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Fairs, Cholera, and Colonial Epidemiology in Bengal, 1860s–1884

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Abstract: This article examines how colonial medical thought, administrative practice, and cultural politics shaped the identification and management of fairs as sites of cholera transmission in nineteenth-century Bengal. While modern epidemiology clearly links fairs to waterborne contagion, colonial officials operated within a hybrid epistemological landscape shaped by miasmatic assumptions, fragmented district-level knowledge, and the political sensitivities of the post-1857 state. Drawing on sanitary reports, government correspondence, and historiography, the article analyses how the Bengal sanitary establishment first sought to render fairs legible as epidemiological problems in the late 1860s. These early assessments arose less from medical certainty than from administrative anxieties and racialised assumptions about Indian society. Using the concept of "epidemic infrastructure," the article shows how fairs, as commercial hubs, devotional sites, and social institutions, embodied the contradictions of colonial governance: culturally indispensable yet framed as inherently unsanitary. Sanitary interventions, therefore, remained limited, based on the state's commitment to non-interference, limited resources, and reliance on selective Indian expertise. Ultimately, during the late nineteenth century, the relation between cholera and fairs was determined by the colonial state as a combination of scientific ambiguity, imperial ideology, and vernacular social worlds, creating a distinctly colonial epidemiological notion.

Keywords: Colonial epidemiology, Cholera, Bengal, Fairs, Epidemic infrastructure, Sanitary administration, Miasmatic theory, Public Health Policy.

Introduction

Cholera held a central place in the medical, administrative, and intellectual life of colonial Bengal. The province gained notoriety as the "home of cholera" from the early nineteenth century. Since then, British officials' understanding and control of the disease had been shaped by dense populations, changing river flows, variations in rainfall, and the culture of ritualism in Bengal.[1] Nevertheless, the relationship between disease, environment, and governance was neither stable nor straightforward. Colonial epidemiology evolved through

competing explanatory frameworks—miasma, waterborne contagion, environmental determinism, and bacteriology—none of which achieved coherent dominance, particularly until the end of the nineteenth century. As historians such as David Arnold, Christopher Hamlin, Mark Harrison, and Pratik Chakrabarti have shown, tropical medicine in India operated through a hybrid and often contradictory epistemology, shaped as much by administrative convenience and racialised assumptions as by empirical observation.[2]

This article contributes to this scholarship by examining how cholera became linked to one distinctive social institution: the fair, or *mela,* in the late nineteenth century. Although fairs were integral to the economic, ritual, and social life of Bengal, they also attracted growing medical scrutiny in the late nineteenth century. Modern epidemiology makes this association clear: crowding, inadequate sanitation, polluted water at the fair sites and large-scale mobility associated with fairs provided ideal conditions for transmission. However, when colonial officials first attempted to evaluate fairs as sanitary problems, the causal relationship was far from obvious. Instead, the identification of fairs as epidemiological spaces emerged gradually, shaped by scientific uncertainty, limited administrative knowledge, and the politics of governing culturally sensitive sites of devotion and commerce.

To conceptualise these dynamics, the article employs the analytical lens of "epidemic infrastructure," demonstrating the physical, social, and bureaucratic arrangements that simultaneously enabled the circulation of people, goods, and pathogens.[3] Analysing the emergence of fairs as epidemiological objects illuminates broader tensions in colonial public health: between scientific uncertainty and administrative ambition, between cultural sensitivity and sanitary discipline, and between the economic indispensability of fairs and their representation as sites of disease. In doing so, it demonstrates how cholera served as a window into the limits of colonial knowledge and the political compromises embedded within sanitary governance.

