

NATURE, HEALTH AND HEALING IN MUGHAL INDIA: A STUDY OF CONTEMPORARY CHRONICLES AND TRAVELOGUES

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ABSTRACT

The Mughal Empire's chronicles offer valuable insights to understand the ecological scenario of that period. These chronicles provide a unique window to understand environmental awareness of the Mughal Era, showcasing a blend of traditional knowledge and scientific observation. The Traveler's who came in India during Mughal period, wrote about the different diseases. They noted the traditional medicine and herbal remedies and observed a glimpse into the diverse healthcare practices during the period. The present paper is an effort to understand various observation and experience to diagnose and treat ailments as provided by the Mughal chronicles.

The significance of environmental issues in historical India cannot be understated, as evidenced by the lack of temperature and precipitation records prior to the late 18th century. While specific data is scarce, general observations suggest that environmental conditions were not substantially different from those experienced today. This is an important insight into the historical understanding of the value of a healthy environment, as evidenced by traveler's accounts and the observations recorded in Mughal chronicles. The knowledge of climate and its impact on court activities further emphasizes the rulers' awareness of environmental factors.

KEYWORDS: Healthcare, Mughal Empire, Nature, Travelers.



I. OBSERVATION ABOUT CLIMATE; AIR, HEAT AND POLLUTION

During the Sultanate period, there was a notable observation that the air became so intense, causing a widespread outbreak of fevers among the people. Interestingly, it had long been in the Sultan's contemplation to establish a town on the banks of the Jamuna, intended to serve as the Sultan's residence.

The Mughal emperors, including Babur and Jahangir, were keenly aware of the impact of climate and ecological circumstances on their movements and activities. Babur's observation of the oppressive heat, violent winds, and dust in Hindustan highlights the challenges they faced. The Mughal preference for staying in the north during the summer and in the south during winter, as well as their choice of specific locations such as Kabul and Kashmir during certain seasons, demonstrates their adaptation to the seasonal rhythm. Jahangir's appreciation of the autumn season in Kashmir further emphasizes the significance of ecological factors in shaping their experiences. This ecological awareness not only influenced their travel patterns but also impacted their observations and appreciation of different regions.

The observations made by Jahangir and other historical sources provide valuable insights into the climate of India during that time period. The detailed descriptions of the climates of Agra and Delhi offer a scientific approach to understanding the environmental conditions and their impact on the people living in those regions. Jahangir's comments about the difference in climates in India indicate a keen awareness of the variations in weather patterns and their potential effects on human health. His mention of the sickness of the climate near Delhi and the impact on the spirits and weakness of the people reflects an understanding of the connection between environmental factors and well-being.

The accounts provided by Tavernier and Thevenot further contribute to our understanding of the climates of Agra and Delhi. Tavernier's description of Agra's location in a sandy soil and its latitude highlights the factors contributing to the excessive heat of summer in that region. Thevenot's mention of King Shah Jahan's decision to change the climate and move to Delhi underscores the significance of environmental conditions in influencing historical events. The comparison between the climates of Agra and Delhi, especially in relation to Shah Jahan's preference for Delhi over Agra, sheds light on the contrasting environmental suitability of the two regions.



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The positive appreciation of Delhi's climate compared to Agra further emphasizes the impact of climate on human habitation and well-being. Inayat Khan's observations regarding the extreme heat in Shahjahanabad and the measures taken to address it provide additional evidence of the challenges posed by the climate during that time period. The mention of epidemics and disease outbreaks underscores the potential health implications of adverse climate conditions. Overall, these historical accounts offer valuable insights into the climates of Agra and Delhi during that era, highlighting the impact of environmental factors on human health and historical events. The scientific approach taken by these observers in documenting and analyzing the climates of these regions contributes to our understanding of the complex relationship between climate and human societies.

