

HISTORICAL, POLITICAL, AND ECONOMIC DIMENSIONS OF EPIDEMICS
Cholera and Smallpox in 19th Century Philippines

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The popular notion is that the opening of the Philippines to European commerce in the 19th century brought to the country the products of the Industrial Revolution. Much has been written about the European merchants, notably British, French and German, who came to the country and the cargo that they brought such as textile, crystals, clocks, soap, knives, iron chests, and lamps. However, the liberalization of foreign commerce also brought to the country diseases that European merchants picked up from various Asian ports on their way to the Philippines.

One of the most virulent of these diseases was smallpox. This disease almost always came from other countries. Smallpox reached the Philippines in this manner. On their way to Asia, European ships sailed across the Mediterranean Sea, invariably picking up the smallpox virus along the coasts of Greece, Turkey and Syria. These European ships brought the virus to the main ports of Southeast Asia like Singapore, Hong Kong, Canton, Saigon and Yokohama which were their main ports-of-call. From these ports European ships often made the short trip to Manila to sell their wares.

Another disease that struck the country in epidemic proportions was cholera as shown by the following:

PATEROS	No. of Persons Sick of Cholera	No. of Persons Died of Cholera
30 August 1882	41	11
31 August 1882	43	15
1 September 1882	35	14
2 September 1882	52	17
3 September 1882	39	25
4 September 1882	29	23
5 September 1882	42	38
6 September 1882	30	21
7 September 1882	32	18
8 September 1882	20	21
9 September 1882	13	24
10 September 1882	17	14
11 September 1882	9	8
12 September 1882	8	11
13 September 1882	12	8

MUNTINGLUPA	No. of Persons Sick of Cholera	No. of Persons Died of Cholera
8 August 1882	-	1
1 September 1882	-	1
3 September 1882	-	1
5 September 1882	3	-
9 September 1882	4	4
10 September 1882	3	-
11 September 1882	9	3
12 September 1882	2	2
13 September 1882	3	2
14 September 1882	9	3
15 September 1882	8	4
16 September 1882	14	12
17 September 1882	14	7
18 September 1882	17	6
19 September 1882	9	9
20 September 1882	10	9
21 September 1882	11	7
22 September 1882	9	5
23 September 1882	12	5
24 September 1882	7	6
25 September 1882	10	6
26 September 1882	9	3
27 September 1882	10	8
28 September 1882	12	7
29 September 1882	8	4
30 September 1882	8	6
1 October 1882	13	7
2 October 1882	6	7
3 October 1882	13	7
4 October 1882	9	6
SAN PEDRO DE MACATI	No. of Persons Sick of Cholera	No. of Persons Died of Cholera
27 August 1882	9	3
28 August 1882	16	10
29 August 1882	8	13
30 August 1882	14	10
31 August 1882	17	
18 September 1882	18	16
2 September 1882	22	11
3 September 1882	9	4

4 September 1882	13	15
5 September 1882	16	18
6 September 1882	16	20
7 September 1882	14	17
8 September 1882	4	14
9 September 1882	13	10
10 September 1882	5	9
11 September 1882	7	5
12 September 1882	5	10
13 September 1882	7	5
14 September 1882	8	7
15 September 1882	6	7
18 September 1882	5	10
19 September 1882	3	3
20 September 1882	1	2
21 September 1882	4	6
22 September 1882	1	4
23 September 1882	3	3
24 September 1882	1	2
25 September 1882	1	2
26 September 1882	0	0
27 September 1882	0	1
28 September 1882	3	3
29 September 1882	2	1
30 September 1882	1	0
1 October 1882	1	2
2 October 1882	0	0
3 October 1882	3	3
4 October 1882	1	2
5 October 1882	0	1
6 October 1882	1	1
7 October 1882	0	0

