## Cholera in Nadia District, 1817-1938: A Review

Sujan Sarkar

Assistant Professor of History, Dwijendral College, Nadia.

**Abstract**: Cholera is a water-borne disease. In the colonial period, death was inevitable when infected. Cholera out broke almost to all the districts of Bengal during 1817, and it became epidemic, especially in Nadia district. Nadia district was the center of the disease. From 1817 to 1938, the cholera terrorized the people of Nadia. Between 1895 and 1896, on an average of 9000 people died of cholera each month in Nadia district. Despite the death of so many people, the British Government has remained inactive without taking any measure for cholera. Not only that, the colonial rule also ruined the human psychology with its domination and oppression. under the influence of cholera, the working power of the people of Nadia was decreasing. As a result, people of Nadia lost respect for the British rule. During this period anti-British Sentiment had gradually developed. The influence of which is seen in the Indigo uprising in 1859. The object of this article is to discuss why cholera originated in Nadia, how the British Government played a role in controlling cholera and how cholera became trope of Nadia mass movement and so on.

Key words: Average, British, Cholera, Death, Mass movement, Power, terrorized.

According to modern medical science cholera is an acute bacterial infection. At present, the risk of death of the disease is very low but in the colonial period, the common people knew that death due to cholera was certain. Liberal, vomiting or dehydration are symptoms of this disease. During the colonial period, cholera became an epidemic in Bengal throughout the early nineteenth century. Cholera disease in Bengal is known as *'olaotha'*. 'Olaichandi' is the goddess of cholera or *'olaotha'*.<sup>1</sup> There is a temple of Olaichandi in Nadia's Birnagar or ula. The incidence of *olaotha* was so severe here that village was named Ola or Ula. Not just Ula, the topic of discussion in this article is Nadia as a whole. First, we will determine where the origin of cholera was, and later explain why cholera came to Nadia district, what was the role of the ruling class in preventing cholera, whether the British government succeeded in vaccination and so on.

**Origin of cholera disease in Bengal:** During the colonial period, the cholera epidemic caused the most damage to the inhabitants of Bengal after the malaria epidemic. So, the question arises in the mind how can these choleras elapse in Bengal? Where is the origin of cholera? In the book "The Asiatic of Bengal cholera of 1857 to 1873", John C. peters points out that cholera originated in the presidency of Bengal in Hindustan, especially in the Ganges basin. And from there it spread all over Bengal.<sup>2</sup> The question is why cholera a has not been found anywhere other than the Ganges basin of the Bengal presidency Division? Bireshwar Banerjee and Jayati Hazra, "Geology of cholera in the West Bengal: A study in medical Geography" has also shown, the first cholera outbreak was in Ganges-Brahmaputra basin.<sup>3</sup> According to James L. Bryden's, "Report on the General Aspects of Epidemic cholera in 1872" cholera outbreaks spread first to Orrissa and Ganjam area, then to western India and then to the Ganges basin in Bengal.<sup>4</sup>

Now the question is which area the first cholera originated in the Ganges basin? Bireshwar Banerjee and Jyoti Hazra, in the "Geocology of cholera in West Bengal- A study in medical Geography" said that in August

1817 cholera broke out in Calcutta which is one of the regions of the Ganges- Brahmaputra basin. The Ganges basin area of Bengal was the origin of the cholera that appeared in India between 1826-37. But the definite place of origin of cholera in the Ganges basin is not known. Again, in 1852-59, the name of the place where the sepoys appeared during the Sepoy Mutiny is Bengal is unknown.<sup>5</sup> Until now, the review did not show the exact location of Ganges basin where cholera broke out.

The location of origin of cholera is an unresolved question. However, it can be said that the birth of cholera is in a district at the corner of Jessore-Nadia. This time Jessore or Nadia was cholera's residence. Let us focus on W.W.Hunter's information. Hunter points out that in the Ganges basin in 1817 cholera originateed in the district of Jessore.<sup>6</sup> J.H.E.Garrett, on the other hand, writes in :Bengal Districts Gazetteer:Nadia", India's first cholera originated in the Nabadwip.<sup>7</sup> But Garrett did not say exactly when cholera originated in Nabadwip. And that is where the problem starts. Although W.W.Hunter writes that in 1842 cholera epidemic spreads in Nadia. John Bell said that cholera originated in Nadia District in 1817. Again, James Long said that cholera originated in the Nadia district of the Ganges basin. At first, it was though that either in Calcutta or at Jessore the cholera was born. But information says that cholera had come to Nadia district before Calcutta. Cholera come to Nadia district in May 1817 and appeared in Calcutta in August 1817. The cholera started in Jessore shortly after. This time we come to the discussion of Reasons of first appearance in Nadia district.

