

## THE CALCULUS OF CONTAGION: IMPERIAL ANXIETY, POLICY, AND RESISTANCE IN COLONIAL PUNJAB'S PUBLIC HEALTH LANDSCAPE (1850–1918)

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### ABSTRACT

This research paper critically examines the evolution of public health policies implemented by the British colonial state in the Punjab region between 1850 and 1918. These policies were a calculated response to protect and further the core political, economic, and military interests of the Empire, particularly after the devastating casualty rates among British troops following the 1857 Uprising. The repeated outbreaks of malaria, cholera, smallpox, and plague created significant imperial anxiety, forcing a policy shift from a limited 'enclavist' medical approach, focused only on Europeans, to a broader, interventionist 'public health' strategy aimed at controlling indigenous bodies and environments. Since the true etiology of these diseases remained ambiguous until the late nineteenth century, early measures were often experimental, discriminatory, and coercive, underpinned by a colonial discourse that essentialized Indians as inherently unhygienic and a perpetual source of contagion. This paper analyzes how indigenous communities responded to these often-brutal state measures, documenting a spectrum of reactions ranging from pragmatic collaboration among the urban middle classes to open, localized resistance and the creation of popular counter-discourses through potent miraculous rumours. This work reveals that colonial public health was fundamentally an exercise in maintaining imperial authority, using medicine as a key instrument for technological and political supremacy.

KEYWORDS: Colonialism, Public Health, Punjab, Epidemics, Imperialism

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The British administration's engagement with public health in Punjab during the period 1850 to 1918 was not a philanthropic exercise but a strategic mechanism for the expansion and consolidation of the British Empire. The core objectives informing the adoption of sophisticated medical facilities and sanitation drives were intrinsically political, economic, and military. They sought to guarantee the health and operational efficacy of the European military and administrative elite, who were critically necessary for maintaining control over this strategically vital frontier province (Arnold 1993, 198). The colonization of Punjab in 1849 intensified the focus on the physical and political geography of the region, revealing it to be highly susceptible to epidemic diseases—a susceptibility that translated directly into a threat to imperial stability and profitability.

The recurrence of devastating outbreaks, including malaria, plague, cholera, and smallpox, acted as the primary catalyst for an administrative shift from a limited, defensive medical strategy—which only protected European "enclaves" such as cantonments and civil lines—to a far more comprehensive and interventionist public health program. This policy transition, however, never fully shed its original, self-interested focus. While it nominally broadened its scope to encompass the indigenous population, its true purpose remained the surveillance and control of Indian bodies and environments, which colonial officials consistently framed as the source of contagion and the principal danger to the ruling race. This narrative of disease became a powerful tool in justifying intrusive state regulations, ultimately making medicine a central instrument of colonial governance.

This colonial discourse, which linked native life to pathology and disease, was met by a complex tapestry of indigenous attitudes and acts that continually challenged the operational authority of the colonial state. The coercive nature of the new health regulations, especially during plague and cholera outbreaks, spurred varying degrees of resistance, anxiety, and even open revolt among the indigenous populace. Understanding the dynamics of public health during this era therefore requires moving beyond simple administrative history; I must analyze the colonial medical establishment as a theatre where political supremacy, scientific knowledge, and profound cultural contestation intersected. This essay, therefore, positions public health policy as a contested domain central to the power struggle between the imperial state and its subjects.

The historiography of colonial health and disease, initiated by seminal scholars, provides the essential framework for this study, moving beyond earlier narratives that merely celebrated the introduction of Western medicine. I observe that the works of David Arnold and Mark Harrison fundamentally reconfigured the field by highlighting the political and social dimensions of colonial medical intervention. Arnold, through his concept of the "corporeality of colonialism," contends that the spread of Western medical epistemology was inextricably tied to the colonial state's ultimate goal of controlling and directing the lives of its subjects, a process he calls the 'colonization of the body' (Arnold 1993, 7). Harrison similarly details how the medical establishment both shaped and reflected a rising pessimistic image of India, arguing that public health measures functioned as tools of social control, primarily established to

manage potentially "toxic or unruly groups," such as such as troops, beggars, and prostitutes (Harrison 1994, 3-4). These scholars converge on the crucial point that while humanistic motives cannot be entirely dismissed, the expansion of state medical involvement in India was overwhelmingly motivated by new calculations of economic and military importance, a perspective that informs my current analysis of the Punjab experience.