It helped considerably that public health service in the 19th century had already greatly improved. There was in the 19th century a special board called Junta Superior de Sanidad (Superior Board of Sanitation) whose principal function was to give advice especially during epidemics. It was headed by the governor general who was joined by the Director General for Civil Administration and doctors from the University of Santo Tomas. The following is an example of the advice given by the Junta Superior in 1889:

1. Disinfect latrines and their channels with sulfate of iron or lime
2. Clean ditches using excess potable water and prohibiting by which these ditches are filled with filthy water
3. Disinfect quarters that have been occupied by cholera patients by means of sulfuric acid and burning their clothes or their disinfection for two hours

4. Disinfect churches, theaters, cockpits, cafes, hospitals, hospices, houses for pious works, barracks and other places where there are large gatherings of people
5. Close tanneries, collecting the organic substances as well as leather scrapings, hairs, etc., bringing them outside of populated areas and disinfecting the places where they are deposited
6. Prohibit throwing of residues of refineries or alcohol distilleries into the *esteros* or rivulets
8. Prohibit the use of the waters of the *esteros* for drinking, cleaning of living quarters, cleaning of streets and baths
9. Increase the number of cleaning carts, load them with lime in baskets for disinfecting purposes, and thereafter the complete burning of garbage or those thrown in the high seas
10. Keep very close watch over noodle houses, restaurants, bakeries and establishments of other kinds of foodstuffs in order to find out if they have any cases of cholera and to report them to the Board

This situation was so much different from the previous two centuries when public health service was largely in the hands of the Church. The Laws of the Indies delegated this responsibility to the Church (*Se pongan los hospitales para pobres y enfermos de enfermedades que no sean contagiosas junto a las iglesias ... y para los enfermos de enfermedades contagiosas en lugares levantados y partes que ningun viento danoso, pasando por los hospitales, vaya a herir en las poblaciones*) as the colonial government, specifically the governor general was much too preoccupied with pacification efforts. The Franciscans took upon themselves the burden of taking care of the health of the people. They built the first hospital in Manila, the Hospital de Santa Ana de Naturales. They also built a hospital for lepers and other contagious diseases (Hospital de San Lazaro). While there were Franciscans with some knowledge of medicine, generally the extent of their ministrations to the sick was to gather together the sick in one place so as to prevent the further spread of disease and to provide them with shelter and food.

In the 19th century the colonial government addressed public health concerns in many ways. One was by introducing vaccination. As early as the first decade of the 19th century, the number of deaths due to smallpox had already been massive, forcing King Charles IV to introduce vaccination in the Philippines. On September 1, 1803 he ordered an expedition to go to the Philippines headed by his own court physician, Doctor Francisco Xavier de Balmis. The expedition left the port of La Coruna on November 30, 1803 aboard the “Maria Pita” with Lieutenant Pedro del Basco in command. With Doctor Balmis were twenty-five children who had come from various parts of Spain and America. They had been vaccinated with a mild strain of the virus and from time to time vaccinated at regular intervals until they reached the Philippines in 1805.

The government made sure that its vaccination program would be sustained by creating the Junta Central de Vacunacion (Central Board of Vaccination). This office preserved the vaccine earlier brought to the country by Dr. Balmis in glass vials. This office was also placed in charge of distributing the vaccine in the provinces.

Another was by imposing quarantine on all ships wishing to enter the port of Manila. An office called *Direccion General de Sanidad Maritima del Puerto de Manila* (General Direction for Maritime Sanitation for the Port of Manila) was created to carry out quarantine measures. The period of quarantine usually lasted three days.

Still another method was by authorizing the opening of a school of medicine. The first medical school in the Philippines was the Faculty of Medicine of the University of Santo Tomas which opened in 1872. Its framework of study was literally copied from the universities in Spain. The doctorate curriculum in medicine began with a preparatory term on such subjects as advanced physics, advanced chemistry, mineralogy, botany and zoology. It was followed by six terms (years) of intensive study of medicine. The licentiate course in medicine consisted of four terms (years) on practical medicine. The graduate of the licentiate course was called a *medico titular*. The student who did not finish the course but was able to take up to two or three years of study was called a *practicante*.