Main causes of cholera in Nadia: We know cholera is a water-born or hydra disease. Contaminated water is the main cause of this disorder. The Ganges basin in fantail of rivers. The source of drinking water for the inhabitant of Bengal was rivers including the Ganges. But as the rivers and water bodies became muddy, the bound water began to become polluted. In this context, Gopaul Chunder Roy's clear ideas are available. He said that the environment changed drastically as the drainage system of rivers and water bodies of lower Bengal was

very poor.<sup>9</sup> Not only that, the canals that were left in the river earlier, the *bils* served as a sewer system in Bengal. But then it became full of ferns. Needless to say, this fern-filled canal, *bil*-bound drinking water, brought cholera among the inhabitants of Bengal. When we read the 'Swathya Samachar' of 1326 bangabdo, we find that there is a great shortage of drinking water in the villages of Bengal. For this reason, the district board dug 2 to 3 wells within a month. But the villagers' problem was not being solved. Because in the Summer, when the canals of the village and the *bils* dried up, the potter's water also became dehydrated.<sup>10</sup> Therefore, even in the wells, the villagers had to drink muddy water from marshy ponds and of dead rivers. And this is what causes cholera. Contaminated water is the main cause of cholera, which was brought into public attention in 1928, 12th July, issue of Banglar Katha' magazine. It is written in this magazine that there were numerous rivers flowing in Bengal<sup>11</sup> and the practice of drinking water from the muddy pond and marshy rivers was crucial in outbreaks of cholera in Ganges basin in Bengal.

Apart from geographical reasons the establishment of railways contributed to the origin of cholera disease in Nadia. On September 29,1862, the railway was opened at Nadia; it was during the reign of Charles Stephens, Lieutenant Governor of Bengal.<sup>12</sup> The introduction of the railway has radically altered the communication system in the region. At the same time, it impacted on the derogatory changes the environment. Railways and stations were elevated with lots of soil, boulders, rocks and bricks. As a result, many moving waterbodies of the railway and its surrounding areas were filled and at the same time many closed waterbodies were created. The people of Nadia were infected with cholera due to drinking water from the bad waterbodies. Kumudnath Mallick also said that, during the construction of the railway, Nadia's soil was dug up and the rail

line was lifted.<sup>13</sup> Cholera and malaria had come all over India for the construction of railway tracks unknowingly, says Sakharam Ganesh Dauskar.<sup>14</sup>

Besides, the dams which were provided to prevent cultivation and flood in Nadia were also closed due to the waterbodies. Dams were constructed over 40 miles on Jalangi river, 18 miles Bhagirathi river, 300 feet in Bhirab river, 14 miles in Padma river, 43 miles in Mathabhanga river, 2 miles in Kumar river and 2640 feet in Kabotakha river.<sup>15</sup> As a result Nadia's normal waterbodies could not mix with the water in those rivers. The waterbodies were shot in the stream. Then, when the people drank the water from the enclosed waterbodies, cholera spread among them.

Surveys showed that numerous sugar and Indigo factories were formed in different parts of Nadia district.<sup>16</sup> All these factories were on the banks of rivers and waterbodies. During the cultivation of the Indigo and the making of the Indigo, a lot of filth and garbage was created. All those filth-garbage was dumped into rivers and waterbodies. Due to which rivers and waterbodies had been polluted. During the construction of the Indigo and sugar factories, numerous soils, boulders were dumped in the waterbodies -which raised the chest of the waterbodies. On the other hand, 'Kushtia Sugar Milk'(1919),'Keru and company'(1939) and Shambhunagar Sugar factories were one of the major causes of water pollution in the river churni,J alangi and Matha Bhanga. Contaminated water spread from these rivers to 0ther waterbodies. And this polluted water was the main cause of cholera. In this case, the role of the British government was more than a natural cause for Nadia's cholera disease. Now, I will talk- how cholera disease affected Nadia District.

