



Scourge of Sitala: Small Pox mortality in Colonial Bengal: A Statistical Analysis for the year 1926

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Abstract:

As the Europeans settled in the coasts of India, penetrated the interiors and colonized the land, they were frequently struck down with many tropical diseases. One amongst those which affected them dearly was the like Small Pox virus. Small Pox occupied an acrid place in the history of European medical ideas and practices in the 19th century India. With the takeover of the Empire by the Crown in 1858, army health became the prime concern of the colonial policy.¹ David Arnold in his *'Colonising the Body; State, Medicine and Epidemic Disease in 19th C India'*, had stated that disease was a potent factor in the European conceptualisation of indigenous society. Mark Harrison in his *'Public Health in British India: Anglo Indian Preventive Medicine'* had explored on the theoretical and administrative aspects of Anglo-Indian preventive medicines in association with various diseases which the indigenous population faced. Poonam Bala in her *'Imperialism and Medicine in Bengal: a Socio-Historical Perspective'* had discussed on the different facets of the establishment of the European medicine in colonial Bengal. Epidemics caused massive fatality among the European Army. The British physicians in the 19th Century ranked Small Pox among the most prevalent and destructive of all epidemic diseases. Small Pox accounted for several million deaths in the 19th Century alone amounting on average to more than one hundred thousand fatal cases a year.² This paper intends to explore the mortality picture of Bengal during the year 1926. In the process, detailed discussion would be undertaken to highlight the mortality rate among infants and how the disease affected the health of the children in colonial Bengal during 1926.

Introduction

An acute contagious viral infection, Small Pox produces an intense fever with a burning sensation and multiple coetaneous eruptions and pustules, which cluster thickest on the face and the limbs. In the extreme confluent form, it covers every inch of the victim's body surface. A third or more of those seized by Small pox

died, usually two weeks of the first symptoms of the disease. Religion played an important role in the process of getting cured from the disease. Considered as a divine presence, rather than a disease, Smallpox occupied a noticeable place in Hindu beliefs. There had been a custom of establishing the Goddess as an embodiment of Small pox and thereby worshipped and appeased

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throughout India, especially in Bengal. Infact, Sitala Mata was given the name of both the God and the disease in Bengal. In Bengal the disease was also known as 'Basanta Rog'.² William Crooke in the 1890 identified Sitala as 'Godling of disease'.³ Small pox was understood to be a manifestation of her personality and presence rather than her essential character. The disease colloquially termed as 'Mayer Daya' in Bengal, was her 'sport' or play and had to be tolerated accordingly or given the respect and honour due to the visiting Goddess. Small pox was hence conceptualized not as a disease but as a form of divine possession. The burning fever and postulates were taken to be signs of her entry into the body of the affected. Hence ritual and worship were approved to be more effective instead of therapeutic remedies. To some Hindus, recourse to any form of prophylaxis or treatment was disrespecting the Goddess, which was feared to provoke and aggravate the goddess's fury. The angry Goddess then might jeopardise the poor sick, in whose body she currently resided.⁴

As Sitala means 'the Cool One', when an attack of small pox occurred, cooling drinks were generally offered to the patients as the patient's body was treated then to an abode of the goddess. The patient's feverish body was washed with cold water or soothed with the wetted leaves of the neem or margosa, Sitala's favourite tree. If the fever rose high and delirium ensued the sick, or in the case of a child victim, if the child cried much and slept little, then puja or worship was offered to the Goddess to please her and ease the suffering of the sick.⁵ Often Malis, or members of other castes, thought to be favoured by Sitala, sprinkled the body of an affected with a cooling talc of ground lentils, turmeric, flour and powered shell. When the disease used to reach its climax, in the evening of the seventh day, he used to place a water pot in the sick room accompanied by offerings of rice, coconut, sugar, flowers and neem leaves and recited prayers to Sitala for hours at a

time. Once the pustules had ripened, the Mali gave the patient physical relief by piercing them with a sharp thorn. Finally, as the patient recovered and the scabs peeled off, the Mali performed a final Sitala puja and then with a share of the offerings and a fee for his services. Thus perceived, Sitala was both the source of smallpox and the means of gaining protection from it.⁶

During epidemics, women sometimes declared themselves as to be possessed By Sitala and going into a trance, revealed the Goddess's wishes or the reason for her anger. The epidemics of 1924 continued throughout 1925 till 1926.⁷

The following table shows the number of death rates from small pox in 1925 and 1926.

