

Cholera, Commerce and Quarantine: Interrogating the Science of Empire in Nineteenth Century India[^]

Arabinda Samanta*

Former Professor of History, The University of Burdwan, West Bengal

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Abstract

The present paper intends to examine how, during the cholera epidemics of nineteenth century India, the colonial state and its people were enmeshed in an interlocking relationship with the British bureaucrats and the colonial physicians. It also seeks to interrogate the dilemma of the pressing imperatives of enforcing sanitary regulations in India as dictated by the international business neighbours vis-a-vis maintaining the normal functioning of trade and commerce without hurting severely the sentiments of its subjects.

Key words: Cantonment, Cholera, Constantinople Conference, Contagion, Miasma, Pilgrim, Quarantine, Sanitary Commissioner, Trade and Commerce.

1 Introduction

Contrary to what is generally believed that government intervention in epidemic cholera in nineteenth-century India was informed by a grave concern for the health of troops, we have evidences to argue that epidemic cholera pressed the government to prompt action not just to save lives of its soldiers, but also to protect the overseas trade and inland commerce. This has become a common knowledge in academia that public health policy of the British India government had its origin in the persistent anxiety for saving the troops from 'native' ailments. Admittedly, the government sought to 'sanitize' the troops; but since the military establishments could hardly be spatially distanced from the neighbourhood of an infected civil population, they shifted their attention to the health

of masses.

This paradigm shift was not a smooth make-over, nor was the technology of public health which informed this take-over embedded in a linear knowledge of science either. There were certainly other variables which seemed to have outweighed the British public health policy in nineteenth century India. Epidemic diseases used to interfere with regular functioning of inland trade and overseas commerce. An infected port or an unhealthy business mart was hardly considered conducive to brisk business. Anxious as they were over these, the administrators resorted to a conventional knowledge technology, which they believed might fetch dividend to their colonial investment. The government had imposed quarantine restrictions, which, contrary to their informed knowledge, further constricted business activities and heightened social tension.

The whole issue had also multiple international implications. In 1865, a devastating cholera epidemic broke out among the pilgrims at Mecca, and it spread so rapidly that

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*Email: iamarabindasamanta@gmail.com

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European governments began to reassess the threat, because their extensive maritime network with the Red Sea was at stake. The delegates at the Constantinople Conference in 1866 recommended a quarantine of ten days against ships from infected ports; it also recommended that the pilgrims were to be subjected to a rigorous quarantine of 15 days if cholera had broken out among them. The Government of India was urged to take steps to prevent the spread of the disease within its territory and to improve sanitary conditions.

The British Government in India was thus threatened with a dilemma. It was extremely concerned about how the regulations directed at the pilgrims would affect the relationship that it had built up so assiduously with its Muslim subjects at a time when the memory of 1857 was still fresh in its mind. It had also to take into account the recommendations of the Constantinople Conference, which would arguably interfere with the inland and overseas trade. Part of this problematic, the issue of its overseas trade, has been addressed by Mark Harrison most adequately (Harrison 1992, pp. 117–144; Dutta 2009), but the question of how scientific knowledge about the proliferation of cholera and the issue of quarantine impacted upon its inland trade and overseas relations still remains an important desideratum.

2 Contesting knowledge of the medical world

The two most prominent theories of epidemic diseases during the nineteenth century were ‘contagion’ which came to encompass germ theory, and ‘miasma’ which generally lent itself to an approach to disease control known as ‘sanitationism’. Germ theory has been proven correct, and we all know that diseases like cholera are passed indirectly from person to person via tiny organisms. Prior to the major bacteriological advances of the late nineteenth century, however, multiple types of ‘contagion theories’ floated, and quarantine was often considered an ineffective method of disease prevention because without knowledge of how various diseases were transmitted, it was difficult to come up with a plan that could prevent infection. Some contagionists including Robert Koch were skeptical of quarantine, and most Europeans agreed that good hygiene was crucial for health (Ogawa 2000, p. 706). The miasma/contagion binary as also the debate surrounding

it, therefore, was far from decisive and clear-cut (Grunberg 2007, p. 17).