**Impact of cholera in Nadia:** Cholera is a major hit in the Nadia District as well as the malaria epidemic. Cholera was rampant in various areas of the Nadia like Ula or Birnagar, Nabadwip, Krishnagar etc. We have already seen that in 1817 cholera disorder occurred in Nadia district. But the exact number of deaths was not reported. The government had not even published a report on this situation. So, we have to keep reliance on newspaper reports. Several news stories were served in this regard from 1824 to 1827, but even in all these news reports, the exact number of people who died of cholera was not mentioned. It was written in Samachar Darpan on 1824, 1st may, that cholera or *'olautha'* were frequent happening at Nabadwip.<sup>17</sup> Not only that, many people died from this disease. The same article written in this newspaper, reports that in Nabadwip 3 people died of cholera in a single day, and 8 to 12 people were infected each day. Therefore, the foreigners started migrating from this part of Bengal. Cholera epidemic occurred in Ula or Birnagar along with Nabadwip. It is identified in the news of the Samachar Darpan' 1827, 22 December. The number reads, "The fatal quality of *olaotha* in village of Ula has caused many to be intimidated by the situation.<sup>18</sup>

Therefore, it is not possible to get an accurate estimation of the number of people died of cholera in the Nadia district from 1817 to 1827.Originally from 1860, accurate estimation of cholera and death were officially available. Now question is why during the 1860s the government took this initiative? Why not before? In fact, cholera has appeared in the European armies of the British Government since the Great revolution (1857 revolt). In particular, the European troops of the Bengal regiment, the Bombay regiment and madras regiment were severally attacked by cholera. 1852-59 cholera outbreaks occurred first in the Army. In 1859 cholera came to the Bombay regiment from the Bengal regiment, then spread all over India.<sup>19</sup> This view is supported by " A Report on the cholera of 1866-68 " in 1869 and "Report on the general Aspects of epidemic cholera in 1872'. In 1869 report shows that 32 European army died of cholera in eastern India. At the end of 1858, the death rate in Calcutta and its surrounding areas increased to 373.<sup>20</sup> In 1858, Cholera outbreaks in Bengal became epidemic among the armies. In 1859, the Barrackpore and Dum Dum cantonments were attacked by cholera and 100

troops were affected within 10 days.<sup>21</sup> The report of 1872 also shows that 14 European army of the Bengal regiment were at Cholera. Report shows 817 people were infected by cholera out of which 559 were died of this disease.<sup>22</sup> Therefore, it is clear that when cholera arrived at the military forces of British imperialism, the British government was ready to resolve it.

Needless to say that they were indifferent to the Native people but for the Army they were protective. So the question arises as to how was the condition of the common people? The search for the subject will come up shortly afterwards. No doubt, the Nadia jail was the cottage house of cholera and the British government was terrified for this. Numerous prisoners, some soldiers and other employees were affected. British government was in panic due to the fear of contamination of European workers by the prisoners. It was found that the two or four prisoners from 1862 to 1889 was infected. European workers were also affected by cholera. Therefore, they also sought treatment for prisoners attacked by cholera in prisons in order to prevent European people. Below is the calculation of exactly how many prison employees and prisoners were attacked and how many of them died-

	Krishna nagar (here in after identified or Nadia)								
Year	Total peoples	Hospitalization	Death						
1862									
1863	436	02							
1864	363	04	03						
1865	333	02	01						
1866									
1867	382	02							
1868	368	04							
1869	415	02							

Source: Cholera in India, 1862-1881, Bengal Secretariat press, Calcutta, 1884.