	1925	1926
Reported Number of Deaths	17,436	25,548
Death Rate per Mille	.4	.5
Percentage of Small Pox Deaths to total Mortality	1.5	2.2

Source: Bengal Public Health Report 1924-1947

As compared with the previous year, and the decennium, the death rate from small pox increased in 1926 by 25.0 and 66.6 percent respectively. Its extensive prevalence in rural areas in 1926 is shown from the fact that it affected 526 out of 632 circles of registration and 7,064 out of 84,748 villages, against 494 circles and 3,699 villages in the previous year. In the towns, however, deaths were reported from only 81 out of 116, as compared with 88 in 1925. The outbreak started towards the middle of November 1924 and continued sincethentill1926. Conditions were especially bad during the hottest months. In Noakhali, the highest mortality namely, 113 out of a total of 283 for the district was reported from Begamganj police station. In the Tippera district, no case was reported from Chandpur and Brahmanbaria towns, while there was only one death in the Comilla Municipality. Deaths

were reported more or less from all thanas except Kasba.⁸

Small Pox in Towns

The death rates in all the towns in 1926 showed a reduction by 62.7 percent, when compared with that in 1925, while in Calcutta rate was lower by 76.1 percent, than in the previous year. Thirty-five towns escaped the disease altogether. The rural death rate on the contrary was 112.0 percent, higher than in 1925. Nawabganj in the Malda, district returned the highest death rate, namely, 9.4 per mille; Katwa returned 4.5 per mille; three other towns recorded rates between 3 and 4 per mille; thirteen towns between 1 and 2 per mille, and the rest below 1 per mille.⁹

Let us now survey a comparative study of the total number of deaths in the Province, Towns, Rural areas and Calcutta during 1925 and 1926.

Total Number of Deaths	1925	1926
Province	17,436	25,548
Towns	6,247	2,338
Rural areas	11,189	23,210
Calcutta	3,923	934
Death Rate per mille of population	1925	1926
Province	.37	.55
Towns	2.01	.75
Rural Areas	.25	.53
Calcutta	3.64	.87

Source: Bengal Public Health Report; 1924-1947

The divisional distribution of Small Pox deaths in towns shows that 82.8 percent of the towns were affected in the Burdwan, 65.9 percent in the Presidency; 60 percent in the Rajshahi, 68.5 percent in the Dacca and 50.0 percent in the Chittagong Division. A reference to the last column of the Table below, however will show that the severity of the disease was confined to the first three divisions only.¹⁰

Districts	Total number of towns	Number of towns infected	Number of Deaths	Percentage of Deaths	Average deaths per town
Burdwan	29	24	778	55.4	32.4
Presidency	47	31*	450	32.0	14.5
Rajshahi	15	09	128	9.8	15.3
Dacca	19	13	34	2.4	2.5
Chittagong	06	3	04	0.3	1.3
Total	116	80	1,394	99.9	66.0

Source: Bengal Public Health Report 1924-1947

Deaths from Small Pox among Infants and Children

2,116 infants and 5,361 children between 1 to 10 years of age, representing 8.3 and 20.9 percent, respectively of the total deaths due to Small-pox, fell victims to this disease. 29.2% of Small pox deaths thus appear to have occurred in infants and children below 10 years of age, while the

remaining 70.8% in persons above 10 against 25.28 and 74.72 %, respectively in the previous year. This result was worse than that of the last year, and the local bodies were expected to draw their attention more vigorously to the primary vaccination, which was then made compulsory throughout the Presidency, with the exception of the Chittagong Hill tracts.¹¹

The table below shows the number of Smallpox deaths amongst infants and children

Divisions	Under 1 year of age	Between 1 and 10 years of age	Total number of Smallpox deaths at all ages
Burdwan	559	1,543	8,047
Presidency (including Calcutta)	741	1,623	6,952
Rajshahi	747	2,010	7,296
Dacca	-----	-----	2,098
Chittagong	69	185	1,155
Total	2,116	6,332	25,5348