Furthermore, this paper acknowledge the contributions of historians like Radhika Ramasubban and John Chandler Hume, who elaborated on the explicit economic and political calculus behind the shift in colonial policy. Ramasubban suggests that Western medicine was merely a reflection of colonial priorities, with its benefits only partially applied to the larger Indian population, thereby reinforcing colonial priorities and neglecting indigenous health needs (Ramasubban 1982, 54–55). Hume's detailed work on sanitary medicine in Punjab specifically demonstrates how preventive health policy in the region was a deliberate attempt by the colonial administration to maintain social order and economic productivity, often at the expense of local traditions and medical practices (Hume 1986, 703). This study incorporate the insights of Gagandip Cheema, whose research on Punjab emphasizes that the imperial rulers were overwhelmingly driven out of their restrictive 'enclavist medical policy' only by the need to maximize economic productivity, making health and colonial wealth increasingly interdependent (Cheema 2013, 8-9). This body of literature collectively establishes that colonial health policy was a mechanism of power, not an instrument of universal welfare, establishing a powerful theoretical foundation for my

analysis of the administrative and indigenous responses in Punjab.

I rely primarily on the critical and phenomenological methodology established by David Arnold and Mark Harrison, which necessitates analyzing colonial public health systems and the imposition of Western medicine within the specific, non-altruistic aims of the colonial state. My approach specifically reconstructs and reshapes the political and economic narrative of health, viewing state medical interventions not as technical fixes but as ideological exercises intended to enforce the hegemony of Western medical knowledge and control perceived sources of danger (Arnold 1993, 8). This framework is necessary for understanding the colonial administration's dual objectives: first, establishing a medical discourse that portrayed Indians and their environments as unhygienic and ignorant, and second, utilizing this discourse to justify coercive policies designed to protect British interests.

The second component of my methodology involves the careful aggregation and critical assessment of a diverse array of primary and secondary sources to achieve a balanced, two-sided historical account. I gathered essential data from government proceedings (Home: Medical and Sanitary), Annual Sanitary Reports for the Punjab, District Gazetteers, and contemporary newspaper articles, notably *The Tribune* (Proceedings, Home: Medical and Sanitary, October 1876, 660–61; *The Tribune*, June 21, 1902). These official records provide minute details of administrative measures, while the indigenous media and selected primary source reports offer a window into local responses, anxieties, and active resistance. I

carefully cross-reference British and Indian historical accounts to mitigate bias and overlapping narratives, maintaining the authenticity and reliability of all cited facts and figures. The use of a phenomenological lens allows me to interpret indigenous resistance—manifested in miraculous rumours and organized revolts—as a counter-discourse and a productive form of power, echoing the theoretical insights of Michel Foucault, who argued that knowledge and power are intrinsically linked in the formation of any successful discourse (Taylor 2011).

The repeated emergence of lethal epidemics in Punjab between 1850 and 1918 served as a profound source of anxiety for the British Empire, creating acute internal tensions regarding the sustainability of their military and political presence. The mortality rates among British troops consistently and significantly exceeded those of their native counterparts, a reality exposed starkly by the Royal Sanitary Commission of 1863, which reported that only 6 percent of British soldier deaths resulted from combat, with infectious disease claiming the rest (Harrison 1994, 6). This existential threat to the army—the foundational element of imperial power—forced a radical re-evaluation of medical priorities, confirming that the battle against disease was, in effect, a crucial military campaign. This dynamic shifted the health debate from a localized, personal concern for European residents to a matter of state security and imperial necessity, demanding large-scale, preventative measures.

