



The Upsurge and Impact of COVID 19 in India: Health Issues and Remedial Measures

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Author's contribution

The sole author designed, analyzed, interpreted and prepared the manuscript.

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ABSTRACT

The novel Coronavirus was something that nobody was prepared for. It was that part of the syllabus which was always neglected. The contagious disease which started in the Wuhan region of China had started to settle in various parts of the World. The outbreak of this disease has reached such a huge number that all the countries witnessed lockdown in some form or the other. Some people have witnessed destruction of mankind while some have even leisured this time to their fullest but as it has been always said "Prevention is better than cure". Prevention of covid 19 in all the nations was one of the major steps which was taken in the year 2020. In India it all started in the year of 2019 December when the first ever case of covid 19 was reported in the state of Kerala followed by Rajasthan, Maharashtra and Delhi. Following such a situation and then sudden increase in the no of cases all over the country a major decision was taken that was of Complete lockdown excluding the emergency and essential services. Before taking the step of lockdown, as a gesture of respect to the frontline workers, government of India announced Tali Bajao movement. In the period of lockdown Certain norms were even made mandatory that were wearing a mask, maintenance of hand sanitation and following social distancing of 1.5 meters in public places. All the educational institutes and teachings were even suspended during the time period of lockdown as it could have become a hub for the virus to spread. With time, the restrictions which were laid

down in lockdown were started to be reduced in the phase wise manner and finally India noticed its very first Unlock period. In all this scenario mankind has dealt with various situations and have emerged to be a better person. All these steps were crucial to control the spread of Novel Coronavirus and prevention from the already spread cases.

Keywords: Lockdown; migrant workers; economy; environment; prevention; unlock.

1.INTRODUCTION

Among the life threatening syndromes that have occurred in the recent past, two of them include severe acute respiratory syndrome (SARS, 2003) and Middle East respiratory syndrome [1]. On 23 march 2020 prime minister of India declared a nationwide lockdown for 21 days restricting any locomotive movement as a preventive step against the coronavirus pandemic. The lockdown was declared after a voluntary - Janta Curfew on 22nd march 2020 followed by a series of regulations in the country. The lockdown came into effect when the number of confirmed cases in the country when the number was about 500. The growth rate of the pandemic was reduced initially but boomed later. The goal was to control the spread of coronavirus in the country. According to epidemiologists, the primary spread was along with a seafood market, where other wild animals were simultaneously being marketed for consumption of individuals [2]. All the services except hospital and groceries shops were closed including the closure of private establishments. Closure of all worship places and suspension of all non essential private as well as public transport was implemented. Just before the end of the first lockdown period approached, few state governments decided to extend the lockdown till 1st may 2020, but later the prime minister of India announced a nationwide extension of lockdown until 3rd may 2020 which was again extended later till 17th may 2020. The Indian government virtually divided the district into 3 zones based on the virus outbreak. Green zone with no or very less cases, orange zone with moderate cases and red zone with large numbers of cases. On 30th may 2020, few restrictions were lifted and the prime minister announced the unlock 1 phase. Unlock 1 began from 1st June 2020 followed by unlock 2 a month later. The country witnessed unlock 3, unlock 4 and unlock 5 in the month of august, September and October respectively and relaxations more than the previous month. On the brighter side, the death rate in our country is one of the lowest (around 2.53%) when evaluated along with the overall global mortality rate of around 4.28%.[3] The covid virus is

communicable between individuals through both direct and indirect ways from both symptomatic and asymptomatic patients [4].

The Indian government Confirmed its first covid case on 30th January 2020 in the state of Kerala, and after the country confirmed near about 500 cases, the prime minister of India asked each and every one to observe then Janta Curfew on 22nd march 2020 as the curfew ended, the prime minister of India stated that Janta Curfew is just a beginning, se can a long battle to fight against the novel coronavirus strain (covid 19). Following this, the Indian prime minister announced nationwide lockdown from 24th march 2020 for a period of 21 days. The prime minister said that the control of the spread could be achieved only if we break the cycle of transmission via social distancing and lockdown would be enforced more strictly than the people's curfew. As of April 29, 2020, there are 22,629 active cases in India with 1007 deaths [5].