The Mughal Emperor Jahangir expressed deep concern about the environmental conditions I Ahmadabad, particularly the air and water quality. He noted that the city should be called 'Gardabad' due to the abundance of dust. Jahangir also observed the adverse effects of the intense heat on the people, leading to widespread sickness and weakened immune systems. He lamented the deterioration of the climate in Gujarat and regretted his decision to visit the region. Jahangir comments,

> O thou, compendium of goodness, by which of thy names shall I call thee? I had already called Ahmadabad Gardabad (the abode of dust)." I do not know whether to call it Samumistan (the place of samum) or Bimaristan (abode of sickness), or Zaqqum-zar ,(the thorn-bed), or Jahannamabad (the house of Hell), for it contains all these varities."

His observations highlight the significant impact of environmental factors on public health during that time period. Jahangir ordered in 1618 when he was in Ahmadabad, "to hang up a sheep on the bank of the *Kankriya* tank after taking off its skin, and at the same time one at Mahmudabad, [Meshva] that the difference of the air might be ascertained. It happened that after seven *gharis* of day had passed in that place (Ahmadabad) they hung up the sheep. When the three *gharis* of day remained, it became so changed and putrid that it was difficult to pass near it. They hung up the sheep at Mahmudabad in the morning, and it was altogether unchanged until the evening, and began to be putrid when one and a half watches of night had passed. Briefly in the neighbourhood of Ahmadabad it became putrid in eight sidereal hours and in Mahmudabad in fourteen hours." By comparing the rate of putrefaction of sheep carcasses in different locations, Jahangir sought to



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ascertain the influence of air quality on decomposition. This not only reflects a scientific mindset but also indicates the emperor's concern for the well-being of his subjects in relation to their environment. Such observations highlight the early recognition of the link between environmental conditions and public health, emphasizing the importance of maintaining a healthy environment for overall well-being.

The hot season in India, particularly in places like Surat and Delhi, is described as extremely dry and intensely hot. Ovington notes that the air in Surat is so dry that it quickly absorbs any moisture, making it difficult to write with a pen. The heat is also so intense, especially in the afternoon, that it is uncomfortable to stand on the grass for long periods of time. To combat the heat, they sprinkle water on the floor and use peacock feather fans to stay cool. Tavernier adds that the heat in India is so great that travellers often choose to travel at night in order to rest during the day. Manucci also comments on the discomfort experienced due to the extreme heat in Delhi, noting that visitors from Balk found it difficult to acclimate to the climate. Careri provides insight into the seasonal differences in Hindustan, highlighting the excessive heat experienced throughout most of the region, especially for Europeans who are not accustomed to such climates. He also mentions the unique timing of the rainy season between Surat and Agra, as well as the scarcity of clouds in the sky for nine months of the year.

Overall, these historical accounts offer a glimpse into the challenging climate conditions experienced during the hot season in various parts of India, shedding light on the measures taken to cope with the extreme heat and dryness.

II. UNDERSTANDING ABOUT DISEASES; REMEDIES, NATURAL HERBS AND HEALING

The prevalence of diseases among the inhabitants of India has varied over time, with some diseases appearing suddenly and then disappearing mysteriously, such as the English sweating sickness of the sixteenth century. During the Mughal era in India, the approach to medicines and remedies was influenced by a fusion of *tibb* and *Ayurveda*. With the arrival of European practitioners, there was a shift in ideologies. While natural herbs and remedies were commonly used throughout the empire, *hakims* or *vaidhyas* were appointed for imperial use, and European physicians were also patronized by the State.



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The use of plants and herbs in ancient India, particularly within the context of the Ayurvedic and Unani systems of medicine, reflects a deep understanding of the natural world and its potential benefits for human health. The reverence for plants as the home of divine spirits with beneficial powers is evident in the seals found in India's earliest cities of the Indus Valley civilization. This perspective on the sacredness of plants continued to be upheld by *Ayurvedic* physicians and Indian philosophers, who integrated the natural world into their teachings and dialogues. Muhammad Ali has listed two hundred ten plant drugs of Indian origin added by *Unani* physicians to their materia medica.