Source ; Bengal Public Health Report : 1924-1947

The percentage of Small pox deaths among infants and children below 10 years of age to the total small pox mortality was 26.1 in the Burdwan; 34.0 in the Presidency; 37.8 in the Rajshahi, nil in the Dacca; and 21.9 in the Chittagong divisions. No death from small pox among this community was reported from Hooghly district in the Burdwan, Nadia and Jessore districts in the Presidency Division, Dinajpur, Jalpaiguri and Darjeeling districts in the Rajshahi division, and all the districts in the Dacca Division and Tippera district in the Chittagong Division; while Khulna reported only 6 deaths and Rajshahi 1 death among children 1 to 10 years of age and none among infants.¹²

Preventive measures

Vaccination and re vaccination was the only effective measures known to the Europeans for suppressing an epidemic of smallpox. Vaccination programmes were resorted to by all the local bodies, in addition to educational propaganda and the disinfection of the affected houses in certain limited areas. The medicated oil recommended by the Public Health department for smearing over the body was also distributed free in Pabna district. However, a problem lay in the fact that, all the district Health Officers practically complained of the absence of compulsory legislation to enforce revaccination during an epidemic and of not getting timely information about the fresh cases. Rewards were offered to the Chowkidars for reporting epidemic cases to the President of the Union

Board or Panchayati Board who would at once inform the District Health Officer and other officers concerned. Even the nearest Charitable Dispensary doctors could be informed about such occurrences. Coloured post cards were decided to be used for this purpose. The District Health Officer of Khulna also recommended punishment of those chowkidars who failed to furnish such reports or be unreasonably late.¹³

Some of the other difficulties experienced by certain District Health Officers in undertaking the preventive measures against small pox were as follows –

In Bankura, free vaccination was not introduced by the District Board. The District Health Officer of Rangpur stated that people often delay vaccination after exposure to infection. They took it for granted that vaccination was useless. Besides these, many persons including doctors who were supposed to blame the vaccinator or the lymph used for vaccination responsible for the failure of vaccination to prevent the disease. Unavailability of female vaccinators was also taken up to be a major cause for the failure of the vaccination programmes, because many Muslims and even some conservative Hindus did not allow their women to get vaccinated by unknown male vaccinators. The District Officer of Pabna reported that as some of his difficulties, opposition to re vaccination, especially those of women and the absence of female vaccinators, need for segregation of the infected person, throwing of the infected dead

bodies into rivers and also want of an adequate number of vaccinators was thoroughly felt.¹⁴

In Murshidabad, an experiment of vaccination of females by female vaccinators had been reported by the Health Officer, such as -----

“Female assistants in 1926 visited 147 villages and delivered 209 lectures to the ladies, mentioning about the benefits of vaccination against diseases and 107 to the local midwives namely, the ‘dais’. They performed 281 primary and 1,492 re vaccinations among the ladies”.¹⁵

Noticeably, in this statement it had been shown that there was no separate permanent hospital in the province, set apart exclusively for Small pox patients. Separate wards for this matter were maintained in the Campbell Hospital, and also in hospitals in Calcutta, Howrah, Darjeeling and Dacca. Temporary arrangements were made in other districts for accommodating such patients during an epidemic of Small pox.¹⁶

Religious objections to vaccination

Rumour and stories among the indigenous population regarding vaccination and vaccinators, presented the vaccination process

Admission to Small Pox hospital in Bengal

The following statement shows the vaccine conditions of small pox patients treated in the various hospitals of Bengal during 1926.

