

# Public Health, Quarantine and State Policy: from Historical Perspective

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**Abstract:** *COVID-19 is a big threat to public health in the world at present time. Standing amidst in this present health crisis I have tried to investigate the history of public health along with the history of quarantine through this study. The study has focused on the world in general and on India in particular. The study has also tried to compare the present crisis with the past. It has touched the history of the public health movement. The study has wanted to get answers to some questions such as what is public health? How did the concept of public health grow up? How did it come to India? What is the impact of a quarantine system on the people? and so on.*

**Keywords:** Health, Quarantine, COVID 19, Movement

The world is now facing a pandemic. The root of this pandemic is a virus called COVID-19. It has gradually spread from China to the whole world. Even in the age of globalization, this virus has been able to isolate countries, states, districts from each other. Most countries now have taken mass quarantine measures to combat the COVID-19 pandemic. Till March 2020, please update 1.7 billion people have been asked to stay home in over 50 countries and territories around the world.<sup>1</sup> In India, according to an official estimate, as of May 26, nearly 23 lakh people, who had moved within the country or arrived from international destinations during the nationwide lockdown due to the COVID-19 pandemic, were in quarantine facilities.<sup>2</sup> Quarantine is the system of stopping people from associating with each other to prevent the spread of the disease. However, this is not the first epidemic. Human civilization has evolved through many such public health problems. It is therefore pertinent to shed fresh light on the history of public health in the present context. While discussing public health, Amiya Kumar Bagchi once said, “No important contemporary problem can be discussed without historical perspective.”<sup>3</sup>

Before discussing the history of public health, first, it is necessary to give an idea about the meaning of the term public health. Public health is a little difficult to define or understand. In 1999, a telephone survey found that more than half of 1234 respondents misunderstood the term.<sup>4</sup> However, in 1920 a theoretician and leader of American public health Charles-Edward A. Winslow defined public health as:

*The science and the art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of the individual in principles of personal hygiene, the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health.*<sup>5</sup>

The definition is also valuable today. Public health is the total of certain factors, such as availability of food, clothing, housing, proper sanitation, pure drinking water, education, employment, pollution-free environment, that prevent the emergence of the disease and improve the quality of life. Despite the advanced public health system diseases can occur and then treatment is needed. Public health and healthcare are complementary to each other. It is not possible to have *health for all* when we look at these two things separately.<sup>6</sup> Public health means the prevention of diseases. Undoubtedly prevention is better than cure.

How did the concept of quarantine and public health come? In a book titled *The New Public Health* authors wrote "History provides a background for the development of understanding and coping with health problems of communities. We can see through the eyes of history how societies conceptualized and dealt with the disease. All societies had to face the realities of disease and death, and develop concepts and methods to manage them."<sup>7</sup>

So we can investigate the history of public health from the prehistoric age. In the early days of prehistoric times, people were hunters and food gatherer. So there was a lack of food among them, which was one of the reasons for their short life span. Then people learned to produce food, began to live in groups. They created agricultural societies and urbanization had also developed. Food shortages were met during that period, but problems arose in other cases.<sup>8</sup> Earlier people were nomads but after the *Neolithic Revolution* when they learned to live in a certain place they also polluted the environment, which led to an increase in the occurrence of infectious diseases. Moreover, various diseases were spread from the body of domestic animals. This problem was not there before. Because before they hunted animals, they did not domesticize them. It is noteworthy that COVID-19 has spread from the body of an animal.<sup>9</sup> According to Dorothy Porter, "Human settlements offered greater opportunity for constant contact with intestinal parasites carried through human feces, whereas a band of hunters constantly on the move were much less at risk from such infections."<sup>10</sup>

At that time the cause of the disease was identified as the curse of God. Some ancient societies, Chinese, Egyptian, Hebrew, Indian, and Incan societies, took health measures such as cleanliness, personal hygiene, sewage, and drainage systems as a part of religious practice.<sup>11</sup> Hippocrates first got out of the religious and mystical traditions of healing. He focused on science and said that supernatural forces had nothing to do with the cause of diseases. According to him, environmental causes were at the root of all human illnesses.<sup>12</sup> So "Hippocrates has become the favoured Father for healers of all stripes."<sup>13</sup> However, although various measures had been taken to prevent the disease, the concept of public health did not develop.