Indian plants and herbs also used by that time also as for medicine and many remedies as *banyan*, *neem*, lotus, *tulsi*, *plash*, *dhak*, coconut, *bel*, *rudraksh*, *bhang*(Ayurvedic medicine used hemp for the alleviation or migraine headaches and stomach spasm)pipal, jamun, brahmi, satavar, *ashoka*, rendi, *Mulethi*, *Vasakha*, *harad*, *amla*, *kachnar*, *aak*, *amaltas*, *majitah*, *arjun*, *guggal*, *dhatura*, *Ashwgandha*, some spices and fruits were also used as cumin, black peeper, coriander, banana, mango, *karela*, palm, cardamom, *tejpatta*, drumstick, brinjal, *imli*, garlic, ginger, cinnamon, *mahuwa*, *hina*, *sesame*, *supari*, *ritha*, *haldi*, lime, saffron, betel leaf, nile, jasmine, *jiaphal*, *keveda*, clove, *camphor*, *champa*, *khas*, rose, *kadamba*, sandle wood etc.

These plants were used commonly as home remedies also, people were aware about this medicinal value. European travelers also noticed some medicinal stones also used by Indians. Additionally, the utilization of various plants, herbs, spices, and fruits as home remedies underscores the widespread awareness of their medicinal value among the Indian population. Pelsaert writes that many drugs which are produced in India, were the regular items for trade of Company. As he himself collected many samples and by druggists, herbalists etc. The abundance of resources such as borax, spikenard, and sal ammoniac, as well as the methods of extraction and trade, indicate the extensive utilization and commercialization of natural medicinal products in India during that time. Overall, the historical use of plants and herbs in ancient India not only reflects a deep-rooted spiritual connection to nature but also demonstrates a sophisticated understanding of their medicinal properties. This traditional knowledge continues to influence holistic approaches to healthcare and inspire further exploration of plant-based remedies in modern times.

Spikenard, also known as *jataamaansee*, is a valuable herb that was highly prized in ancient times. It is derived from a Himalayan plant belonging to the valerian family, and is used to produce



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a perfumed ointment. In addition to its use as a fragrance, spikenard is also considered to have medicinal properties. It is particularly valued for its ability to alleviate stiffened limbs, as it can be rubbed onto the affected area with oil and left to dry. This application produces a warming effect and helps to expel cold from the body.

The Jesuit Missionaries documented various Indian remedies used by the indigenous people for treating a range of ailments. These remedies included the use of natural ingredients such as pomegranate-shell powder, pepper, sar-armoniac, lime, frankincense, lemon juice, black cumin, *stramonia* seed, mother-wort, wormwood, *giraumont* fruit, ginger, garlic, cucumber-leaf juice, olive oil, sweet-oil, white cumin, and sugar. For example, remedies for headaches included the use of pomegranate-shell powder and pepper for violent headaches, and a composition of sar-armoniac, lime, and water for common headaches. Additionally, vertigo caused by thick blood was treated with wine steeped with frankincense, while deafness due to cold humours was addressed by squeezing lemon juice into the ear. To alleviate toothache, a kind of lozenge made with bread crumbs and stramonia seed was used to numb the pain. For individuals suffering from bloody-flux, mother-wort or pounded wormwood were applied to the nose. Furthermore, the heat of the stomach or spitting of blood was treated with a plaster made of *giraumont* fruit and its water.

The remedies also covered gastrointestinal issues such as cholic and lientery. Cholic arising from wind and phlegm was treated with a mixture of boiled water with anise and ginger, as well as the application of raw onion and ginger on the affected area. Lientery was addressed by baking a head of garlic in ashes and giving it to the patient to suck its juice. Other remedies included using the juice of bruised cucumber-leaf for purging and vomiting, drinking olive or sweet-oil mixed with water for stoppage of urine, and consuming parched white cumin and ginger mixed with sugar for looseness. Fevers were treated by administering large pills composed of ginger, black cumin, and long pepper before the onset of the fever. Furthermore, it was noted that physicians of higher castes refrained from consuming meat and other prohibited animal products but utilized animal products as medicinal treatments.