Each province was assigned a *medico titular* who became its principal health officer. The following were the *medico titulares* of the following provinces:

1882	Agustin Alvarez Llana	Abra
1891	Luis Calvo y Lopez	Albay
--	Jose de Pino y Fernandez	Antique-capital
--	Juan Gutierrez y Serano	Antique-Bugason
--	Felix Munos de Bustillos	Ambos Camarines-capital
--	Narciso S. Agustin	Ambos Camarines-Daet
--	Luis More y Lopez	Ambos Camarines-Lagonoy
1894	Antonio Esmerado Pedrotti	Bataan
1895	Mariano Felizardo y Chico	Bataan
--	Marcial Moreiras y Sandillo	Batanes
--	Enrique Jubindo y Calvo	Batangas-capital
1893	Jose Maria Pardillo	Batangas-Lipa
1894	Jose Losada Aguilera	Batangas-Lipa
--	Eduardo Rodriguez de los Santos	Bohol-capital
--	Manuel Rogel y Lebres	Bohol-Tubigon
--	Eduardo Diaz Perez	Bulacan-capital
1895	Francisco Paes Escalera	Bulacan-Baliuag
1896	Francisco Garcia Feijoo	Bulacan-Baliuag
1896	Mariano Martin Barrios	Benguet
--	Francisco Mageda	Cagayan
1896	Jose R. Hidalgo Padilla	Calamianes
1897	Clodoaldo Abad y Recio	Calamianes
1893	Manuel Riobo y Guimarans	Capiz-capital
1897	Juan Jerilli y Casedevant de Espeletta	Capiz-capital
1895	Sebastian de Castro	Capiz-Calivo
1895	Jose Aramburo y Esguerra	Capiz-Calivo
1897	Antonio Jimenez Baena	Capiz-Calivo

--	Francisco Massip y Vals	Cavite-capital
1893	Dario Canizal y Lescos	Cavite-Yndang
1895	Francisco Rosario y Narciso	Cavite-Yndang
1897	Vicente de Jesus y Serapio	Cavite-Yndang
1897	Mariano Camacho y Carrasco	Cavite-Yndang
--	Gaudencio Ares	Cebu-capital
--	Santos Carrada	Cebu-Barili
1894	Jose Losada Aguilera	Concepcion
1894	Jose Maria Pardillo	Concepcion
1897	Bernardino Solivellas y Arbona	Concepcion
1895	Marcelo Eloriaga y Mendoza	Catanduanes
1896	Jesus Catalan y Lopez de Haro	Catanduanes
1897	Sebastian Petit y Ramon	Catanduanes
--	Nicolas Prada y Moras	Davao
--	Matias Arrieta y Ageo	Dapitan
--	Bernardo Arias y Garcia	Jolo
1894	Mariano Felizardo y Chico	Ylocos Norte
1895	Antonio Esmerado Pedrotti	Ylocos Norte
--	Julian de Arce y Dorado	Ylocos Sur-capital
--	Eduardo Homar y Lapuente	Ylocos Sur-Candon
1894	Juan Juilli y Casedevant de Espeletta	Yloilo-capital
1897	Manuel Riobo y Guimarans	Yloilo-capital
1893	Bernardino Bolivellas y Arbona	Yloilo-Pototan
1897	Jose Maria Pardillo	Yloilo-Pototan
1895	Manuel Llorens y Bescos	Ysabela de Luzon
1897	Jose Maria Pardillo	Ysabela de Luzon
1897	Francisco Garcia Feijoo	Ysabela de Luzon
--	Jose Bravo y Pazos	Negros Occidental
--	Arturo Pelayo del Pozo	Negros Oriental
--	Bonifacio Rosello	Laguna-capital
1893	Pablo Rianzares y Franco	Laguna-Nagcarlan
1896	Tomas Pardo del Rio	Laguna-Nagcarlan
1896	Catalino Nicolas y Bunales	Lepanto
--	Jesus Sanchez Mellado	Leyte-capital
1894	Tomas Pardo del Rio	Leyte-Maasin
--	Roberto Rodriguez Berris	Manila
--	Francisco Napal	Marianas
1896	Adolfo Estran y Justo	Masbate
--	Celestino Poza Cobas	Mindoro-capital
--	Gerardo Lastortres	Mindoro-Marinduque
1896	Angel Soriano y Roca	Misamis
1894	Anastasio Andrada	Morong