Cholera in Colonial Bengal: Historiography and Theoretical Framework

The historiography of cholera in British India reflects a long-standing debate over the relationship between disease, environment, and colonial governance. From the early nineteenth century, when the disease first acquired global notoriety, Bengal occupied a central position in both epidemiological and administrative discourse. Its deltaic landscape with dense populations, seasonal flooding, and intricate river systems became synonymous with endemic cholera. Throughout much of the nineteenth century, miasmatic theory remained the dominant framework. According to this theory, diseases were believed to arise from foul air, decaying organic matter, and climatic disturbances. Although John Snow's study in London in 1854 demonstrated that cholera was waterborne and linked to contaminated pumps, his findings initially had little influence in India, where skepticism remained strong. Snow's work nevertheless introduced an alternative framework that suggested cholera spread through contaminated water, food, or surfaces.[4] Bacteriological reasoning only began to shape colonial sanitary policy after Robert Koch's identification of the *Comma bacillus* (*Vibrio cholerae*) in 1884.[5] Koch's discovery established the microbial cause of cholera and clarified its mechanisms of transmission, providing a clearer scientific foundation for controlling measures. However, acceptance within the Indian medical and administrative establishment was slow and uneven, shaped by institutional caution and the persistence of competing medical ideas.

Medical officers in Bengal repeatedly emphasised the "Insalubrity" of the environment, pointing to excessive humidity, stagnant pools, and decomposing vegetation as sources of noxious vapours. This reasoning was simultaneously environmental and social: it linked disease not only to conditions in the delta but also to human settlement patterns, hygiene practices, and local behaviour. Historians such as Christopher Hamlin and Mark Harrison have shown that the germ theory did not simply replace miasmatic ideas; rather, it coexisted with them.[6] In Bengal, medical officers continued to attribute outbreaks to

"unwholesome conditions," "crowded huts," or "defective drainage," even while invoking bacterial contamination of water. The persistence of miasmatic language reflected both the empirical complexity of the environment and the administrative convenience of blaming natural conditions rather than state neglect.

As David Arnold argues in *Colonizing the Body*, the colonial state's engagement with disease was less about saving lives than about asserting control. Such governance was exercised through the idioms of sanitation and surveillance, including inspections, reporting, and environmental interventions. Cholera thus became a lens through which the Raj imagined its civilising mission, portraying indigenous habits as unhygienic and fatalistic while framing sanitary science as the moral remedy. However, Arnold cautions against viewing colonial medicine as a fully rational, all-controlling system because it was fragmented, underfunded, and often reactive rather than systematic.[7] Recurring seasonal outbreaks of cholera repeatedly exposed the limits of the state's capacity to impose sanitary order on a complex and unruly landscape.

By the 1880s, cholera was increasingly mapped in spatial and temporal terms. The "disease geography" of Bengal, elaborated through annual sanitary reports, sought to correlate outbreaks with rainfall, soil type, river currents, and population density. At the same time, increasing mobility primarily through expanded steamship routes and the growing railway network created new pathways for the spread of disease. These transport infrastructures connected distant regions more rapidly than before, reshaping the wider geographical patterns of cholera that sanitary officers sought to map.[8] The resulting picture was one of persistent endemicity punctuated by epidemic waves. Statistical tables plotted death rates by district and season, revealing that cholera peaked during the transitional months, March–April and October–December, when falling water levels and human mobility converged.[9] In Bengal, the vast river system with its shifting channels and tidal rhythms was both essential and dangerous. When the monsoon failed or receded early, tanks and ponds stagnated, providing ideal conditions for infection. Civil surgeons repeatedly observed that cholera rose with the heat and declined with the floods.[10]

Recent scholarship has emphasised that cholera in colonial India cannot be understood solely as a natural phenomenon. Pratik Chakrabarti highlights the social, economic, and infrastructural networks, such as trade routes, shipping lines, and railways, that shaped patterns of disease circulation, linking environmental and human factors to the spread of epidemics.[11] Meanwhile, Samiksha Sehrawat focuses on the institutional and administrative dimensions of colonial medical care, including the politics of state-provided health services and sanitation interventions.[12] Together, these studies underscore that cholera was both a biological and a socio-political phenomenon. Its transmission and control were deeply intertwined with imperial infrastructure, colonial administration, and the broader economic and social context of India. In Bengal, the epicentre of these transformations, cholera outbreaks both tested the emerging bacteriological understanding of disease and revealed the limitations of colonial scientific and administrative control.

