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Historical Analysis of Disease Prevention in Colonial India: A Medico-Legal Perspective

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Introduction

Modern public health in India evolved drastically during the nineteenth and twentieth centuries under colonial rule. The colonial authorities implemented and enforced various sanitary measures for the army in 1863 and civilians in 1912 through the appointment of Deputy Sanitary Commissioners and Health Officers. However, widespread public resistance broke out against cities planned according to imperial interests, instead of Indigenous welfare. Through studying Reports on Sanitary Measures in India and Gazettes, legal instruments, such as the Epidemic Diseases Act of 1897, are critically assessed with their implications for both public health outcomes and civil liberties. By situating colonial disease prevention within broader frameworks of surveillance, control, and racial hierarchies, this paper contributes to understanding the complex legacies of colonial health policies and their lasting impact on postcolonial public health infrastructure. A comprehensive historical analysis of disease prevention efforts in colonial India, focusing on the intersection between medical policies and legal frameworks enforced by the British colonial administration in their regulation of epidemic diseases like cholera, the plague, and smallpox, can be understood through a medico-legal lens. This period is studied in the paper to explore how the socio-political needs of colonial rule shaped public health strategies. The findings underscore the need to reflect on how historical approaches to epidemic control inform contemporary public health practices and legal frameworks in South Asia.

Background

The Portuguese introduced India to Western medicine in the 16th century. Garcia de Orta, a Portuguese physician, acknowledged the cross-cultural exchange between India and Portugal in *Colloquies on the Simples and Drugs of India* (1563)–the first textbook on tropical medicine and *materia medica* (medical material). According to him, India had certain medicines the Greeks did not know about.[113] However, after the Charter of 1600, the medical officers that arrived with the East India Company's first fleet of ships imposed Western medicine in India. The British colonial rule in India prioritized imperial economic and racial interests over indigenous well-being. With

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[113] Annamma Spudich, "Portuguese and Dutch Records of Indian Medicine, National Centre for Biological Sciences," Google Arts and Culture, (2019). https://artsandculture.google.com/story/portuguese-and-dutch-records-of-indian-medicine-national-centre-for-biological-sciences/KwXhWshAlfr6IQ?hl=en.

urbanization around cantonments and trade cities, colonial authorities aimed to protect European lives and commerce. Health campaigns targeted ports and pilgrimage sites to prevent the spread of disease to Europe.[114]

In this initial stage, the medical departments provided medical relief only to troops and employees of the East India Company. In 1775, hospital boards were formed which consisted of a Surgeon General and Physician General. In 1785, medical departments were established in Bengal, Madras, and Bombay presidencies.[115] In 1869, these three departments were amalgamated with the Indian Medical Services, and a competitive examination was held in London to recruit doctors into the services.[116] The appointment of doctors from Europe caused fiscal strain on the government, thus, medical education was introduced in India to recruit local staff.[117] After the implementation of Crown rule in India to improve public health, the Indian Medical Service, the Central and Provincial Medical Services, and the Subordinate Medical Services were initiated.[118]

The merging of departments into the Indian Medical Service in 1869 placed huge financial pressure on the colonial administration, as most doctors were recruited from Europe via a London-based examination.[119] These doctors sought high pay, pensions, and allowances for housing, travel, and furloughs to England, making their jobs far more expensive than those of locally qualified employees. Recruitment and training in Britain, combined with opposition to postings in remote or unsafe areas, increased costs.[120] Given the restricted availability of treatments at such high costs, the government developed medical education in India and Central, Provincial, and Subordinate Medical treatments to hire affordable Indian doctors.[121]

The British policies were not guided by the concept of altruism but self-motivation. They perceived that India, with its tropical climate, was a breeding ground for various diseases. Such a perception drove them to retreat into their sanitized enclaves or cantonment areas.[122] However, young British soldiers and sailors often ventured out, mingling with locals, consuming market food and alcohol, and engaging in sexual relationships.[123] High death rates from cholera, enteric fever, and venereal disease sparked alarm. In response, colonial authorities imposed stricter controls, including short-term military service, creation of segregated cantonments, allocation of alcohol from the camp, and the Contagious Diseases Act of 1868, which subjected Indian sex workers to mandatory inspections and confinements.[124] Additionally, the sanitation efforts in cantonments, such as draining water and

[114] Syed Islam, "Epidemic, Diseases Prevention, and Colonial State: A Brief History of Epidemic Diseases Act (1897) in Colonial India," *AGPE The Royal Gondwana Research Journal of History, Science, Economic, Political and Social Science*, 2(1) (2020): 158–164, https://agpegondwanajournal.co.in/index.php/agpe/article/view/33.
[115] Anshu and Avinash Supe, "Evolution of Medical Education in India: The Impact of Colonialism," *Journal of Postgraduate Medicine,* 62(4) (2016): 255-259. https://pmc.ncbi.nlm.nih.gov/articles/PMC5105212/.
[116] *Ibid.*
[117] *Ibid.*
[118] *Ibid.*
[119] *Ibid.*
[120] Samiksha Sehrawat, "'Prejudices Clung to by the Natives: Ethnicity in the Indian Army and Hospitals for Sepoys, c. 1870s-1890s," in *The Social History of Health and Medicine in Colonial India*, ed. Biswamoy Pati and Mark Harrison (Routledge, 2009), 157-160.
[121] Anshu and Supe, "Evolution of Medical Education in India," 255-257.
[122] Burton Cleetus, "Tropics of Disease: Epidemics in Colonial India," *Economic and Political Weekly,* 55(21) (May 23, 2020), https://www.epw.in/engage/article/tropics-disease-epidemics-colonial-india.
[123] *Ibid.*
[124] *Ibid.*

clearing grass, reflected the belief that isolation and cleanliness could shield Europeans from the perceived dangers of native life.[125]

Diseases like small-pox, cholera, *kala-azar* (black fever, visceral leishmaniasis), tuberculosis, leprosy, malaria, influenzas, etc. were prevalent in 'black town', causing concern for the colonial rulers who lived in 'white town'. Hence, British medical interventions were introduced to arrest the epidemic outbreak in their part of the town.[126] Urbanization, overcrowding and the expansion of cities created an unhealthy environment. Due to overcrowding of areas around cantonments and trade cities, colonial authorities aimed to protect European lives and commerce.[127] Bombay, Pune, Calcutta, and Karachi were some of the cities worst hit by the plague epidemic.[128] Health campaigns targeted ports and pilgrimage sites to prevent the spread of diseases to Europe. Under international pressure to prevent damage to trade, the British colonial government passed the Epidemic Diseases Act of 1897 in India.[129] This act gave special powers to doctors, Indian Civil Service officers, and armed officers to prevent epidemics by allowing them to hospitalise or forcefully quarantine any infected person.[130]

These government restrictions resulted in dissatisfaction among the Indian/Indigenous people,[131] who argued this disrupted religious pilgrimages, and mandatory house inspections breached privacy. Many people also disapproved of the segregation in hospitals and camps, which led to riots and strikes in Bombay in March 1898.[132] In addition to this, Indians contested the claim of the superiority of western medicine, which isolated the *vaidyas* and *hakims* (traditional medicine practitioners) whose indigenous knowledge was dismissed as inferior. These practitioners resented the exclusion and sought to defend their practice by familiarizing themselves with the new techniques of diagnosis. They also demanded an official recognition for indigenous medicine that included *Ayurveda*, *Unani* (Graeco-Arabic medicine), and *Siddha* (Tamil traditional medicine).[133]

By the late nineteenth and early twentieth century, nationalism created fertile grounds for the revival of indigenous medicine. The demand for *swaraj* (self-rule) required India to project itself as modern, scientific, and progressive. To make Ayurvedic knowledge more accessible, books on *ayurveda* were published in English, Sanskrit, and other vernacular languages. This surge in publication coincided with rise of nationalism, which in part was a response to the colonial government's 1835 decision to suspend *Ayurveda* teaching in Calcutta Medical College. These publications, along with the establishment of All India Ayurvedic Congress in 1907, sustained the movement, offering platforms to frame Ayurveda within nationalist visions of a modern India. Indigenous doctors played a central role in synthesizing medical systems and advancing institutionalisation. Leaders such as Bhagvat Sinh Jee, the king of Gondal, and authors like Nagendra Nath Sen Gupta highlighted India's ancient scientific

[125] *Ibid.*
[126] Tanmay Barman, "Epidemics and Infectious Diseases in Colonial Bengal: A Historical Study," *International Journal of Trend in Scientific Research and Development*, 5(1) (2020): 1625.
[127] Islam, "Epidemic, Diseases Prevention, and Colonial State," 158–162.
[128] *Ibid.*
[129] *Ibid.*
[130] *Ibid.*
[131] *Ibid.*
[132] National Army Museum, "The Bombay plague," (n.d.). https://www.nam.ac.uk/explore/bombay-plague.
[133] Uma Ganeshan, "Medicine and Modernity: The Ayurvedic Revival Movement in India, 1885-1947," *Studies on Asia*, 4(1) (2010): 108. https://castle.eiu.edu/studiesonasia/documents/seriesIV/Uma_Ganeshan.pdf ; Anshu and Avinash Supe, "Evolution of Medical Education in India: The Impact of Colonialism," *Journal of Postgraduate Medicine*, 62(4) (2016): 255-259. https://pmc.ncbi.nlm.nih.gov/articles/PMC5105212/.

achievements to situate Ayurveda within a broader heritage of knowledge. Thus, Orientalism, initially a tool for Britain's hegemony over India, was reappropriated to shape anticolonial cultural movements.[134] A notable example was the Banaras Hindu University in the 1920s, which developed a program integrating both Ayurveda and Western medicine. C.G. Mahadeva, an Ayurvedic scholar, also argues for the synthesis of the two systems of medicine as there can't be watertight compartments between them both.[135]

These contested encounters over disease management reveal layers beyond medicine. It calls for political authority, cultural hegemony, and the struggle for legitimacy. The pushback against the quarantine and segregation reflected privacy concerns and broader resentment towards colonial power structures. At the same time, traditional practitioners found themselves at a crossroads of either marginalization or compulsion to adapt. This landscape set the stage for the formalization of epidemic legislation under the Epidemic Diseases Act of 1897.