This shift was initially complicated by the prevailing environmentalist paradigm which dominated epidemiological thought prior to the late nineteenth-century biomedical

revolution. Colonial medical authorities relied heavily on miasma theories, which attributed diseases like cholera and malaria to "dangerous chemicals" or vapors arising from the tropical climate, rotting vegetation, and the perceived "filth" of Indian urban environments (Shlomowitz and Brennan 1990, 85-110). This intellectual framework provided a dual benefit to the colonial rulers: it justified their separation into clean, engineered enclaves (cantonments) and simultaneously rationalized their derogatory stereotypes of the indigenous population as inherently untidy and the source of contagion. This paradigm, while scientifically inaccurate, perfectly served the political function of justifying colonial intervention and administrative segregation as necessary acts of civilizing hygiene.

The introduction of the germ theory—the "golden period of bacteriology"—in the late nineteenth century fundamentally reshaped the medical landscape, yet its application in Punjab continued to serve imperial ends. Robert Koch's discovery of the comma-shaped bacilli for cholera in 1883 and Sir Ronald Ross's identification of the *Plasmodium* parasite in the *Anopheles* mosquito's stomach in 1897 revolutionized understanding but also gifted the British a new tool for asserting scientific and cultural supremacy (Russel 1955). This new knowledge became a potent ideological weapon, allowing the administration to promote Western scientific epistemology as unequivocally superior to all indigenous medical traditions, which it then officially deemed 'wahshi' (uncivilized) and 'beusool' (unprincipled). This scientific hegemony provided the unassailable rationale for widespread interventionist policies, validating the coercive measures used to

control native bodies and environments as modern, necessary, and universally correct.

Cholera, which was known to the native medical community as "Visucika" or "Haiza," presented the first major administrative challenge, particularly because its emergence coincided directly with the British efforts to consolidate their territorial control across the subcontinent (Arnold 1993, 198; Klein 1980, 36). I find that the disease, once thought to be endemic to India, gained new political gravity precisely because its rapid dissemination, often along the new arteries of imperial commerce and military movement, demonstrated the vulnerability of the European presence. The disease's devastating outbreaks, such as the 12 major episodes that struck Punjab between 1866 and 1921, caused over a quarter of a million fatalities and forced the administration to acknowledge that the health of the Indian population was intrinsically linked to their own security (*Proceedings, Home: Medical and Sanitary*, October 1876, 660–61).

The administration's immediate response to cholera was marked by significant medical uncertainty and a heavy reliance on discriminatory cordoning and disinfection strategies. Before accepting Koch's findings, British doctors often grabbed indigenous remedies like calomel and ginger mixed with opium, demonstrating a temporary, pragmatic reliance on traditional knowledge when Western science failed (Cheema 2013, 73–74). However, the subsequent adoption of the germ theory led to extensive public interventions, focusing on disinfecting water sources and restricting public movement, measures that disproportionately disrupted the lives of the indigenous working population. The insistence on stringent

cordons around infected areas and the mandatory isolation of the sick were clear acts of state control, designed less to cure and more to contain the threat away from European settlements and military routes (Cunningham 1873, 28).

The arrival of the bubonic plague in 1897 transformed imperial anxiety into a profound, existential political crisis, especially in the severely afflicted Punjab, which ultimately lost 12.5 million people nationwide between 1896 and 1918 (Catanach 2001, 132). The plague's impact was uniquely destabilizing because it threatened to cripple the economic foundation of the colony—harming commerce, decreasing production, and escalating administrative costs—while simultaneously sparking unprecedented social unrest (Kumar 1998, 194). This unique combination of military, economic, and social threats necessitated the most aggressive and coercive public health intervention the province had yet seen, often overriding earlier caution against meddling in native affairs (Klein 1988, 724).

