



## Vaccination Drive in colonial Bengal of 20<sup>th</sup> Century: A Brief Historical

Madhusudan Nayek, Research scholar, Department of History  
RKDF University, Ranchi, Jharkhand, INDIA

### ORIGINAL ARTICLE



#### Author

Madhusudan Nayek, Research scholar

shodhsamagam1@gmail.com

Received on : 07/02/2024  
Revised on : -----  
Accepted on : 08/04/2024  
Overall Similarity : 01% on 30/03/2024



### Plagiarism Checker X - Report

Originality Assessment

Overall Similarity: **1%**

Date: Mar 30, 2024

Statistics: 18 words Plagiarized / 1912 Total words

Remarks: Low similarity detected, check with your supervisor if changes are required.

### ABSTRACT

The western medicine was introduced in colonial Bengal to prevent the infectious tropical diseases from British soldiers and officials in early decades of 19<sup>th</sup> century. Along with the western medicine, the public health system gradually emerged with special focus on sanitization and vaccination to control the infectious diseases and epidemics- like malaria and cholera, that ravaged the Bengal province frequently in late 19<sup>th</sup> and early 20<sup>th</sup> century. The vaccination drives was initially restricted to the cantonment areas to protect the British soldiers. It was not popularised among the natives of Bengal in fear of general apathy and resistance. From the year of 1921, the separate vaccination section was inducted under the purview of the department of Sanitization. The urban educated class particularly the rising middle class of Colonial Bengal, who resided in Calcutta Metropolitan and districts towns, showed greater interest in vaccination but the illiterate rural communities mostly ignored due to lack of proper awareness, apathy of Colonial administration and lack of adequate medical professionals. Though the Public Health Department was established in 1921, following the enactment of Montagu-Chelmsford Act of 1919; the vaccination drives in Bengal until 1947 remained controversial and fairly inconclusive. The epidemic particularly small pox and cholera maintained their havocs even in the final phase of Nationalist Movement in Colonial Bengal. As the Public Health Movement was gradually popularised and expanded in different districts, the awareness of the vaccination of the common people remained quite aloof. The paper seeks to explore the growth and impacts of Vaccination of colonial Bengal in analyzing secondary and primary sources of historical records.

## KEY WORDS

*Colonial Bengal, Public Health, Sanitization, Vaccination.*

## INTRODUCTION

The modern history of public health had its origin in colonial India. The colonial rule that laid foundation in the second half of nineteenth century marked significant changes in the political and philosophical idea in Indian subcontinent, particularly in Bengal as the province of Bengal was first inducted in direct colonial rule. The health system particularly the severe epidemic and the great invention of western medicine were remarkable area of medical perspective in colonial India more specifically in colonial Bengal. The modern health system gradually started after more than hundred years of British rule.<sup>1</sup>

It is pertinent to note that the public health system is different from medical services in terms of conceptions. The public health system broadly serves different objectives like sanitation, reducing control of mortality, prevention from different epidemics providing modern education and enhancing food safety to the society at large. The public health service aims to provide basic health care system such as vector control, monitoring waste disposal and explanation of health education.<sup>2</sup>

The vaccination drive in colonial Bengal as part of public health system initiated by colonial dispensation in early 20<sup>th</sup> century brought an important shift in the history of health care system to control and eradicate the killer diseases like small pox and cholera. This ambitious vaccination drive was primarily initiated to protect the English soldiers from different viral diseases. The immunization programmed was not initially extended to natives of Bengal.<sup>3</sup>

## Vaccination Against Smallpox

First vaccination drive in Bengal was instituted against smallpox. Smallpox was the most fatal viral disease in medieval and early modern Bengal. It inflicted the death of thousands of people in every year. Before the introduction of European vaccine, the traditional method of inoculation was practiced in different countries like India and Egypt. Through this medical method, a healthy person was injected by the germ from the active virus of mild infected smallpox patient. This traditional practice of inoculation did not prevent the mayhem of smallpox expectedly and the large number of British soldiers as noted earlier were infected and killed in the cantonment areas in newly build growing cities like Calcutta and Madras. The traditional practice of inoculation was officially banned in 1804 A.D., but made little success. The traditional practice of inoculation was widely practiced in rural Bengal.<sup>4</sup>

The smallpox also was widely infectious in European countries in eighteenth and nineteenth centuries. In early 19<sup>th</sup> century Edward Jenner showed, new sign of prospect to control and eradicate this viral infection. The vaccine invented by Dr. Jenner was gradually introduced in United Kingdom and others European countries instead of oriental method of viral inoculation. The European vaccination method was widely accepted within a few decades and it was also brought in India, particularly in cantonment areas of colonial Bengal.<sup>5</sup>