1.0 Colonial Priorities, Public Resistance, and Legislative Responses

Throughout history, pandemics, such as major cholera and plague outbreaks, have shaped public health responses. Cholera, native to India, became a global pandemic in the 19th century killing millions. Yet, it was initially met with minimal intervention due to prevailing miasma theories.[136] From ancient Greece to the mid-19th century, the miasmatic theory was used to explain the causes of infectious diseases. According to this theory, diseases like cholera and malaria were caused by "bad air" or miasmas which were poisonous emanations from putrefying carcasses, rotting vegetation, molds and microscoping dust within houses. When this contaminated air entered the huma respiratory system, it was believed to have caused illnesses. Over the past two centuries, cholera outbreaks have been primarily caused by two serogroups of *Vibrio cholerae*: O1 and O136. Both serogroups produce similar illness, characterized by severe acute watery diarrhoea.[137] The first cholera pandemic, originated in the town of Jessore in western Bangladesh (erstwhile Bengal) in 1817 and lasted until 1824. This outbreak spread across South Asia, Southeast Asia, the Middle East, and parts of Europe and Africa, making it one of the most devastating cholera epidemics of the 19th century.[138]

1.1 The Plague of Justinian

The world endured three significant plague pandemics. First, the Plague of Justinian, began in 541 CE in Egypt before spreading rapidly via established trade, military, and food networks to Constantinople, Syria, Anatolia, Greece, Italy, North Africa, and Ireland. Recurrences continued till mid-eighth century, marked by widespread reports of buboes – swollen lymph nodes in the victim's groins or armpits.[139] Genetic evidence links these

[134] Ganeshan, "Medicine and Modernity," 108-112.
[135] Anshu and Supe, "Evolution of Medical Education in India," 255-259.
[136] David Arnold, "Cholera and Colonialism in British India," *Past & Present*, 113(1) (1986): 118-126.
[137] World Health Organization, "Cholera," December 5, 2024, https://www.who.int/news-room/fact-sheets/detail/cholera.
[138] Mark Harrison, "A Dreadful Scourge: Cholera in early nineteenth century India," *Modern Asian Studies*, 54(2) (2020): 503. https://www.cambridge.org/core/services/aop-cambridge-core/content/view/7277A51FD55951F1D22F1166CFF9A064/S0026749X17001032a.pdf/a-dreadful-scourge-cholera-in-early-nineteenth-century-india.pdf.
[139] Peter Sarris, "Viewpoint New Approaches to the Plague of Justinian," *Past & Present*, 254(1) (2021): 318-321.

outbreaks to Central Asian strains of *Yersinia pestis* dated to the Bronze Age.[140] DNA traces of the lethal *Y. pestis* associated with the Black Death were found by Michael McCormick in sixth century skeletal remains at burial sites in Bavaria and Edix hill in Cambridgeshire, as well as in medieval Valencia, Lunel-Viel, and Saint-Doulchard in France, predating local written records indicating the gradual and persistent spread of disease which moved silently across continents, hitching rides on trade, armies, and even rodent populations.[141]

1.2 The Black Death

The Black death or Great Pestilence devastated Europe between 1347 to 1770, killing an estimated 25 million people - nearly 40 percent of the population. Medieval writers, including Pope Clement VI, believed the disease originated in the East. The Prague chronicle mentions outbreaks in China, India, and Persia, tracing its arrival in Europe via trade routes from the Black Sea.[142] Several factors fuelled its rapid spread: China's civil wars (1205-1353) damaged agriculture and trade, while repeated famines and cold waves harmed crops and livestock. Widespread hunger and malnutrition weakened people's resistance to disease. Urban centres had already been hit by a typhoid epidemic, and in 1318 another pestilence decimated sheep and cattle, further depleting food supplies and straining the economy. At this time, three types of plague were prominent: Bubonic, which affected the lymph nodes and damaged the skin, Pneumonic, an airborne disease that attacked the lungs, and Septicaemic, where an infected bite led to blood poisoning.[143]

The Black Death did not originate in India; rather, it began in Central Asia in the 14th century and spread to Europe through trade routes. India was spared the medieval pandemic but was a significant victim of the Third Plague Pandemic.[144] The Plague first appeared in China's Yunnan province in the 1850s and spread to Bombay in 1896 by diseased rats and fleas on ships. Poor sanitation, overcrowded towns, and significant trade aided its spread throughout the subcontinent. Between 1896 and 1921, it killed more than ten million people in India.[145] Colonial control tactics frequently sparked public unrest, exacerbating the issue and prolonging subsequent outbreaks.[146]

From the 1970s onwards, historians and biologists recognised that the second plague pandemic, including the medieval Black Death, killed far more people than previously believed. In the 1970s-80s, historian Winston Black revised many entrenched myths revising plague history. With new DNA evidence arising in the 2000s, researchers confirmed that *Yersinia pestis* was the cause of Black Death, overturning older theories that exclusively blamed overcrowding and unhygienic living conditions.[147] Based on ancient DNA findings, Black

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[140] *Ibid.*
[141] *Ibid.*
[142] Francis Aidan Gasquet, *The Black Death of 1348-1349*, (George Bell and Sons, 1908), 1-2.
[143] Tapati Dasgupta, "Black Death: A Disaster in European Civilization," *Anudhyan: An International Journal of Social* Sciences, I(1) (2016): 10-11. https://rnlkwc.ac.in/pdf/anudhyan/volume1/Black-Death-A-Disaster-in-European-Civilization-Dr-Tapati-Dasgupta.pdf
[144] Julia Hollingsworth, "A History of the plague in China from Ancient times to Mao - and now," *CNN World,* November 23, 2019, https://edition.cnn.com/2019/11/23/asia/plague-china-history-intl-hnk-scli.
[145] *Ibid.;* E.D. Williamson and P. C. F. Oyston, "The Natural History and Incidence of *Yesinia Pestis* and Prospects of Vaccination," *Journal of Medical Microbiology* 61, (2012): 911. https://www.microbiologyresearch.org/docserver/fulltext/jmm/61/7/911_jmm037960.pdf?expires=1760334620&id=id&accname=guest&checksum=A90744ED0B51A80BECF132A96F436C8D
[146] Ira Klein, "Plague, Policy and Popular Unrest in British India," *Modern Asian Studies*, 22(4) (1988): 739.
[147] Hollingsworth, "A History of the plague in China," https://edition.cnn.com/2019/11/23/asia/plague-china-history-intl-hnk-scli.

showed that plague existed in Eurasia thousands of years earlier than previously believed, with Central Asia as a likely epicentre which reached China and Europe via an ancient trade network of Silk Road routes.[148] Genetic research pushed plague history even further with *Y. pestis* being identified in human remains dating up to 5,000 years ago. The scientific speculation that the second plague pandemic spread from China via the Silk Road, or that the Chinese explorer Zheng He might have introduced it to Africa, stands corrected.[149] However, the third pandemic began in Yunnan around 1855, then spread to Hong Kong, India, the United States and triggered pneumonic outbreaks in Manchuria during the 1910s, killing thousands. Black also corrected other myths, for instance, Black highlighted that the nursery rhyme "Ring Around the Rosie" predated the plague and that iconic beaked plague doctors' mask appeared a century after the plague. [150]

1.3 Great Plague of London

Subsequent waves of plague struck, including the Great Plague of London and the third pandemic, which began in China in 1896 and reached Bombay through intensified global maritime trade. British colonial authorities, reacting to international pressure and economic risk, enacted strict disease control measures as the pandemic effects rippled worldwide.[151] The colonial administration responded with the same frantic urgency seen during the First War of Independence in 1857.[152] India had been identified as the origin of the 1817 cholera pandemic, so the bubonic plague outbreak of 1896 sparked international pressure that threatened the commercial dominance of the British Empire.[153] In response, colonial authorities enacted the Epidemic Disease Act on the 4th of February 1897 to prevent and control the spread of the plague which had reached Bombay's shores in 1896. As global trade intensified and ships traversed the seas, the plague escalated into a pandemic, its effects reverberating worldwide.[154]

During this period, medical internationalism emerged and marked a significant shift in global health governance, particularly in response to epidemics like cholera and the plague.[155] While physicians before 1800 were aware of medical ideas circulating across borders and shared a common classical heritage, it was during the rise of nationalism, intensified imperial rivalries, and global trade that international medical cooperation assumed an institutional form and International Sanitary Conference was inaugurated in 1851 in Paris. [156] These conferences were largely Eurocentric, reflecting the geopolitical dynamics of imperialism which were disrupted

