

## SMALLPOX IN EARLY SINGAPORE (PART III) (1850-1859)

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A brief introduction to the study of the medical history of early Singapore has already been outlined.<sup>1</sup> The history of Smallpox in Singapore from 1819-1829<sup>2</sup> and from 1830-1849<sup>3</sup> has been documented.

Smallpox was rampant in Singapore in 1849. The Singapore Free Press in its issue of 4th January 1850 recorded this in its article "Annual Retrospect": "In Singapore, . . . several hundreds, principally of the infant population, were carried off by Smallpox during the past year, which also prevailed very extensively in several of the neighbouring islands as well as on the Peninsula. . . ." <sup>4</sup> The population of Singapore according to the census taken in November and December 1849 was only 52,891.

One of the measures taken in attempts to contain the epidemic was to obtain vaccine lymph from other than the regular sources, i.e. Bengal and Batavia, in the hopes that there would be better results. The Senior Surgeon had requested some vaccine from the Royal Jennerian Institute in London. This was despatched on 24th December 1849 and arrived six weeks later in Singapore on 5th February 1850. The Senior Surgeon lost no time in trying it on a healthy European child the next day.<sup>5</sup> The vaccine from the Jennerian Institute failed with Senior Surgeon Oxley and another doctor, but succeeded with the Public Vaccinator. It, however, soon became spurious like those from the other places and its use had to be discontinued. The Calcutta vaccine failed in the hands of the Senior Surgeon, the private practitioners as well as the Public Vaccinator. The Java virus proved successful most of the time, and was obtained each month by Dr Oxley paying a small sum of money to the native Public Vaccinator at Batavia.<sup>6</sup> Batavia being nearest to Singapore, the vaccine arrived "fresh" and still potent.

In August 1849, the Municipal Committee had resolved to assist the Government's vaccination programme by paying for the expenses of procuring vaccine lymph from Batavia. In 1850, it cost the Committee \$27.50. At the February 1851 meeting when this bill was submitted and passed, "it was

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resolved that Dr Oxley be informed that the Committee are prepared to grant further pecuniary aid with a view to extend the invaluable benefit of vaccination among the natives and others residing beyond the limits of Town. . . ."<sup>7</sup> It was considered beneficial that vaccination should no longer be restricted to people living in and around the Town but should also be introduced into the outlying villages.

In 1851, only 71 people were vaccinated by the Public Vaccinator. There is no record of the number of private patients vaccinated by Dr Oxley and the other doctors. At the February 1852 meeting of the Municipal Committee, Dr Oxley expressed his opinion that Batavia was the only place from which the virus could be procured with any chance of its succeeding, and that to prevent deterioration, the vaccine should always be sent by steamer. He also proposed that instead of obtaining it through private arrangements, it would prove more satisfactory to get the vaccine direct from the Superintendent of Vaccination at Batavia.<sup>8</sup>

Extending vaccination outside the limits of Town increased the expenses. The Public Vaccinator had to be granted an allowance for "palankin hire".<sup>9</sup> (Palankin = a litter, usually for one person, carried by four or six men by means of poles projecting before and behind.)

In June 1852, Smallpox appeared in the northern part of the island, the disease having been imported from Johore. "During the past week, 10 cases of Smallpox were reported at the Police Station at Bookookang, about 11 miles from Town and beyond Bukit Timah. The disease was from Johore."<sup>10</sup>

Senior Surgeon Oxley, in August 1852, reported that the vaccine from Batavia which came by the last steamer had totally failed. He had immediately on receipt of the vaccine distributed it to all the medical gentlemen in the Settlement, five in number, and they tried with no success. The Public Vaccinator, Mr Allan, vaccinated five patients, also without success. Dr Oxley suggested that the vaccine should be sent more frequently "as the vaccine becomes spurious after one month or six weeks at the most".<sup>11</sup>

The numbers of successful cases however remained few over the next couple of years because of the failure of the virus to take although supplies of new vaccine were regularly obtained from Batavia.