The colonial response to the plague, structured under the Epidemic Diseases Act of 1897, crystallized the true nature of imperial medicine as a tool of raw power. The policy centered on forced house inspections, the relocation of diseased residences, segregation of the sick, and the disinfection of personal items—actions that represented a deep, intrusive violation of privacy and cultural norms. This all-encompassing strategy created two classes of people: the vulnerable native population subjected to mandatory medical screenings at checkpoints, and the privileged Europeans and Eurasians who were exempt from these checks and permitted to continue their

travel even while ill (Proceedings, Home: Medical and Sanitary, August 1898, 1). This blatant, institutionalized discrimination revealed the policy's core objective: to protect the imperial framework at the expense of native rights and sensibilities.

Smallpox, known in Sanskrit as *Masurika*, was a continuous scourge, yet its management became a flashpoint for cultural and religious resistance against the colonial state's scientific authority (Cheema 2013, 286). Long before the introduction of the Jennerian vaccine, indigenous practices like variolation were widely and successfully employed, and the disease was deeply integrated into religious life, associated with the deity Sitala (Nicholas 1981, 26). The administration's decision to ban variolation and mandate Western vaccination through the Compulsory Vaccination Act of 1880 was, therefore, not merely a medical improvement but a direct, ideological assault on indigenous spiritual and medical traditions.

This enforcement policy exposed the British willingness to use coercion to achieve its public health goals. Government vaccinators frequently used the power of local authorities to forcibly round up and vaccinate children against their parents' will, leading to accusations of brutality and violation (Proceedings, Home: Medical and Sanitary, February 1881, 82-83). The resistance from groups like Brahman priests, Mullahs, and traditional variolators—who saw their subsistence threatened—demonstrates that the conflict was fundamentally one of authority and control, where Western medicine sought to establish a monopoly over physical well-being by actively discrediting and replacing native knowledge systems (Arnold 1989, 49).

Malaria, despite being the "king of illnesses" that caused widespread mortality and debilitating weakness, received less sustained attention than the sudden crises of plague and cholera, highlighting the reactive and self-interested nature of colonial health planning (Report of Punjab Sanitary Commissioner, 1890-99). The administration's initial difficulty in pinpointing malaria's cause—oscillating between the miasma theory and later, Ross's mosquito-borne findings—resulted in inconsistent preventative measures, though the vast public works projects such as irrigation canals, roads, and railways inadvertently exacerbated its spread by creating new breeding grounds (Arnold 1991, 6; Watts 1999, 143).

The main colonial response to malaria became the aggressive promotion of quinine prophylaxis, a strategy that served multiple economic and political functions beyond simple curative care. Quinine was distributed through government hospitals, dispensaries, and most notably, via the postal service from 1898 onwards, expanding the reach of Western pharmacology deep into the rural landscape (Proceedings, Home: Medical and Sanitary, April 1891, 15-17; Proceedings, Home: Medical and Sanitary, July 1903, 53). I observe that this widespread drug distribution not only aimed to keep the agricultural workforce minimally productive but also established a vast, non-military network for the dissemination of allopathic medicine, subtly undermining the authority of local practitioners and cementing the economic dependency on British-produced remedies, regardless of indigenous cultural acceptance or efficacy.

## THE COLONIAL PUBLIC HEALTH POLICY

The policy shift from 'enclavist' medicine to comprehensive 'public health' was triggered by the systemic failure of the former to protect the Empire after the devastating mortality among troops during the 1857-58 Uprisings. I argue that the establishment of the Royal Sanitary Commission in 1863 was the ultimate bureaucratic confession that the health of the military was critically interdependent with the surrounding native environment (Ramasubban 1982, 13). This transition signaled an acknowledgment that absolute physical and medical separation was impossible; the empire could not function effectively if its surrounding society was constantly diseased. The strategic decision was thus made to expand state intervention, not out of care for the general population, but out of a calculated necessity to mitigate the disease vectors posed by the indigenous people, who were now placed under 'mass surveillance' (Mushtaq 2009, 6).