[148] *Ibid.*
[149] *Ibid.;* Sarris, "Viewpoint New Approaches to the Plague," 319-321.
[150] Hollingsworth, "A History of the plague in China,"https://edition.cnn.com/2019/11/23/asia/plague-china-history-intl-hnk-scli.
[151] Samuel K Cohn Jr., "4 Epidemiology of the Black Death and Successive Waves of Plague," Medical *History 52*, no. S27 (2008): 75-76. https://www.cambridge.org/core/journals/medical-history/article/4-epidemiology-of-the-black-death-and-successive-waves-of-plague/6B70B323BC04D13C7EBCDBB991B728CB ; Klein, "Plague, Policy and Popular Unrest," 725-739.
[152]Ananya Chatterjee and Aratrika Das, "Revisiting the Violence of the Third Plague Pandemic in India," *The Polyphony: Conversations Across the Medical humanities*, October 3, 2024, https://thepolyphony.org/2024/10/03/stories-third-plague-pandemic/.
[153] *Ibid.*
[154] *Ibid.*
[155] William Frederick Bynum, "Policing Hearts of Darkness: Aspects of the International Sanitary Conferences," *History and Philosophy of the Life Sciences*, 15(3) (1993): 422-432. http://www.jstor.org/stable/23331732.
[156] *Ibid.*

by the global pandemic during 1817-1830. The aim of these conferences was to harmonize international protocols, often prioritizing commercial and colonial interest over scientific unanimity or equitable health outcomes.[157]

1.4 Cholera and the Plague pushing scientific uncertainty and remerging as global health concerns

Cholera became the central focus of early sanitary efforts, given its explosive epidemiology and complex transmission patterns defied simple explanations. Disputes among delegates revolved around whether cholera was contagious through its transmission routes (overland versus maritime), and whether it originated exclusively from British India, or could arise from multiple endemic regions.[158] Despite John Snow's early work linking cholera to contaminated water and Filippo Pacini's identification of the *cholera bacillus*, scientific explanations were overshadowed by political debates and commercial anxieties.[159] Quarantine measures were unevenly applied, with colonial ports and non-European pilgrims, such as those travelling to Mecca, often bearing the brunt of health surveillance systems. Cholera thus served as both a medical and political concern highlighting the tensions between scientific uncertainty, imperial control, and the protection of trade.[160]

In the final decades of the nineteenth century, plague re-emerged as a global health concern and prompted more coordinated international responses. Unlike cholera, which remained scientifically contested, the plague catalysed tangible policy shifts, including improvements in urban sanitation and housing, designed to eliminate rat populations – the disease's primary vectors.[161] The recognition of socio-environmental factors in disease control signalled a maturing understanding of public health beyond quarantine and contagion debates. As Sir George Newman observed in the ministry of Health report of 1920, summarizing the war era experience with epidemic diseases, "good housing and sanitation are among the surest means of extirpating plague, for they deprive rats of food and shelter."[162] This statement captures a key colonial legacy driven by metropolitan fears and imperial mechanisms.

Fatalities in India were staggering, reaching an estimated 12 million between 1896 and 1918.[163] As a result, local governments and the Indian government implemented strict preventive measures to avoid disease transmission both inland and at seaports. Colonial India's legislative structure for infectious or contagious diseases was fractured. The Epidemic Diseases Act of 1897 was the first step in developing a unified regulatory framework to restrict the transmission of epidemics in India, and from India to other countries. It was a small Act with only four provisions that established India's pandemic and epidemic management strategies.[164]

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[157] *Ibid.*
[158] *Ibid.*
[159] *Ibid.*
[160] *Ibid.*
[161] *Ibid.*
[162] *Ibid.*
[163] Chinmay Tumbe, "Pandemics and Historical Mortality in India," *Research and Publications – IIMA Working Paper*, (2020): 42. https://www.indiaspend.com/uploads/2021/06/25/2020-Tumbe-IIMA-WP-Pandemics-and-Historical-Mortality-in-India.pdf
[164] Rakesh P.S., "The Epidemic Diseases Act of 1897: Public Health Relevance in the Current Scenario," *Indian Journal of Medical Ethics*, 1(3), (2016): 156-157.

2.0 British Colonial Rule and the Indigenous Health System

The establishment of British colonial rule in India heralded a profound reconfiguration of Indigenous health systems, as public health was repurposed to serve the strategic and economic imperatives of the empire. Traditional Indian systems of medicine—such as Ayurveda, Unani, and other localized healing practices—were gradually delegitimized or sidelined in favour of Western biomedicine, which the colonial state deemed more "rational" and efficient for governance.[165] Public health, under colonial rule, ceased to be a communally embedded practice, and was instead transformed into a mechanism of state control aimed primarily at preserving the health of European officials, soldiers, and commercial agents. Epidemic diseases such as cholera and the plague were viewed less as humanitarian crises and more as disruptions to administrative stability, trade continuity, and military readiness. Consequently, public health interventions were disproportionately concentrated in urban centers, port cities, and transport hubs—zones vital to colonial infrastructure. The health of the native population was largely instrumentalized and treated as a variable in the broader calculus of imperial governance.[166] Through a combination of sanitary policing, coercive quarantines, and legal enactments, such as the Epidemic Diseases Act of 1897, the British medical apparatus entrenched itself as a disciplinary force, often provoking resistance from the very communities it purported to protect. In effect, colonial medicine in India functioned less as a tool of welfare and more as an extension of the imperial state's biopolitical authority.

The state intervention in public health was violent, insensitive, and unappreciated by Indians who were against segregation. A widespread belief among Indians at that time was that hospitals were centres of pollution and contamination, posing serious threat to the caste, religious norms, and the practice of *purdah* (a religious and social customs that require women to conceal their faces and bodies from public view). Health officers frequently reported resistance to government measures. One such example is narrated by Dr. Weir. Dr. Weir describes a case in Kamathipura in which a Hindu boy, living with a Parsi family, contracted the plague and arrangements were made to move him to the hospital. However, when the health inspector arrived, he was confronted by Parsi women armed with knives who threatened to kill themselves if the boy was taken away. The removal was postponed until the next day. When Dr. Weir returned, the boy had already died. Another tragic episode involved the suicide of Laxmi, a 75-year-old woman living with her son. When her son encouraged her to go to a plague hospital for treatment, she chose instead to consume opium and end her life, preferring death over hospitalization.[167]

Thus, it can be suggested that public health interventions in colonial India were often met with local resistance due to cultural, religious, and social concerns, whilst the broader international context saw the formalization of medical cooperation.

[165] Ganeshan, "Medicine and Modernity,"108-109.
[166] Islam, "Epidemic, Diseases Prevention, and Colonial State," 160.; Mark Harrison and Biswamoy Pati, "Social History of Health and Medicine: Colonial India," in *The Social History of Health and Medicine in Colonial India*, ed. Biswamoy Pati and Mark Harrison (Routledge, 2009), 2.
[167] Natasha Sarkar, "Plague in Bombay: Response of Britain's Indian Subjects to Colonial Intervention," *Proceedings of the Indian History* Congress, 62 (2001): 442-446. http://www.jstor.org/stable/44155787.

2.1 The Bubonic Plague in Bombay and Pune (1896–1897): A Historical Case Study

India experienced plague outbreaks in the seventeenth and early nineteenth centuries, and in 1878 the disease appeared in the Himalayan region of Garhwal and Kankhal.[168] Between 1884 and 1897, outbreaks were seen in Kumaon.[169] The third bubonic plague pandemic originated in Yunnan, spread to Hong Kong by 1894, and entered British India via trade routes. This was recognised internationally by mid-1896.[170] In August 1896, many pilgrims, including some from plague-endemic Himalayan areas, arrived in Bombay and camped at Waleshwar temple grounds. The Municipal Commissioner's report attributed the Bombay outbreak to these pilgrims, claiming that *sanyāsis* (wandering ascetics) who travelled to Mandvi seeking alms from generous Bania merchants, carried the plague bacilli into the city.[171] Nonetheless, the prevailing view among British officials was that the pandemic strain entered via maritime traffic from Hong Kong, rather than purely though overland pilgrimage routes. Chinese authorities under the Qing dynasty had been reluctant to employ isolation and saw it as a violation of Confucian familial obligations, leading to widespread transmission across the Chinese mainland before the disease reached port cities in 1894.[172]

The urban poor and rural population were affected more by the plague than affluent sections of the society. Ira Klein highlights a striking disparity in plague mortality in late 19th century India. From the example of South India, he shows that Europeans and upper-caste Hindus, especially Brahmans, had remarkably low death rates, while fatality rates soared among lower-caste Hindus and impoverished Muslims. In south India, during the early plague epidemic of 1898-99, not a single European died, and only one Eurasian died, yet over 800 Shudras and 800 poor Muslims perished. In Porbandar in 1897, the prosperous Banias suffered the lowest death rate of 0.6 percent. Among 350 plague fatalities there, Brahmanas accounted for 1.8 percent, Kshatriyas 2.5 percent, and Shudras 2.6 percent. Wealthier caste groups experienced only 2 deaths, in stark contrast to the 340 deaths amongst weavers, butchers, beggars, barbers, dhobis, unskilled labourers, and other ordinary workers. Klein argues that the heavier toll of the plague on lower classes stemmed from their greater exposure to infection and widespread malnourishment, which undermined their resistance to the disease.[173]

