

Indian Response to Pandemic: A Journey from 1918 Pandemic to Covid-2019

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Abstract

Uncertainty is always hard to predict and estimate. It is not only a challenge to individuals but to the businesses and the governments as well. Often we prepare ourselves to tackle these uncertainties and many times tackle the uncertain conditions with outside support. However, the most challenging situation arise when all have to be dealt at once. This is what has been experienced during Covid -19. If we search through the archival records, an event with similar spread and impact can be traced during 1918 pandemic, termed as Spanish flu. Although the Spanish flu and its impact are under reported, the lessons learnt from the pandemic Spanish Flu can guide us on a way to tackle Covid-19 in a better way.

Keywords: 1918 Pandemic; Covid-2019 ; Lockdown; Unlock.

Introduction

On the Huanan seafood market in Wuhan, China, SARSCoV2 appears to have made the leap from animals to people. Attempts to identify probable intermediate hosts, on the other hand, appear to have been neglected in Wuhan, and the exact route of transmission must be determined as soon as possible(Nandal, Nandal, & Anuradha, 2020).

Covid-19 has put humankind in unprecedented situation. The world is facing public health crisis and economic downturn. The situation seems alarming for India due to its large population and limited medical facilities. Indeed, timely lockdown decision by Government of India has successfully reduced the fatality rate across nation under the prevailing conditions. However, relaxations given to revive the economy has increased the threat of community spread. This becomes evident from the active cases reaching 90,95,908 as on 22 November 2020. Government, researchers and practitioners are exploring every possible solution to rescue us from this “New normal” and take us back to the times of socializing and on the path of 5 trillion economies. However, the situation has constrained us to look into archival records for lessons to tackle this challenge. From the books of history, Spanish Flu in 1918 seems a relevant period/event to be explored. The virus is known as ‘Spanish Flu’ as only Spain (a neutral country in World War I) allowed its newspapers to public the national death toll.

Pandemics and Their Environment Since the turn of the century

Following the outbreak of the Spanish Flu pandemic in 1918, the world was startled, resulting in a global catastrophe. The H1N1 virus, a new, highly virulent, and highly transmissible form of influenza, was responsible for the pandemic. Because of the mobility of military troops during World War I, the strain was able to reach even the most remote parts of the globe (WWI). In February 1957, a new strain of Influenza A virus, H2N2, emerged in Singapore, and by the summer of that year, the epidemic had spread to other parts of the world. The pandemic was dubbed Asian flu pandemic because it was milder than the preceding Spanish flu outbreak (Payne, 1958). The epidemic emerged in different phases of the waves, similar to H1N1 illness, although it was less transmissible. Between 1957 and 1958, it killed an estimated 1.1 million people globally (Honigsbaum, 2020; Viboud et al., 2016). H3N2 virus emerged in 1968, a decade after the outbreak of H2N2, owing to genetic reassortment, resulting in the Hong Kong flu pandemic. Despite the virus's great transmissibility, H3N2 infection had milder clinical signs than H2N2 (Viboud, Grais, Lafont, Miller, & Simonsen, 2005). The first wave of the Hong Kong flu pandemic wreaked havoc in the United States and Canada, while the second wave swept across Europe and Asia, killing an estimated 2 million people worldwide (Reperant, Moesker, & Osterhaus, 2016). Another influenza strain, the pH1N1/09 virus, developed in 2009 through several reassortments between distinct influenza lineages, one of which was the 1918 human virus (Garten et al., 2009). This virus is also known as swine flu, Mexican flu (because it originated in Mexico), or new flu, and it has resulted in almost two million fatalities (Simonsen et al., 2013). Aside from influenza-related outbreaks, coronaviruses are also to blame for outbreaks including the Severe Acute Respiratory Syndrome (SARS) epidemic of 2002, the Middle East Respiratory Syndrome (MERS), and the COVID-19 pandemic. The first two pandemics were very minor, with a global death toll of less than 1000 people. Because of its highly transmissible condition, the COVID-19 pandemic has had a significant impact on the world (Mills, 1986). The Spanish flu and COVID-19 pandemics appear to be one-of-a-kind; as previously said, these viruses from various sources have had enormous global consequences. Given the current condition of the COVID-19 pandemic, there is a risk that it could soon resemble the 1918 epidemic, and the world is now unprepared to endure such a burden. As a result, evaluating the course of Spanish flu and exploring solutions from prior experiences to limit COVID-19 has become a must.

HISTORICAL INTRODUCTION

The first instance of the H1N1 virus was discovered in Kansas, USA, in spring 1918, after military troops reported symptoms of fever, cough, and headaches. The illness had a minimal initial impact in its first wave, but the second wave was distinguished by high virulence and mortality (Lemon, Mahmoud, Mack, & Knobler, 2005). This

extremely fatal wave broke out in an Army Training Camp outside Boston in the United States in the fall of 1918, resulting in a large number of infection cases and deaths, eventually contributing to a nurse shortage in the United States. The third wave began in the winter and spring of 1918 and gradually faded by summer of that year (Español, 2018). The influenza virus that caused this outbreak originated in wild waterfowl birds, which served as the virus's major reservoir and spread to people. The viral strain that is infectious to people is a result of a mechanism known as assortment, in which avian virus strains are transformed into human virus strains. The virus was able to evade immunity in that era due to this antigenic change (Taubenberger, Kash, & Morens, 2019). Pigs are susceptible to both avian and human strains, according to the research. As a result, the pig is considered to have a role in the transfer of disease from birds to people. During WWI, the H1N1 infection spread around the world as military soldiers from many countries functioned as carriers, carrying the virus to their respective countries. Because of the enormous mortality and morbidity, the illness epidemic was dubbed the "Spanish Flu Pandemic," and Spain was the first to recognize the outbreak

