history of India. India is mother of ancient civilization. There are various discoverers which were made by Indian scientists in ancient times and now these are recognized by modern science. Amongst them most important is ayurveda. In present years, the herbal ameliorating role of ayurveda in various kinds of diseases is accepted by the modern scientific and/ medical personnel. In this quest I have made some survey of literature (both online and off line). Based upon the available information the present review was designed. I divided my study in two parts. In the beginning, we will look into the occurrence of pandemics in ancient India. Second, we will put some light regarding the remedial procedures and /measures taken to stop the spread of pandemic mentioned in ayurveda. In this regard, I have got very interesting results. I noted occurrence of pandemic in India times back to B.C.E and this was prevalent in 19th century as well. For prevention of this pandemic number of measures are mentioned in ayurveda including quarantine, isolation, home isolation etc. As part of remedial measures, boosting up of immunity, reframing and refreshing of metabolic systems of body, different tests and methods for enhancing lung capacity, physical mobility (in forms of yoga and meditation) are prescribed as non-invasive methods. Thus, present study will encompass the rich cultural as well as scientific heritage of ancient India.

Keywords: Ayurveda, ancient, India, occurrence, pandemic, prevention.

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1 | INTRODUCTION

When the globe was heading towards conquering Artificial Intelligence as an inherent tool for virtually doing everything in 2020, the dream line trajectory was deviated by a Virus. Originating from China in December 2019 the novel Corona Virus reached to about 19 Countries by end of January when the WHO declared it a Public Health Emergency of International concern (PHEIC) (1). The prevention and control guidelines were released by the WHO and Ministry of Health & Family Welfare (MoHFW) Govt. of India (2, 3). The simple good personal hygiene measures and physical distancing were declared as most effective protections for the COVID 19(4). Age old traditions and Customs have been the core of Indian culture. The Indian way of living — Sanatan Sanskriti has many scientific principles inherited in it, to prevent infectious diseases (5). We follow them traditionally sometimes not even realizing the rationale behind it. This article tries to explore the correlation between preventive measures and traditional practices of Sanatan principles of life. These principles were capable of preventing infectious diseases, major killers in ancient times. Many measures are coherent with the Modern Public Health approaches of handling infections and there is a need to realize this reality.

2 | ROLE OF CUSTOMS, CULTURE & TRADITIONS OF "SANATAN WAY OF LIFE" IN DISEASE PREVENTION

India is the most ancient civilization and has its own way of living; the scriptures mention it as Sanatan way of living. It has customs, traditions and culture which define the different code of ethics, behaviour, lifestyle and every aspect of human life. It talks about your daily routine, type of diet, Yoga-asana, and rituals. It is not a religion but rather a way of living. It is based on the tenets of achieving Moksha or salvation and thus restricts to its followers to speak truth and follow the correct path. The Sanatan Sanskriti is above the religion and based on experiences rather than blind teachings. This Sanatan way of living is much ancient to Hinduism, which was

the religion being practiced by majority of people in this geographical area. The principles of Sanatan Sanskriti were central to Hinduism. The Sanatan Sanskriti, Yoga and Ayurveda are invaluable gift of India's ancient tradition. Sanatan Sanskriti defines how to live a life; Yoga unites mind, body and soul for attainment of physical, mental and spiritual health. Ayurveda deals with preventing diseases and promoting positive health (6, 7). All these are known to increase immunity and our defense mechanism essentially needed to fight all diseases including COVID 19. Our lifestyle, behaviour and nutrition are the key factors to fight from diseases. The Sanatan way of living has stressed on these tenets for living a healthy life and numerous scriptures are available in support of that. Sanatan practices have many of the preventive measures essentially required to fight COVID 19. We shall see how these ancient measures are capable of preventing Pandemic and are in coherence with our modern epidemiological and scientific knowledge.

3 | HAND WASHING

The concept of cleanliness ("Shaucha" in Sanskrit) is vital in Sanatan traditions. The cleanliness or purity of anything decides if it is usable or not. The importance given to hand washing, cleaning of body, surroundings and objects to be used is such that your work will be fruitful only if everything is clean. The use of unclean object was rather a sin in ancient traditions. In Sanatan concepts it is essential to wash hands before eating and performing any ritual. It was also essential to wash hand with water and fly ash or clay or Lona (having detergent properties) after use of Toilets. To prevent infection there was a concept

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of separate slippers made of wood, for outdoor and indoor home. Bringing outside slippers inside the rooms and vice-versa was strictly prohibited. People following these rules of Sanatan way of life requests visitors to remove sandal, shoes or slippers outside the house to prevent any probable spread of infection. The description of cleanliness, hygiene and purity are mentioned by Patanjali in Yoga-Sutras, here Shaucha is described as-

शौचात्स्वाङ्गजुगुप्सा परैरसंसगः ॥ (2.41)

सत्त्वशुद्धिसौमन्यैकाग्र्येन्द्रियजयात्मदशगनयोग्यत्वानन च ॥
(2.41)

Shaucha is that from which there arises dislike i.e. dispassion towards one's body and detachment towards contact with others. Shaucha gives rise to purity of mind, contentment, one-pointedness, conquest of the senses and competency to attain Atma-Darshana (Self-Realization). Manu Smriti also describes Shaucha as one of the four Niyamas or duties (8).