In India, contemporary men of science also debated upon the nature of infecting properties. A belief gained ground in Madras that cholera was contagious. It was contended in 1870 that for the production of cholera, two conditions were necessary, first, the presence of a special contagion and second, a susceptibility to its influence on the part of the person to whom the contagion was applied (Townsend 1870, p. 299). Nevertheless, it was argued that the habitudes of the disease proved that it was not kept up by infection. Instead of daily increasing, it invariably ran a regular course of increase, mortality, decay and extinction. This uniformity of rise and decline appeared to be quite inexplicable, upon the supposition of contagion.

When the question of contagion remained largely undecided, a review of the notion of its proximate or distant causes seemed to the contemporaries perfectly in order. Of the causes strictly predisposing, debility was considered to be the most powerful one. Contemporary commentators believed that the lower classes, those badly fed, and ill-clothed and lodged, suffered more than persons in better circumstances of life. Thus, the Hindus, who lived chiefly on poor and crude vegetables, and were, in respect of diet and clothing, sparing of extreme, were believed to be more liable to be attacked, than the Muslims who ate flesh-meat, sometimes used spirituous liquors, and were generally warmly dressed, and comfortably lodged (Corbyn 1832, p. 5).

The second great predisposing cause was believed to be fatigue, aggravated by exposure to sun by day and cold by night. Thus in Calcutta, the men working in the open dockyards were far more frequently taken ill, than persons of nearly the same descriptions employed under shelter in the cotton screws. For the same reason, fishermen, boatmen, gardeners, travelers, bearers, washermen, and prisoners, working on the roads, suffered dreadfully (Corbyn 1832, p. 141). All contemporary accounts agree that the young, the healthy, and the robust were the least liable to cholera.

3 The question of quarantine

Amid so many conflicting deliberations, the Government faced too many dilemmas to warrant any consistent position with regard to its health policy. However,

British Cholera Commission came to the conclusion¹ that cholera was communicable from the diseased to the healthy. It seemed to the Commission that in the case of ships arriving from infected neighborhood ports, no persons should be allowed to land before an inspection by medical men, and persons with cholera or diarrhea at the time of arrival, or at any period of the detention, should be isolated from the rest and removed to a separate place.

When officials, bureaucrats and physicians were engaged in an apparently puerile debate over the nature of the disease and devising ways and means to combat it, some practical suggestions for the diminishing the cholera in India and preventing its spread to other countries were made at the Constantinople Cholera Congress, 1866.² The most important conclusions arrived at by the Congress with regard to Cholera in India were that (a) India was the birthplace of cholera and was its permanent home (b) since 1817 this country had been the focus from which the disease had radiated in every direction and (c) in India, pilgrims were the most powerful of all the causes which tended to develop and propagate epidemic diseases.

Now the question is how the officials of British India government reacted to all these debates and deliberations. The government would have been certainly in severe constraints should it have to submit to the dictates of the Congress. The government therefore prevaricated. It wasted lots of time in expressing its opinion with regard to their accuracy or as to what extent they were borne out by Indian experiences.

Perusing through the official records, it appears that to the idea of contagion, authorities in India had been strenuously opposed; but the belief in the communicability of cholera was gaining grounds. It was suggested that this communicability should be assumed as an established fact. If cholera be an air-borne miasma, then comparatively little could be done to arrest its propagation. If, on the other hand, it was spread by humans themselves,

much good might be anticipated by the employment of preventive measures.

But, practical measures designed to carry out those recommendations involved the whole question of general sanitary administration of the country, which demanded huge amount of financial investment. Mr. Strachey submitted some proposals on this subject. He suggested appointment of local Sanitary Committees in all towns, civil stations, and other places or circles (see footnote 2). The next group of recommendations referred to pilgrimage and the part they played in dissemination of cholera. They involved, first, the carrying out of proper conservancy measures during all fairs, and second, the supervision of the pilgrims on their return to homes. As regards the sanitary arrangements of fairs, officials in Bengal believed little difficulty would be experienced (see footnote 2). The supervision of pilgrims returning to their home was, however, a matter of much greater difficulty. The vast number of people, the numerous routes by which they might travel, the oppression and extortion they might be subjected to by the police, all formed very serious obstacles in the way of carrying out a really efficient quarantine. Nevertheless, health officials in Bengal believed that quarantine should be established (see footnote 2).