On the other hand, common people, particularly women, gathered useful herbs from their surroundings after the rains to cure simple ailments prevalent in their families. In conclusion, the documentation by Jesuit Missionaries provides valuable insights into the traditional Indian remedies used for various health conditions. The utilization of natural ingredients reflects the indigenous knowledge and practices related to healthcare in Indian society during that period.



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The autobiographies of Babur and Jahangir provide valuable insight into the medical treatments used by the Mughals for fever and other illnesses. Babur's personal accounts detail his own experiences with intermittent fever, including the use of medication derived from barley flour, mixed with other medicine, which he found to be quite unpleasant tasting. Additionally, miniatures in the *Baburnama* depict servants administering drugs to Babur during his childhood illness. Furthermore, the treatment of abscesses involved boiling pepper with water in a clay pot, and then bathing the affected area in the hot water and steam. These historical accounts offer a glimpse into the medical practices of the Mughal era and highlight the remedies and treatments used for various ailments.

In the ninth year of his reign, Jahangir experienced a severe headache and fever, for which no doctor could provide relief. It was only his wife, Nur Jahan, who knew of an effective remedy. Jahangir abstained from heavy foods and consumed only light food, attributing his eventual recovery to the spiritual power of Mu'inuddin Chishti, to whom he had prayed for help. Despite following the advice of his doctors and fasting for three days and two nights, Jahangir's fever persisted, leaving him weak and with no appetite. This experience led Jahangir to reflect on the spiritual and physical aspects of his illness, emphasizing the role of faith and perseverance in overcoming adversity.

Based on Jahangir's writings, it is evident that he found the milk of antelope to be beneficial in managing his asthma. Additionally, he experienced a bout of diarrhea after consuming an excessive number of mangoes. Jahangir also faced challenges due to the climate, particularly in Agra and Gujarat, where he suffered from fever and vomiting. His physicians recommended reducing his intake of wine and opium. Furthermore, Jahangir mentioned experiencing asthma attacks and difficulty breathing due to excessive rain and damp air. Despite trying goat's milk and camel's milk, he did not find any relief. It is worth noting that Hakim Mirza Muhammad was highly regarded for his natural skill and experience.

Princess Jahanara Begam's recovery from her sores was attributed to the efforts of a mendicant named Hamun and his slave, Arif. Their ointment proved to be highly effective, completely healing the princess's sores within two months, a feat that had not been achieved by other treatments over a period of four months. Inayat Khan, in his account, emphasized the remarkable healing properties of the plaster prepared by the mendicant, which had previously been successful in treating burn wounds. This led to the summoning of Hamun to the court, where his plaster once again



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demonstrated its efficacy in providing relief to the princess. In recognition of his invaluable contribution to the princess's recovery, Shahjahan rewarded Hamun, who had previously lived in poverty and struggled to afford even his evening meal. Hamun was honored with a substantial sum of money, a robe of honor, a horse, and a female elephant. Similarly, Arif, the slave who had assisted in preparing the ointment, was also duly rewarded for his efforts. Princess Jahanara Begam's recovery stands as a reminder of the transformative power of dedication and expertise in the field of healing, as well as the importance of recognizing and rewarding such contributions.

The major difference between European and Hindu medicine was the widespread practice of bleeding by Europeans. While Hindus did not use bleeding at all, Europeans routinely employed this method for treating various illnesses. This is evident in historical accounts such as that of Francis Xavier, who mentioned being bled seven times in a single day due to illness. However, there are also instances where bleeding was mentioned in Hindu medicine. Jahangir, for example, described being bled from his left arm to address the congestion of blood that was affecting his health. This indicates that while the practice of bleeding may have been more prevalent in European medicine, it was not entirely absent in Hindu medicine.