अहिंसा सत्सयम् अतेयं शौचम् इन्द्रियननग्रः

एतं सामानसकं धर्मं चातुर्वर्ण्ये अब्रवीन् मनुः ॥ (10.63)

Non-Violence, Truth, Non-Stealing, Cleanliness/Purity and Sense-Control are the duties that are common for all four classes, so declares Manu (9). Hence, Cleanliness is a prime duty as per Sanatan traditions. Violation of cleanliness of body, mind or soul was considered sin. Quite similar to these COVID 19 times where not washing hand is a sin and every celebrity, sportsperson and others are requesting to wash hands with soap or sanitizer regularly.

4 | NO SPITTING IN PUBLIC

The Sanatan philosophy further stresses on cleanliness of environment. Atharva Veda mentions the

Earth as a Mother, a Living force. The Manu Smriti says that no one should throw filthy substances like urine, faeces, saliva, cloths infected by impure substances, blood and other poisonous things. Thus, our culture also cared at that time regarding water pollution, Soil pollution and Bio Medical Waste. It also stresses about hygienic disposal of faeces and urine and suggested covering them in deep ground with sticks, grass, leaves, clod etc. for natural decomposition. So Sanatan culture was following hygienic practices and environmental friendly methods of waste disposal to sustain healthy life, environment and development much before the world thought of concept of hygiene, waste disposal and sustainable development (10).

5 | YOGA & AYURVEDA

Yoga uses various postures, breathing exercises, and meditation to improve overall health. Yoga was developed in ancient India as a spiritual practice thousands of years ago. Today, most Westerners do yoga for exercise and to reduce stress. Yoga is one of the best ways available for stress management. It emphasizes unifying mind with body and soul to promote mental, spiritual and physical wellbeing. Vedic literature says one has to clean all the body secretions to avoid various infections and allergies. This includes Nasal mucus secretions, Ear wax, Phlegm, Tears, Rheum of the eyes and Sweat. Even in the times of COVID 19, Yoga will not only improve lung capacity but also stabilize mental health to overcome the stress and depression associated with Pandemic.

Ayurveda originated in India more than 5,000 years ago and is often called the "Mother of All Healing." In Sanskrit it, means "The Science of Life." here emphasis is on prevention and encourages the maintenance of health through close attention to balance in one's life, right thinking, diet, lifestyle and the use of herbs (11-13).

6 | NAMASTE — THE INDIAN WELCOME STARTS WITH NAMASKAR

The Indian way of greeting one another has become global now as it does not require touching or coming close. Many famous international personalities have adopted Indian Namaskar for greeting others instead of handshake. Now its importance is being realized for implementing the social distancing. Namaskar means “I bow to the divine in you” and is a way of saying ‘May our minds meet’, indicated by the folded palms placed before the chest. This is an evidence of India’s rich cultural heritage being in line modern scientific rationale. (14)

7 | SOCIAL DISTANCING – THE ANCIENT INDIAN'S HAD SOCIAL STRATIFICATION

Social distancing is being followed to prevent the spread of Corona Virus. The idea is to avoid being too close to contract the droplets from infected person. Public is advised to stay out of crowded places and avoid going out. (15). But people in essential services like Doctors, health care workers and others - The CORONA Warriors have to go out and are unfortunately getting infected. The occupational risk of getting infected is highest amongst Doctors and staff of Hospitals. This has given rise to social stigma and some people see these frontline workers as agents of infection. Probably the public has to realize that in this COVID 19 era we have to follow physical distancing but not any kind of hatred with corona warriors as these are the real fighters.

When we look at Ancient Indian system of social stratification i.e. the “Varna Vyavastha” it was based on occupation or Karma and main principle behind was probably the risk of transmission of infectious agents. As mentioned in Manusmriti, the society was stratified into four categories (varnas) - Brahmins, Kshatriyas, Vaishyas and the Shudras. Brahmins were mainly priests, teachers and intellectuals. Kshatriyas, were the administrator, warriors and rulers, Vaishyas were the artists, farmers, merchants and traders. Shudras were manual laborers. It is understandable that due to different occupational

nature of varnas, their risk of transmitting infections were different. The dalits, truly the warriors of keeping public safe, were involved in cleaning of wastes, streets and drains. They definitely had the highest risk of transmitting infection to others while the Brahmins had minimal risk of transmission to other varnas due to their nature of work. Such type of stratification must have been carefully thought and used at those times to prevent spread of infectious diseases from one section to the other. However, unfortunately with time, the work based concept of varna system converted to birth based caste system in the society. Though today the Caste system has many more implications in our society, the original concept of varna system might have been to prevent disease by maintaining the Social Distancing (16-19).