Building on the spatial and infrastructural understanding of cholera in Bengal, attention turns to the vernacular sites where people, environments, and movement converged most densely: fairs. These gatherings were seasonal, mobile, and often situated along rivers or near transport nodes. Although fairs were central to commercial and cultural life, they generated conditions that increased the chances of outbreaks. Kama Maclean's analysis of the *Kumbh Mela*, where crowds appear as spectacles of both devotion and disorder, offers a useful comparative framework.[13] While focused on a different region, her work helps explain how Bengal's fairs could be celebrated as signs of prosperity while simultaneously condemned as potential sources of disease. From this perspective, fairs become a productive lens for understanding how colonial authorities confronted the difficulties of regulating highly mobile and socially vibrant spaces.

Explaining cholera's recurring presence in nineteenth-century Bengal requires attention to the interplay between ecological conditions, patterns of mobility, and colonial sanitary administration. The study of fairs brings these dynamics together. They drew large crowds at specific moments in the seasonal cycle, reshaped rural landscapes with temporary

roads, congested ferries, and makeshift markets, and attracted a limited and uneven sanitary presence. Interpreting these sites through the concept of "epidemic infrastructure" highlights how physical, social, and bureaucratic arrangements enabled pathogens to circulate. In colonial Bengal, fairs became one of the nodal points where environmental determinants, infrastructural changes, and public health administrative anxieties converged. This article traces how these debates unfolded through the nineteenth century, before the consolidation of a more bacteriological regime in the early twentieth century.

Colonial Perceptions of Fairs as Sites of Cholera Risk

From a modern epidemiological perspective, the relationship between fairs and cholera in nineteenth-century Bengal appears straightforward. Modern medical science confirms that *Vibrio cholerae* spreads through contaminated water and thrives in areas with inadequate sanitation and poor waste disposal.[14] Fairs, with their fragile water supplies and lack of secure latrines, offered multiple ways for contamination: seepage from open defecation sites, polluted riverbanks used simultaneously for bathing and drinking, and shared food prepared in unsanitary surroundings. Overcrowding, poor sanitation, and the temporary nature of fair infrastructure increased the chances of cholera outbreaks. Large and diverse crowds gathered for days, often camping in makeshift shelters without adequate latrines or drainage. Cholera, in particular, flourishes in such conditions.

By contrast, other epidemic diseases common in nineteenth-century Bengal, such as smallpox or plague, had transmission mechanisms less directly tied to water or sanitation.[15] Smallpox spread primarily through respiratory droplets and required different forms of intervention, such as vaccination and quarantine.[16] It was also easily identifiable by its distinctive rash. Cholera offered no such visible early warning. Its sudden onset of diarrhoea, vomiting, dehydration, and its ability to be carried by asymptomatic individuals made containment far more difficult. This gave cholera a unique prominence in the colonial sanitary imagination.

Although cholera outbreaks and fairs had long coexisted in Bengal, it was in the late 1860s when colonial authorities began systematically considering fairs as potential sites of epidemic risk. During this period, led by David B. Smith, the Bengal Sanitary Commissioner, civil surgeons from forty districts explicitly identified *melas* as possible sources of cholera.[17] Stationed at the district level, the civil surgeons monitored fairs, recorded their dates, locations, and attendance, and assessed sanitary conditions. These overall observations were compiled in the Annual Sanitary Report in 1868.

The data compiled in 1868 reflected different views and understandings of civil surgeons. Some civil surgeons interpreted fairs as important causes of cholera. The Civil Surgeon of Jessore, for instance, claimed that "there is always more or less cholera developed at fairs in Jessore."[18] Similarly, the Civil Surgeon of Barisal argued that fairs were held "at the most unhealthy seasons of the year," and that "no attempt at anything like sanitary precautions is ever made."[19] Others framed the danger spatially. The Civil Surgeon in Maldah urged that authorities be empowered to relocate fairs away from "notoriously unhealthy places" to elevated, well-ventilated sites far from swamps and marshes.[20]

At the same time, some surgeons rejected any causal link, reasoning that because people appeared healthy during the fair itself, the *mela* could not be the point of origin.[21] This argument reflected a limited grasp of incubation periods and asymptomatic transmission. The possibility that cholera spread precisely because attendees dispersed rapidly after the event, carrying infection into wider areas, lay outside the epidemiological imagination of the period. Taken together, the 1868 survey reveals not a clear consensus but a proto-epidemiological debate, marked by inconsistent data, competing interpretations, and the conceptual limits of nineteenth-century sanitary science. Nevertheless, the late 1860s represent the moment when fairs were first problematised as potential epidemiological threats, laying the foundation for later colonial attempts to take sanitary measures at such vernacular gatherings.