Now come to the concerns of common people. What was the effect of cholera in general? Area surrounding rivers and waterbodies was the most populated place in Nadia district. There was no problem of the drinking water at the nearby places of rivers. Later because of the British rule, when the canals the rivers sprouting were blocked, heavy cholera broke out in places like Nabadwip, Birnagar, Kushtia and Krishnagar. Kushtia civil surgeon Dr. J. G. Grant says, of the geological conditions were responsible for the cholera in the region. Most of these water bodies were responsible for this. Most of these waterbodies were quite muddy and full of moss. Therefore, finally in november,1867, a huge cholera broke out. The statistics showed that out of 2778 victims 1799 people were died. On the other hand, cholera was seen in the Shantipur from October in 1868. And from there it spread in three places in November. The disease continued throughout Nadia until April 1869. A total of 878 people was infected in 8 Nadia circle and of these, 305 died.<sup>23</sup> Both reports have remained silent on preventing cholera.

In the 1870's cholera also hit the peoples for several months on different sides of the Nadia District. In this decade cholera was destructive.7th February 1870, cholera broke out in the Nadia district and is in various subdivisions. Statistics shows that cholera occurred in 486 villages in Nadia district. The most affected areas were Krishnagar, Ranaghat and Shantipur. Police Report from various police Stations shows that in Nadia 4657 people had suffered from cholera out of which 2866 died. Nadia had not been released from cholera even in the year 1872. Rather, it had grown rapidity: In this decade, the maximum number of people was affected in

December and lasting until April,1872. The most dangerous areas were Bangaon, Ranaghat and Birnagar.<sup>24</sup> The "Report on the General Aspects of Epidemic Cholera in 1872" shows that in 1872, 1989 people were infected in Nadia.<sup>25</sup> That's how it is -

Nadia													
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
1872	584	474	168	657	236	07	08	23	09	25	90	258	1989

Source: James.L.Bry den, Report on the General Aspects of Epidemic cholera in 1872.

1873 AD There is news of cholera infestation in the Nadia District. About 725 people died of cholera this time. However, in 1874 the death rate of cholera dropped. About 215 people died in this time. Cholera reappeared in 1875, and 265 died. And until the year 1876 the situation of cholera was quite the same.<sup>26</sup> During this decade, people were so infected with cholera that Nadia became known to everyone as the 'District of Death'. The death-play by cholera continued until 1881.<sup>27</sup> Due to the cholera epidemic 470 people died in 1876, 7937 people died in 1877, 844 in 1878 and 6149 in 1881. It is now estimated how many people die each month in Nadia from 1873 to 1881 –

						Nad	ia						
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Total
1873	74	24	111	129	54	76	43	12	04	06	52	137	725
1874	18	04	38	82	52	54	01			01	10	05	215
1875	02	36	28	17	04		03	01	01	06	73	104	265
1876	66	26	20	76	17		06	01	01	03	115	139	470
1877	622	298	480	1480	558	51	06	10	23	1120	1242	2957	7937
1878	1026	622	1420	1410	420	53	05	02	09	07	67	377	5408
1879	734	380	642	740	370	221	213	26	07	06	13	50	3402
1880	53	70	153	139	114	07	02	04	05	01	19	277	844
1881	550	184	1385	2425	1276	31	12	29	16	04	17	220	6149
Total	3145	1652	4267	6438	2870	433	290	84	65	154	1535	4266	25415

Source: Cholera in India, 1862 to 1881, Bengal province, 1862 to 1881, And Review, the Bengal Secretariat press, Calcutta, 1884.

From the year 1872 to 1881, the figures show that (2866 + 1989+25415) total 30270 people died of cholera in Nadia. That is, on average, 2752 people had died every year. The death figures from private sources must have been more spine chilling. At the end of the Nineteenth century, the deaths due to cholera were seen to be alarming. The daily death rate for cholera from 1894 to 1896 was  $300.^{28}$  Then  $9000(300\times30)$  people died in the cholera epidemic in a month.

Cholera prevalence in colonial Nadia continued to decline from the twentieth century until 1939. The mortality rate of cholera in Nadia District from 1901 to 1906 was 3.88 per thousand. Another report shows that in 1903 to 1907 and from 1898 to 1902, the number of cholera disease in Nadia was 3.95 and 2.32 respectively, which was the third and eleventh place in the whole Bengal.<sup>29</sup> After 1916, the number of choleras out breaks in Nadia dropped significantly. At this time, 0.6 people died per mile in cholera. But from 1923 to 1938-39,

cholera had constantly out broken in Nadia district. A 1923 report found that 0.6 percent of the people in the district died in cholera.<sup>30</sup> The 1925 report found that cholera deaths in Nadia were 1.3 percent per mile - the highest in the presidency Division.<sup>31</sup> In 1927, cholera death toll was 1.3 people per mile in Nadia.<sup>32</sup> Again in 1923 this continued at same pace. The figures for 1933 are highlighted below –

Cholera in Bengal							
District	Effected people	Death					
24-pargana	2122	1953					
Khulna	1703	1193					
Jessor	1120	1012					
Nadia	983	566					

Source: General Report on presidency Division Rural Health Circle, 1933, Bengal Government press, Alipore, 1935.