The very definition of 'public health' under colonial rule was fundamentally exclusionary. While the American bacteriologist Charles Edward Amory Winslow defined public health as the art of preventing disease and promoting life for all, the British application in Punjab remained highly selective (Park and Park 1991, 38). The 'public' in question primarily consisted of those segments of the Indian population whose disease—or death—posed a direct threat to European military and administrative interests, or whose health was essential for economic exploitation, such as workers in key commercial sectors (Wald 2014, 71). This selective application confirms that the reforms were a pragmatic accommodation to necessity, not a moral commitment to universal welfare, thereby establishing a system that was structurally discriminatory from its inception.

The establishment of medical institutions, like the Lahore Medical School in 1860, was a direct political maneuver designed to create a subordinate class of indigenous medical practitioners trained exclusively in Western methods. I propose that the intention was not merely to train doctors but to manufacture a network of native collaborators who would help administer and legitimize the spread of allopathic medicine deep into the colony (Kumar 1998, 23). The unique feature of the Lahore Medical School, which initially offered licentiate programs to vaidas and hakims, confirms this goal, aiming to subtly co-opt and integrate traditional practitioners into the Western medical sphere rather than acknowledging them as equals (Croft 1886, 87).

The racial hierarchy was explicitly maintained through the structure of medical service, ensuring that control remained firmly in British hands. The Indian Medical Service (IMS) was structured so that native soldiers and civilians received treatment from IMS doctors, while the European elite were reserved for the Royal Army Medical Corps (RAMC). Furthermore, Indians were largely restricted to subordinate roles, such as hospital assistants, regardless of their qualifications, a system which upheld the racial segregation of medical authority (Imperial Gazetteer of India 1909, 457-80). The proliferation of public hospitals and dispensaries, which increased from 1,200 in 1880 to 2,500 by 1902, therefore functioned primarily as geographically dispersed outposts of imperial medical power, extending the reach of Western discourse and practice into previously resistant territories (Imperial Gazetteer of India 1909, 457-80).

The aggressive promotion of allopathic medicine over traditional systems, particularly after 1835, was a conscious political choice to establish scientific hegemony in the colony. This study argue that the end of medical cohabitation was enforced by allopathic proponents who asserted a monopoly over the East India Company's health initiatives, effectively beginning a long-term campaign to discredit *Unani Tibb* and *Ayurveda* (Hume 1986, 703). This campaign culminated in the 1860s with the controversial "Hakim Experiment" or "Sialkot Program," which superficially involved giving local hakims a year of allopathy training before sending them back to their localities (Hume 1977, 44-56).

I find that this experiment, while appearing benign, served two clear imperial objectives: first, it strategically undermined native medical systems by forcing them to adopt Western methodologies, and second, it successfully expanded the market for allopathic drugs into remote Punjab districts using the trusted agency of indigenous practitioners (Cheema 2013, 72). The program, which ended in the 1880s, revealed a consistent pattern: any engagement with native medicine was merely a pragmatic means to an end—the ultimate expansion of British economic and medical dominance. The distribution of quinine via the postal service later mirrored this approach, using state infrastructure to ensure the consumption of British-produced remedies, cementing the commercial profitability of the colonial medical enterprise.

Sanitation reforms, beginning with the appointment of A.C.C. De Renzy as the first Sanitary Commissioner of Punjab, were undeniably necessary but implemented with

a clear geographical and racial bias. I assert that the initial focus was solely on improving the "poor state of condition" within British-occupied urban centers, leading to the implementation of drainage projects to reduce waterlogging and mosquito breeding primarily around cantonments and civil lines (Hume 1886). The primary motivation was the protection of European quarters; the cleansing of indigenous wells and the banning of bathing on well platforms were subsidiary actions intended to prevent the spread of contagion *back* into the clean enclaves (Proceedings, Home: Medical and Sanitary, June 1876, 335).