After fairs came to the fore as potential sources of disease, the colonial states' other challenge was a lack of understanding of these local mass gatherings. The 1868 survey had revealed not only inconsistent epidemiological knowledge but also a profound lack of familiarity with fairs themselves, their organisation, meanings, frequency, and diverse forms they took across Bengal. Many civil surgeons struggled to distinguish between actual fairs (*melas*) and routine weekly markets (hats), exposing a fundamental lack of contextual knowledge about the social landscape they were supposed to evaluate.[22] Before initiating and implementing sanitary interventions, colonial officials needed more precise knowledge about Indian fairs.

To address these gaps, the government enlisted Babu Digambar in 1868, an educated Bengali with extensive knowledge in local customs and practices.[23] His involvement reflects a broader colonial strategy of collaborating with elite Indians to administer local matters. As Saurabh Mishra has argued, colonial public health in India was shaped not only by scientific reasoning but also by cultural brokerage, wherein educated Indians served as interpreters between the state and the wider population.[24] The consultation of Digambar was therefore not an isolated gesture but part of this larger pattern of selective engagement with Indian elites whom the colonial government regarded as "modern," reliable, and positioned to mediate between bureaucratic priorities and indigenous life.

Digambar revealed the complex features of Indian fairs that were highly localised, heterogeneous, and multifunctional.[25] They varied in scale, purpose, and ritual content. Some were religious, others quasi-religious. Fairs were also integral to society, serving as hubs for entertainment and trade. They offered traditional sports, cultural performances such as *jatra* (folk theatre), magic shows, and puppet dances. Culinary offerings from diverse regions added to the attractions, facilitating vibrant trade.[26] Their fluidity rendered any attempt at uniform sanitary regulation impractical. Drawing on his knowledge of local practices, Digambar suggested the need for more apparent distinctions within this diverse landscape, specifically, which types of fairs might reasonably be regarded as potential centres of cholera transmission and which fell

outside that category.[27] His reflections underscored the difficulty of imposing sanitary classifications on social institutions that performed multiple, deeply embedded roles within mass populations.

Equally important were Digambar's cautions about the cultural and emotional significance of fairs. For many rural households, fairs were not optional amusements but integral to social life, collective identity, and ritual cycles. Heavy-handed interference risked being interpreted as an attack on religion, provoking suspicion and resistance.[28] His perspective reminded officials that public health interventions could not be solely epidemiological; they required sensitivity to cultural meanings, ritual obligations, and potential political backlash, a concern made more acute by the politically sensitive aftermath of the Indian Rebellion of 1857–1858. To address anxieties about unrest and respect for local custom, the Queen's Proclamation of 1858 pledged non-interference in religious affairs.[29] This commitment shaped the colonial approach to fairs, which were often centred on religious sensitivities and drew devotees engaged in blessings, vows, and ritual practices.[30]

Although villagers frequently observed cases of cholera among those returning from fairs, their profound cultural and religious significance made them difficult to forgo. As Digambar noted, 'Nor are the people of this country unaware of this [disease threat], but so strong is the religious fervour by which they are impelled to attend the fairs, that they undergo all the sufferings attendant on it with cheerfulness, and repeat their visits as often as they can afford the means and the leisure to do so.'[31] Rather than avoiding fairs, local populations often integrated them into their efforts to combat cholera, treating them as sacred spaces. Many Indians regarded cholera as divine retribution for British transgressions, such as desecrating sacred sites or slaughtering cows.[32] Fairs were thus seen as opportunities for recovery and spiritual solace, with people attributing survival or health to the benign grace of divinities.

