

Environment, Disease and Modernization: Public Health in the Princely State of Cooch Behar

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Abstract

The recent years have witnessed the publication of articles and monographs on the history of public health and the development of modern health care systems in the princely states of India during the colonial period. The present article intends to critically examine the causes of the occurrences of diseases and epidemics and the introduction of modern health care systems in the princely state of Cooch Behar. The article has been divided into three main parts, firstly – the article makes a comparative study of the health care systems between the ‘pre-modern’ and ‘modern’ era; secondly – the article examines the environmental aspects of diseases and epidemics that were occurred in colonial Cooch Behar, and thirdly – the article delves into the growth and development of western medicines (especially vaccines) and the establishment of several medical institutions like, hospitals, dispensaries etc. in the princely state of Cooch Behar.

Keywords: Cooch Behar, disease, epidemics, public health, vaccination

Introduction

The history of public health in India during the colonial period has been developed as a new branch of study over the past few decades. History of public health and medicines becomes a distinctive discipline in present day historical research. The issues of diseases, medical treatment and vaccination receive considerable historical attention from the professional historians who are engaged in exploring the social and political trajectories of western medicines in colonial India. Colonization of India has provided a major breakthrough towards understanding the imperial ideology of introducing western medical system in order to combat against the oriental diseases. Thus, western medicines and medical systems appeared as a major justification for the colonial rulers who wanted to tame the Indian body through the controlling of Indian diseases by western system of treatment and healing. David Arnold argues that western ‘medicine represented direct intervention in, and interaction with, the social, cultural and material lives of the Indian people.’¹ While designating this process as ‘medical colonization’,

Arnold, elsewhere, argues that the western medicines had ‘become one of the most confident expressions of British political and cultural hegemony in India.’² Harrison and Pati show that the medical manuals which were written by and for Europeans had largely emphasized ‘the dangers posed by the habits of Oriental peoples and often blamed them for their failure to make progress in matters of public health.’³ This attitude of the colonial medical practitioners and administrators had provided the justification of colonial hegemonic influence over the question of public health of the ‘inferior’ colonized people.

Although there is a good deal of literature on the history of public health and western medicine in British India, existing literature on the medical history of the Princely States in colonial India still deserves considerable historical investigation. However, in the recent years, historians have dealt with the diverse aspects of public health and western medicines in the princely states of colonial India. But these contributions have mostly concentrated on the princely states of southern India, viz., Travancore and Mysore.⁴ Scholars have shown the history of modernization of public health conditions and the institutionalization of western medicines in the princely state of Travancore under the influence of the Christian Missionaries and through the introduction of colonial health policies.⁵ Though recent studies have focused on the Orissan states,⁶ other princely states of Eastern or North-Eastern India, till date, have not received any considerable historical attention. Hence, the present article intends to fill this gap by trying to examine the issues of public health, disease and epidemics and the introduction and implementation of western medicine and medical system in the princely state of Cooch Behar during the period between second half of the nineteenth century and first half of the twentieth century. Though there are few write-ups on the history of epidemics and western medical system in the princely state of Cooch Behar,⁷ there is still ample scope to re-examine the following issues - environmental aspects of diseases and epidemics, growth of western medical system and vaccination, concerns over women health care etc. in the princely state of Cooch Behar during the period between the late-nineteenth century and early twentieth century.

The present article intends to critically examine the causes of the occurrences of diseases and epidemics in colonial Cooch Behar and the introduction of modern health care systems in the princely state of Cooch Behar. The article has been divided into three main parts, firstly – the article makes a comparative study of the health care systems between the ‘pre-modern’ and ‘modern’ era; secondly – the article examines the environmental aspects of diseases and epidemics that were occurred in colonial Cooch Behar, and thirdly – the article delves into the growth and development of western medicines (especially vaccines) and medical institutions like, hospitals, dispensaries etc. in the princely state of Cooch Behar.

Tradition and Modernity: Situating Cooch Behar

The princely State of Cooch Behar had a long history of struggle against the Mughals. It was founded by Raja Vishwa Singha and he was the first ruler of the State who took the title of Kamateswara. Hence the State was also known as Kamta-Bihar, as it is mentioned in the Assamese historical chronicles. Though, Khan Amanatulla Ahmed mentioned in his book that the State was founded in 1496⁸, according to Jaynath Munshi the State was founded in 1522 by Vishwa Singha.⁹ However, the colonial

contact with Cooch Behar can be traced from days of the Anglo-Cooch Behar treaty in 1773 when the East India Company had responded in support of the native state against the Bhutan's aggression in Western Duars. Since then, Cooch Behar became an ally of the British colonial power in Indian subcontinent and the British administration made an 'indirect' inroad into the daily affairs of the state through the British Resident at the court of the Cooch Behar Maharajas.¹⁰ The process of westernization in the state had started since Maharaja Nripendra Narayan ascended to the throne as a minor maharaja. The reign of Maharaja Nripendra Narayan (1863-1911) has been regarded by the historians as an 'era of modernity'¹¹ due to the direct influence of colonial systems and culture in the development of the state. The subsequent years had also witnessed a cordial relationship between Cooch Behar and the British government, and the native state had responded actively to the path of modernization in the fields of administration, education, public health, communication, etc.