8 | PROTECTION FROM MASK: OUR TRADITIONAL GAMCHHA

The MoHFW, Govt. of India has recommended use of Mask in public places for protection from COVID19. Earlier its use was limited to those with symptoms and healthcare workers. But expert opinion has changed because of asymptomatic carriers (20). Then queries arose on what type of mask and its availability for 1.3 billion Indians. The homemade mask of cotton cloth was declared to be good enough for the public by MoHFW (21).

Indian gamchha is a traditional thin cotton cloth used very commonly in many rural parts. This works well as a mask considering its availability. Traditionally it is used to dry the body after bathing or wiping sweat and worn on one side of the shoulder. Its appearance and name varies from region to region and is produced as a handicraft. But it serves an excellent purpose of protecting public from contracting disease. It can be easily used by anyone as compared to the surgical mask, which is costly, short of supply and has a specific way to use (22).

9 | INDIAN VEGETARIAN FOOD: SANATAN DHARMA'S SATVIK BHOJAN

Our traditional food is mainly vegetarian; in fact globally India has maximum number of vegetarians. Even in the diverse range of cuisines the basic tenets are the same, use of vegetable, fruits and spices is essential. *Mānasollāsa*, (The Delight of Mind) written in 12th century describes the need to change cuisine and food with seasons. (23) Utilization of local foods was promoted in Satvik Bhojan for staying healthy and fit.

Indian philosophy of non-violence (ahimsa) keeps us away from animal chain of infective diseases. Rather we have the concept of worshipping animals, as cow is regarded the symbol of fortune and wealth. Non-vegetarian diet is a taboo in Sanatan Sanskriti. This is the best example of disease preventive Indian philosophy. As we all know the suspicious but official origin of this SARS-CoV2 is Animal Market of Wuhan, China. The relation of food and Health was well known as reflected in this quote from the Bhagavad Gita (24).

“Foods dear to those in the mode of goodness increase the duration of life, purify one’s existence and give strength, health, happiness and satisfaction. Such foods are juicy, fatty, wholesome, and pleasing to the heart. Foods that are too bitter, too sour, salty, hot, pungent, dry and burning are dear to those in the mode of passion. Such foods cause distress, misery and disease. Food prepared more than three hours before being eaten, food that is tasteless, decomposed and putrid, and food consisting of remnants and untouchable things is dear to those in the mode of darkness.” (Lord Krishna, Bhagavad-Gita 17.8-10)

10 | INTAKE OF VITAMIN D

We all know that Vitamin D plays a significant role in our immunity system. The studies on COVID 19 are showing that low level of Vitamin D is associated with high mortality especially in elderly population of developed countries (25). Vitamin D supplementation is now recommended to prevent these deaths.

Vitamin D synthesis occurs naturally in our skin cells on exposure to sunlight (26). Daily exposure to early morning Sunlight is required. It is advised to get exposure of Sunlight, Sunbath for 30-40 minutes in a week with about 40% uncovered body (27). The Sanatan Way of living had a concept of offering water to the Sun just after taking bath in the morning in minimal clothes. This early morning exposure to the Sun light if done regularly on seven days serves the modern scientific recommendation. We need to realize the science behind our culture and follow it. (28, 29)

11 | DISPOSAL OF DEAD BODIES OF COVID 19 PATIENTS

The COVID 19 infected bodies have to be treated with utmost precautions and guidelines were issued for the same to avoid spread of infection to person performing last rites. In Sanatan system, dead bodies are cremated by burning to ashes, a complete mechanism of killing or destruction of disease causing agents as compared to the process of burial, which might transmit infection through worms. These worms could be eaten by birds or bat; and might again be eaten by humans to get infected.

In Sanatan system during these rituals the person, who perform last rites, has to discard all his clothes, remove hairs and take bath many times and remain almost in quarantine for at least 13 days. Probably these 13 days compulsory quarantine would have been made equal to the duration of incubation period of infectious diseases. During this period he has to stay alone, keep physical distancing with other family and community members, and only one person gives him food and other essential things. The Sanatan traditions of removing hair and staying separate were probably to reduce the chance of spreading infection. Thus we understand that Sanatan Cultural practices were scientific, evidence based and quite efficient in prevention of infectious diseases.

12 | CONCLUSION

Most of us are today inclined towards modern and advanced culture of the west without even exploring or realizing what all we have in Sanatan Culture. Indian civilization has been one of the most ancient and biggest one. This was the place of learning for scholars all around the world. Sanatan Sanskriti has many preventive measures essentially required to fight COVID 19. Either it be the importance of cleanliness, regular practice of Yoga or utilization of natural medicine in Ayurveda, We have to realize the importance of our Traditions and Customs by visualizing it from the scientific lens. We never thought that we are following physical distancing while bowing for a Namaskar and that the classification of society is probably to prevent disease spread. The pandemic is here to change our behaviour, social structure and also the thought process. The nature has shown us that we were on the right path decades back. Our traditional gamcha, local food and traditional rituals for even the last rites were all coherent with the scientific rationale. There is definite need of more research to create evidence for the hidden scientific underpinnings in favor of our traditional practices so that it is well accepted by the scientific community.

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