Fairs often served as important commercial hubs in nineteenth-century India, functioning not merely as occasions for ritual gathering but as vital nodes in the regional

economy. Their temporary marketplaces facilitated the circulation of goods such as agricultural produce, livestock, pottery, textiles, tools, medicines, and inexpensive manufactured items.[33] For many rural households, fairs were the primary venues for acquiring commodities unavailable in village markets, while small producers and itinerant traders relied on these gatherings to secure seasonal income. The removal or disruption of a major fair, therefore, risked significant economic dislocation, forcing the state either to tolerate existing gatherings or to invest in the creation of alternative markets.

Recognising the social and economic significance of these gatherings, Smith illustrated his perspective through a description of the Baronee fair in 1869. He wrote:

The Baronee [a fair held in Dacca district] is a source of great enjoyment to the people. Year by year, following the custom of their fathers, people take delight in hastening to a scene where the conjunction of circumstances is very pleasing to their simple tastes. Such a gathering fulfills their general ideas of happiness. Many come from mere innocent curiosity and for recreation, which they probably talk about for the remainder of the year. Others see it as a useful and pleasant emporium of trade. Some attach a certain degree of sanctity to the spot, approaching it with feelings of veneration and piety, their boats wafted along sacred streams like the Brahmapootra, Lukhya, Megna, Boorigunga, and Dullessery. Traders, combining pleasure with profit, come from distant points; people from surrounding districts flock annually with cheerful animation; and villagers attend day by day with a childish enthusiasm.[34]

Smith's account highlights the multiple dimensions of fairs, such as economic, devotional, recreational, and social, and clarifies why sanitary intervention was politically and socially delicate. A fair was not a simple religious festival or leisure event; it was embedded in circuits of production, mobility, and exchange, and central to the seasonal rhythms of rural life. Suppressing or relocating a major *mela* threatened livelihoods, risked alienating traders and cultivators, and could easily be interpreted as state intrusion into local custom.[35] In the political climate shaped by the aftermath of 1857, such concerns carried even greater weight. Early

interventions, therefore, had to be cautious, negotiated, and attentive to local sentiment.

Recognising the wide-ranging social, religious, and economic importance of fairs, Smith argued that these functions outweighed the sanitary risks they posed. As he put it, 'Yet considering certain risks attached to all large gatherings of the people, the social, religious, legendary and commercial aspects of fairs, it would, I think, be very inadvisable to prevent their occurrence.'[36] He was also acutely aware of the deep distrust with which many Indians viewed the colonial state, a mistrust that made official intervention in fairs especially volatile. The *Indian Medical Gazette* warned in 1867 that such interference could revive 'the resurgence of the old cry that the *Sircar* [government] is going to make us all Christians *zabardasti* [by force].'[37] For Smith, banning fairs risked reinforcing fears of forced Christianisation and further eroding the fragile legitimacy of colonial rule. Although some British officials advocated outright prohibition, he regarded such measures as impractical and politically counterproductive. Like many provincial administrators, Smith acknowledged the health dangers posed by large gatherings but ultimately viewed fairs as a "necessary evil," too deeply embedded in social life and local economies to be abolished.[38]

This broader context also helped consolidate the view that fairs were non-contagious, that is, cholera did not spread over long distances through fair attendees. Smith attributed outbreaks to unsanitary conditions at the fairgrounds, such as ground moisture, temperature fluctuations, overcrowding, and accumulated filth, which created an environment conducive to producing miasma, or bad air.[39] This 'aerial poison,' emanating from decomposing organic matter, contaminated the atmosphere and increased attendees' susceptibility to the disease.[40] Thus, he proposed that outbreaks were not caused by attendees infecting the location but rather by attendees being affected by pre-existing local conditions.[41]