Before the advent of colonialism, the people of the princely state of Cooch Behar were heavily depended upon the indigenous medical systems which were based on their own traditional and religious beliefs and practices. According to Hunter, the population of Cooch Behar was of a mixed origin.¹² The Rajbanhis or Koches formed the majority of population along with Muslims and other tribes viz. Rava, Boro, Garos, Meches. These people had mostly depended on natural things to prepare their medicine, besides they worshiped nature for their physical healthiness. The Rajbanhis had their own set of beliefs to deal with the disease and epidemics like cholera, malaria, small-pox, fever etc. Ghosh explains that the Rajbanshi medical practitioners 'excelled in the treatment of wound, pimple and fracture.'¹³ The Rajbanhis had beliefs in the supernatural causes of the diseases and they worshiped their own tribal gods for cure and healing. The practice of worshipping of tribal gods were associated with several natural deities, plants and animals.¹⁴ *Chandi Thakurani* was worshiped by them during the outbreak of cholera.¹⁵ There were also some local gods viz. – *Gram Thakur, Masan, Jit-Bahah Thakur*, who were regularly worshipped by the Rajbanhis. Rajbanhis had also faith in black magic to get rid of their problems and diseases. Saha argues that exorcism (commonly known as *Mohanti Kora*) was the method used by the Rajbanhis or the other tribes in order to get rid of the evil spirits that brought out diseases and misery to the people.¹⁶ Saha further argues that these rituals which were conducted under the direct and active guidance of the local traditional healers had a profound impact upon the minds and lives of the local people than the modern medical treatment. Cholera was commonly known as *dhum* to the local people. When cholera visited the state the Meches, one of the principal aboriginal tribes of Cooch Behar, worshipped the goddess *Kali*, who was popularly known as *Kali Thakurani*.¹⁷ People had made offerings to the goddess to please her so that they could survive from the epidemics. The introduction of modern health care systems, especially during the initial years of its introduction, had little impact upon the minds and practices of the local people who had displayed their keen interests towards the superstitious or medieval practices.

Though the present article mostly deals with the period from 1863 onwards upto the 1940s, it is important to have a brief look at the medical system of the princely state prior to the 1860s. Before the year 1819, the system of allopathic medicine was unknown in Cooch Behar. The Rajas of Cooch Behar had from early times *Kavirajas* or *Ayurvedic* physicians. But this form of treatment was confined only to the royal family

and to the upper classes. It did not penetrate to the masses who by and large had faith upon the *Ojhas* or village quacks.’¹⁸ In June 1814, the Commissioner, MacLeod applied to the British Government to send a qualified medical man to the State but due to the paucity of such men the Government was unable to send one. In November 1819, an Indian doctor was sent to Cooch Behar on a salary of Rs. 40 per month. In 1841 Maharaja Sibendra Narayan applied to the British Government for a qualified medical man and in February 1842 Dr. Syama Charan Sarkar, a graduate of Medical College of Calcutta was appointed as Medical officer at the Maharaja’s Court.¹⁹ In 1846, the Maharaja asked for an European Medical Officer and Dr. Ralph Moore was appointed on a salary of Rs. 350 as the Medical Officer of the Maharaja. Although there was a qualified Medical Officer since 1842, there was no attempt to open any hospital or dispensary before Colonel Haughton took over the charge of the administration during the minority of Maharaja Nripendra Narayan.’²⁰

Environment, Disease and Public Health in Colonial Cooch Behar

Captain Lewis had depicted the climate of Cooch Behar as ‘damp and malarious.’²¹ According to Hunter, the chief diseases which prevailed in the State were ‘dysentery, malarious fevers, spleen, goiter and venereal diseases.’²² While dysentery and malarious fever had been attributed by Hunter to the ‘dampness of the soil and humidity of the climate, together with the excessive heat during the day in the summer months, followed by sudden cold after sunset’, goiter on the other hand was caused by drinking of polluted water of certain streams.²³ It is to be noted here that though Hunter had mentioned about Captain Lewis’s description of the climate of Cooch Behar, there was a sharp disagreement between them. For Lewis though the climate was ‘not so hot as in other parts of Bengal’, Hunter had designated the climate of the state with having ‘excessive heat.’

The history of the introduction of western medicine or western system of treatment in Cooch Behar was to some extent associated with the personal experiences of Maharaja Nripendra Narayan. In the year 1884, Maharaja Nripendra Narayan was seriously attacked by typhoid-fever and again in 1886 he had to suffer from malarial fever. As a therapy of treatment ‘he had to make a trip to England to recoup his health and he came back fully recovered in February 1897.’²⁴ From this time onwards Maharaja’s faith in western ‘climate and treatment started to take a deep root’ and the subsequent years had witnessed the unprecedented progress of western medical-system throughout the state. However, the majority of the people still believed in the traditional healing system and till the end of the nineteenth century ‘the people had no faith in scientific medicines, charitable dispensaries and hospitals.’²⁵ Among the epidemics, cholera and small pox were the most frequent visitors of the state. In local language cholera was known as *Garmari* and small-pox was called as *Thakurani*.²⁶ This part of the article, however, intends to examine the occurrences of some principal diseases like small-pox, cholera, and malarial fever that had taken shape of epidemics in the state.