The first vaccination was injected in India to a smallpox patient on June 14, 1802 A.D. in Bombay. The vaccine brought from United Kingdom, was soon transferred to first Bombay and was then in Calcutta. The educated Indians, showed liberal attitude to receive the vaccine, particularly the surrounding areas of cantonments.<sup>6</sup> In the early stage the volunteers were entrusted to popularize the vaccine in rural landscape. The interested Bengali natives have to pay the vaccinator by receiving it. The trained vaccinators were very limited in number and the Company Government did not take any concrete initiative to popularize the wide spread vaccination.<sup>7</sup>

As we already noted the public health system was gradually emerged in India, particularly in Bengal in the second half of 19<sup>th</sup> century, following the enactment of different laws and the special initiative of sanitary

system in early stage of the British Raj administration. The vaccination drive was entrusted to the sanitary commissioner. Different dispensaries were set up in metropolitan cities from where the vaccination drive was controlled. The buffer zone was created by injecting large vaccination doses in the surrounding of Calcutta. In 1867 a man came from unknown location was contracted to smallpox. Following this incident the Government undertook special surveillance to prevent from wide spread outbreak. The municipal commissioner and surgeon were given special task to report to the concern authority with immediate effect. Some of the official emphasis the necessity of vaccination act. to immunized maximum numbers of people.<sup>8</sup>

The first vaccination act against smallpox was promulgated in 1880 and through the provision of this Act. the vaccination for smallpox was made compulsory for the children in the metropolitan areas of Bengal province. The act was not implemented in rural district as it was not building to every municipalities in remote districts. More over the local authority was lacked by efficient vaccinator and educate fund.<sup>9</sup>

We already observed that the vaccination drive was primarily entrusted to sanitary commissioner. It was initially targeted to control the disease in metropolitan areas and protect the Europeans and the educated native city dwellers throughout 19<sup>th</sup> century. In early 20<sup>th</sup> century the mission of vaccination drive was slowly transfer to the surgeon general by creating Public Health Department in 1920 in Bengal province. But the widely spread apathy and the delusion or social taboo did not provide the expected success to prevent the smallpox in rural Bengal. The outbreak of smallpox continues and killed thousands of people and make large number of people permanently disabled, particularly in the time of famine and starvation in colonial Bengal.

The traditional practice of deity worship of “Maa Shitala” had a major cause of less success in vaccination drive. The Muslim community also showed similar kind of prejudice and more apathy to get the vaccine as shown by the official report.<sup>10</sup>

### **Vaccination Against Other Viral Diseases**

The mosquito breeding and the spread of malaria created havoc from the second half of 19<sup>th</sup> century. The policies adopted by the colonial Government are generally believed for the spread of malaria. From 1850 the colonial Government adopted the policy of eliminating insects primarily responsible to content the mosquito breeding, for the growth of agricultural production. It is generally suggested that the contentment of insects played an important role for the growth of mosquito, in flourishing cities like Calcutta. The English soilders became venerable for malaria disease.<sup>11</sup>

In another policy initiative the colonial Government embanks different rivers for railways construction and road connectivity. In view of this policy the temporary water bodies and deposition of water were created in different district like- Barddhaman. The mosquito breeding became more widespread due to this unnatural embankment. A large section of people in the surrounding district of Calcutta were infected and killed in malaria in every year from 1850A.D.

The British surgeon Ronald Rose was entrusted to undertaken research in Calcutta Medical College and subsequently invented a vaccine in 1896 A.D. for the vaccination of malaria could not get enough trust and funding by the colonial administration. More over the invention of quinine which was less expensive receive more favorable attention of the administration to introduce of containing malaria in colonial Bengal. It is necessary to note the fact that as the mosquito breeding change frequently the malaria vaccine could not meet the desire result.<sup>12</sup>

The vaccination against plague was also introduced in early 19<sup>th</sup> century. India suffered the cargoes of bubonic plague from medieval period in time to time. The spread of bubonic plague in 1896 A.D. in different cities like Bombay killing more than thousand people. The British soilders and officers were also highly constructed by the plague epidemic. The western medicine against plague was invented in 1802 A.D. but not introduce substantially before the early half of 20<sup>th</sup> A.D. the vaccine was administrated through different

machineries and public health system in urban areas. The plague was particularly content in the closing years of colonial rule.<sup>13</sup>

