

Fear of Disease: The Effects of Cholera Epidemics on Eastern India's Coal-mines, 1894-1947

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Abstract: *In Bengal, cholera spread rapidly in 1817, and within three years, the whole subcontinent was affected. Like the rest of the nation, coal mining areas were not immune to the disease's spread. The research is conducted in Eastern India with a primary focus on the two mining communities of Jharia and Raniganj. Unsanitary living conditions and lack of consciousness were the main reasons for the spread of cholera. The Government usually took some preventive measures in their interest. They did not solve anything permanently. The main purpose of this article is to discuss the outbreak and effects of cholera in the coal mines of eastern India during the colonial period.*

Keywords: Coalmines, Cholera, Eastern India, Raniganj, Jharia

The historian Arabinda Samanta has shown that during the colonial period, India was Asia's largest 'disease laboratory'. Malaria, smallpox, plague, and cholera were frequent visitors to the subcontinent, sometimes as minor annoyances, but more often as pandemic vengeance. Thousands of people used to die in days, leaving those who survived all but physically and mentally ruined.¹ In nineteenth-century Bengal, cholera was the most devastating epidemic. It lasted a long time and became a seasonal disease in India for a period. Cholera became widespread in Lower Bengal in 1817, and the disease spread to the rest of the subcontinent within three years.² Scientifically it can be said that the term "Cholera" signifies a disease characterised by the purging and vomiting of colourless watery fluid accompanied by muscular cramps and suppression of urine. Coal mining areas, like the rest of the country, were not immune to the disease's spread. There was a time when outbreaks of that illness swept over the coalfields almost every year. Concurrently, the lives of the workers were being added to a process of loss of life and great misery. It occurred throughout March and April, as well as on occasion after the end of the rains. The paper attempts to study how the cholera epidemic spread to the coal mines during the colonial era and affected the lives of the workers to endure severe physical and mental pain. It also aims to examine the role and real motives of the government in taking preventive measures to counteract the epidemic. The study is carried out in Eastern India focusing primarily on two mining settlements – Jharia

and Raniganj. The period of research starts from the year 1894 when Jharia coal mine was started and ends in 1947, the year the colonial era came to an end.

Unhygienic Living

Unsanitary living conditions were a significant factor in the frequency of epidemic breakouts in collieries. According to the Report of the Royal Commission of Labour, the hygienic conditions in the mine's housing sections were far from ideal. Latrine facilities were insufficient, and there was scope for expansion in bathing and washing cloths along these lines, with most of the population relying on surface tanks for these functions.³ Attempts to address the problem of promiscuous defecation had been largely unsuccessful. The miners went out into the open fields to meet nature's call.⁴ They sometimes used dustbins as latrines.⁵ The "Aqua privies" provided on mines were rarely used, but the public latrines provided by the Board in Jharia, Katras, and Kirkend bazaars were well utilised. On the collieries, gangs of sweepers were hired to clear ashes and other garbage, with the Board's regulations requiring adequate conservancy practices.⁶ Some sweepers were employed by coal companies, but they were either too lazy to work properly or too clever and easygoing to do their duties honestly. They were responsible for cleaning the proprietors', managers', and subordinate staff's quarters at Indian collieries. Many collieries had provided dustbins, but there had been no sufficient planning to clean them at regular intervals. These were often found overflowing, causing some of the dirt used to back into the worker's quarters by gusts of wind.⁷ There were occasionally seen to be too few properly trained sanitary inspectors. There was a time when Raniganj had none and Asansol Municipality had three unqualified sanitary inspectors. The Mines Board of Health supervised the control of epidemic disease in these municipalities, which was one of their most significant duties. The municipalities were not involved in this activity. Due to the lack of a properly trained Sanitary Inspector, the conservancy arrangements of the Asansol Municipality were also very inadequate, which led to the creation of conditions that were favourable to the spread of cholera.⁸ Due to the overcrowding in the labourers' housing, diseases could readily spread over the area like wildfire.