4 Question of quarantine contested

The position the health officials at Calcutta had taken, hardly went uncontested. Thomas Henry Starr argued in 1848 that those countries where quarantine was most rigid had hardly fared better (Starr 1848, pp. 9–30). Beatson argued in 1873 that he would not advocate the ‘stoppage of travellers on their journey, the herding together of large bodies of people in quarantine camps, or the absolute isolation of infected localities and communities...’³ Nevertheless, he concluded that advice for quarantine might be very sound as regards England and European countries, but it had no application to India, where, as Cuninghame asserted, quarantine was altogether powerless to check the diffusion. Parkes argued that an island or an inland village far removed from commerce and capable for a time of doing without it, might practise quarantine

¹Conclusion of the British Cholera Commissioners, India Office, London, 16th July 1866, Forwarded for information to the Government of Bengal, N W Provinces and Punjab, the Chief Commissioners of C P and British Burma etc. Home Dept. Public, B Proceedings, August 1866, Nos. 165-66, National Archive of India (NAI), New Delhi.

²From G B Malleson, Sanitary Commissioner for Bengal to the Secretary to the Government of India (GOI), Military Dept. (No. 312, dated 29th May 1867, Simla). Proceeding No. 90, Home/Public/A August 1867, Nos. 82–90, NAI, New Delhi.

³From G. S. Beatson, Inspector-General of Hospital, Her Majesty's British Force in India, to F. S. Roberts, Officiating Quarter Master General of the Bengal Army, Home, Sanitary, March 1874, No. 26 D, Simla, 13th June 1873, NAI, Proceedings no. 14.

and sustain, but in other circumstances both theory and actual experiments showed that quarantine failed.⁴

Cunningham, Sanitary Commissioner with the Government of India, argued in 1884 that facts were opposed to the opinion that the extension of cholera was due to human contact. Stories of seeming importation of cholera, frequently adduced, were often vague, and open to numerous fallacies. The influence of the locality was often ignored (Cunningham 1884, p. 70). He further argued that Indian fairs were not the centers of cholera dissemination as they were supposed to be. The great fairs at Hardwar was associated in people's mind with a constant recurring epidemic spread by pilgrims year after year, and yet the fact was that during the last 30 years, only two epidemics could be in any way connected with Hardwar (Cunningham 1884, p. 70).

Murray however believed that the human body appeared to be the chief medium of re-production, multiplication and dissemination of the poison. The history of the Hardwar epidemic in 1867, he believed, showed that the disease radiated with the pilgrims from one focus in all directions from 300 to 700 miles, advancing in strict conformity to their rate of traveling, and being accelerated by the railway to Multan.⁵ Beatson however raised the most crucial question: accepting the view that cholera could be spread extensively by human intervention 'is it possible to isolate infected localities and communities to prevent the spread of the disease to others free from it?' He concluded that 'sanitary cordons are altogether unsuitable in districts of Bengal where cholera is admittedly endemic.'⁶ Cunningham argued that 'sanitary improvements, and sanitary improvements alone, embraced the whole action which a government could take in order to prevent cholera'. And these sanitary improvements were to be directed not to remedy one evil only, but to improve every evil as far as possible. Pure air, pure water, pure soil, good and sufficient food, proper clothing—these were the great requisites for resisting the cause which produced cholera (Cunningham 1884, p. 130).

Thus circumstanced, Cunningham formulated certain policy decisions. First of all, there ought to be no attempt at quarantine, for all attempts at quarantine in India had

signally failed to afford protection. Second, there should be no cordons, for they were cruel and oppressive, and did a vast amount of harm. Third, there should be no forced isolation of the sick or disinfection. They had done harm because they had caused alarm (Cunningham 1884, p. 139).