1918 Pandemic (Spanish Flu): Impact & Measures

In early September 1918, Influenza first arrived in erstwhile Bombay, and in a period of just three months it swept across north and east (Hill, 2009). In November 1918, the crude death rate was about 16 per 1,000 populations. India lost more than 12 million people (Mass, 2020; Mills, 1986). However, the recording of deaths for India in this period is expected to have been under reported and incomplete. The historical observations from these times are:

- 1) During 1918 pandemic, general disturbance in day to day economic activities had distressing impacts on individuals.
- 2) The deterioration in economic activities elevated the inflation, resulting in large declines in the real returns on stocks and short-term government bonds (Mass, 2020).
- 3) Massive mortalities resulted in acute shortage of workforce. During 1918 Pandemic, farmed land has declined in total area cropped (Donaldson & Keniston, 2014).
- 4) According to reports of Sanitary Commissioner of Punjab 'food prices were high and the sufficiency of blankets and warm clothes was almost impossible'. In other provinces also, there was huge scarcity of farm products, clothing etc. Furthermore, shortage of fodder made milk as scare product (Ojo, 2020).
- 5) All the provinces encountered a substantial decline in output and subsequent decrease in export between 1918 and 1919.

- 6) The government imposed closure of schools and colleges, cinemas, social gatherings places and banned organizing of fairs and religious events.
- 7) Public services (as postal services & others) implemented rigid travelling guidelines for their personnel. As a result, postal services became unorganized, further hampering the communication.

Covid-19: Impact & Measures

In context of number of confirmed cases, India is only behind America with nearly 10 million positive cases. To contain the impact of this pandemic, strict lockdown was forced on, 24 March 2020. This lock-down period decelerated the spread of the Corona virus and allowed country to prepare for coming times. However, the first quarter GDP declined (at Constant 2011-12 Prices) to 23.9 % as compared to 2019-20. Among various business sectors, agriculture sector offers a ray of hope with 3.4 % positive GDP growth. Broadcasting, trade, hospitality, and transport are worst hit sectors reported with approximately 47 % negative growth.

In order to revive Indian economy, the government of India is lifting restrictions in Phases. The government termed these phased relaxations as 'Unlock'. Unlock Phase-I with an economic focus was introduced on June 1, 2020 allowed opening of places of worship for the public, hospitality services and shopping malls.

From July 1, 2020, Unlock Phase-II mainly offered ease in most activities outside containment zones and permitted more domestic flights and trains. The GoI has permitted the states to manage the situation as per the conditions prevailing in their respective state. Only the limited number of activities were prohibited throughout the country. The main highlight of Unlock Phase-III was removal of restriction on inter-state and intra-state movement of people and goods. This was followed by Unlock Phase-IV starting from September 1, 2020 allowed operation of Metro rail and initiated the process of opening of academic institutions for selected group of students on voluntary basis. Unlock Phase-V came with more relaxations. States and Union Territories were authorized to take a decision regarding opening of schools from October 15. Cinemas and multiplexes were allowed to open with half capacity. Restrictions on outdoor gatherings were removed and indoors gatherings with half capacity were allowed. The opening of businesses and industries have infused some strength to the economy, but the new waves of Covid-19 are posing new threats for the states and to the nation.

1918 Pandemic (Spanish Flu) vs Covid-19: A comparison

Provinces/Cities that implemented aggressive policies (like school lockdown and curb on public gatherings) during 1918 Pandemic reduced the relative weekly flu deaths (average) (Mass, 2020). However, this shattered the economy of British ruled India. The current environment is quite different as compared to 1918 pandemic, as:

- 1) An important factor is the economy structure. Today 86% of global workforce is employed in service industries; whereas in 1918 it was less than 50%. Thus, agriculture and manufacturing were comparatively less exposed to the pandemic than retail.
- 2) World War-I acted as a catalyst and governments mandated production to meet frontline needs. This saved economy at the cost of epidemic spread. Thus, industries sailed through that period.
- 3) The better mode of communication is also a contributor of the great slowdown. During 1918, communication modes were not available to the people and the newspapers restricted their focus to the war front.
- 4) Another safeguard during 1918 was less prevalent non-essential services i.e. luxury services. Thus, people were constrained to buy the essential items, and this kept markets alive. However, today's market has considerable share of non-essential services, which many gave up easily.
- 5) Nonexistent global supply chains also eased the economies. Local supply chains maintained demand, self-resilience and growth pace. The global supply chains have snatched this benefit from many nations.

Conclusions

As inferred above, the scenario in 1918 was quite different. Certainly, it is evident that for survival and economy rebound India need to open its industrial sectors. In addition, like other countries across the globe, India has realized the risk associated with offshoring. Thus, Atma-Nirbhar India is a way forward. A shift towards automation may back this goal. However, this transition will be capital intensive and may not be swift. The ill manufacturing sector cannot make this shift without government encouragement and support.

According to Maddison Project Database 2018, India's per capita Gross Domestic Product took four years to recover from 1918 crisis. With the lockdown and other measures (social distancing, restrictions, etc.), implemented by the Government fatality rate in India may remain low, but without instant and serious measures, economy may suffer high fatality with further slowdown and may take years to recover to pre-covid scenario.

Although we are aiming to reach normality both socially and economically, it is necessary to remain vigilant against the waves of the virus. As 1918 pandemic occurred in two waves in India, and the literature reports that the second wave between September and November 1918 was more severe (Chandra, Kassens-Noor, Kuljanin, & Vertalka, 2013). The impact of different waves of Covid-19 is still to be realized and the count of waves is still uncertain. Therefore, until the vaccination

trials prevail any fruitful results and the supply chains make those vaccines available in every corner of the nation; it is not safe to lower our guard and avoid precautions.

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