Small pox: Small pox happened to be one of the most life-threatening diseases in Cooch Behar. Treatment of small-pox had received official consideration from the time of Maharaja Nripendra Narayan. In the year 1878-79 only 38 small-pox cases were reported for the first time,²⁷ of which 18 recovered, 8 died and 12 were under treatment in the hospitals and dispensaries at the close of 1879.²⁸ The next year saw a rapid

decline in the small-pox cases and in 1879-80, total small-pox cases were only 9²⁹ which was further reduced to only two in the year 1880-81.³⁰ The government was successful to check the occurrences of small-pox for the next couple of years.³¹ But after 1883 small-pox cases were gradually increased. On September 1884-85 small-pox appeared in the State at Shitai in Dinhata sub-division, where total 17 cases were found (9 men, 2 women and 6 children). Out of 17 cases one man and one woman were died.³² Apart from small-pox, two cases of chicken-pox were under observation during the year 1892-93, being treated at the Police and Sudder Hospitals, respectively. With the exception of Fulbari to the east, small-pox appeared in a more or less virulent form in all the sub-divisions in 1902-03. Mekhliganj and Mathabhanga had to suffer most.³³ In 1905-06 total numbers of patients were only 81 in the state who were suffering from small-pox.³⁴ In the year 1906-07 small-pox was prevalent in a more or less sporadic form and total small pox cases were 132 in the State.³⁵ Though the year 1908-09 had been considered as one of the most 'unhealthy year' due to the prevalence of several diseases which had visited the state in a single year, the total small-pox cases were 591 against 665 in the previous year.³⁶ There was, however, a considerable increase in the number of reported cases of small-pox which broke out in a virulent epidemic form in the Mathabhanga sub-division in the year 1916-17. Out of a total of 2290, Mathabhanga alone reported 1501 cases.³⁷ Special measures had been adopted to cope with the epidemic of small-pox and medical staffs, doctors and vaccinators were organized for the affected areas. Several taluks of the State were infected by small-pox during the year 1927 which led to the appointment of 2 temporary Medical Officers. The total number of attacks was 845 out of which 145 only ended fatally, i.e. 17.15 per cent victims had died. It was stated that the low percentage of mortality was due to the thorough vaccination and re-vaccination.³⁸ In the beginning of 1928, small-pox broke out in epidemic form in the Sudder and in the sub-divisions of Dinhata and Mathabhanga, which sought for the full-fledged deployment to the newly organized Health Department of the state. Fortunately, the mortality throughout the epidemic remained moderately low - 332 persons were killed out of a total of 1848 cases, and the percentage of deaths was 17.20.³⁹ During the 1928-29 administrative year, small-pox that broke out in an epidemic form had caused 254 deaths against 1849 cases with 332 deaths in the previous year. The percentage of death was 16.26 against 17.20 in the previous year.⁴⁰

A few steps were taken to deal with the epidemics of small-pox. For the accommodation of small-pox patients a temporary shed was erected by the municipality near Kalighat. Though in other parts of Bengal small-pox came as a server form, but its impact was not so much dangerous in Cooch Behar. Several measures were adopted time to time by the Maharajas in order to curb the spread of small-pox. The principal measures included – a) the 'appointment of temporary medical officers for the quarantined-passengers those who were coming up to Cooch Behar through the stations of Dinhata, Cooch Behar, Haldibari, and Changrabandha; b) appointment of special constable to help the medical officers for the purpose of effective allotment of treatment, c) building of temporary huts for the segregation of suspected cases close to each of the stations mentioned above and d) beginning of thorough vaccination and re-vaccination, especially in Dinhata and Sadder Sub-division and disinfection of any locality before the disease could spread in an epidemic form.⁴¹