On 20th January 1854, the Singapore Free Press reported that "Smallpox is very prevalent amongst the infant part of the native population, with a few deaths".<sup>12</sup>

The situation did not improve for the next two

years. In fact, it became worse. The Editor of the Straits Times suggested that a law should be passed to make vaccination compulsory and to prevent the importation of the disease by small coastal vessels coming from the neighbouring islands. Public business was being held up by Smallpox:<sup>13</sup>

"We regret to notice the widely extended prevalence of Smallpox, many cases of which have proved fatal. We believe there is a liberal allowance from the Local Government to their doctors for the purpose of extending vaccination, and if the amount is insufficient a larger sum of money ought to be set apart for the purpose. Indeed, when we reflect upon the number of cases occurring annually, we think it is high time the Legislature provided a general measure to make vaccination compulsory as in Java and elsewhere. The disease is generally imported into the place by small trading prahus, but surely some means could be employed to prevent our being annually visited by this frightful scourge. In some of the islets in the neighbourhood, more than half the inhabitants are labouring under Smallpox. A criminal case at the present Session has been postponed in consequence of three of the seven witnesses for the Crown being laid up with Smallpox."

No new measures were taken except to ask the Indian Government to vaccinate all convicts before they left India for the Straits, and to solicit a supply of vaccine virus from the Superintendent-General of Vaccination in Calcutta, to be sent by the monthly steamer from Calcutta to the Straits. For the record, the method of despatching the vaccine was as follows:

"A tin box containing a supply of vaccine lymph charged on four pairs of glasses and three ivory points, and also of six vaccine crusts enclosed in a small wax ball."<sup>14</sup>

By early 1857, the epidemic had assumed such extensive proportions that the Municipal Commissioners discussed it at their April meeting.

The Commissioners felt that it was their duty to urge upon the Local Government the necessity of taking precautions to prevent the landing of infected persons. It was resolved that the Chairman of the Commission request the Governor to impose quarantine measures if he had the power under the existing law, and if he were not authorised to do so, to apply to the Legislature to pass an Act for the purpose.<sup>15</sup>

The Chairman wrote on 1st May 1857:<sup>16</sup>

"Honourable Sir,  
The Municipal Commissioners having at their

last meeting taken into consideration the subject of Smallpox and other pestilential diseases which have been brought here by parties arriving from sea, have requested me to address your Honour on the subject, and to beg that your Honour will be pleased as far as the law permits, to adopt measures for the prevention of contagious and infectious diseases being introduced into this Settlement by ships or boats arriving at our Port.

At present, vessels enter the port and anchor amongst the shipping without restrictions, and also land their crews and passengers in whatever condition they may be. I have the honour to state that it is our opinion, and I sincerely hope that after due consideration your Honour may concur in the view we take of the subject, that every vessel should be boarded by a duly constituted authority on her arrival off the port, and that in the event of his finding sickness on board, of a nature likely to spread amongst the shipping or on shore, she should be detained in some convenient part of the port set apart for the purpose until she has a clean bill of health, that none of her crew or passengers should leave the ship during such quarantine, and that parties from shore or the shipping should only visit her for the purpose of rendering medical aid and supplying fresh provisions when absolutely necessary.

We earnestly hope that your Honour will be pleased to give this important subject your Honour's most serious attention with a view to the prevention of disease being introduced from seaward; either by enforcing the existing laws if any on this subject have been extended to the Straits, or if no power at present exists by applying to the Legislature to pass such an enactment as will give your Honour the right to interfere and to impose a heavy penalty on the Commander of any vessel who shall knowingly allow anyone suffering from or convalescent from Smallpox or other infectious malady, to leave his ship without the permission of the proper officer."

This letter was handed by the Governor to the Resident Councillor for his comments. Three weeks later, in reply, the Resident Councillor stated that even if it were desirable it would be impossible to carry out the suggestions of the Municipal Commissioners without a very considerable increase to the Port Establishment and its maintenance cost. But he was decidedly against the views of the Commissioners, and held that it would be very unwise to apply legislation on this score. Not a single coolie vessel from the Malabar coast, pilgrim ship from the Persian Gulf or Red Sea, or passenger junk from

China reached Singapore without deaths occurring on board from contagious diseases, and if all arrivals were subjected to the annoyances of quarantine regulations, there would be an unjustified check to free immigration to the Straits Settlements to the great detriment of their agricultural interests.