Attack of the Disease

Cholera spread in three different ways when it had once appeared in an area, either spontaneously from chronic carriers already present there or by importation from outside: (i) By the whole contamination of drinking water supplies. (ii) By direct ('house') contact. (iii) By flies.⁹ After a series of cholera outbreaks in Jharia Coalfield in 1906 and 1907, some managers took significant action. They set a good example in the matter of the *cooliy* line.¹⁰ H. Coupland pointed out that "little attention was, however, paid to the water-supply question outside a very limited circle, and the result was the disastrous epidemic of 1908, which, besides causing enormous mortality, practically

brought the working of the mines to a standstill for nearly three months at a time when every extra ton of coal raised meant a record profit'.¹¹ Cholera was rampant from the middle of March, 1908 for about two months.¹² W.T. Griffith, who was an officer at that time described this terrible epidemic. He felt that the citizens of Calcutta would not realise the truly dire nature of the epidemic. The countryside was littered with corpses, and neither burial nor cremation plans had been made. They were the prey of vultures and pariah dogs, lying in *nullahs* and paddy fields. For instance, 70 deaths occurred over three days at the Reliance Coal Company's neighbouring mine, which employed roughly 500 miners. Even several European Managers were scared, and they applied for leave and left.¹³ The corpse was quite tough to remove. Since there was such a strong demand for *domes*¹⁴ to carry corpses, the poorer families were forced to leave the hut where the disease was resting and acted offensively whenever they were unable to take the body by themselves or were too terrified to do so. Additionally, due to the pressure of their workload, the *domes* only carried the bodies a short distance from the residences and left them beside the road and used to attend other cases. As a result, corpses that had either not been buried at all or partially buried had been devoured by animals.¹⁵ According to the Chief Inspector of Mines report, approximately 5,000 people died from cholera in the collieries alone in 1908.¹⁶

Rumours played a big role during the time of the plague in the Colliery area. Cholera falls under the same category. W. W. Clemesha,¹⁷ said that the people who made up the labouring class were certainly a very timid and ignorant race, they were easily frightened even by the rumours of epidemics. There were 20 cases of cholera in a village near a colliery, but there was only one imported case. As a result, nearly all the labourers fled, and for two months, the output of a well-produced colliery was only approximately one-fourth of what it should have been. Another incident where in a native-owned colliery, everybody including the manager ran away because cholera made its appearance. Even though there was no epidemic to scare them away, people came and went to their houses in the village as they pleased.¹⁸ Thus, the number of hands in a mine was never consistent. Clemesha stated that "there is none of the sorts of attachment to the soil or to the concern that exists in many of the free labour tea gardens or to a less extent in the jute mills."¹⁹ After that, cholera continued to appear yearly, sometimes with fewer victims and other times in the form of an epidemic. Cholera attacked Jharia Colliery once more in 1919, this time with tragic human casualties. Out of 4,400 seizures, around 2500 deaths occurred.²⁰ In the Asansol mining settlement, it was impossible to prevent the frequent introduction of cholera due to the immigrant nature of the labour who was employed there. Cholera played an important role in the revenue of the mining industry. After the establishment of the mining board in 1916, the owners of the coal mines became more aware of this situation.²¹ Recorded provincial death rates from cholera were often inaccurate when the actual death rates were several times higher. A government report showed one reason for this. It was an obligation for the

village *chowkidars* to submit daily reports on the progress of the epidemic to the police station through a letter. Because the *chowkidar* in most cases resided a day's trip or more from the police station. He, therefore, used to avoid the obligation to report all cases after the outbreak of the epidemic had passed and then submit a return showing most deaths occurred due to 'fever'.²²

Officers primarily diagnosed cholera as a result of the collieries' water supply, and everyone called for the development of a proper water supply in the collieries. The Jharia Water Board has been supplying water for domestic use since 1914. A proposal for combined sanitation and water supply came from the Sanitary Commissioner of Bengal in 1908. It was decided to adopt the gravitation scheme as providing the most satisfactory and reliable supply.²³ This supply was linked to around two-thirds of the Jharia collieries. In addition to a piped water supply, the Board reserved water from two tanks in Jharia and Katras for domestic use in 1928-29.²⁴ Furthermore, when there was a possibility of outbreaks, the *chowkidars* were assigned to maintain tanks that had been either reserved or restricted from being utilised for domestic purposes.²⁵ The Raniganj and Giridih collieries were not connected to the Jharia Water Supply Scheme. Wells were the primary source of water supply in Raniganj Coalfield. Every other day, bleaching powder was put into the wells to sanitise them. There had been no attempt to attach a water pump to individual wells to prevent this random drawing of water.²⁶

