

History of Medicine

Scenario of India during the last pandemic: A century ago

The Coronavirus pandemic, starting from January 2020, has affected all walks of life all over the world. International travel has been halted, major events have been cancelled and the financial market has been in free fall. After ravaging China and Europe, the disease has come to India. It is still the early stages of the epidemic in India but experts are apprehensive that the disease has the potential to grow exponentially in the population. At this juncture, it may be prudent to take a look back to a similar scenario a century ago.

1918 was the year when the First World War ended. It was the year Prohibition first came into effect in the USA. It was the year Poland became independent, the Romanov family in Russia was brutally killed. But it was also the year a deadly disease struck humanity: The Spanish flu. The name is a misnomer. It did not start in Spain. But Spanish media were the first to report about the disease extensively and the moniker was coined.



Copyright free image (Wikimedia commons) of flu ward in Washington D.C. during 1918-19 pandemic (copyright free)

The Spanish flu affected around 500 million people, approximately one-third of the world population at that time. Mortality was estimated to be between 2050 million. No region of the world was spared and India was affected severely. The disease was notable for affecting young, healthy people.

In all probability, the Spanish flu came to India with a garrison of soldiers coming back from the War in June, 1918. The ship carrying the soldiers docked at Bombay and the epidemic started among the population of that city. Bombay was already overcrowded at that time and a recent famine in the countryside had forced many villagers to the cities in search of work and food. In such a petridish of undernourished population with almost no medical support, the disease spread like wildfire. Recent research has found out that there was probably a second entry of the virus from the Madras port. The virus ravaged South India and also spread to Ceylon.

By July 1918, more than 200 people were dying daily in Bombay from the flu. Almost all the houses of the city had at least one patient; sometimes whole families were down with the malady. An excellent graph was prepared by the office of the Sanitary Commissioner of India showing the weekly death rates in Calcutta, Bombay and Madras. It is seen that the peak death rate, around 260, was reported in Bombay in the first week of October, 1918 while for Madras, the death rate of around 200 was reached in the third week of October. Calcutta recorded much lower death rate, with the highest being around 60. In the Bengal province, the overall death rate was 8.5 per 1000 population. The epidemic peaked in December in Bihar and Bengal. There was one small focus of hotspot in the Hindu pilgrimage site of Puri in Orissa. But generally, other coastal areas were spared. The government instructed the people to avoid crowded places. Newspapers also instructed the people to avoid going to places like fair or circus.

The epidemic in India lingered on. A Times of India archive document shows that in Bombay, in the week ending March 5, 1919, the number of deaths recorded was 1471. Places of the country which received less rain were more affected. It must be remembered that at the same time, epidemics of plague, small pox and Malaria were also devastating the country. So, the death rate was astronomical. The population of India in 1911 was 315 million. In 1921 census, it was 318 million. This was much lower than the natural rate of increase. Influenza epidemic, along with the world war and the notorious crop failure season of 1920 were to blame for this.

Various countries of the world tried various techniques to contain the spread of the virus. In St. Louis, USA the mayor closed all schools, pool halls and movie theatres. The epidemic curve was flattened. In San Francisco, it was a law to wear gauze masks and anyone not wearing them was fined.

In October 1918, several cities in Europe banned public gatherings and church sermons were limited to five minutes. Free soap was distributed. Number of passengers in public transport was restricted. Spitting on the street was prohibited.

At first, the global nature of this infection was not known. So, local Indian newspapers referred to the illness as "Bombay fever". According to JA Turner, the then health officer of Bombay, the disease "...came to Bombay like a thief in the night". It must be remembered that Bombay at that time was also home to other infectious diseases like Plague, small pox and Cholera. Plague had just killed about 70 to 80 million people in different parts of India. Thus, the authorities were slow to take notice of this new disease.

By popular accounts, seven policemen posted at Bombay port docks were the first recorded victims of this flu in the city. Next to follow were multiple employees of the Bombay port trust and telegraph office. By the last week of June, 1918, there were thousands of patients with fever, extreme

body ache and chest congestion all over the city. The mortality figures started rising from July. The disease then spread to the great plains of North India and people of all ages started dying in large numbers. In some accounts, the Ganges river was clogged with dead bodies. The total number of the dead will never be known with certainty but historical estimates put the number somewhere between 10 and 25 million. So, a large part of the global mortality was from India only. The urban areas had much more mortality compared to the rural belts.

People hoped that the infection would go away with the monsoon. But it came back with vengeance again in September-October of the same year. This time, the target was the working age population: adults between the ages of 20 and 40. One researcher documented that in one day, 06 October, 1918, there were 768 deaths from influenza in Bombay city alone. This gives some idea of the severity of the epidemic. However, except for some sporadic accounts, records of the epidemic in both photographic and written form are largely missing from contemporary Indian narrative. Some people have argued that in a country already on the brink of destruction with food shortage, rising inflation and death in war, this was not something which the people prioritized at that time. Novels written around the same time are almost devoid of any detail mention of the epidemic. The only exception was "The final Question" written by Saratchandra Chattopadhyay in Bengal. In chapter no. 18 of this great novel, he has given a vivid description of the influenza epidemic in Agra. He writes that people fled their homes, leaving the patients behind. The city of Agra was reduced to a necropolis with all shops and businesses closed. The only people in the streets were the undertakers. The main affected areas were the slums of the poor workers and labourers. 1918 is the worst year in modern Indian economic history. GDP fell by more than 10% and inflation was at an all-time high.

Worldwide, a number of famous people, including Woodrow Wilson, the president of USA, the prime minister of Britain and the king of Spain fell prey to the virus.

Mahatma Gandhi, residing in his Gujarat Ashram at that time, was also struck down with the illness. Many members of his ashram also fell violently ill, as attested by Mahadev Desai, the personal secretary of Gandhi. In a letter, Gandhi wrote, "I am myself confined to bed still. It appears I shall have to keep to it for many days more." Suryakant Tripathy, a Hindi poet, lost many family members in the flu. He writes, "I travelled to the riverbank in Dalmau and waited. The Ganga was swollen with dead bodies. At my in-laws' house, I learned that my wife had passed away." The virus spread from Bombay province to Madras and then to the North and East. One peculiarity of the Indian epidemic was much more death rate of women compared to men. Historians and scientists have tried to explain this phenomenon in various terms. The general consensus is that women at that time in the Indian society were much more malnourished compared to men. In households, the major portion of the food went to the boys. Naturally, these malnourished women fell easy prey to the virus.

The question is, what would happen if a similar epidemic enters India now? On one hand, medical science has improved a lot. The molecular pathogenesis of viral infections is now known. There are many more doctors,

hospitals and health workers in India, compared to 1918. In 1918, not only were there fewer doctors, but also, a large number of them had gone to the War and not yet returned. But there are other people who would like to be cautious.

Recently, an article was published by Dr Lalit Kant, titled "Pandemic Flu, 1918: After hundred years, India is as vulnerable". In it, he argues that if such a pandemic happens again, India would again have the highest number of deaths in the world: around 15 million. And why is that? Dr Kant argues that India is more densely populated now. So the chance of rapid person-to-person spread is higher. Also, India does not have the capacity to manufacture vaccines for 1.3 billion people at a short notice. Finally, most Indians do not have the luxury of working from home like the privileged IT sector. They must go out every day to earn their living. So a complete lockdown of all businesses will be very difficult for India.

We can only hope that Indian society will be able to contain the current epidemic very soon. However, at such a time, it may be worthwhile to take a look back at history so as to avoid repeating the mistakes.-----RP

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