Nevertheless, some local officials, especially those directly involved in sanitary work, questioned the rigidity of this miasmatic interpretation. Offering alternative perspectives,

they argued that the relationship between fairs and cholera could be understood in multiple, competing ways. In 1868, for instance, Babu U. C. Kastogree, a Bengali civil medical officer from Malda District, explicitly endorsed the contagionist view by attributing nearly all cholera cases in his district to fairs, particularly emphasising the role of the Magmurdan fair in Dinajpur.[42] Beyond Bengal, John Murray, Inspector General of Hospitals for the North-Western Provinces, emerged as a leading critic of strict anti-contagionism. He argued that during 1872, disease often appeared not during the gathering itself but after attendees dispersed, spreading across wide regions.[43] He further contended, 'There is a material difference between facts that are not observed and facts that do not exist.'[44]

Not all sanitary commissioners adhered rigidly to a single theory, as Smith did. For example, in 1875, Coat, the Sanitary Commissioner in Bengal, criticised anti-contagionists for frequently rejecting the theory of transmission through human contact and importation, even though evidence regarding the prevalence of cholera in some districts strongly supported the idea that the disease was imported into areas where it had not previously existed.[45] 'Human intercourse,' he reasoned, 'does convey cholera from place to place but not from man to man. It arises de novo wherever men abound, and sanitation is neglected.'[46] From this perspective, he argued that while cholera might occur naturally, it could also be transmitted from person to person, especially from fairs and pilgrimages. Thirsty pilgrims who consumed contaminated water could carry the cholera germ and spread it to others.[47] Fairs, therefore, emerged as objects of medical suspicion not through firm evidence but through a bureaucratic process in which incomplete district knowledge, contagion and non-contagion debate, and administrative anxieties converged.

Whether colonial officials subscribed to contagionist or anti-contagionist explanations, their interpretations of the relationship between fairs and cholera were consistently shaped by deeper cultural assumptions that framed Indian fairs as inherently "filthy", "disorderly", and "uncivilised." Their understanding of why fairs were dangerous drew heavily on racialised notions of Indian society, rather than on

consistent epidemiological reasoning. Even as the colonial government upheld its post-1857 promise not to interfere with indigenous customs, fairs continued to be problematised as sites where "unclean" habits and "ignorant" rituals supposedly facilitated the spread of disease.

This attitude reflected the wider ideological framework of the colonial "civilising mission," described by Thomas Metcalf, which imagined British rule as a benevolent force bringing order and modernity to a "backward" population.[48] Health reformers such as Florence Nightingale supported this perspective, arguing that sanitation improvements in India were integral to the Empire's mission.[49] J.F. Wise, Civil Surgeon of Dacca, shed light on the colonial attitude with his remark: 'The best educated of them, with rare exceptions, keep their own premises as filthy and offensive as the poorest householders.'[50] Such statements reveal that sanitary discourse routinely blurred medical observation with cultural judgement, casting Indians as inherently incapable of managing hygiene without British guidance.

These assumptions had deep roots. Missionaries in the early nineteenth century had long depicted fairs as superstitious, chaotic, and unsanitary, establishing an interpretive template that persisted into the sanitary politics of the 1860s.[51] When cholera became central to debates about fair hygiene, many British officials interpreted outbreaks not only as epidemiological events but also as evidence of the colonised population's supposed civilisational deficiencies. Some believed that with the spread of Western education, Indians would eventually abandon these gatherings altogether. Smith's own comments reflected this perspective; he attributed the unhygienic state of fairs to the "great natural apathy of the people," echoing racialised tropes that linked disease to moral and cultural weakness rather than to infrastructural neglect or administrative failure.[52] In this context, debates over contagion versus miasma were filtered through pre-existing assumptions that viewed fairs and their attendees not simply as epidemiological challenges but as manifestations of an "uncivilised" society.

Health and sanitary interventions at fairs

Almost throughout the late nineteenth century, colonial sanitary interventions at fairs were shaped by miasmatic understandings of cholera. Since officials attributed outbreaks to local environmental conditions rather than to human-to-human transmission, fairs were framed primarily as hazardous spaces rather than as centres of microbial contagion. This interpretation also suited the political constraints of the post-1857 state. By presenting cholera as an environmental problem, authorities could acknowledge sanitary risks without imposing disruptive contagionist measures such as quarantines or prohibitions on gatherings that might have provoked unrest or violated the government's promise of non-interference in indigenous customs.