2.2 The Outbreak in Bombay

In Bombay, the first confirmed case appeared in Mandvi, identified on 23rd September 1896 by Dr. A.C. Veigas. Within days the infection spread to neighbourhoods such as Nagpada, Kamathipura, Fanaswadi and Khetwadi. By 1897, the epidemic spread to all wards of Municipal Corporation. Medical authorities were unprepared to diagnose, treat, or contain the disease effectively, and Bombay's infrastructure proved inadequate. The British

[168] *Ibid.*
[169] "Pandemic Plague," *The British Medical Journal* 2, no. 2078(1900): 1250, https://www.jstor.org/stable/20266180.
[170] Suyash Verma, "How the Bombay Plague of 1896 Played Out," *Science: The Wire*, April 7, 2020. https://science.thewire.in/health/how-the-bombay-plague-of-1897-played-out/.
[171] Cynthia Deshmukh, "The Bombay Plague (1896-1897)," *Proceedings of the Indian History Congress*, 49 (1988): 478. http://www.jstor.org/stable/44148433.
[172] Verma, "Bombay Plague of 1896."; Sarkar, "Plague In Bombay," 442.
[173] Klein, "Plague, Policy and Popular Unrest," 729-731.

administration in Bombay initially downplayed the severity of the outbreak, referring to it as a mild type of disease. The British Administration's reluctance to fully acknowledge the crisis delayed effective intervention.[174]

Cynthia Deshmukh observes that the outbreak of plague in Bombay unfolded along the fault line of class, caste, and community. In Mandvi, an overcrowded port district, over 32,000 residents crammed into 1,615 houses.[175] Poor ventilation, continuously running taps, and damp conditions made these buildings ideal breeding grounds for plague bacilli. Mandvi was largely inhabited by merchants, namely Banias, Bhatias, and Jain traders whose godowns attracted rats.[176] Their adherence to *ahimsa* (non-violence) meant they opposed killing or occupying rats, resulting in widespread infestation. British records remark, "all attempts to catch rats were opposed or threatened. It is difficult to persuade people with more regard for the lives of animals than for the safety of their own kindred." Stories of officers throwing live rats on fire for amusement were also in circulation.[177]

By 1896, Bombay had become the empire's commercial hub, drawing migrants from across India into densely populated neighbourhoods near their workplaces. Areas like Mandvi, Kumbharwada, Chakala, Kamathipura, Umarkhadi, Kharatalao, and Bhuleshwar often held an estimated 500 persons per area and were predominated by Shravaks, Banias, Bhatias, Marwadis, Lohanas, and Jain communities. Their crowded houses, storerooms, and godowns were infested with rats. As a result, they suffered disproportionately during the epidemic, which became stigmatized as the 'Bania disease'. Frequent travel carried infection into the Deccan as well.[178]During the Bombay plague outbreak in 1897, the British government in India saw a dramatic response fuelled by scientific progress, cultural hubris and radicalism.[179]

Fig. 1. Female Bubonic Plague Patient, Karachi – India 1897.[180]

[174] Sarkar, "Plague in Bombay," 442–443.
[175] Deshmukh, "The Bombay Plague," 478-479.
[176] *Ibid.*
[177] *Ibid.*
[178] Sarkar, "Plague in Bombay," 442–443.
[179] Verma, "Bombay Plague of 1896."
[180] Wellcome Collection, Female patient with bubonic plague in Karachi, India, 1897, Photograph, 10.3 x 15 cm. https://wellcomecollection.org/works/wvqjvuqa.

2.3 State Intervention and Colonial Plague Policies

The plague remained present in India for roughly two decades, tapering off after the 1930s. By the 1930s its persistence was confined to small, localised areas. Throughout that period, the disease exhibited a distinct annual cycle.[181] Cases dropped during the hot summer months from May to July and rose in the cooler seasons of autumn and spring. Northern India, where winters were longer and cooler, suffered more, since those conditions supported the survival of flea vectors.[182] The disease hit hard in Bombay, Punjab, Uttar Pradesh, north Bihar and resulted in the collapse of social organisations.[183] The epidemic reached Karachi by 1896 and caused 3.45 percentage mortality amongst the population; in Daman the percentage was even higher at 28.58 percent.[184] Millions died during the epidemic's worst phase, and countless others were driven from their homes and forced to camp in fields. The local government responded by detaining people in segregation or observation camps to contain the disease. These measures, enforced by the Indian Medical Services, were met with strong resistance from many communities.[185]

In 1896, the Municipal Commissioner of Bombay sanctioned the segregation and forced hospitalisation of suspected plague victims under the Municipal Act of 1888, authorising officers to enter buildings suspected of infection. These measures quickly proved ineffective.[186] In 1897, the Bombay government formed a new Plague Committee led by Brigadier General W.F. Gatacre, who recommended dedicated plague hospitals.[187] By 1898, forty such hospitals were operational. At that time, P.C.H. Snow declared that all plague cases must be hospitalised, even by force. This clashed with caste and religious resistance. To address this, communities were allowed to fund their own hospitals: eight by Hindus, fourteen by Muslims, one by Parsis, one by Jews, and one by Chinese communities.[188]

[181] Klein, "Plague, Policy and Popular Unrest," 723-733.
[182] *Ibid.*
[183] *Ibid.*
[184] "Pandemic Plague," 1250, https://www.jstor.org/stable/20266180.
[185] Klein, "Plague, Policy and Popular Unrest," 723-733.
[186] Sarkar, "Plague in Bombay," 442–444.
[187] *Ibid.*
[188] *Ibid.*

Fig. 2. A temporary hospital for plague victims 1896-97, Bombay.[189]

Post-1897, the Plague Committee instituted four categories of camps, detention, health, contact, and private camps, to separate the infected from the healthy.[190] The contact camps were further divided into two types: health camps and observation camps. The observation camps functioned as detention camps for newcomers, where individuals were placed under surveillance. According to the Acting Commissioner, the detention camp at Malir played a key role in protecting the Singh province from the disease's spread. People who evacuated their quarters or towns were admitted to these camps after undergoing disinfection. In principle, the health camps were voluntary but anyone who declined to stay in a health camp was detained instead in the observation camp. If a case emerged within an observation or detention camp, the residents of that hut were transferred to a contact camp.[191]

[189] Wellcome Collection, *Bombay plague epidemic, 1896-1897: interior of a temporary hospital for plague victims*, 1896-1897, Photograph, 21.7 x 27.4 cm. https://wellcomecollection.org/works/awct3kzq.
[190] *Ibid*.
[191] "Pandemic Plague," 1250, https://www.jstor.org/stable/20266180.

Fig. 3. Spraying a detainee with disinfectant, Observation camp, Bombay, Source: British Library[192]

Leveraging the Epidemic Diseases Act of 1897, Governor Lord Sandhurst mandated that all trains leaving or entering Bombay should be inspected and certified by the Chief Medical Officer as plague-free. Stationmasters were given lists of plague hotspots for targeted passenger screening. Under the Epidemic Diseases Act of 1897, colonial authority enforced plague management in trains by mandating medical inspections at stations, giving health certificates, and providing stationmasters with hotspot lists. Suspected cases were transferred to camps, and noncompliance resulted in prosecution under Section 188 IPC, with police maintaining strict surveillance. European passengers were often first and second class, or seasonal ticket holders, so enjoyed exemptions and softer scrutiny. Inspection teams typically included a medical officer, three policemen, three peons, one clerk, and four watchmen. Those found infected were confined to detention camps. Similar inspection extended to passengers, vessels, and native crafts at the port.[193]

Since the manifestation of plague in Bombay, the city adopted certain measures to contain the further spread and progression of the disease to other districts. Any person who left Bombay by railway were examined by a medical officer at the jetty before onboarding. No friends or visitors were allowed to embark a ship that was about to depart for foreign ports. Each vessel was thoroughly examined, and all ship's officers and crew were also inspected. If a dead rat was found on board, it was immediately sent for bacteriological examination at the government laboratory, and if the plague *bacillus* was detected, the vessel was at once quarantined and thoroughly disinfected. Particular watch was kept at all wharves against rats, and rewards were offered for their destruction in plague infected quarters of the city. When a case of plague was reported, the patient was removed to one of the

[192] Ursula Sims-Williams, "Under the Mantle of Plague: A British Medical Mission to East Persia in 1897," *Asia and African Studies Blog*, (2022). https://blogs.bl.uk/asian-and-african/2022/10/under-the-mantle-of-plague-a-british-medical-mission-to-east-persia-in-1897.html.
[193] Sarkar, "Plague in Bombay," 442–443.

plague hospitals, the inmates of the house were sent to a segregation camp, and the house and clothes were carefully disinfected.[194]