District	Total number of admission	Number vaccinated	Number of Successful vaccination without mark	Number of unvaccinated or unsuccessful vaccinations without mark	Number vaccinated during Incubation of small pox	Number started to have been successfully vaccinated
Burdwan	58	27	2	15	-----	-----
Birbhum	----	-----	-----	-----	-----	-----
Bankura	1	1	-----	-----	-----	-----
Midnapore	18	15	1	2	-----	-----
Hooghly	17	11	3	3	-----	-----
Howrah	19	6	-----	13	-----	-----
24 Parganas	4	3	-----	1	-----	-----
Calcutta (Campbell Hospital)	480	253	47	161	5	14
Nadia	5	5	-----	-----	-----	-----
Murshidabad	3	-----	-----	3	-----	-----
Jessore	-----	-----	-----	-----	-----	-----
Khulna	2	2	-----	-----	-----	-----
Rajshahi	-----	-----	-----	-----	-----	-----
Dinajpur	3	1	-----	2	-----	-----
Jalpaiguri	3	2	-----	1	-----	-----
Darjeeling	-----	-----	-----	-----	-----	-----
Malda	-----	-----	-----	-----	-----	-----
Dacca	6	4	2	-----	-----	-----
Chittagong	-----	-----	-----	-----	-----	-----
Tippera	10	2	2	6	-----	-----
Mymensingh	5	4	-----	1	-----	1
Faridpur	17	12	3	1	----	1

Source: BPHR 1924-1947

as suspicious. Vaccination was thought as the instrument of a villainous empire attempting to place tracers on individual. Resistance also arose from fears that the colonists were deliberately infecting locals with disease. Added on to this was the issue of religion which played a dominant role in the society. Religion posed substantial difficulties to the British vaccination in India, as also on Bengal, particularly in light of the caste system. Castes such as the Hindus and the Muslims refused the vaccination process originally because of the nature of animal lymph used in it. As cow had been considered to be sacred by the Hindus, the effects of injecting something bovine into the human body, sparked hostility in the society.¹⁷ In 19th C Bengal, some mediums attributed the wrath of the Goddesses, to the activities of the vaccinators. To overcome this, experiments with other animals were trialled, for example, the buffalo. However, the most frequent resolution was to continue arm-to-arm vaccination, unpopular in itself because of the connotation of extracting lymph from previously vaccinated children. Many parents even forbade the early vaccination practice of using children as arm-to-arm vaccinators. They feared that their child could become more ill, and, in some cases children died from prolonged exposure and fatigue from being taken to other villages as vaccinators. In addition, the caste system strictly forbade the mixing of the blood between lower and higher castes, and children used as vaccinators were often of a lower caste.¹⁸ However, this practice soon died out with the advent of substance-sustained lymph at the turn of the century.

Arguably one of the greatest barriers to vaccination was the habit of inoculation. Religion and inoculation joined hands in against the European vaccination. A very interesting case in the then Bengal had been reported, which focussed on a woman possessed. The report stated -“..... a woman apparently possessed by the Goddess Sitala in Bengal... she ... amid

incoherent ravings denounced the vaccinators and prophesised that everyone they operated on would die ..”.¹⁹

Conclusion

Mortality due to Small Pox, whenever and wherever it took epidemic form, tended to be very high especially among children under 12 years of age. Presumably, the disease was quite severe in large tracts of the country. The absence of a large scale of vaccination resulted in a heavy loss of life, especially in rural areas of Bengal. Defective vaccination and absence of the system of compulsory revaccination had been primarily responsible for the spread of the disease. The stubborn conservative mentality and apathy of the people towards anything and everything foreign disabled the effective results of vaccination in preventing the disease from spreading. The Bengal Public Health Report stated that, in the year 1930, out of 118 municipalities, 9 did not vaccinate a single infant. Of these 9 again, 5 municipalities returned a blank record in the preceding year.²⁰ Thus we can see that in the late colonial India, specially Bengal, health education aiming at maternal and child welfare became sites for interaction between state agencies promoting sanitation and public health. Works of professional health visitors undoubtedly represented the movement of western medical care and the state into Indian homes. Propaganda efforts of maternal and child welfare centres, works of School Inspectors etc, meant that the health system was turning from repressive approaches to constructive approaches aiming at participation of clients which would at the same time lead to better and more professional control of the population. The initiators of the child welfare movements in India generally and in Bengal particularly, were the voluntary workers including medical women and wives of British officials. They felt it necessary to have a special class of trained workers for preventive works among mothers and children. This according to them was essential to secure more healthy citizens for a strong colonial state.

Footnote and Reference

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