Within this conceptual framework, measures focused on managing the fairgrounds, rather than addressing long-distance transmission of the disease. Annual reports from the 1870s indicate that interventions were concentrated at major fairs that drew large crowds, spanned several days, and featured bustling commercial activity.[53] Sanitary measures included designating areas for waste disposal 150–300 yards behind the main grounds, marking them with bamboo poles, and excavating trenches for sewage. Separate zones for cooking, livestock, and fish markets were established to minimise cross-contamination and unpleasant odours.[54] Sanitary workers were tasked with sweeping streets, collecting debris, and protecting the river water from pollution. Vendors were arranged in orderly rows to reduce overcrowding and maintain hygiene.[55] Collectively, these interventions reflected an environmental, anti-contagionist approach aligned with miasma theory.

However, efforts to combat miasma and filth at fairs often proved inadequate. For instance, at a large fair in Hooghly in 1880, which drew around 40,000 people, only three latrines were provided, a grossly insufficient number.[56] Although some fairs established defecation trenches and temporary latrines, the limited number of 'sweepers' was inadequate to maintain these facilities for such large crowds.[57] Recognising this shortage, some civil surgeons suggested bringing in 'sweepers' from the North-Western Provinces, where wages were comparatively lower, but no evidence shows this was ever

implemented.[58] In response to cholera outbreaks, local authorities at larger fairs occasionally enlisted 'native' hospital assistants or physicians to dispense medications.[59] However, one or two doctors were insufficient to meet the needs of the vast crowds attending these events. Medical supplies were also severely limited, leaving most attendees without access to essential treatment. Only a select few, such as zamindars and affluent merchants, brought their own provisions.[60]

The priority of clean water was neglected because of the predominant miasma theory. For example, the *Ganga Sagar Mela* in 1880, attended by around 84,000 people over a week, reportedly lacked fresh water.[61] If a major fair faced such issues, it is reasonable to argue that smaller fairs received even fewer public health efforts. People had to bring their own supplies in their boats, which were often tainted or insufficient.[62] Local officials primarily focused on preventing the deterioration of a few existing water sources, such as tanks or wells at the fairgrounds. However, these resources were often inadequate for the numerous visitors. Consequently, people had to drink water from contaminated sources, especially when travelling long distances to and from the fairgrounds.

Authorities viewed attendees as key contributors to unsanitary conditions and sought to regulate their behaviour accordingly. The British administration frequently attributed poor hygiene to what they termed the "great natural apathy of the people," a diagnosis that justified calls for "firm and judicious authority."[63] As Sanitary Commissioner, Smith argued that strict enforcement of sanitary rules was essential to prevent practices such as polluting water sources and open defecation that he believed created the environmental conditions for cholera. For Smith, maintaining "reasonable limits" on individual actions was necessary for the protection of public health.[64] His endorsement of tighter control encouraged district officials to act similarly. The Magistrate of Dinajpur, for example, emphasised the need to 'accustom people's minds to strict obedience to the rules and tackle any opposition strictly.'[65] Thus, while the colonial state avoided direct contagionist interventions such as quarantines, it

imposed behavioural discipline and environmental control at fairs.

The discovery of the cholera bacillus by Robert Koch in 1884 began to challenge the dominance of miasmatic explanations, but its impact on colonial policy in Bengal was slow and uneven. Although bacteriological ideas gradually gained traction among some medical officers, they did not displace environmental reasoning until the 1890s, and even then, the transition was partial.[66] During this intermediate period, fairs increasingly appeared in official reports as both environmentally hazardous spaces and potential sites of microbial contamination, carried and transmitted by mobile populations. Administrative memoranda often described fairs as points of epidemic radiation. The Government of India in 1889 warned that 'fairs are liable to become foci whence epidemics radiate over a wide extent of country and become the cause of death to thousands who have not attended the fair.'[67] The Sanitary Commissioner of Bengal, in 1891, explicitly linked epidemics to the breaking up of fairs and festivals when polluted water supplies coincided with mass gatherings. [68]

However, contagionist interpretations were applied cautiously and inconsistently, even after Koch's discovery of the cholera bacillus gained wider recognition. While some medical and administrative officials drew on Koch's findings to argue that fairs facilitated the spread of disease through contaminated water or food, others continued to attribute outbreaks to localised filth or climatic conditions. The result was a hybrid epidemiological framework in which fairs were imagined simultaneously as miasmatic zones and as nodes in emerging networks of bacteriological risk, combining traditional environmental reasoning with new bacteriological insights.