5 History of land quarantine revisited

Takers of Cunningham's views were evidently large. Land Quarantine Committee argued that strict quarantine had never been attempted or achieved in any part in India.⁷ But we have evidence to the contrary. The report of the cholera epidemic in the Punjab in 1862, for instance, mentions enforcement of some restrictive measures of the nature of quarantine. Again, in 1867, some restrictions of the nature of quarantine were enforced with respect to the pilgrims who were returning from Hardwar; they were compelled to make detours to avoid entering cantonments and large towns, and the escort which the Maharaja of Kashmir had taken with him to Hardwar was broken into small parties, and was diverted from the Grand Trunk Road into less frequented tracks. Sanitary cordons were formed around many large cities and several cantonments.⁸ In 1872 quarantine restrictions were for first time attempted on a systematic scale.⁹ In 1875 quarantine restrictions were more fully enforced in 20 cantonments.¹⁰

6 Cantonments and quarantine

Indeed, more pressing was the question of quarantine at cantonment. Health officials argued that infected pilgrims returning from some of their huge gatherings should not be allowed to pass through cantonments which were as yet free from cholera.¹¹ They argued that

⁷From Quseley Gore, Commissioner and Superintendent, Umballa Division, President of the Land Quarantine Committee, to The Offg Secy to the GOI, Home Dept. Home/ Sanitary/ December 1877. NAI, New Delhi

⁸Home., Sanitary, Dec. 1877. nos. 36–41. NAI, New Delhi

⁹Report of the Sanitary Commissioner for the year 1872 to the GOI, Para. 91 to 103.

¹⁰Home, Sanitary, Dec. 1877. nos. 36–41, p. 2, NAI, New Delhi.

¹¹From G. S. Beatson, Inspector-General of Hospital, Her Majesty's British Force in India, to F. S. Roberts, Officiating Quarter Master General of the Bengal Army. Home, Sanitary, March 1874, No. 26 D, Simla,

⁴*ibid*, Proceedings no. 18.

⁵'Report on Cholera', 1869 Home, Sanitary, March, 1874, Proceeding nos. 14–20, NAI, New Delhi.

⁶*Ibid*, Proceeding no. 17

they didn't see any hardship in removing cases of the disease to an isolated hospital for treatment. The Government had ordered that quarantine should be continued as far as cantonments were concerned, and as such, so far as Punjab was concerned, military department had decided to maintain quarantine in case of military cantonments.¹² This was opposed to by S. C. Townsend, the Sanitary Commissioner, who argued that he fully agreed with Cuningham that as a preventive against cholera, quarantine always proved futile. He would not therefore prohibit attempts at quarantine on main lines of traffic, but he would not advocate cordons around cantonments.¹³ Though it could be ascertained 'strict quarantine' had never been attempted or achieved in India, it is difficult to prove that immunity, which any cantonment might have enjoyed from cholera, was due to the quarantine restrictions. We have evidences of mixed results.¹⁴

7 Quarantine and commerce

Quarantine, partial or complete, tended to interfere with the regular functioning of inland trade and commerce. Pilgrimage centers in India were not merely sites of religious congregations. They were also meeting places for sellers to hawk their goods and buyers to choose from. Inland quarantines compromised those economic functions as well. Quarantines affected the flow of troops as also shipment of merchandise between India and Britain. India was hit hardest by the restrictions, for more than half of her imports were supplied by Britain, which was the principal importer of Indian raw cotton, the country's chief export at that time (Harrison 1994, pp. 123–124). Quarantines thus adversely affected the economy of both the countries. The government therefore was increasingly opposed to the use of quarantine and cordons, and the majority of medical officers, acquainted with the atmospheric theory of cholera dissemination, associated with Bryden and Snow's waterborne theory, agreed that there was no medical logic in quarantine, and thought it unnecessarily damaging trade.

The quarantines incited howls of indignation in the

13th June 1873. Proceedings no. 14, NAI, New Delhi.