Malaria: The princely state of Cooch Behar saw the frequent occurrences of malarial fever and there was hardly any year when malarial fever did not take a violent shape. In the 1870s, measures were taken to reduce the occurrences of malarious fever by clearing of jungles, opening up of roads, filling up ditches, constructing drains, etc.⁴² Despite of these measures, in the year 1878-79, total 189 malaria cases were reported and 13 patients were died due to malaria in Cooch Behar.⁴³ However, the next year witnessed a rapid increase in the number of malarial fever. In the year 1879-80 total malaria patients were 3290 and in the year 1880-81 it was increased again and total 4476 cases were reported in the health department.⁴⁴ The year 1884-85 was very unhealthy for the State; in this year malarial fever took dangerous character: total 5605 patients were found in all over the State and maximum patients were found in Mekhligunj sub-division.⁴⁵ In 1891-92 a huge number of people of the State had to suffer from malarial fever due to the heavy rainfall in the State. Total 7495 people were attacked by this fever and many people lost their lives in the hospitals and dispensaries.⁴⁶ In 1893 a temporary dispensary was opened at Takagach area to cope with the epidemic malaria.⁴⁷ In 1895-96, flood was responsible for the outbreak of malaria in the Princely State of Cooch Behar. But the Civil Surgeon of the state asserted that the want of proper drainage system was the main cause of fever in the rural areas of the State. He asserted that in Takagach and adjacent areas across the bed of the old Torsha River, the number of deaths was near about 300 out of 800 people. The epidemic appeared due to the cutting up of river channels which occurred few years before and it was followed by silting up of its bed which had obstructed drainage.⁴⁸ The year 1897-98 was also very feverish one— a total of 5606 people were affected by the malarial fever but most of them had recovered in the hospitals, only a few people had lost their lives.⁴⁹

There was a marked decrease of sickness during the year 1902-03. This improvement in public health conditions had been attributed to the rainfall which was ‘exceptionally heavy and continuous’ for the year.⁵⁰ Malaria showed the most marked decrease, especially in the Cooch Behar town itself, and in those portions of the town which had lately been raised and of which the drainage had improved. This raising of the different low- lying portions of the town was one of the most important steps from the sanitary point of view.⁵¹ However, the year 1908-09 was an unhealthy one. This was principally due to the prevalence of malaria which had increased to 15684 at the Sudder Hospital and Dispensaries.⁵² A high percentage of school boys was infected with malaria. The situation had aggravated to such an extent that the Civil Surgeon had been provided with a machine for the manufacture of quinine tablets to ‘enable the Medical Department to distribute [quinine] in a convenient and not unpalatable form.’

In the year 1910-11, the Cooch Behar Town Committee adopted some scheme to prevent malaria. 98000 square feet of an area was being raised, leveled and drained to prevent the accumulation of stagnant water.⁵³ Despite of these programmes, the subsequent years had witnessed a massive increase in malarial fever.⁵⁴ In order to prevent malarial fever free use of quinine in all the dispensaries had been prescribed. Since the scheme of sale and distribution of quinine through the Fauzdari Adhikar’s office proved unsatisfactory during the last ten years, the Civil Surgeon had proposed that two Epidemic Inspectors with the help of their assistants should be employed to visit the various Hats during the malarial season. On the other hand, weekly

administration of quinine to convicts in jail proved successful in stamping out Malaria there.⁵⁵ However, cases of malaria had been on ever increasing form and between 1916-17 and 1918-19 malaria appeared as a major epidemic in the state.

Table 1
 Police returns for the accounts of diseases from 1916-17 to 1918-19

Diseases	1916-17	1917-18	1918-19
Malaria	13309	19069	20183
Cholera	38	100	1253
Small-pox	2290	1454	281
Influenza	Nil	Nil	1320

Source: *The Annual Administration Report of the Cooch Behar State for the years, 1918-19*, p. 55.

The above table shows the number of malarial cases which were treated at different hospitals and dispensaries during the period from 1916-17 to 1918-19. It can be said from the above table that the people of Cooch Behar were more prone to malarial infections during the period than the other diseases. As malarial fever had continued to be a recurrent disease, a spleen index survey was regularly conducted by state medical authority. As a preventive measure against malarial fever free quinine tablets were distributed in hospitals and dispensaries and free travelling dispensaries were started with centers at Rajarhat, Dodearhat, Dewanhat, Tapurhat, Sutkabari, Pundibari, and Banesar.⁵⁶ An anti-malarial department was started from 1937 for taking anti-mosquito measures within the town area. Dr. A. Rahaman, the Sub-Assistant Surgeon who had completed his training in the treatment of malaria from Calcutta School of Tropical Medicine, was in charge of the department under the supervision of the Civil Surgeon. He first made a general survey of the town. Then certain measures were adopted to eradicate the causes of malaria – a) the weeds and jungle of the Torsha were cleaned; b) *pucca* drains were constructed; c) latrines of the houses accumulated in some places were washed; d) the cistern maintained for cows and buffalos at the crossing of roads, unused wells and stagnant water in drains were cleaned and wiped off; e) larvicides were sprayed on stagnant water in the several places of the town.⁵⁷

Cholera: Main reasons of the outbreak of cholera were impure water, bad foods, insufficient clothing, improper accommodation facilities, defective drainage system and the overall unhealthiness in the princely State of Cooch Behar. The main sources of drinking water of the people were rivers' water and tanks where people also washed themselves, their cattle, clothes, utensils, etc. They also utilized this water of disposing dead bodies those who were killed by cholera. The indigenous people of the State used to take dry fish and it was an important cause of spreading cholera.⁵⁸ In 1869, cholera had taken a virulent form in the state. The principal character of the disease was that 'after the purging and vomiting had ceased, the patients relapsed into a remittent type of fever, which terminated generally in coma and death.'⁵⁹ The chief victims of cholera in 1869 were the ill-fed peasantry and labourers who had no access to proper food and clean water. The Sub-Assistant Surgeon of the state remarked that out of 528 cases that came under treatment, 247 were cured and 281 were died.⁶⁰ Cholera assumed an epidemic form at Toofangunj in November and in March, 1878-79 in the Mathabhanga