The process of disinfecting a house was carried out in different ways. If the floor was of cow dung, it was "fired" by spreading a four-inch layer of grass over it, the walls were scraped off, and the whole house was saturated by a stream or hand spray with a 1:1000 solution of $HgCl_2$. Tiles were removed, the windows kept open, and the house left uninhabited for about a month before being disinfected again with the same solution and then reoccupied. If the floor was of cement, it was thoroughly saturated with the solution alone. Clothes were treated according to their value and durability. All rags and inexpensive garments were burned; clothes that were able to withstand the sublimate solution were soaked in it for a quarter of an hour; others were boiled for half an hour in water, while silks and other costly articles were exposed to sunlight.[195]

As the epidemic spread, international panic ensued. Countries like Colombo banned Bombay vessels, and Baghdad enforced a 21-day quarantine, Russia labelled all Indians as contaminated, and Italy refused entry to Indian ships. The Committee came under fire in the press for imposing quarantines without warning and exempting Europeans and wealthy passenger from inspection, a decision widely condemned as lacking scientific justification. Widespread fear of cholera spurred a global trade embargo against India. These sanctions would remain in place until the British implemented effective anti-plague measures to prevent the disease spreading to Europe.[196]

Fig. 4. Detention of natives at Nariel Wadi Hospital, Bombay, 1897.[197]

[194] Hormasjee Eduljee Banatvala, "India. House disinfection at Bombay," *Public Health Reports (1896-1970) 15*, 22(1900): 1380-81. http://www.jstor.org/stable/41454464.
[195] *Ibid.*
[196] *Ibid.*
[197] Captain Claude Moss, "Nariel Wadi Hospital. Natives from an infected district detained under Observation, Bombay, 1897," *National*

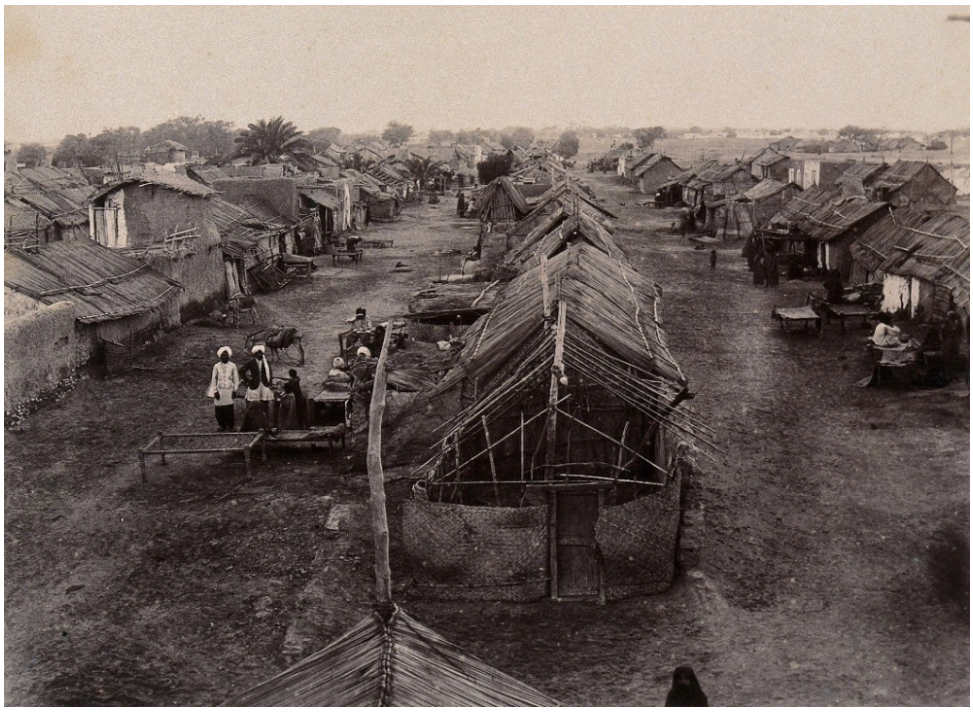

Fig. 5. Segregation camp of the Bubonic plague at Karachi – India, 1897.[198]

Fig. 6. Refugee camp of healthy but poor inhabitants, Mahim, Bombay.[199]

Army Museum London, 1897. https://collection.nam.ac.uk/detail.php?acc=1992-08-74-38.

[198] Wellcome Collection, *A segregation camp during bubonic plague outbreak, Karachi, India*, 1897, Photograph, 15 x 20.4 cm. https://wellcomecollection.org/works/xfdesegu.

[199] Wellcome Collection, *A camp of huts made out of bamboo and matting, where refugees from Bombay live and work during the*

Compulsory government actions to curb the plague were drastic. Authorities ordered mandatory hospitalisation of victims, segregation of contacts, disinfection of infected homes, evacuation of affected areas, inspection of travellers, detention of suspected cases, and even halted overseas pilgrimage traffic. The idea of hospitalisation, segregation or quarantine sparked violent confrontation and resistance among the Indian population.[200] According to a contemporary plague report, evacuation proved the most effective means to halt the disease's spread. While both full and partial evacuations were recommended, full evacuation delivered the strongest results, shortening epidemic duration and halting transmission in villages. Notable failures occurred in Luni and Nasik, where evacuation attempts fell short and resulted in many deaths. Villages were permitted to be reoccupied within seven to ten days, with some places requiring ten days of house-to-house inspections afterwards.[201]

Fig. 7. House-to-house visitation by Justice of Peace, Bombay 1896.[202]

In Satara, however, recurrent plague cases following reoccupation and disinfection led C.G. Dodgson to delay reoccupation until three to four months after evacuation. During that period houses were partially or fully

plague, 1896-1897, Photograph, 19.8 x 27 cm. https://wellcomecollection.org/works/pmmwp3hw.
[200] Klein, "Plague, Policy and Popular Unrest," 739.
[201] "Pandemic Plague,"1250, https://www.jstor.org/stable/20266180.
[202] Wellcome Collection, *A group of officials making a visit to a house in Bombay, suspected of holding people with plague,* 1896, Photograph, 20 x 26 cm. https://wellcomecollection.org/works/xabbkrmr.

unroofed to permit sunlight and ventilation.[203] Though in many cases, poor airflow in lower stories rendered the measure ineffective, and reoccupation remained unimplemented. By contrast, Ratnagiri fared better: houses disinfected with carbolic acid and limewash were reoccupied after just one month.[204] In Sholapur district, thatched roofs were removed and burned, surrounding houses sprayed with perchloride, and reoccupation permitted only after drying. In two streets where cases persisted entire rows of houses were burned. In Hubli evacuation was unfeasible during the rainy season, so in February 1898 the Collector resorted to burning down approximately 250 houses.[205]

Fig. 8. Limewash and disinfection of a plague house, Bombay, 1896.[206]

Lieutenant Colonel H.E. Banatwala was the first Indian appointed as Inspector-General of Hospitals in the Central Provinces. This was made possible by the Indian Act of 1853 (Acts XVI and XVII, Vict., cap. 95), which allowed "all natural-born subjects of Her Majesty" to enter through competitive examinations. The first such examination was held in 1855. Over the following fifty-eight years, 104 officers with distinctly Indian names were admitted to the Indian Medical Service through this process.[207] In one of his public health reports, Banatwala

[203] *Ibid.*
[204] *Ibid.*
[205] *Ibid.*
[206] Wellcome Collection, *A plague house being whitewashed by men standing on scaffolding in Bombay,* 1896, Photograph, 20.3 x 26.2 cm. https://wellcomecollection.org/works/qquj9fjy.
[207] "Natives of India in the IMS," in *The Indian Medical Gazette*, 48 (Thacker Spink & Co, 1913), 190. https://archive.org/details/in.ernet.dli.2015.65043/page/n329/mode/2up.

reviewed the government's measures for dealing with the plague outbreak in Bombay. Alongside restrictions on Bombay streamer, he noted the destruction of plage-infected sites in towns with dismantling of roofs of the infected houses, and disinfection through stringent measures.[208]

Fig. 9. Disinfection of a House through Flushing Engine, Bombay 1897.[209]

[208] Banatvala, "India. House disinfection," 1381.
[209] Captain Claude Moss, "Flushing engine cleansing infected houses, Bombay, 1897," *National Army Museum, London*, 1897. https://collection.nam.ac.uk/detail.php?acc=1992-08-74-108.