## The Vaccine Management

The management of vaccine became an important aspect following the wide spread introduction of smallpox vaccine in the 2<sup>nd</sup> half of 19<sup>th</sup> A.D. The colonial Government did not showed greater interested established a vaccine laboratory in colonial Bengal.<sup>14</sup> All vaccine were imported from European centre and not properly preserved for long time. The vaccination some time becomes inactive before immunization. In the first half of 20<sup>th</sup> century some vaccine centers were closed in view of economy constrain. The local Government was given responsibility to preserve the vaccine without allocating adequate fund. More over the skilled vaccinator were poorly paid and so much so there they left the job by the getting better opportunity. The immunization programmed was heavily suffered after First World War and almost closed during the Second World War. The rise of poverty in a closing decades of the colonial dispensing also contributed the slower immunization campaigning.<sup>15</sup>

## CONCLUSION

The vaccination in colonial Bengal presented a fragile picture in terms of its success. It was primarily introduce to protect the British soilders and officers from the destruction of viral disease, particularly smallpox, cholera and plague. The company Raj did not showed any interest to introduce the programmed among the natives. The colonial administration gradually shifted the policy for much vaccination in the second half of 19<sup>th</sup> century. But the policy did not get any co-ordination and proper shape. The vaccination drive was restricted to the urban areas and kept under the perview of sanitation commissioner without enacting any public laws. It first vaccination act of 1880 did not yield any concrete step toward universal immunization. The apathy of Government to allocate enough fund had profound impact of its drawbacks. Apart from the certain reason the rational method of inoculation and the apathy of rural communities also created major said backs in successful vaccination drive. The lack of educated vaccinator and the poor vaccination management also contributed of its failure. The vaccination drive has got a matter of controversy among the researcher in colonial Bengal.

## REFERENCE

### (Endnotes)

1. Arnold, David. (1988) *Imperial Medicine and Indigenous Societies*, Manchester University Press, p 15-18.
2. Banerjee, Madhulika., (2009) *Power, Knowledge, Medicine: Ayurvedic Pharmaceuticals at Home and in the World*, Orient Blackswan, Hydrabad, p 20-22.
3. Yadav,S. Sajjan., (2022) *India's vaccine growth story: From cowpox to vaccine maitri*, SAGE publication pvt.Ltd. p 6-9.
4. *Ibid.*,p. 48.
5. Brimnes, Niels. (2004) *Variolation, Vaccination and Popular Resistance in Early Colonial South India*. Medical History, 2004, April; 48:199-228. Available from <https://doi.org/10.1017/50025727300000107> published online by C.U.P., Retrieved on 10 January 2024.
6. Lahariya,C., (2017) A brief history of vaccines and vaccination in India, *The Indian Journal of Medical Research*. 2014 April; 139(4):491.
7. Bhattacharya, S.; Harrision, M.; Worboys, M. (2006) *Fractured states: Smallpox, public health and vaccination policy in British India 1800-1947*, Oriental Longman, Hydrabad, p. 6-15.

8. Proceedings of the Government of Bengal (Department of Public Health and Local Self Government) Public Health Branch (File P.H H-1, Proceeding 41 to 46, Feb. 1921)
9. Peterson, J.C.K., (1910) *Bengal District Gazetteers-Burdwan*, Bengal Secretariat Book Depot, Calcutta, p 80-86.
10. Roy, Kabita. (1998) *History of public health: colonial Bengal 1921-1947*, Calcutta, K.P.Bagchi & Co. p 160-165.
11. Zakir, F.; Islam, F.; Jabeen, A; Moni, SS. (2021) *Vaccine development: A historical perspective*, Biomedical Research, 2019;30:452-455. The history of vaccines [internet], History of vaccines.org. Available from: [https://www.historyofvaccines.org/timeline#EVT\\_100871](https://www.historyofvaccines.org/timeline#EVT_100871), Retrieved on 10 January 2024.
12. The history of vaccines [internet], History of vaccines.org. 2021 Available from: [https://www.historyofvaccines.org/timeline#EVT\\_100871](https://www.historyofvaccines.org/timeline#EVT_100871), Retrieved on 02 February 2024.
13. Samanta, Arabinda. (2002) *Malarial Fever in Colonial Bengal, 1820-1939: Social history of an epidemic*, Kolkata, Firma KLM, p. 115-120.
14. *Ibid.*, p 82-85.
15. Roy, Kabita. (1998) *History of public health: colonial Bengal 1921-1947*, K. P. Bagchi & Co. Calcutta, p 180-185.

\*\*\*\*\*