Prevention & Inoculation

In 1917, the Sanitary Commissioners of Bengal, Bihar, and Orissa, as well as the Chief Sanitary Officer of the Asansol and Jharia Mining Settlement, met in Asansol to discuss the procedures needed to prevent Cholera epidemics.²⁷ Based on some regulations approved by this conference, it is known what sort of preventative measures were done throughout the outbreak. A few examples of such rules are available. The Chief Sanitary Officer was directed to order that anyone who had contact with a person found to be infected with cholera be quarantined for no more than ten days. Without the consent of the chief sanitary officer, no one could enter any site where people were isolated or separated.²⁸ Every mine was expected to produce a sufficient supply of clean water both above and below ground; the Board was authorised to shut a colliery that did not have such a supply, and rules were passed to ban the use of any source of water supply for bathing or washing clothes or animals. It was essential to include a clause in the Act to enable the Board to take preventive measures in respect of places where flies or mosquitoes breed. Both the abundance of flies and the presence of mosquitoes were recognised as important factors in the transmission of epidemic diseases, particularly cholera and malaria.²⁹ Various rules and regulations concerning the embalming of corpses were also issued. Some regulations were issued in this respect during the cholera pandemic that struck Jharia in 1908, and they are included here. Every Colliery Manager was responsible for the appropriate disposal of deceased corpses found in his own Colliery. His sweepers had the

right to decide how the bodies were to be cremated. If additional help was needed, he was to send a written request to the Sub-Inspector of Police at Jharia.³⁰ It was agreed that proper and thorough corpse disposal was necessary. Destruction of the dead's clothes, bedding, *charpoy*³¹, etc., and thorough disinfection of the surroundings were required.³² In March 1918, it was decided to stop third-class passenger bookings on one branch of the Bengal Nagpur Railway to limit the spread of cholera in the Bokaro coal fields as much as feasible.³³ That is, some coercive preventive measures were taken, and some labour welfare measures that would permanently stop the outbreak of epidemics were not taken.

Inoculation is critical for preventing an epidemic. It is very important not only for physical resistance but also for gaining mental strength. The subcutaneous injection of the cholera vaccine provided cholera immunization. Inoculation played a major role at the time of the cholera epidemic in Jharia in 1908. W.M. Haffkine who was the chief inoculator at that time described the pitiful condition of Jharia standing during the horrendous epidemic. "At the time of my arrival at Jharia a large proportion of the native mining population had left the place in consequence of the epidemic and was not expected to return for some weeks. Part of the collieries were shut down and the rest were working at a much-reduced rate."³⁴ It was expected that if the inoculations were gradually brought to the knowledge of, and spread among the local labour, they may assist to reduce the horrible mortality. At the same time, it was hoped that the panic caused by the dire situation of the disease would also decrease a little. The inoculation work at Jharia and Sejua was carried out by W.M. Haffkines without the help of a proper staff then he asked for some staff for the laboratory and the place of inoculation. On the day following his arrival, he inoculated seven Europeans who related to the management of the Jamdoba and Lodna collieries. In the next eight days, 392 Europeans and Indians were inoculated, of which 102 were women, 24 children under nine and 2 babies.³⁵ It was quite encouraging that natives responded spontaneously to inoculation, but some Europeans were anxious and hesitant to inoculate.³⁶

Any outbreak in a coal mine was a nightmare for the owners, and it was also difficult to prevent. At the time of the outbreak, almost every worker used to abandon the area. The output of coal would have been extremely difficult in this situation, and the owner would have suffered a huge loss. So, they tried their best to prevent the epidemic for their interest. They were more concerned with preventing epidemics than with the overall health welfare of the labourers. There were no modern methods in place for identifying occupational diseases or providing maternity care to female workers. Even the proper sanitary measures which are necessary to prevent cholera or other epidemics were not taken. As a result, each year, a certain number of workers became victims of epidemics. This procedure continued uninterrupted throughout the colonial period. Contemporary government reports had always blamed the irresponsibility of various native servants, such as

chowkidars or labourers for different epidemic situations. White people always used to hide their irresponsibility. Margaret Read in her book identifies such working class who transformed from peasant to worker as a 'human-machine.'³⁷ Workers employed in coal mines were treated like coal-cutting machines. They were not given respect as human beings.

Notes and References (Endnotes)

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