Fig. 10. Holes carved on the roof of Plague Infected Houses, Bombay.[210]

The plague often left towns in chaos with administrators demoralised, businesses in failure, taxes uncollected, and workers refusing to work. Officials frequently fled to safer places and special plague committees

[210] U.S. National Library of Medicine, *Plague-Infected House in Bombay*, 1899, Photograph. http://resource.nlm.nih.gov/101435573.

sometimes collapsed as members deserted during outbreaks.[211] Hospitals saw rapid deaths among patients, sparking rumours that colonial authorities were poisoning them. Fear drove hospital staff to abandon their posts.[212] Townspeople and villagers hid cases wherever they could, in the lofts, cupboards, and gardens, to avoid inspection and forced hospitalisation. Infected women would feign normal activities, like making *chapatis* (flatbreads), when plague officers approached.[213] Some patients escaped to Bombay to disappear into the crowds. Families avoided calling doctors, tracked inspection schedules to be absent during visits, and sometimes attacked segregation teams to rescue the sick. Relatives guarded patients in hospitals to stop them from receiving any medicine or food, fearing it was harmful.[214]

Under the Epidemic Disease Act, governments often appointed a single powerful medical authority, and in places with Sepoy regiments like Pune (Poona) and Karachi, the military was deployed to impose strict control.[215] Operations resembled surprise raids, the cordons sealed entire areas, making entry or exit nearly impossible, and house searches were planned in secret, kept even from the search teams themselves. Residents never knew when a raid might occur, prompting some to report plague cases to avoid punishment. Informers were also used to uncover hidden victims.[216]

Local enforcement was often careless with village *Munsif* (headmen) indifferent and sanitation workers fleeing. Some plague inspectors could barely identify the disease. Madras Sanitary Commissioner W.G. King blamed Mysore, which he said, largely abandoned its people in the epidemic. He reported that almost daily, plague sufferers departed Mysore for the south, bypassing government control and spreading infection.[217] By 1898, Mysore, became the focus of endemic plague, and people fleeing the region for the south bypassed government checkpoints, carrying the diseases into Tamil districts. Officials assumed that human movement was the main driver of contagion, but this explanation was only partial. The more significant factor was the spread of plague *bacilli* through rodent flees, particularly *Xenopsylla astia*, which were widespread in South India – went unrecognised. As a result, policies shaped by the incomplete human contagion theory failed to contain the epidemic.[218]

By 1898, growing understanding of plague transmission spurred more systematic countermeasures. Large scale rat extermination, slum clearance schemes, and the introduction of a vaccine, first developed in 1898 by Dr. Waldemar Haffkine in Bombay, became central to control efforts.[219] A dedicated plague laboratory was established there in 1899, later renamed the Haffkine Institute in 1925.[220] Despite these efforts the disease continued to

[211] Klein, "Plague, Policy and Popular Unrest," 745-747.
[212] *Ibid.*
[213] *Ibid.*
[214] *Ibid.*
[215] *Ibid.*
[216] *Ibid.*
[217] *Ibid.*
[218] *Ibid.*
[219] Museum, "The Bombay plague," https://www.nam.ac.uk/explore/bombay-plague.
[220] Chandrakant Lahariya, "A brief History of Vaccine and Vaccination in India," *Indian Journal of Medical Research*, 139(4) (2014): 495. https://pmc.ncbi.nlm.nih.gov/articles/PMC4078488/pdf/IJMR-139-491.pdf.

devastate large parts of India, with Punjab among the worst hit. It was only in the early 1920s that the epidemic began to recede, after claiming at least ten million lives in British India.[221]

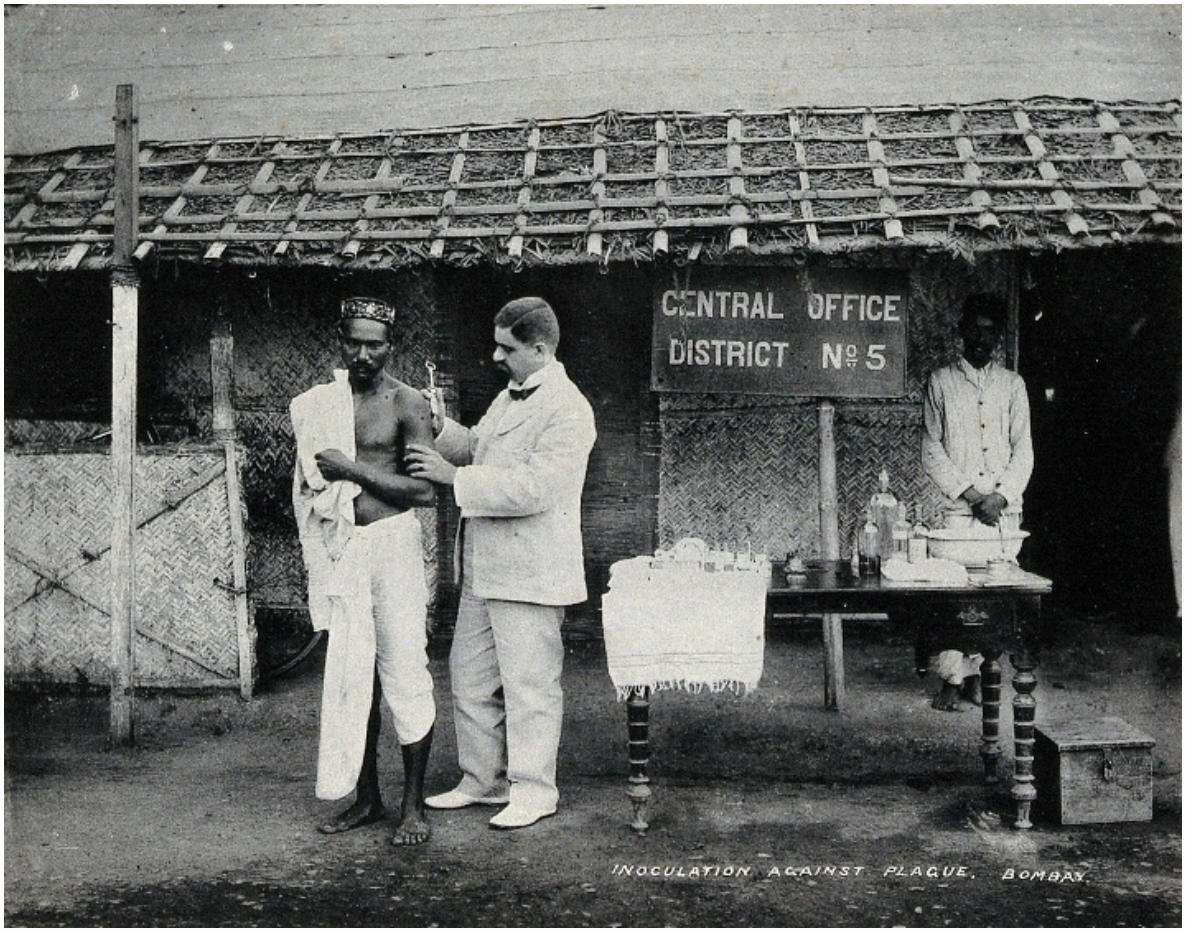

Fig. 11. Plague inoculation, 1896-97.[222]

2.4 Resistance to Colonial Plague Policies

Scholars have shown that the Indian government's anti-plague campaigns often failed because their guiding principles were medically unsound.[223] Klein recounts an incident on 10th October, 1896 when a group of mill workers attacked the Arthur Road Hospital, threatening to demolish the building and assault the staff. In some cases, organised search and rescue parties were formed to retrieve relatives from hospitals. Bombay's sanitation services nearly collapsed as workers fled *en masse*, while the public prepared for mass flight in anticipation of further unrest.[224] Witnesses described the harsh realities from an Indian perspective with wives being "led away by the hand of another man", mothers driven frantic when their "suffering children were taken away", patients "thrown down on the floor… as if they were pieces of stone", and plague sufferers denied regular prayer and forced to "drink spirits."[225] In response to mounting resistance, officials relaxed the most resented measures. Segregation

[221] Museum, "The Bombay plague," https://www.nam.ac.uk/explore/bombay-plague.
[222] Clifton & Co., *Bombay plague epidemic, 1896-1897: inoculation against plague*, 1896-1897, Photograph, 18.3 x 24.1 cm. https://wellcomecollection.org/works/w8qna525.
[223] Klein, "Plague, Policy and Popular Unrest," 739-742.
[224] *Ibid.*
[225] *Ibid.*

could now take place at home, and compulsory hospitalisation would only proceed with a medical certificate.[226] Discretionary relief funds were introduced, enabling plague officers to provide hospital support, compensation for destroyed property and clothing, lost wages, transit costs to contact camps, and basic amenities within those camps.[227] Yet the condition in many facilities, as seen in figures 5 through 9, fell short of humane standards.

The harshness and invasiveness of colonial plague policies in India sparked significant opposition. People hated forced entry into houses, sick segregation, property devastation, and female body searches.[228] By late 1897, plague spread outside of Bombay, affecting more than fifteen cities across the northern and western India.[229] Under pressure to project authority before the international community, the colonial Government of India responded with even harsher anti-plague regulations.[230] As medical officers began admitting large numbers of Indians to segregation camps, resentment deepened. Many families hid patients, abandoned cities, or exploited local networks to avoid authorities.[231] After the assassination of plague officer W.C. Rand, the violence and resistance escalated and reached to different parts of the country. In Bombay, Calcutta, Punjab, and Kanpur, residents openly resisted inspections and quarantines.[232] Nationalist leaders like Bal Gangadhar Tilak, Gopal Krishna Gokhale, and Pandita Ramabai denounced the measures as repressive, connecting them to broader criticisms of colonial administration.[233]

Another deeply unpopular measure in Bombay was the inspection of corpses, introduced in 1898. This policy sparked the riot of 17th March 1898.[234] According to W.H. Onslow, Undersecretary of State for India, two telegrams, from the Governor of Bombay and Lord Reay, dated 9th March, 1898, described how an attempt to remove a plague patient to hospital sparked violence. Initial clashes left four dead, several injured, and four police officers attacked. Presidency Magistrate, Mr. Dastur, a Parsee, was also wounded. Subsequent disturbances in adjoining areas led to the death of two rioters, which lead to even more deaths. Injuries to British soldiers, police, and civilians, and attacks on Europeans were also recorded. By late afternoon, cavalry reinforcements from Pune were requested. Troops secured key streets and hospitals, though tensions remained high, particularly in quarters inhabited by Julais, a sect of Muslims.[235]