Epidemics such as plague, cholera, smallpox, were common incidents in Europe until the eighteenth century. However, the cause of the disease was unknown. So, various theories were prevalent as the causes of diseases. In Europe, the church stated that poor moral and spiritual conditions were responsible for the occurrence of diseases.<sup>14</sup> According to them, prayer and piety were needed to get rid of the epidemics. But the most popular was the *Miasma* theory. "Miasmists believed that disease was caused by infectious mists or noxious vapors emanating from filth in the towns and that the method of prevention of infectious diseases was to establish sanitary measures to clean the streets of garbage, sewage, animal carcasses, and wastes that were features of urban living."<sup>15</sup>

It was thought that diseases spread from person to person through touch. So in cases of an epidemic, the only method used was the isolation of the ill and quarantine of the travelers. The popularity of that method had increased since the fourteenth century. That method was used to prevent the spread of plague in Italy. The term quarantine came from Italian “Quaranta”, which means forty.<sup>16</sup> In 1377, quarantine was first introduced in the Republic of Ragusa (now Dubrovnik in Croatia) for thirty days, which was increased to forty days in 1397. The quarantine system was followed by Marseilles (1383), Venice (1423), Pisa (1464), and Genoa (1467).<sup>17</sup> When the epidemics occurred in various cities, people would try to flee from those cities. The state forcibly imposed quarantine and isolation measures on the common people. As a result, the rich suffered economically. But the poor suffered the most. And so they occasionally became rebellious. The state deployed its troops and legislation was enacted.<sup>18</sup> That measure was followed not only in Italy but also all over the world. America adopted the rules of trade quarantine. In 1701, Massachusetts passed a law to prevent the small-pox epidemic.<sup>19</sup>

The world had reached the era of enlightenment in the eighteenth century. That era was the seed-time of the nineteenth century's public health revolution. French philosophers Diderot, d'Alembert, Voltaire, and Rousseau emphasized social reformation. The articles of *Encyclopédie des Arts, Sciences et Metiers* revealed the philosophers' thoughts on public health.<sup>20</sup> According to George Rosen, “The 80 years from 1750 to 1830 form a pivotal period in the evolution of public health. The peculiar interest of these decades derives from the creation during this period of the foundation for the sanitary movement of the nineteenth century, a development fraught with momentous consequences for modern public health.”<sup>21</sup> At that time Jeremy Bentham's utilitarian theory focused on “greatest good for the greatest numbers.” From that idea Bentham's disciple Edwin Chadwick organized a sanitary movement in England.<sup>22</sup>

Two revolutions, the American Revolution (1775-83) and the French Revolution (1789), took place in the late eighteenth century. Jeffersonian democracy (the 1790s-1820s) in America emphasized the liberty of people. Thomas Jefferson said that countries were created to keep people happy. The regime that could not keep the citizens happy must be befallen.<sup>23</sup> “Jefferson declared that sick populations were the product of sick political systems. According to Jefferson, despotism produces disease, democracy creates good health. Jefferson believed that a life of political ‘liberty and the pursuit of happiness’ would automatically be a healthful one. French revolutionaries added health to the rights of man and asserted that health citizenship should be a characteristic of the modern democratic state.”<sup>24</sup>

The industrial revolution had a bad effect on public health. In the post-industrial revolution, England witnessed a social change that resulted in overcrowding in slums and an increase in death rate especially among women and children, which indicates deterioration of public health. A new disease, cholera, spread in industrial cities.<sup>25</sup> <sup>26</sup> In this situation, Chadwick had emphasized the sanitary movement. He believed that garbage, poor sanitation and drainage system were the main causes of diseases. As a result in 1848, the public health act was enacted.<sup>27</sup> But Chadwick did not depart from Miasma theory. An English epidemiologist, John Snow later tried to find an individual cause of the disease. He studied the epidemiology of cholera in London and showed that polluted drinking water was the only cause of cholera. In this way, the germ theory first came up. John Snow is called the ‘father of

public health'.<sup>28</sup> Therefore the concept of public health became clear in the late nineteenth century. The government of European countries focused on public health. As a result mortality rate had reduced in Europe.

In pre-colonial India, public health is part of the non-governmental sector. The western treatment came in India with the English East India Company. The Company set up Indian Medical Service (IMS) in 1824 for the Europeans.<sup>29</sup> But the first half of the nineteenth century, the emphasis of the imperial government was on armies and white civilian populations, and non-medical services rather than on sanitary services. As the public health movement in Britain was strongly supporting improved sanitary conditions, nutrition and welfare services for the poor, at the same time, sanitary activities in India were confined to the cantonments.<sup>30</sup>

After the rebellion of 1857, the administrative power of India was shifted from the Company raj to the British Crown. During the mutiny, the main problem of the British troops was an epidemic disease, particularly cholera. Therefore, in 1859, the Royal Commission was set up by the new government to inquire into the health of the army in India. The report of the commission, which was probably the first document of 'public health policy' in British India, was published in 1863. The commission recommended that sanitation and prevention of epidemics in distinct areas of European habitation (military cantonments and 'civil line') for improving the health of the British Army need to be improved.<sup>31</sup> The commission recognized that diminution of mortality rate in the army and improvement of its sanitary conditions would not able to be done unless measures were also taken for the improvement of public health generally and for the prevention of the more obvious causes of diseases among the community at large.<sup>32</sup>

The report of the Royal Commission had an immediate effect.<sup>33</sup> But the colonial government was concerned for the health of its army and civilian personnel, neglecting the health of native people. The curative health services, which were provided by IMS (Indian Medical Service), were urban-centric. Indeed, IMS was a wing of the British Indian Army. Health services and facilities were meant for the ruling class and elite. "A few metropolitan hospitals in the district headquarters were meant for the urban elites and there too, the white ruling class was privileged."<sup>34</sup>