He pointed out that there were two Acts which were applicable under the circumstances, but had not been properly enforced for lack of staff. By Act XLI of 1850 (an Act to prevent the landing and leaving of decrepit beggars in the Settlements of Prince of Wales Island, Singapore and Malacca), masters of all vessels arriving at the Straits Settlements were liable to a fine of \$100 should they land any diseased person, and they were bound to give a correct list of their passengers with certain particulars to the Master Attendant within 24 hours after arrival under a penalty of \$500. Act XXII of 1855 (an Act for the regulation of Ports and Port Dues) and the regulations passed under its provisions, would be adequate to deal with the problem. If these two Acts were faithfully carried out, he was of the opinion that all the objects sought by the Municipal Commissioners would be attained. Any increase in the Port Establishment and expenses could be met by a levy of port duties or special charges.<sup>17</sup>

The Governor then communicated with the Chairman of the Municipal Commissioners on 26th May 1857.<sup>18</sup> He concurred in the general tenor of the Resident Councillor's report. He believed that quarantine would cause unnecessary interference with trade and annoyance to all concerned. There would be strong objections from the merchants. The cost would be phenomenal and would mean increased taxation. A previous proposal to introduce port dues had met with strong protests. Moreover, medical opinion was divided on the usefulness of quarantine:

"... The freedom of the port of Singapore, i.e. freedom not only from taxation but from vexatious interference with the course of trade has ever been jealously guarded by the mercantile community, and the Governor doubts much whether the suggestion of your Committee would be approved of — that all vessels entering the Port should wait outside till boarded by a Health Officer and on his report, whether she should be placed in quarantine and all communications with her cut off. In a crowded open port like that of Singapore affording such singular facilities for the evasion of quarantine, the rules or regulations must be made minute and breaches of them visited with severe penalties. All this would cause interference with trade, annoyance with private

individuals and unnecessary disputes with the Health Officer. Besides this, the expense must be taken into consideration. The Health Officer must be a medical man and one would not suffice. His establishment must be large to enable him to enforce his orders, and other items of expense would arise which need not be recapitulated here. It would not be expected that the Government should incur all this expense and consequently considerable port dues must be imposed and after all, the benefit to be derived is very doubtful. Medical men are far from being unanimous on the subject of the value of quarantine establishments, and the Governor believes they are retained only when the prejudices of the people are strong in their favour.

Under these circumstances, the Governor agrees with Mr Mackenzie that an effective working of the Acts XLI of 1850 and XXII of 1855 would in a great measure carry out the objects contemplated by your Committee, but here again the want of establishment cripples the efficiency of the Conservator of the Port. It was with a view to such required establishment that the proposition of a small port due was submitted to the Legislative Council and that which had elicited such strong demonstration of disapproval."

The Municipal Commissioners at their meeting on 8th June 1857 debated the subject of quarantine again in the light of the Governor's reply, and decided not to pursue the matter any further.<sup>17</sup>

On 25th July 1857, the Indian Government replied to the Governor's request, which was made on 21st October 1856, that all convicts be vaccinated before leaving India as a preventive measure against the importation of Smallpox. The various Local Governments in India had agreed to do so.<sup>19</sup>

Smallpox was very widespread in 1858. The various newspaper reports give a vivid account:

"Smallpox is very prevalent in the native quarters at Campong Glam, Rochor, Kallang, etc. Some mortality, especially among children."<sup>20</sup>

"Smallpox continues to rage, particularly in the rural districts and suburbs. At Rochore, many recent cases were reported. Campong Glam has more than 50 cases."<sup>21</sup>

"Smallpox is again on the ascendant in the Campong Glam and Telok Blangah districts. . . . Mr Allan went to Telok Blangah during the last week and was enabled to vaccinate 10 persons, but although many presented themselves he was unable to perform the operation owing to their being subject to cutaneous diseases, etc., and he proposes to go this week to Tanjong Pagar to

vaccinate the people there and at the Campong Glam Police Station. Smallpox is very prevalent at Changhie and Pulo Tiokong."<sup>22</sup>