1896	Pedro Riera y Bertran	Morong
1897	Clodoaldo Abad y Recio	Morong
--	Aquilino Ariza	Nueva Ecija
--	Cesar Sorarrain y Pazuto	Nueva Vizcaya
--	Sebastian Sanchez Palomares	Pampanga-capital
--	Manuel Sta. Maria y Bustamante	Pampanga-Guagua
--	Rafael Monserrat	Pangasinan-capital
1896	Jose Nunez y Crespo	Pangasinan-Dagupan
1893	Francisco Rosario y Narciso	Romblon
1895	Dario Canizal y Lercos	Romblon
--	Juan Antonio Soto de Zaldivar	Samar-capital
--	Manuel Rey y Ponce de Leon	Samar-Borongan
1895	Jesus Catalan	Surigao
1893	Francisco Garcia Feijoo	Sorsogon
1896	Francisco Paes Escalera	Sorsogon
--	Manuel Murciano	Tarlac
--	Emilio Florencio Fernandez	Tayabas-capital
--	Julian Morrondo y Nacar	Tayabas-Atimonan
--	Lucino Almeida	Union
1894	Ricardo Perramon Caballero	Zambales-capital
1893	Miguel Garcia Navarro	Zambales-Alaminos
--	Ramon Alba y Martin	Zamboanga

The University of Santo Tomas also opened a Faculty of Pharmacy. Just like in the medicine curriculum, the pharmacy student first enrolled in a preliminary course which was followed by five terms (years) of study. The licentiate course in pharmacy consisted of five terms (years) of study.

The colonial government also opened a school of midwifery whose curriculum entailed four intensive years of study of the female anatomy and physiology, pregnancy, childbirth and delivery. The graduate of the midwifery course was called a *matrona titular*.

Still another was by taking the necessary steps to prevent the further spread of disease. When cholera struck, the parish priest, the town mayor and the leading residents gathered together in the parish office and convened themselves as the municipal council of health. The parish priest and the town mayor were designated as president and vice president, respectively, of the council. The first order of business of the council was to look for a house where all those who were sick of cholera could be gathered together. The medico titular was notified so that he could administer to the sick the proper medications. In the absence of a medico titular, the pharmacist or *practicante* was called to attend to the sick. An inspector was appointed for every street in the town whose duty was to report the number of people who had become sick or had since then died.

The civil governor of the province was informed whenever an epidemic struck in any of the towns under his jurisdiction. The town mayor made a daily report to the provincial governor on the number of people who became sick and those who died.

If necessary, whole provinces were placed under a state of epidemic. Provincial governors were constantly updated of the extent of the number of cholera cases through the daily reports submitted by the town mayors. The provincial governors, in turn, elevated these reports to the General Direction for Civil Administration. Depending on the advice of the latter, the governor general may place provinces under a state of cholera epidemic (Camarines Sur and Iloilo on June 5, 1889, and Negros, Leyte, Capiz, Mindoro, Marinduque and Lubang Island on June 19, 1889). Having done so, the governor general informed the Ministerio de Ultramar (Ministry for Overseas Colonies).

The immediate concern of the town where a cholera epidemic broke out was burying the dead. Problems arose when the dead could no longer be accommodated in the town cemetery. The only recourse is to build a new cemetery.

Epidemics entailed huge financial costs. There were payments to be made for provisions for the sick who were mostly poor; medicines; salary of the medico titular at the rate of 500 pesos/month and the *practicantes*.