Sub-division, besides being more or less prevalent in all parts of the State. Chlorodyne and Cholera pills were freely supplied to all police stations, and the native doctors and compounders were sent from time to time to treat patients in the parts which were most severely infected.⁶¹ Ecological conditions played a very crucial factor towards the occurrence of cholera. Dr. Briscoe, the first Civil Surgeon of the state, remarked that cholera generally occurred 'when the rainfall after the cessation of the rainy season [was] scanty, [and] the water supply in many parts of the state [became] bad.'⁶² Flood had also contributed to the occurrences of cholera. According to Briscoe a reference to the past reports had shown that 'an exceptionally heavy rain-fall accompanied with floods adds to...the general healthiness of the year.'⁶³ During the year 1883 cholera prevailed in some parts of the State, and assumed an epidemic form in some villages in the south of Dinhata sub-division.

J. L. Hendley, the Civil Surgeon of Cooch Behar in 1887-88 had mentioned in his *Report* about the prevalence of severe cholera epidemic during the years. To quote Hendley: 'The chief feature in the Medical History of the year 1887-88 was the terrible epidemic of cholera, which created frightful ravages in the mofussil.'⁶⁴ In 1892-93 cholera broke out again in Dinhata and a large number of Muslim populations became the victims of the epidemic. The native doctor had ascribed the outbreak to the eating of new rice and drinking polluted water.⁶⁵ However, floods played a crucial role in this epidemic which was more intensified by the inundation. Almost every hut was surrounded by water and the Civil Surgeon was of the opinion that the existing cause of the diseases was the drinking of this flood water which was laden 'with impurities of all kinds.' The carcasses of the cholera affected dead bodies were thrown out indiscriminately into the water surrounding the various houses that further contaminated the water 'with the specific poison which, placed under favorable conditions for development, multiplied freely, and spread the disease.'⁶⁶ In 1906, Cholera broke out in a severe form due to a heavy flood that occurred in Cooch Behar.⁶⁷

In 1909-10 an elaborate anti-cholera campaign was organized with the approval of Maharaja Nripendra Narayan and some preventive measures had been adopted. In order to supply good drinking water *pucca* wells were dug throughout the State of Cooch Behar on the grant-in-aid system and a large number of Notton's Tube wells were kept ready for the emergencies.⁶⁸ While on the one hand, pamphlets containing short and simple hygienic rules in the vernaculars had been widely distributed, the village pundits on the other hand spread the concept of hygiene among the rural populations.⁶⁹ Moreover, the State had assured the supply of medicine, sago, barley and raw fruits to the victims. In 1924, temporary medical officers were appointed and some permanent staff with compounders were sent to the mofussil areas to cope with the diseases. Two temporary dispensaries were opened for this purpose - one at Kholta and the other at Bhaiskuchi. Anti-cholera inoculation was introduced which proved successful. The police and the military staff and other hospital staff were inoculated first as preventive measures against cholera. Despite of several attempts to check the spread of cholera, reports came from all the sub-divisions of the State and the disease threatened to spread in epidemic form in 1925. In 1925-26, the subdivision of Mathabhanga had suffered most from the epidemic. The entire sub-division was divided into five circles with a Medical Officer and a staff, and a large number of tube-wells were installed in the

affected areas to supply pure drinking water.⁷⁰ Fairs (*melas*) had acted sometimes as the main reason of spreading cholera in the state. In 1927, persons returning from *Baruni Mela* imported cholera to the Taluks of Dinhat and the Sudder sub-divisions. The next year cholera appeared in a severe form. Three were altogether, 4529 cases with 3685 deaths. The percentage of death from cholera was 81.36. The increased number of deaths was mainly due to the scarcity of pure drinking water and late information of the outbreaks in taluks.⁷¹ An anti-cholera fund was created in order to serve the expenditure for the treatment of cholera.⁷² In order to deal with the diseases and epidemics, the princely state of Cooch Behar had introduced western medicines in the state and established a good number of hospitals and dispensaries.