The report for "Bengal Public Health 1935" shows that 0.9 people died per mile in 1934 and 0.7 people per mile in 1935. As a result, Nadia district witnessed 1412 death in 1934 and 1123 death in 1935.<sup>33</sup> In 1936, 1900 people died in the whole Nadia district and 378 in 1937 by cholera.<sup>34</sup> Again in 1938,1372 people died in the whole Nadia district and 1171 in 1939 by cholera disease.<sup>35</sup> Now to see how much the government's initiative was to prevent the cholera epidemic in Nadia.

The role of British Government in preventing cholera disease: It is clear to us that in the colonial period, cholera in the Nadia formed epidemic. We have also learnt that cholera outbreak was due to sewage defects and poor drinking water. For this, the governments task was to (a) maintain sewerage system and supply of drinking water. (b) Regular miniatous. But the question is whether this saintly initiative was taken by the British government.

First, in the Colonial period, after introduction of the railways in Nadia natural waterbodies began to wane. The normal rhythm of the waterbody was lost- it gradually became contaminated. But it the government does not do so, then the cholera consumes the people. From 1817 to 1869 the government did not set up tube wells. After 1870, the government excavated some wells in Dogachi, Teghari and Jhitkopota along with Krishnagar Head Quarters. The main well was excavated in Krishnagar and its adjoining areas due to the accommodation of ruling class. Thereafter, the government was not seen to take initiative in this area regarding drinking water supply for a long period of 60 years.<sup>36</sup> After 1930, Nadia Zila board took initiative to solve the drinking water problem by installing a shallow tube well in the Nadia district. But this system was also based on myths or fantasies as the shallow tube wells were not installed by the district Board or by the government at every village of Nadia District. Originally, the tube wells were installed at the site of urban administrative activities. People from remote villages still used to drink contaminated drinking water from rivers and ponds. As a result, cholera came to Nadia even after 1930 and expanded from city to village.

In the true sense, the government could not solve the problem of drinking water due to constraints, the government relinquished the responsibility to the district Board. District Board started work in 1935 to 1936. The 'District Water Supply Committee', under the management of Zila board, could not properly implement this

initiative of excavation of tub well. The proof of which was found in a 1941 referendum. It was written in 1941, the tub well on the Baikuntha Road (Near Krishnanagar) was not function for a long time, and there was no local waterbodies or any nearby river. Anjana river has become inaccessible in German hyacinth. Therefore, this referendum proves that there was no tub well at the corner of every village of Nadia. In 1944 a letter by the villagers was written to the union Board. In this letter, residents of Mahishnengra village said that they would suffer from malaria, cholera, dysentery etc. disease from water. They had wells in this village, but their condition was very bad. It they did not get drinking water; they were afraid that they would die like flies.<sup>37</sup>

The British government could not be able to solve the problem of drinking water till 1947- these two letters written by the public proves that. Due to the problem of drinking water, so many choleras occurred in Nadia. This Caused thousands of deaths in the Nadia district. who will answer it? who will take the responsibility?

Secondly, let's talk about to the initiatives for vaccination. In fact, according to the first view, the government could not take proper action in this regard. There is no evidence of establishing a health centre in Nadia from 1817 to 1860. As a result, the question of government initiatives in the prevention of cholera remains unanswered. The first substantial relief came to notice at 1923. In this case, the government called for five major warnings against cholera.<sup>38</sup> These were: -

- 1) Proper cotton cloths should be worn to prevent cholera infected.
- 2) use of disinfectant water.
- 3) Acquisition of anti-cholera vaccine.
- 4) Use of 'arrhythmic sulfated acid' to prevent disease.
- 5) Drinking water and keeping hands clean etc.