Conclusion

The history of cholera at fairs in Bengal between the 1860s and 1880s demonstrates how medical theory, administrative practice, and cultural politics intersected in shaping colonial public health. Fairs were problematised not based on firm epidemiological knowledge, but through a bureaucratic process shaped by miasmatic assumptions, fragmented district reporting, and the post-1857 commitment to avoid

overt interference in indigenous practices. Early sanitary investigations and interventions at fairs revealed the fragility of colonial epidemiology. Officials disagreed over causation and frequently interpreted outbreaks through racialised readings of Indian society.

This study frames fairs as forms of "epidemic infrastructure," understood not as hospitals, laboratories, or quarantine stations, but as social, economic, and cultural structures that facilitated both human activity and disease transmission. It shows how these gatherings simultaneously enabled mobility and commerce, propagated infection, and revealed the limits of colonial sanitary authority. The social, religious, and economic importance of fairs limited the scope of intervention. Embedded in seasonal and rural mobility, fairs could not be strictly regulated without risking political backlash. Fairs were culturally indispensable yet cast as disorderly and unsanitary, highlighting the tensions and contradictions of colonial rule.

Sanitary measures such as waste trenches, rudimentary latrines, and basic regulation of movement remained modest and unevenly implemented, leaving structural conditions conducive to cholera largely unaddressed. The discovery of the cholera bacillus in 1884 introduced bacteriological ideas, but their influence developed slowly. Fairs were thus conceptualised through a hybrid framework: as environmentally hazardous spaces and potential sites of microbial contamination. Some officers emphasised microbial risks, while others continued to focus on filth or climatic factors. However, at the policy level, the non-contagion view dominated the states' health and sanitary policies regarding fairs until the end of the nineteenth century.

Through fairs, this study has reflected the tensions of early sanitary measures. The history of cholera at fairs illuminates both the ambiguities of nineteenth-century medical science and the structural constraints of public health intervention in socially embedded epidemic environments. The state hesitated to impose heavy-handed intervention, relying mainly on limited measures to regulate the movements and activities of the fair attendees.

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17 *Annual Report of the Sanitary Commissioner for Bengal for 1868* (Calcutta: Alipore Jail Press, 1869), 5.

18 *Ibid.*, 52.

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23 Digambar Mitra was a renowned Bengali businessman and actively involved in other spheres of life. He became the assistant secretary of the British Indian Association in 1851 and later on became the President of Indian Association. He became the sub-editor of "Bharat Sabha". In 1874, he became the first Bengali Sheriff of Calcutta. Before that, he presided over various committees and commissions. He was the only Indian representative in "Epidemic Fever Commission". He was a staunch orthodox Hindu and opposed the issues of abolition of Kulin polygamy practice and widow remarriage. Digambar Mitra passed away in 1879. For details see https://en.wikipedia.org/wiki/Digambar_Mitra

24 Saurabh Mishra, *Pilgrimage, Politics, and Pestilence: The Haj from the Indian Subcontinent, 1860–1920* (New Delhi: Oxford University Press, 2011), *20.*

25 The Hajj as a pilgrimage central to Islam involved a set route and rituals performed within a specific timeframe in Mecca. While it attracted large, mobile populations, the event was geographically confined, religiously uniform, and managed under a centralized system of governance by Islamic authorities. For details see Mishra, *Pilgrimage, Politics, and Pestilence: The Haj from the Indian Subcontinent.*

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38 *Ibid.*, 274–275.

39 *Report on the Baronee Mela of 1869*, 3; *Report of the Sanitary Commissioner for Bengal for the year 1869-70* (Calcutta: Bengal Secretariat Office, 1870), 12-13.

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