Vaccination, Hospitals and Dispensaries: Modernization and the State

During the time of Maharaja Nripendra Narayan process of vaccination was started in the princely State of Cooch Behar. Prior to 1865-66, the ‘inoculation’ system was the only preventive method against small-pox. Since the process was risky there had been hardly any other preventive measures that were adopted against small-pox. However, modern vaccination was started in the Raj Family in the year 1868-69 when Maharaja was young and only 5 years old. Total 81 vaccinations had been performed in the Royal Family in 1868-69.⁷³ In 1869-70, and the following year, Colonel Haughton obtained some Government vaccinators from the Darjeeling circle, but the local people were very much averse to vaccination. One Deputy Superintendent and vaccinating staff were appointed during this time.⁷⁴ Considering the popularity of the local inoculators among the people, Babu Bireswar Palit, who was then in charge of a medical unit of the State, at the request of the Commissioner, had decided to educate the indigenous inoculators about the process of modern vaccinations. But, popular response towards vaccination was not favourable enough and great difficulties were experienced on many occasions. However, vaccination system was gradually improved over the years due to increasing consciousness among the people along with the active help of the State’s health department. During 1879-80, it was decided that a thorough vaccinations of the whole State should be done, and that inoculation, which by that time had greatly decreased, should be prohibited. In order to execute this decision, seven natives of Cooch Behar were sent to Dr. Lidderdale for acquiring knowledge about the Government (western) system of vaccination.⁷⁵

Table 2

Year	Number of persons vaccinated
1873-74	4449
1874-75	7065
1875-76	7825
1880-81	17447
1885-86	28127
1890-91	13755
1895-96	20709
1899-1900	16895

Sources: Durgadas Mazumder, *West Bengal District Gazetteers: Koch Bihar*, p. 184.

The above table has shown the increasing number of populations who were vaccinated during the period between 1873 and 1900. The programme of vaccination had reached to the highest in 1885-86, when 28127 people were vaccinated. The reason for this increase had been attributed to the appointment of a good number of staffs who were engaged in the programme of state-sponsored vaccination. The British administration had been directly engaged with the process of vaccination in the state and had appointed personnel for the maintenance of the programme. Dr. Briscoe writes in 1884-85:

“...altogether 40 licenses were granted, 29 to old vaccinators and 11 to apprentices, resident of Cooch Behar, who qualified themselves during the season. Of the vaccinators 3 came from Dacca, 3 from Bogra and 5 from Boda, these 11 men were told at the close of the season, that it would be useless their coming here again, as licenses will not be granted in future, to any but Natives, or residents of the States.”⁷⁶

The governmental policy of involving the local people of Cooch Behar was merely an attempt to popularize the vaccines which faced serious criticism from the aboriginals of Cooch Behar. It is to be noted here that though natives and local people of Cooch Behar had received license for vaccination during the early phase, they were debarred from this programme in the later phase when vaccination received considerable popular participation.

During the late-1880s programme of vaccination received considerable success in the state. In 1887, Dr. Hendley reported that

‘vaccination was carried on during the cold weather with great energy and success, and the fact that not a single authentic case of small pox [was] reported from any of the dispensaries speaks volumes for the good which [had] already accrued since vaccination was introduced into the State.’⁷⁷

After considering the ‘success’ of the vaccination programme, Hendley suggested for reduction of licensed vaccinators in future.

Table 3
Statistics of Vaccination for the period between 1915 and 1920

Vaccination	1915-16	1916-17	1917-18	1918-19	1919-20
Total	28211	40019	50584	64856	28616
Males	16078	23269	29115	41100	17854
Females	12188	16750	21464	28991	11262
Christians	Nil	Nil	Nil	Nil	30
Hindus	19119	25057	33169	47570	19928
Mahomedans	8952	13946	17118	21729	8567
Other castes	140	1016	297	776	96
Total successful cases	25393	36910	40587	61440	19981

Sources: Extracted from the *Annual Administration Report for the years between 1915 and 1920*, various pages.

The above table shows a vivid description of the execution of vaccination works by the state. It can be noticed from the above table that the process of vaccination attained a

steady success in the state between the years 1915 and 1920. There was considerable number of women who were vaccinated during this period. It is to be noted here that despite of initial unwillingness of the local population for getting vaccinated, large-scale participation of women has demonstrated the signs of social acceptance of western medicines. It can be said that the western medicines had made a significant inroad into the households of the natives of Cooch Behar. Thus, women's health received an important consideration by the state. The above table also shows a growing disparity between the Hindus and Muslims in regards to the acceptance of the vaccines. The total number of Muslims (70,312) who received the vaccines were almost half than the Hindus (1,44,843). The situation was even worse for the other lower castes who did not show any inclination towards the vaccination. The involvement of minimum number of the other castes had also included certain amount of persuasion from the end of the state which was not successful always to bring a considerable portion of other castes for vaccination. The situation had not improved in the later years. Muslims and other lower classes were still hesitant to approve the vaccines for general uses for their respective communities.

Table. 4
 Statistics of Vaccination for the period between 1924 and 1935

Vaccination	1924-25	1925-26	1926-27	1927-28	1928-29	1929-30	1930-31	1931-32	1932-33	1934-35
Total	32892	45424	55896	41691	47777	28537	12593	14861	23218	43641
Males	18887	29858	34316	26898	30282	18349	7344	8136	13879	27892
Females	14005	16066	21580	14793	17495	10188	5249	6225	9389	16649
Hindus	20867	31781	39155	28168	33274	18157	8068	8783	13097	29168
Mahomedans	11512	13643	16698	13341	13979	9968	4457	5413	9854	14102
Christians	10	Nil	10	Nil	85	12	02	Nil	21	85
Other caste	03	Nil	33	182	491	400	66	165	246	336

Sources: Sources: Extracted from the *Annual Administration Report for the years between 1924-25 and 1934-35*, various pages.