The discriminatory nature of these policies reached its peak during the plague and cholera cordoning measures. The administration's all-encompassing plague management structure—involving the early discovery of the disease, forced relocation, and segregation—was imposed with brute force on native communities, restricting public mobility and banning all caste meetings and social gatherings (Proceedings, Home: Medical and Sanitary, August 1898, 208; Proceedings, Home: Medical and Sanitary, May 1901, 1). This contrasts sharply with the treatment of Europeans and Eurasians, who were permitted to continue their journeys and avoid mandatory medical screenings, illustrating that the sanitary measures functioned as instruments of social segregation and control rather than universal public health dictates (Proceedings, Home: Medical and Sanitary, August 1898, 1).

#### INDIGENOUS RESPONSES AND COLONIAL STATE: AUTHORITY, ANXIETY, AND RESISTANCE

The imposition of these politically motivated public health policies elicited a spectrum of indigenous responses in Punjab, revealing a dynamic contestation over state authority, bodily autonomy, and cultural integrity. I observe that the immediate, visceral crisis for the local population was the physical and economic trauma inflicted by mandatory epidemic measures, which went far beyond the suffering caused by the disease itself. Evacuation and cordoning were not abstract administrative policies; they were arduous, upsetting activities that forced pastoral poor from their homes and subjected them to appalling conditions in quarantine camps with inadequate shelter, food, and sanitation (The Tribune, April 27, 1901, 2; Cunningham 1872, 26).

The economic disruption was a core source of resentment, particularly among those who relied on daily wages. Cording measures made it impossible for peddlers, merchants, and small farmers to operate, effectively halting commercial activity and agricultural production (Proceedings, Home: Medical and Sanitary, April 1898, 1; Proceedings, Home: Medical and Sanitary, August 1898, 3-4). The quarantine of farmers during the 1872 cholera outbreak, for instance, prevented them from working their crops, demonstrating the state's disregard for native economic well-being when it clashed with the perceived security of the European population (Cunningham 1873, 28). This prioritization confirmed the public health policy as an inherently colonial system designed to minimize imperial risk, even at the cost of crippling native livelihoods.

While many faced hardship, a select group of influential men and the urban middle class often chose pragmatic

collaboration with the authorities. Individuals like Rai Bahadur Lala Kishen Das of Delhi, who offered his gardens for public use during evacuation, and social organizations such as the Arya Samaj and the Punjab Brahmo Samaj, who assisted in relief and medicine distribution, engaged with the state to mitigate the crisis and maintain their own local influence (The Tribune, April 17, 1907, 3; The Tribune, February 20, 1902, 5). I propose that this collaboration was class-based: the urban elite, unlike the rural poor, had a political and economic stake in maintaining stability and were able to communicate their frustrations through formal complaints rather than open revolt, thus securing a slightly more accommodating relationship with the administration.

Conversely, the widespread dissemination of miraculous and terrifying rumours served as a potent, non-violent form of counter-discourse against the colonial state's narratives of scientific benevolence. I suggest these rumours were not simply signs of ignorance but were complex political commentaries that reflected and amplified popular anxieties about the state's true intentions. For instance, the rumour that the government was collecting blood to create a "blood mummy" or identifying vaccinated children for slavery directly challenged the civilizing mission, framing British scientific intervention as a demonic or exploitative act (Proceedings, Home: Medical and Sanitary, February 1881, 84). Similarly, the belief that local officials were poisoning village wells or distributing poisoned sweets during the plague served to delegitimize the colonial administration at its lowest, most visible level, transforming medical staff into agents of death and destruction (Proceedings,

Home: Medical and Sanitary, June 1901, 2-3).

The most assertive response involved active resistance, which frequently took the form of hiding the sick, assaulting low-level officials, and culturally based refusal of treatment. The intense unpopularity of government policies, driven by the anxiety of separation and isolation, led people to disguise cholera patients and conceal children during mandatory vaccination drives (Cunningham 1873, 4-5; Proceedings, Home: Medical and Sanitary, June 1880, 342-43). The fact that villagers resorted to covertly burying plague victims in mass graves, sometimes bribing *lambardars* to avoid official detection, underscores the degree to which they feared the state's medical interventions more than the disease itself (Proceedings, Home: Medical and Sanitary, April 1898, 5).