In Pune, the corpse inspections were credited, by Major Reade, Royal Army Medical Corps, to have enabled the administration in detecting and containing the spread of plague over a ten-month period in 1898. However, the requirement to produce a certificate stating the cause of death before cremation, which was strictly enforced

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[226] *Ibid.*
[227] "Pandemic Plague," 1252, https://www.jstor.org/stable/20266180.
[228] Gargi Mukherjee, "The Bubonic Plague in Bombay and Pune (1896-1897)," *Asian Journal of Religious Studies*, 64(2-4) (2020): 110-111.
[229] Rebecca L. Burrows, "The Third Plague Pandemic and British India: A Transformation of Science, Policy, and Indian Society," *Tenor of Our* Times, 10 (18) (2021):146-149. https://scholarworks.harding.edu/cgi/viewcontent.cgi?article=1170&context=tenor.
[230] *Ibid.*
[231] *Ibid.*
[232] *Ibid.*
[233] Alok Oak, "Political Ideas of B.G. Tilak: Colonialism, Self and Hindu Nationalism," (PhD diss., Universiteit Leiden, 2022), 90-107. https://scholarlypublications.universiteitleiden.nl/access/item%3A3283511/view.
[234] "Pandemic Plague," 1252, https://www.jstor.org/stable/20266180.
[235] Hansard, "Riots in Bombay," *House of Lords Debates* 54, March 10, 1898. https://api.parliament.uk/historic-hansard/lords/1898/mar/10/riots-in-bombay; Hansard, "Riots in Bombay," *House of Commons Debates* 54, March 10, 1898. https://api.parliament.uk/historic-hansard/commons/1898/mar/10/the-riots-in-bombay.

in Pune and many other major centres, was seen as of little practical value.[236] Pune also saw violence as a form of resistance to plague measures.

The British formed a Special Plague Committee and appointed W.C. Rand as Plague Commissioner. At first, his measures of hospitals, quarantine camps, and disinfection offered relief, but they soon became oppressive. Soldiers entered homes without warning, stripping men, women, and children to inspect their groins and armpits for signs of bubonic plague, sometimes in public. Backed by doctors, the army, and police, Rand oversaw property destruction without consent, dug through homes, restricted funerals, and criminalised any defiance. Outraged by Rand's brutality, public resistance sparked. The resentment was fuelled by Bal Gangadhar Tilak's writing in *Kesari*. The Chapekar brothers, Damodar, Balkrishna, and Vasudev, along with members of "Chapkear Club", decided to assassinate Rand.[237] On the night of 22nd June 1897, Rand was returning from Queen Victoria's Diamond Jubilee celebrations with Lieutenant Ayerst, And the brothers lay in wait on Ganesh Khind Road. On spotting their carriage, Damodar called "*Gondya ala re ala*" (the target has arrived). Balkrishna acted on the call, shooting Ayerst by mistake. Undeterred, Vasudev pursued Rand's coach and shot the commissioner whose plague policies had humiliated Pune's residents. Damodar was soon arrested, imprisoned in Yerawada, and sentenced to death. There, he met Tilak and asked for Hindu cremation. Balkrishna and Vasudev, with Mahadev Ranade, remained free until they were betrayed by the Dravid brothers, fellow revolutionaries. In retaliation, Balkrishna and Vasudev killed the Dravids, after which they too were arrested and executed.[238]

The most significant turning point in Indian plague policy was the abandonment of compulsion policies. This shift was catalysed by violent resistance in the Sialkot and Gurdaspur of Punjab, where opposition to compulsory measures reached a critical point.[239] The first major confrontation occurred in Shahzada, Sialkot, when a protest over enforced evacuation escalated into armed conflict between three hundred sepoys and twenty armed police constables on one side, and a large group of Jat Sikhs armed with swords and clubs on the other. The Shahzada incident triggered a more violent uprising in Sankhatra, where an unpopular plague official and two hospital assistants were killed, and the plague camp was burned.[240] British observers reported that antagonism toward anti-plague measures had risen to "a tremendous height" in all surrounding villages. This unrest intensified resistance in the older plague-affected districts of Jalandhar and Hoshiarpur.[241]

Confronted with the likelihood of sustained and bloody opposition, Lahore authorities concluded that further coercive interventions which violated local customs would be counterproductive. They replaced compulsion with a policy of voluntary cooperation which soon became the standard approach to plague control in the Punjab.[242] The Government of India subsequently endorsed voluntarism as national policy. This policy shift aligned with the views of the Director General of the Indian Medical Service (IMS), who came to oppose

[236] "Pandemic Plague,"1252, https://www.jstor.org/stable/20266180.
[237] Mukherjee, "The Bubonic Plague in Bombay and Pune," 111-113; Tanvi Patel, "June 22, 1897: When Pune's Dignity Was Avenged by Chapekar Brothers," *The Better India*, June 22, 2018. https://thebetterindia.com/147005/news-history-pune-dignity-chapekar-brothers/.
[238] Patel, "When Pune's Dignity Was Avenged."
[239] Klein, "Plague, Policy and Popular Unrest," 747-749.
[240] *Ibid.*
[241] *Ibid.*
[242] *Ibid.*

compulsory hospitalisation and quarantine. In his assessment, such measures were destructive in the Indian context because they encouraged concealment and flight, thereby spreading infection.[243] Historically, quarantine failed in Asia for similar reasons, as populations were deeply suspicious of innovation and often willing to risk death rather than submit to state intervention. The Indian Plague Commission further justified the change as it considered the plague an airborne contagion. It noted that widespread "unreasoning terror" of hospitals and "dread of segregation" caused the sick to scatter "like rabbits", inadvertently carrying disease with them.[244]

2.5 Stories and Literature of Plague

The narrative accounts of the plague provide a particularly vivid record of the diverse ways in which colonised Indians experienced the plague pandemic. Literary works such as Master Bhagwandas' *The Plague Witch* (1902) and Rajinder Bedi's *Quarantine* (1938), alongside reported incidents from the Himalayan region, situate the disease within its specific cultural context. These narratives endow the plague with extrinsic and often violent subjectivities, foregrounding local experiences of displacement under colonial authority, the stigmatisation of patients, and the oppressive dualities produced by the intersection of disease and entrenched social inequalities. In many of these stories, the onset of the plague is marked by forced displacement, and the disease occupied not only the body of the victim but also the physical and social spaces they occupy, compelling the abandonment of infected localities.

The Plague Witch, originally written in Hindi, is set in Prayag against a backdrop of the widespread fear generated by the plague. In this climate of dread, even the closest family bonds collapsed. It follows Vibhav Singh, a wealthy landowner, whose wife falls ill. A doctor, examining her only from a distance, mistakenly pronounces her dead. Fearful of contagion, Singh delegates her cremation to his servants. Neither he nor his servants verify the diagnosis. After Singh departs, the servants bypass both the government sentry rules and Hindu cremation rites, abandoning the bier in the river. Still alive, the wife regains consciousness and reaches the village where Singh and their son have taken refuge. Covered in shroud, with red, swollen eyes, and calling faintly for help, she is denounced by the villagers as a witch and shot by her own husband. Her body is thus doubly mislabelled, first as dead and then as a supernatural being, revealing the layered ostracism inflicted on plague victims.[245]

This narrative also exposes the structural inequalities evident in the handling of the disease. Singh's upper-class position enables him to distance himself from contagion and transfer ritual obligations onto lower-class servants. In contrast, the unnamed wife's ordeal reflects the compounded oppressions women faced during epidemics: illness intersected with patriarchy, class hierarchy, and superstition. Plague narratives often note that victims, weakened and unconscious for prolonged periods, were frequently misdiagnosed as dead, an error that compounded their suffering.

Quarantine, originally written in Urdu and set in Lahore, unfolds through the narration of Dr. Bakshi, a physician working in a quarantine centre during plague. Bakshi observes that the fear of enforced isolation

[243] *Ibid.*
[244] *Ibid.*
[245] Bhagwan Das, "The Plague Witch (1902)," in *Medical Maladies: Stories of Disease and Cure from Indian Languages*, ed. Haris Qadeer, trans. Abiral Kumar (Niyogi Books, 2023), 269-287.

outweighed the fear of contracting the disease. He himself adopted elaborate personal rituals like carbolic soap washes, brandy or hot coffee consumption, antibacterial gargles, and even self-induced vomiting to ward off infection. Dr. Bakshi's actions were severe, but they were typical of medical fears during the plague era. These practices represented not just a limited scientific understanding of plague transmission at the period, but also the psychological toll of quarantine, in which dread of isolation and death drove physicians and laypeople to extreme, quasi-magical forms of self-protection. Thus, the measures were both excessive and symbolic, illustrating how fear influenced medical behaviour throughout colonial plague regimes. He lamented that families often concealed plague patients, fearing the government's mandate that doctors report cases, which inevitably led to quarantine. For many, confinement meant death: patients were placed in unfamiliar, unhygienic surroundings, witnessing an "unceasing cycle of death" as bodies were heaped together and cremated with petrol, without religious rites.[246]