The above-mentioned years had witnessed significant development in regards to the popularization of vaccination programme in the state. In 1933, a separate vaccination department was started to maintain a Sub-Assistant Surgeon with 4 Inspectors and 25 paid vaccinators at state's cost. From the above table it can be said that the number of vaccinated people reached to 55896 in 1926-27, which remained highest for the above-mentioned period. Although the number of the vaccinated persons among the Muslims had increased, it still remained less than half of the Hindus. The number of total vaccinated populations had also witnessed a declining trend than the previous period (table 3). The number of vaccinated people had even decreased for the lower castes during the period between 1924 and 1935. One probable reason might be, as it was reflected in several *Administrative Reports*, the lack of education and consciousness among these two sections of society which demonstrated a delayed, sometimes negative, response towards the acceptance of western medicines despite of active propagation carried out by the native and colonial rulers.

The colonial Cooch Behar had witnessed the establishment of a large number of hospitals and dispensaries throughout the state. Harrison and Pati argue that a study of

hospitals provides important questions 'about the scope and influence of Western medicine.'⁷⁸ The first dispensary was opened in the town of Cooch Behar in 1865 with Babu Hari Charan Sen, a native doctor.⁷⁹ There were also charitable and ayurvedic dispensaries in the state. In addition to the existing Sadar dispensary, several rural and sub-divisional dispensaries were established throughout the state. The first Mofussil Dispensary was opened on 13th June 1873 in Dinhata for out-patients and in 1874-75 it was totally settled for in-patients. On 9th August 1874, Mekhligunj Dispensary was opened and on 28th September of the same year Mathabhanga Dispensary was established. Each of these dispensaries was provided with one Hospital Assistant, one cook, one servant and one sweeper. However, no qualified medical graduate or licentiate officer till that date was in charge of the sub-divisional Dispensaries or Hospitals. During the subsequent years rural dispensaries were established at Haldibari and Fulbari which was then the Head-quarters of Tufanganj subdivision. Despite of the establishments of a good number of dispensaries across the state, the common people of the state 'had no faith in European medicines and [preferred] their Ojhas or village quacks.'⁸⁰ The doctors who were appointed for the dispensaries had mostly dealt with the diseases like fever, spleen, rheumatic affections, skin-disease and goitre. There were also dimensions of social disparity in regards to the availing of modern treatment by the women in the hospitals. Women did not generally come up to receive treatment in the hospitals and dispensaries. The Civil Surgeon remarked: 'Women of the lower castes [did] not attend the hospital, but... the majority of female in-patients in the Sadar Dispensary have been prostitutes suffering from venereal diseases.'⁸¹ These dispensaries and hospitals were established at the State headquarters and at the sub-divisional headquarters and were visited mainly by the people of the towns and those living close by. The rural people remained apathetic to the scientific treatment and still had faith in *Ojhas* and village quacks. When there was a serious cholera epidemic in 1881 only a few of the case came to the hospitals.⁸² In the year 1898-99 another initiative was taken by the government of the State in the field of medical for the railway department. The Superintendent of Cooch Behar after consultation with the Manager of the Eastern Bengal State Railway and Civil Surgeon, proposed the appointment of a native doctor to travel up and down to give medical attendance in all ordinary cases occurring within railway limit.⁸³ In 1900-01 another new hospital was opened at Dinhata.⁸⁴ In 1902-03 the official records highlighted that the number of hospital and dispensaries were increased from 8 to 9 respectively.

On 15th February, 1917 the proposed Carmichael Ward was ready for service and on that occasion State authority had also opened extra accommodation facilities for dispensary, library, medical store, separate bed arrangement for female patients and outdoor department for the Sadar Hospital.⁸⁵ On 16th February, 1918 Governor of Bengal, Ronaldshay came to Cooch Behar and was graciously pleased to lay, at an open durbar of Cooch Behar, the foundation stone of a ward named, Ronaldshay Ward at the Sudder Hospital of Cooch Behar.⁸⁶ Clinical laboratory was established in Cooch Behar State. In the beginning of 1928, a regular Clinical Laboratory was started in a miniature scale in the Sadar Hospital under a specially trained Sub-Assistant Surgeon and every effort is being made to improve it gradually.⁸⁷ The Cooch Behar Sadar hospital had an Assistant Surgeon as Medical Officer in charge. The clinical laboratory and anti-rabies department was in charge of a Sub-Assistant Surgeon for the outdoor