The British health services were essentially based on curative measure whereas preventive and sanitary measures were not properly addressed. Until 1919, the imperial government did not take any initiative to improve the health of people. The Montagu-Chelmsford Reform Act (1919), emphasized the necessity for proper water supply, sanitation and public health infrastructure, the public health sphere of government passed into the hands of provincial ministers. The people in the provinces had to pay various taxes for their health care. But despite great hope and expectation, that act could not bring any key change in government health policy. Therefore, the mortality rate of people in British India was very high.<sup>35 36</sup> But the mortality rate in the army had reduced dramatically.<sup>37</sup>

The Indian subcontinent was imagined as quagmires of lethal epidemics and decimating diseases.<sup>38</sup> There was racial discrimination in colonial India; Europeans hated indigenous people as carriers of all kinds of infectious diseases. The white town was separated

from the black town. For sexual disease, they blamed indigenous prostitutes and quarantined them. Moreover, segregation was the watchword of imperial medicine.<sup>39</sup>

India was considered as the source of cholera, which plagued Europe since 1830. Quarantine was imposed in India for colonial trade and annual Hajj pilgrimages after the Sanitary Conference in Constantinople in 1866. As a result, India suffered more than England. Muslims were blamed as a community for the spread of the epidemic. Despite the advent of germ theory, the quarantine policy was imposed.<sup>40</sup> From 1880 to 1930 the colonial government tried to bind the bodies of the people through public health-centric law, proclamation, decree, and legislation. That policy was called biological imperialism, which took full shape in the time of the Bombay plague in 1896.<sup>41</sup> David Arnold wrote, "That the colonial government and colonial medicine attempted such forceful and far-reaching controls were indicative of the interventionist ambitions and capacity of India's mature colonial state."<sup>42</sup> Quarantine and isolation were part of this biological imperialism. We know that under the colonial rule if anyone was suspected to be suffering from a disease in this country, he was forcibly taken to a hospital and kept in hospital to separate him from society.<sup>43</sup>

The quarantine concept was against individual freedom. Moreover, accepting quarantine was to deny the philosophy of the American Revolution and the French Revolution, which uphold the ideal of the liberty of people. Mark Harrison wrote "Quarantine had always had its critics. Quarantine seemed like a vestige of a less enlightened era: it encouraged corruption, despotism and economic stagnation at a time when the wealth of nations depended on liberty and free trade."<sup>44</sup> Post-modernists also criticized the quarantine and isolation system. According to them, hospitals and prisons play a similar role. Michel Foucault wrote, "This enclosed, segmented space, observed at every point, in which the individuals are inserted in a fixed place, in which the slightest movements are supervised, in which all events are recorded, in which an uninterrupted work of writing links the centre and periphery ... all this constitutes a compact model of the disciplinary mechanism."<sup>45</sup> The body has been brought under surveillance through quarantine. COVID-19 has also given the states unlimited surveillance powers. The technologies were previously used against terrorism, this time they have been used on common people to diagnose the disease.<sup>46</sup>

Yuval Noah Harari said "To stop the epidemic, entire populations need to comply with certain guidelines. One method is for the government to monitor people, and punish those who break the rules. Today, for the first time in human history, technology makes it possible to monitor everyone all the time."<sup>47</sup> According to him, surveillance under the skin is the most important development in the 21<sup>st</sup> century.<sup>48</sup>

Noted Bengali novelist Sarat Chandra Chattopadhyay (1876-1938) wrote about the torment of quarantine life. He said the pain of quarantine that was mainly felt by the lower class people.<sup>49</sup> Quarantine and epidemics are still harmful to the poor in the present as well as in the past. The mass quarantine system stops the income of the poor and even the lower middle classes and they lose the ability to earn food. As a result, on the one hand, their body becomes weak due to lack of food and on the other hand, germs easily attack the weak body. Besides, due to the inadequacy of government health services people have to fight with death.<sup>50</sup>

Despite the controversy over quarantine, this measure is to be taken to combat epidemics or pandemics. However, proper planning is required before imposing quarantine. Along with it government health service needed to be improved. The government has understood that lockdown is not the only way to win against COVID-19. The health ministry of the central government has stated that “we have to learn to live with the virus. The preventive guidelines against the virus need to be implemented as behavioural changes.”<sup>51</sup> But there was no statement regarding the improvement of public health and the health care system. However we know that the inadequacy of public health services is a major problem in India. We have seen that the government has announced a lockdown without prior planning in the current COVID-19 situation. The government enforced the law. In the wake of the government's callousness, the migrant workers have lost their lives. So it can be said that the government has taken the wrong steps from the beginning in the fight against COVID-19. But peasants-labourers were compelled to pay the price for government mistakes. Moreover, the interesting thing is that COVID-19 has not been brought to India by the peasant-labourers rather it has been brought by elites, who had recently visited foreign countries.

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