Bakshi's fear of both contracting the plague and ending up in quarantine stands in sharp contrast to the courage of William Bhagav, a sanitation worker. Bhagav willingly volunteered to care for the afflicted, tending to them closely and disposing corpses. In one incident, he tried to rescue a man who was mistakenly placed among the burning pile of dead. The man, still alive but gravely burned after petrol was poured and set alight, refused to be saved by Bhagav in fear of being sent back to quarantine. Despite sustaining burns to his own arm, Bhagav respected the man's wish and returned him to the funeral pyre. Inspired by the sermons of "*bade paadri* Labbe (Revt. Mont L Aabe)," and undeterred after losing his wife and infant to the plague, Bhagav continued to serve tirelessly, often recognised by the *mundasa* (small loose turban like headgear) tied around his forehead.[247]

The shattering of human bonds as an effect of the epidemic was quite real. Colonel Hutchinson, Sanitary Commissioner of the North-Western Provinces noticed this in Kumaon. He describes how the infected families broke apart, parents abandoned their children, and spouses left each other to face the disease alone, fleeing to remote hillsides in desperate isolation.[248] The absence of effective relief or medical teams meant that survival often depended on escape rather than treatment. Dr. Richardson recorded one such case, where 30-year-old Kusalli and his eight-year-old-daughter were isolating themselves on the hill above their village. Both fell ill on the forested slope and died within five days. Their bodies were dumped into a stream, but those who handled the corpses caught the plague the same day. They were also driven into the jungle to die, buried shallowly, and later, scavengers scattered their bones.[249] The handling of the dead without safeguards and medical aid illustrates how prevention failed in the remote Himalayan region.

Colonel Hutchinson also recorded the tragic story of Danuli's family, who died of the plague, leaving only her and her brother alive. Her father died in their home, and her mother, who had cared for him, buried his body outside the doorway. Within a week, the mother also died, leaving five children, four boys and nine-year-old Danuli, who took refuge in the neighbouring hut. The eldest, a fourteen-year-old boy, took responsibility for his siblings, but when he fell ill, he returned to the family home and died, leaving Danuli in charge of the younger boys. One day her seven-year-old brother attempted to collect honey from a hive inside the abandoned house,

[246] Rajinder Singh Bedi, "Quarantine (1938)," *Indian Literature, Sahitya Akademi's Bimonthly Journal* 319, (2020): 31-37.
[247] *Ibid.*
[248] "Pandemic Plague," 1250, https://www.jstor.org/stable/20266180.
[249] *Ibid.*

carrying burning straw to drive away the bees. Likely frightened by the sight of decomposing bodies, he accidently set the house on fire. He died of plague three days later, followed soon after by the infant. Hutchinson later found Danuli outside the deserted village, wearing ragged clothing. She recounted how the villagers had fled, how her family had perished, and how she cooked rice for herself and her remaining brother, sleeping with him in her arm. They were taken in by their grandfather in a distant village.[250] Her survival and the circumstances of her loss highlight the complete absence of outside aid and illustrate how colonial relief, and medical intervention had failed the poorest communities.

3.0 The Legal Framework Under the Epidemic Diseases Act 1897

The Epidemic Diseases Act (referred to here as 'the act') came into play in 1897 due to the outbreak of the deadly bubonic plague in Mumbai.[251] During the spread of the virus, the response was characteristically colonial, marked by fear, overreaction, ineffective planning, and brutal policies.[252] This Act was a result of the "stringent measures" envisioned by the British administration to control the plague outbreak.[253]

Legal frameworks during public health crisis shape the government's response as well as a citizens' responsibilities. However, the Epidemic Diseases Act, in particular, warrants a careful evaluation. The Act was highly criticised in local newspapers, such as, Gujarati, *Mumbai* Vaibhav, *Subodh Sindhu*, *Paisa Akhbar*, and *Lahore Punch*, for its ineffectiveness in controlling health threats, forceful segregation, exploitation of native population, disregard for the privacy concerns and destruction of private property of plague victims.[254]

Despite the importance, the Act is amongst the smallest in the country as it is composed of only four sections. It empowered authorities to take necessary measures to prevent the spread of disease. These included inspection, quarantine, isolation, and other precautionary steps. It provided a legal foundation for restricting movement, and for closure of public and private spaces.[255]

Under the Act, special powers were granted to State and Central Governments. They could establish isolation hospitals, segregation facilities, enforce penalties, and punish violators under Section 188 of Indian Penal Code, 1860 (IPC).[256] The Act also authorised the Central Government to implement additional measures or prescribe new regulations if existing laws proved insufficient.[257] Moreover, it protected officials from liability arising from actions taken while carrying out measures to prevent the spread of the epidemic.[258]

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[250] *Ibid.*
[251] Monidipa Bose Dey, "Lessons from the Bubonic Plague of 1896," *Peepul Tree*, March 24, 2020. https://www.peepultree.world/livehistoryindia/story/eras/lessons-from-the-bubonic-plague-of-1897?srsltid=AfmBOooGOG9FfhC93HDF_p7-ORrvBAxxItvIohMfUra0JozE79qv2h1.
[252] *Ibid.*
[253] Pratima Yadav and Muraleedharan V.R., "The Epidemic Diseases Act (1897): A Study of International and Domestic Pressures on British Epidemic Policy Formation in India," *The National Medical Journal of India*, 37(2) (2024): 101-108.
[254] Oak, "Political Ideas of B.G. Tilak," 90-110; Yadav and V.R., "The Epidemic Diseases Act (1897)," 106.
[255] The Epidemic Diseases Act, 1897, Act no. 3. (British India). https://cdnbbsr.s3waas.gov.in/s3feecee9f1643651799ede2740927317a/uploads/2025/07/2025071820662508 77.pdf.
[256] *Ibid.*
[257] *Ibid.*
[258] *Ibid.*

3.1 Medical Policies and Legal Frameworks

The Government of India passed the Epidemic Diseases Act on February 4, 1897, to prevent and control the spread of the plague, which reached the coasts of Bombay, now Mumbai, in 1896. With greater globalization and ships traveling the globe the plague grew to pandemic proportions and its impact was felt across the world.[259] India had one of the greatest fatality rates from the plague, with an estimated 12 million deaths between 1896 and 1930.[260] As a result, local governments and the Indian government implemented strict preventive measures to avoid disease transmission both inland and at seaports. Colonial India's legislative structure for infectious or contagious diseases was fractured. It was recently used by the Indian government to combat the spread of Covid-19 across the country.[261]

3.2 The Privacy Concern in the Act

In a landmark Supreme Court decision,[262] the right to privacy was declared to be an inherent aspect of the right to life under Article 21 of the Constitution. It should be highlighted that the Epidemic Diseases Act does not include procedural safeguards against any abuse of official power involving privacy invasion. There was a concern that the law would be used to profile, quarantine, and target individuals. There is comprehensive legal protection for public personnel who work under it. As a result, the legislation fails to meet the standards for reasonable constraints on privacy infringement and is thus grossly inadequate when balanced against the scales of private rights.

Conclusion

The trajectory of public health in colonial India, from the imposition of Western medicine by Company doctors to the codification of epidemic legislation under the Crown, reveals that disease prevention in colonial India was never just about health; it was about power. Measures that ostensibly sought to safeguard people were primarily designed to protect British troops, secure commerce, and preserve imperial authority. Sanitary reforms, cantonment planning, and epidemic laws were not neutral responses to disease, but mechanisms of surveillance and control embedded in racial hierarchies and cultural alienation. This study emphasises that Western medicine did not arrive as a neutral body of knowledge, but as part of a political project striving to protect imperial interests and marginalise Indigenous practices. The evidence examined in the study confirms that dynamics of coercive quarantine, racial segregation, and the marginalisation of *vaidyas* and *hakims* were all manifestations of medicine as a tool of authority deployed to erode Indigenous legitimacy. The Epidemic Disease Act of 1897 embodies this process, revealing how the law became a tool of control, rather than collaboration. Viewed through a medico-legal lens, the history of epidemic control in colonial India cannot be disentangled from its political and cultural contexts. Its legacies are evident in contemporary South Asian public health frameworks, where the balance

[259] Natasha Sarkar, "Fleas, Faith and Politics: The Anatomy of an Indian Epidemic: 1890–1925." PhD diss., (National University of Singapore, 2011).
[260] Klein, "Plague, Policy and Popular Unrest," 729-731.
[261] David Arnold, "Touching the Body: Perspectives on the Indian Plague 1896-1900," in *Subaltern studies V: Writings on South Asian History and Society*, ed. Ranajit Guha, (Oxford University Press, 1987), 55-90.
[262] Justice K.S. Puttaswamy et. al., *"Justice K S Puttaswamy (Retd) & Anr vs Union of India & Others.*," Legal Case, 2017. https://nluwebsite.s3.ap-south-1.amazonaws.com/uploads/justice-ks-puttaswamy-ors-vs-union-of-india-ors-5.pdf.

between state authority, community trust, and individual rights remains fraught. This history underscores that public health is never simply technical; it is inherently tied to questions of legitimacy, justice, and power. To engage with it critically is to recognise that equitable health systems cannot be built on structures that replicate colonial exclusions. Moving beyond these legacies requires a conscious dismantling of the hierarchies introduced by Western medicine in India. In this sense, the study of colonial disease control does more than reconstruct the past, it illuminates the continuing challenge to ensure the pursuit of health is inseparable from the pursuit of equity, dignity, and justice.

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