In fact, this campaign was urban centric, and it was not for rural people. As a result, people in the village were more prone to cholera. Six cities of Bengal were at the forefront of the prevention of cholera such as Hoogly, Natar, Bogura, Chinsura, Sherpur and Krishnagar.<sup>39</sup> Amongst the cities Krishnagar was a long way ahead in talking measures to prevent cholera. Cholera infected areas in the city of Krishnagar, clean drinking water was being supplied with pipes<sup>40</sup>

But the government failed to deliver the services to the villages. So, more people died in the villages due to cholera. In 1925, while 2697 people died in cholera all over urban areas 31579 people died in the village.<sup>41</sup> Another report from 1872 shows that in Nadia, 5 people in the city and 3821 in the village were affected by cholera disease.<sup>42</sup> This means that the residents of the village was getting more and more affected by it.

Therefore, based on various facts and arguments, it is said that the British government failed to take adequate steps in curing the cholera disease. The outcry of a large number of rural people was not responded by the government. Extreme indifference to vaccination can also be noted. Before 1860, there was no question about cholera awareness. The question of vaccination came only when people started to get infected. The vaccination is mainly due to selected immunization in cities and some rural areas. For example, 1925, 500 Doses Cholera vaccine were distributed by the government. Due to this small number of vaccines, only 1160 person could be vaccinated. And 1992 people died this year due to lack of vaccination and awareness.<sup>43</sup> A 1926, statistic shows that the government supplied the 3000 cholera-vaccine in Nadia. Only about 1942 people were vaccinated. And 845 people died in the absence of vaccination.<sup>44</sup> Because of this, public dissatisfaction gradually increased. In 1927, the government increased the number of vaccinations to meet this public discontent. At this time, 40300 cholera vaccination was sent to the Nadia district by the government. But

immunization was possible for 22084 people. And this year 3376 people died due to lack of cholera vaccination.<sup>45</sup> On the other hand, the government continued the vaccination process in the affected areas. Then the number of vaccinations increased. In 1934, it was possible to vaccinate 110237 people.<sup>46</sup> However, in 1935 the number of vaccinations dropped to 91102. This process continued at an extremely slow pace until 1938.<sup>47</sup> Then, because of second world war the government engaged in suppressing nationalist movements, the issue of vaccination was lurked. For this irresponsibility, 1412 people died in 1934, 1123 people 1935, 1900 in 1936. and 378 people died of cholera disease in 1937.<sup>48</sup> It is therefore understood that the colonial government had failed acutely in preventing cholera disease.

After this criticism many would say that the government was raising awareness and was taking measures for vaccination to prevent the cholera disease. So where is the government's fault? But the matter is not so easy. The statistics we are seeing are mainly of the 1930's. At that time, there was no universal vaccination system. Because the cholera vaccine did not reach the village during the 1930s, British government first started vaccination in isolated urban area in Nadia district. Now the question is, did they ever take such an initiative before? The above information and logic do not provide an answer. From 1817 to 1860, the British government did not take any initiative to prevent cholera. In this reason, thousands of Nadia's residents died of cholera in those days. There was no question of vaccination at that time. Because the cholera vaccine had not yet been invented. The cholera vaccine was invented in 1885. But even when the cholera vaccine was spread everywhere, the government still did not provide vaccine for everyone to prevent cholera. The question of vaccination comes when Europeans started getting infected by cholera. There is no evidence that cholera was vaccinated in Nadia before the 1930s. The people of Nadia did not take this two-pronged policy of ruling class. This kind of incident had been witnessed by the Nadia people for a long time, which formed the basis of various mass movements of Nadia district. Like the Indigo uprising of 1859. Many people died in cholera before and after this uprising. But the government did not take any action. As a result, the people of Nadia became dissatisfied and rebellious to the government. The people, in a large scale, subsequently participated in the Indigo uprising. Then in the Countryside, vaccination was arranged only after 1930 only to pacify public unrest caused by increasing death tolls. This process continued until 1939. Similarly, the government failed to prevent Nadia's cholera from 1930 to 1939. The manifestation of people's anger was reflected in various Gandhian mass movements in Nadia district.

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