This resistance often converged with existing religious and cultural sensitivities. The refusal of Sayyids to permit door-to-door inspections by Muhammedan midwives, the condemnation of rat extermination by Hindus and Jains for religious reasons, and the refusal of conservative Hindus to accept vaccinations due to the perceived inclusion of animal matter all transformed public health into a battleground over religious purity and personal sovereignty (Proceedings, Home: Medical and Sanitary, June 1889, 2-5; Proceedings, Home: Medical and Sanitary, June 1890, 40-41). Furthermore, the physical assaults on vaccinators—such as the attack on Ghalib Ali in Delhi—and the abuse of medical staff in Banga circle demonstrate a tangible and violent rejection of the subordinate officials who embodied the most intrusive aspects of state power

(Proceedings, Home: Medical and Sanitary, July 1884, 87; Inglis 1898, 53-146).

The accumulated resentment against the state's often brutal and coercive methods ultimately culminated in episodes of full-scale revolt and civil unrest. I find that the violence was a direct result of the police's heavy-handed tactics and the general inability of public servants to mediate the policies humanely, leading to riots that targeted government machinery and medical institutions (The Tribune, May 9, 1901, 3). The focus of the people's fury was consistently directed at lower-level officials—the physical manifestations of colonial power—who were stoned, brutalized, and even put to death, indicating that the resistance was a direct political confrontation with the authority of the state (Inglis 1898, 53-146).

This violent pushback, fueled by unified cross-communal and cross-caste anger, eventually forced a policy recalibration by the administration. The rising "tension of the empire" compelled the administration to become slightly more accommodating toward indigenous populations in order to regain control and prevent further widespread unrest (Klein 1988, 724). This strategic easing of the imperial grip began the process of decentralization, culminating in the Montgomery-Chelmsford Constitutional Reforms of 1919, which transferred responsibility for public health and sanitation to the provinces, granting increased discretionary authority to local governments (Government of India Act 1935). This final, gradual dismantling of the colonial state's direct influence over public health confirms that policy was ultimately dictated by the shifting necessities of control

and stability, not by an inherent desire for indigenous welfare.

## CONCLUSION

The history of public health in Punjab between 1850 and 1918 reveals a colonial strategy driven by the calculus of imperial self-preservation, not humanitarian concern. The recurring crises of malaria, cholera, smallpox, and plague served as powerful catalysts, forcing the British administration to transition from a restricted, defensively 'enclavist' medical approach—focused solely on securing the military and administrative elite—to a far more extensive 'public health' system. This transition was fundamentally political, economic, and military in nature; its true objective was the control and surveillance of the indigenous population, whose environment and bodies were constructed as perpetual vectors of contagion, thereby justifying the coercive and discriminatory nature of the resulting legislation, most notably the Epidemic Diseases Act of 1897. The structural segregation inherent in these policies, from the racial bias in train screenings to the political function of the Lahore Medical School in creating a subordinate medical class, confirms that medicine was a central instrument for asserting British scientific and political hegemony over the colonial subject.

The indigenous responses to these interventions—ranging from organized collaboration among the urban middle class to the creation of potent counter-discourses through political rumours and outright physical resistance—critically constrained the operation of colonial authority. The widespread, violent rejection of forced vaccinations, house inspections, and cordoning measures proved that the

implementation of policy was not seamless; it was a contested domain where the state's power was constantly negotiated and often violently challenged by its subjects. Ultimately, the intense civil unrest and the resulting "tension of the empire" compelled the colonial state to gradually reduce its direct, interventionist control, a process formally initiated by the Montagu-Chelmsford Reforms of 1919. This final, structural retreat confirms that the evolution of public health policy in Punjab was not a narrative of enlightenment or altruism, but a reluctant and tactical adjustment to the intractable resistance provoked by an inherently exploitative imperial framework.

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