¹²Home/ Sanitary/March, 1874, nos. 14–20. NAI, New Delhi

¹³'Quarantine in Cantonments', Home, Sanitary, March 1874, no. 14–20, NAI, New Delhi

¹⁴Home, Sanitary, Dec. 1877, nos. 36–41, pp. 2–3 NAI, New Delhi

Anglo-Indian Press in Bombay. The Bombay Gazette, champion of the city's European commercial class, was anxious to play down the incidence of cholera, and lamented the effects of quarantine at Suez (Harrison 1994, p. 123). The annual imposition of quarantine at Suez during the 'cholera season' had by 1883 begun to eat into the profit of Bombay's mercantile community, and the city's chamber of commerce became more vociferous in its own defence.

8 Conclusion

The story of nineteenth-century cholera epidemic in India demonstrates that global demographic consequences of Western expansion were profound. Admittedly, ecological and demographic disturbances were involuntary but not inexplicable happenstance. But the moot question is why did death rates rise in India during nineteenth century 'Free Trade' imperialism? Not coincidentally, India was the premier colony for development projects, for railways, irrigation canals and other projects to multiply its commerce, and concurrently, India suffered the most palpable disease depredations.

In India, medical authorities commented on particular features of cholera's dissemination without developing a synthesizing explanation (Klein 1994 p. 493). The incidence of cholera produced knowledge at different locations with varying meanings. In India's long historical experience, its tradition of pilgrimage, its caravan trade, its imperial wars, its negotiation with water pollution, from Imperial Guptas through Mughals, there were ample opportunities for contaminated water to spread cholera subcontinentally. But apparently it did not become endemic or frequently epidemic in many places. It proliferated systematically only after the mid-nineteenth century. There was no lethal mutation of the microbes, no radical collapse of living standard, no dissemination of a dangerous vector either (Klein 1994, p. 496). So how can one explain this phenomenon? Certainly the colonial infrastructure including ports, harbors, trade and commerce had something to do with the proliferation of cholera as an epidemic form.

The response of the British India government to epidemic cholera exhibited multiple sites of tension and contradictions. The post-1857 priority with law and order, coupled with financial stringencies, compelled the

government to take a non-interventionist approach to health and sanitation. Admittedly, protection of European troops necessitated some degree of intervention in the lives of the indigenous peoples, but any such action carried with it the risk of civil unrest. In order to maintain its policy of detachment from public health, the government was prepared to adopt an apathetic attitude, manipulating the flow of information and theoretical discussion in the official circles. It was even prepared to deal harshly with medical officers who stepped out of line and voiced a different note. Medical experts were drawn selectively and employed to defend the government's position wholeheartedly. They effectively defined the limits of medical intervention under British rule and sought to legitimize government's lukewarm response (Harrison 1994, pp. 116).

As an interface between Indian and imperial affairs, the quarantine debates of the late 19th century could provide a new avenue through which to explore relations between imperial metropole and colonial periphery. The free passage of ships between India and Britain was high on the agenda of both the governments, but equally important to the Government of India was the question of sanitary regulation of the pilgrimage and its likely effects on Anglo-Muslim relations. The imposition of quarantine against Indian pilgrims and the indictment of the Indian Government at international sanitary conferences for its apparent lack of concern for the health of Indian pilgrims traveling to Mecca, threatened to jeopardize the government's strategy of 'cooperation' with Muslim leaders. A much more difficult situation lay in the fact that if it were to implement the sanitary controls desired by the European powers and by the Muslim leaders and thus reduce the perceived need for quarantine, the government's actions were likely to be misconstrued by lower class Muslims as interference with their religious practices and as violations of their personal dignity (Harrison 1994, pp. 117).

But, if quarantine issue exposed the tensions in relations between the ruler and the ruled, it also revealed the worries of the government in safeguarding its colonial and commercial interests. British mercantile communities, port town authorities, and the provincial governments shared the fear of the British government that quarantine would have to be imposed against the ports if the infecting properties of cholera were officially acknowledged. The history of cholera, commerce and quarantine

in India was thus enmeshed in an interlocking relationship implicating public memory, social customs and prejudices, fear and panic on one hand, and sanitation and politics, quarantine and empire, on the other.

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