department. The other part of medical treatment i.e. the veterinary department was also developed very speedily during the reign of Maharaja Jagadipendra Narayan. There was only one Veterinary Assistant Surgeon in the service of the State. The Regency Council of Cooch Behar decided that veterinary department should be strengthened, and accordingly, a second veterinary assistant surgeon for touring the state was appointed in 1924.⁸⁸ In 1937 the medical department of Cooch Behar sent sub-assistant surgeon of Sadar Hospital at Calcutta School of Tropical Medicine for receiving training on anti-malaria work.⁸⁹ By the year 1937-38 the Medical Department in Cooch Behar had been greatly improved. Surgical operations were also performed in the Sadar hospital from the initial years of the decade of 1901-10 and in course of time the number of surgical operations had gradually increased. The total number of operations performed in the Sudder Hospital in the year 1902-03 under report was 423 against 367 in the preceding year.⁹⁰ Major and minor surgical operations were performed in the Sadar hospitals and only minor surgical operations were performed in the sub-divisional hospitals. The surgical operations performed in 1937-38 numbered 1090 against 1004 in the previous year.

Issues of women health and maternity cases had received considerable importance in the state which demonstrated the implementation of modern features of the medical system in Cooch Behar. Recent studies have shown that the system of midwifery had been institutionalized by the colonial government during the nineteenth century as a 'scientific-medical discipline' in colonial Bengal.⁹¹ The princely Cooch Behar had also responded to this development towards modernization of the system of midwifery. During the reign of Maharaja Nripendra Narayan a midwife was appointed to the Sadar dispensary in 1889-90.⁹² In the year 1913 during the time of Maharaja Jitendra Narayan, midwives attached to the medical department attended 89 cases and at the same time it is to be noted that due to the available medical facilities there was no record of premature death caused by the maternity in the princely State of Cooch Behar.⁹³ During the time of Maharaja Jagadipendra Narayan concerns over women's health had immensely improved. For maternity cases in 1923 one midwife was employed at Dinhatra for maintaining the Dinhatra sub-division and another midwife was appointed at Mathabhanga sub-division to control the maternity cases.⁹⁴ It is important to note here that a considerable number of delivery cases had come to the Sadar hospital and other sub-divisional hospitals. Though most of the maternity cases had been primarily dealt with the domestic helps, the system of child-birth in the hospitals during the 1920s and 30s had reflected the progressive attitude among the small section local people. Apart from the recruitment of female nurse, there was a system of appointment of male nurse in Cooch Behar. In order to tackle the work-load male nurses were also employed and a Head Compounder, Sri Srijit Gati Nath Bose had continued to work as Head Male Nurse in 1925-26.⁹⁵

Midwives who were associated with maternity cases were given official appointments in the princely Cooch Behar. A post of a Lady Doctor was created in the Sadar Hospital of Cooch Behar and Miss Annie Soudamini Biswas, Sub-Assistant Surgeon, was appointed to the post on the 9th November 1929.⁹⁶ One Midwife was employed at Dinhatra and one at Mathabhanga, the cost was borne by the Town Committees of those two places. The Midwife attached to the Sadar Hospital attended 106 maternity cases, of which 51 were male and 55 females. Out of the total number one case was twins, 12

were still-born and 2 were difficult labour cases and had to be attended by Surgeon. The Tufangunj and Mekhligunj Sub-divisions were each provided with a Midwife. In the latter place the cost was partly met by the State and partly by the local contributions.

Conclusion

From the above discussion it can be said that the issue of introduction of western medicines and western medical systems in the princely state of Cooch Behar had remained a contested terrain due to the simultaneous continuation of the indigenous medicinal practices and the modern hospitals or dispensaries. Despite of repeated governmental efforts western medicines or especially the vaccination programme had been able to include a very tiny section of local population in comparison with the total number of populations in the state. During the initial years, though the administration had dealt with the issue with 'kindness and persuasion', in fact, a majority of people did not allow their children to get vaccinated. Moreover, the number of children among the vaccinated population of the state was remarkably low in comparison with other groups; and caste and religion had acted as the major barrier for accepting the western health care systems in the princely state of Cooch Behar.⁹⁷ It can be argued from the above discussion that despite of adopting several precautionary measures in addition with the implementation of modern medical treatments, cholera and malaria had made repeated epidemic visitations in the state throughout the period of our study. Hence, it can be argued here that though the state had made the quinine tablets free for the people, it had failed to eradicate the problems of water-logging or to introduce a better drainage system that could check the recurrence of malaria. Cholera, which was mainly caused by the consumption of polluted drinking water and other food-habits, had revealed that the administration had failed to provide pure drinking water to a large section of population even at the time of calamities. Thus, in both cases, water remained a very contested issue towards understanding the condition of public health in the princely state of Cooch Behar. The princely Cooch Behar had witnessed the establishment of a massive number of local dispensaries throughout the state. The state had also made considerable progress towards adopting the modern techniques of operation and treatment. But the paucity of adequate number of doctors and nurses hindered the flow of growth of western medical treatment in the state, and people were largely depended upon the indigenous medicines. Thus, it can be concluded that the introduction and development of modern health care system in the princely state of Cooch Behar had received a mixed-success which was blended with negation, reluctance, and acceptance.

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