". . . The deaths amongst the natives during the course of the year from Smallpox were numerous. Greater efforts appear to be required to enforce the use of vaccination. . . ."<sup>23</sup>

In July 1858, the Court of Directors in London, and in September 1858, the Bengal Government, called on the Governor for reports on vaccination.<sup>24</sup>

In his 4th Quarterly Report for 1858, the Senior Surgeon asked for a ward for contagious diseases in the Convict Hospital, and one for the European Seamen's Hospital. "Several severe cases of Smallpox have been treated lately in this hospital, and although in a separate room, they are so close to the other patients that all are exposed to infection from this frightful disease. . . ."<sup>25</sup>

At the Municipal Commission meeting held in January 1859, Mr Dunman, the Commissioner of Police, called the attention of the Commissioners to the fact that one Public Vaccinator was not enough for Singapore, and asked for another to be appointed and paid out of the Municipal Fund. This was agreed to<sup>26</sup> (but not implemented).

The Governor's report on vaccination was ready on 31st January 1859.<sup>24</sup> He reported failure which he attributed to the weather which ruined the vaccine, and to the lethargy of the natives. These two causes interacted with each other and aggravated the situation. He was certain that only a law making vaccination compulsory would ensure more participation in vaccination and the control of Smallpox.

"The result . . . is very unfavourable to the progress and success of vaccination. Two causes are assigned for this. First, the heat and moisture of the climate which appear to affect the vaccine matter immediately and very soon render it inoperative. Secondly, the apathy and indifference of the natives on the subject. They can only with difficulty be induced to bring their children to be vaccinated and with still greater difficulty to bring them again for examination and for supplying fresh matter for further operations. (Lymph was collected from patients and used on others.) Nothing but a legislative enactment can prove effectual. For until the Police are authorised to interfere and enforce the execution of orders for attendance, the people will continue to be indifferent. Indeed, the two causes above nominated act and re-act on each other. The lymph received from foreign parts being so difficult to retain effective must frequently prove inoperative, and consequently fail with a large number of patients.

This increases the indifference, if not the dislike, of the people to subject their children to the operation and increases the difficulty of obtaining patients.

The following statement exhibits the amount of vaccination performed. . . . since 1855.

	Number of operations	Successful	
1855	167	98	
1856	96	61	
1857	18	3	
1858	699	560	"

The state of affairs remained bad in the first two months of 1859. The Senior Surgeon had to postpone his tour of inspection of the hospitals in Penang and Malacca as he felt that he should not leave Singapore.<sup>27</sup> However, on 21st March 1859, he was able to inform the Governor that he would be able to make the trip soon "because Smallpox no longer exists epidemically".<sup>28</sup>

No action was taken on the Governor's proposal that a law should be passed to make vaccination compulsory. The Public Vaccinator continued his work with occasional interruptions which interfered with the vaccination programme: (see below)

"61 persons were vaccinated in March by Mr de Souza, the Public Vaccinator, in the Town and country districts:

Europeans	1 succeeded	2 failed
Portuguese	4	0
Malays	27	8
Chinese	5	1
Jews	0	1

In 12 cases, the result was not known on the last day of the month. Gratifying to observe that the Malays exhibit a desire to benefit by the opportunities of free vaccination."<sup>29</sup>

"The Public Vaccinator in April visited Sirangoon Road, Campong Malacca, Tanjong Katong, etc. Vaccinated 50, 35 successful, 5 failed, 10 uncertain.

	Malays	Chinese	Portuguese	Klings	
Succeeded	12	13	8	2	
Failed	0	2	3	0	
Uncertain	6	4	0	0	" <sup>30</sup>

"The services of the Public Vaccinator having

been discontinued since the middle of June last when he proceeded to Bombay with the Troops, and as he has now reported his return, it is resolved that his duties be resumed under the supervision of the Government Medical Officers and the Senior Civil Surgeon, requesting that he will have the kindness for the due supervision of this important service."<sup>31</sup>

The above minutes of the December 1859 meeting of the Municipal Commissioners indicate that the Vaccination campaign was not one of the top priorities of Government. It was suspended for six months just because the Apothecary in charge had to accompany troops overseas.

The next article in this series will trace the developments during the next decade.

## REFERENCES

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