Addressing the costs of epidemics was harder for the province that had only meager financial and material resources. The problem was aggravated if it had no doctors or drugstores to depend upon. One such case was Samar in 1883. When cholera struck in that year, the province lacked medicines and blankets. Following the bureaucratic procedure at the time, the governor had to first obtain authorization from the Governor General or the General Direction for Civil Administration to use the public calamities fund. Also, the province lacked doctors. There was not even one in the provincial capital or the larger towns. It was over a month when the General Direction for Civil Administration issued an order authorizing the provincial governor to use up to 500 pesos of the public calamities fund. While the latter ordered the Pharmacy Office to send medicines to the province, the immediate delivery of the medicines was still not guaranteed. The transport of the medicines was dependent on the availability of a ship going to the province.

Funds to meet expenses solely for epidemics were not allocated. While there was a public calamities fund, this money was reserved for *all* types of calamities that include pestilence, earthquakes, storms, fires, etc. Moreover, this fund could not be automatically used by the local authorities without first getting the permission of the governor general.

The order rescinding the state of cholera epidemic was initiated by the medico titular. He informed the provincial governor if there had been a number of days, usually twenty, when no other cases of cholera had been reported. He then advised the provincial governor that it was now safe to declare the epidemic ended. The provincial governor thereafter informed the governor general together with a recommendation to declare the province free of epidemic. The latter sought the advice of the General Direction for Civil

Administration. If the latter concurred with the recommendation of the provincial governor, the governor general issued the appropriate declaration.

The official declaration of the end of an epidemic was a time of great rejoicing and thanksgiving. The people went to the local church to hear mass. A solemn *Te Deum* was sung to thank the Lord Almighty for having saved the people. The principalia or the leading citizens of the town were also thanked since they made up the members of the local board of sanitation and as such devised the ways and means to control the further spread of the epidemic.

Governors of provinces far from Manila were authorized to take provisional precautionary measures pending the receipt of official communication. In 1864, the governor of Samar began initiating measures against the further spread of cholera even as the number of deaths was not yet sufficient enough to cause alarm. For example, he prohibited the sale of fruits. He varied and at the same time lessened the hours that were allotted for public works, making them from 6 o'clock in the morning until 10 o'clock in the morning and then again from 4 o'clock in the afternoon until 6 o'clock in the afternoon. He did not keep all of the prisoners in the old jail. He placed some in the new jail. He held those charged for a lesser penalty at the court house. He converted the school for boys into a temporary clinic.

In the absence of a hospital, any such place or quarters that could serve the purpose were utilized. When cholera struck the capital of Cebu in 1883, the political-military governor of the province converted the infantry barracks into a hospital. It was large enough to accommodate the many who fell ill. It was also well isolated from other buildings. Moreover, it was close to the sea and was well ventilated. Its use as a hospital was discontinued as soon as the cholera epidemic in the province subsided.

Conclusion

In the agenda of priorities of the colonial government, public health figured prominently, if not significantly. The various developments in public health in the nineteenth century coincided with a strong political imperative that was dictated by the times. This was the pursuit of good governance to prevent the inroad of rebellion that could result in the breaking away of the Philippines as a Spanish colony much in the same way as the Spanish colonies in America obtained their independence in the first quarter of the nineteenth century through rebellion. The improvements in public health service ought to be seen as part and parcel of the spirit of reform that Manuel Bernaldez Pizarro proposed in 1827. Counting on his wide experience as an **asesor** or consulting attorney of the colonial government, he had been called upon by Ferdinand VII to find out the causes that antagonized the security and progress of the Philippines. Bernaldez Pizarro's response was for Spain to bring about a carefully planned system of measures to strengthen peace and security and more importantly, to advance the progress of the natives. These goals were in one way or another pursued by the colonial government when it sought to prevent disease, to prolong life and to promote physical and mental health through the modernization of public health service.