Based on John Fryer's classification, the diseases prevalent in India vary according to the seasons. In the winter season, common ailments include coughs and tumours of the mouth and throat. During the summer, fever, cholera, and inflammation of the eyes are frequently observed, along with a hot and irritable climate. The rainy season brings about dysentery and various brain and stomach disorders. Smallpox tends to spread more easily in dry weather, particularly from February to May. Many other diseases also noted by the European travelers as paralysis, stone problem, apoplexy, dropsy, anaemia, gout, elephantiasis, diarrhea, jaundice, and many more. As for the symptoms and treatment of the various diseases listed by them, then often fail to indicate either the one or the other except in the case of cholera, dysentery, fever, and smallpox, for which they have documented the symptoms and indigenous treatments.

Bernier's observations provide valuable insights into the healthcare system in seventeenth century India. He highlights the prevalence of certain diseases such as dysentery, venereal diseases, and the Guinea worm plague, along with the challenges posed by the scorching conditions. Bernier also discusses the remedies used to address these health issues, noting the effectiveness of the local approach in treating certain ailments. Additionally, he emphasizes the potential risks associated with the consumption of Arac, cautioning against its excessive use due



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to its harsh and burning nature. Furthermore, Bernier contrasts the Indian healthcare system with the European system, offering a critical analysis of the differences between the two. His travelogue serves as a valuable historical resource, shedding light on the healthcare practices of that era and the comparison between different medical traditions.

Manucci provides a detailed and intriguing account of his encounter with an old lady who sought his assistance in treating the wife of the *qazi*. Despite the scepticism of other physicians, he agreed to visit the ailing woman and assess the possibility of a cure. After conducting a thorough examination and relying on his knowledge of secret remedies, he recommended administering a clyster, despite initial opposition. Drawing from his experience with enemas in Goa, he prescribed a concoction of mallows, wild endive, herbs, bran, black sugar, salt, olive oil, and Canna fistula. With a makeshift instrument and careful instruction, the patient ultimately recovered. Manucci's account highlights his expertise in medical treatment and his willingness to challenge conventional wisdom in order to provide effective care.

Based on Manucci's account, it is reported that Shahjahan prohibited his wives from giving birth and instead instructed the administration of medicines to induce abortion. This practice was continued by his successors, including Aurangzeb and his sons.

According to Thevenot, Musalipatnam is plagued by a particularly severe disease known as *Akeron*, or mumps, which primarily affects children. This disease causes inflammation in the tongue and mouth due to excessive heat. Parents take care to use herbal remedies to cool the affected children, as failure to do so can lead to the disease spreading to the intestines and ultimately proving fatal for the child.

Cholera, a disease that has been endemic in India for over two millennia, became a global pandemic in the early 19th century, spreading from Bengal to the Indian Ocean region, Europe, and America. The symptoms of cholera, as described by historical accounts, include violent vomiting and extreme looseness, often caused by overeating, particularly of fish and meat. The severity of the disease is categorized into four stages, with the final stage, known as cholera morbus, presenting with all three symptoms: vomiting, looseness, and extreme pain. Historical remedies for cholera included the application of a red-hot iron to the sole of the patient's heel, a practice believed to be effective in alleviating the symptoms. However, it was noted that blood-letting in conjunction with this remedy posed a significant risk to the patient's life. Some accounts



also mention the use of ligatures, or tight bandages, applied to various parts of the body in an attempt to cure the disease.

Historical observations shed light on the understanding and treatment of cholera during that time period. The remedies and practices described reflect the limited medical knowledge and resources available at the time, as well as the desperate measures taken to combat a disease that was widely feared and misunderstood. While modern medicine has made significant advancements in understanding and treating cholera, historical accounts provide valuable insights into the impact of the disease and the efforts to combat.

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