Janta curfew was a 14 hour curfew in which every citizen was supposed to obey the rules with exceptions for police, medical services, media and home delivery professionals. At 5 pm all the people were asked to clap their hands bang steel thalis to show respect and appreciate the efforts and services provided by the professionals. People were restricted from stepping out of their houses suspension of all transport services that is air, rail and road exceptions were essential goods and transportations, police and emergency services. All the non essential services like hospitality, educational institutions were also suspended. There are three other vaccine candidates which have entered into clinical trials and another 71 vaccine candidates are undergoing preclinical testing [6].

The government of India stated that who so ever fails to follow the restrictions can end up in the jail. The 3 zones red, orange and green having maximum moderate and less no of cases respectively had different sets of restrictions each. The red zone prohibited use of railways and metro services with prohibition on

functioning of educational institutions, cinema halls and public gatherings, place of worship, intra and inter city buses and taxis. The orange zone permitted e-commerce dealing with essential goods, two wheelers without pillion rider, interstate movements of goods. Similarly the green zones lifted restrictions just like orange zone in addition permitted inter and intra seat buses with 50 percent capacity. One of the major step was around the reopening of liquor shops. However citizens were asked to follow the protocols of covid 19 prevention that is wearing mask, hand sanitisation along with maintaining at least 6 feet of social distancing among one another. But it turned out to be a major disaster as none of the protocols were followed by the citizens all around India and the liquor shops observed long chaotic queues outside the premises from as early as 5 am. This led to a massive increase in the number of cases and the liquor shops turned out to be a major center of spread of novel coronavirus.

The state governments and municipal corporations decided to shut down the liquor shops while some authorities were totally against this shutdown of shops. Instead some authorities demanded the state government to increase the taxes on the purchase of liquor by the citizens of that particular area where the shops turned out to be infectious pool of coronavirus. The WHO has also approved of a setup with private and academic sectors for laboratory testing in remote areas [7].

2. LOCKDOWN MEASURES

India, being the second most populated country in the world, stands as the third most affected country by corona with 769,052 confirmed cases. India on March 12 confirmed its 73rd case of novel corona virus, with Kerala reporting the most number of confirmed cases according to the Ministry of Health and Family Welfare. The initial three cases of the novel corona virus happened on the 30th January and 3rd February in Kerala as they had come back from Wuhan China [8]. On their return, they were quarantined for a period of 14 days. Narendra Modi, the prime minister of India announced a nationwide janta curfew for 14 hours [9]. A nation-wide lockdown was observed from 25th March 2020 till the 31st May 2020. A ban was imposed on people from stepping out of their homes throughout this period and all the services and shops were closed except for the pharmacies, hospitals, banks, groceries and other necessary services.

All the commercial and private establishments were closed and all educational, training and research institutions were suspended. This ban was also applicable on all places of worship and non-essential public and private transport. In the beginning, it was considered that India had the virus well in control within its boundaries due to the implication of lockdown and social distancing [10], but, on the contrary once the various phases of lockdown had ended, India had a total of 1,90,648 confirmed cases among which there were 5407 deaths due to covid-19 [11]. A medical insurance of worth 500 million was provided to all healthcare workers at the frontline. Following this, the Indian government then arranged for a special Air India flight for 324 Indian citizens from Wuhan on 31st January 2020 who were then quarantined for 14 days. A second batch was also evacuated after this and their health condition was monitored on a daily basis. The government also took measures to evacuate the citizens stranded in Iran. A few government organizations including the National Pharmaceutical authority in charge and Drugs controller general of India have been instituted to make sure than an adequate supply of API and also to keep in constraint and corrupted or illegal activities. From the 4th March 2020, screening was made compulsory at all airports in the country throughout. Thermal screening was mandated at 21 airports across the country. At the same time, screening measures were also established at around 10 major seaports and 60 minor seaports. The NIV (National Institute of Virology) and around 50 other laboratories under the Indian Council of Medical Research's (ICMR) Viral Research and Diagnostics Laboratories network had all the required basic instruments required for testing the citizens presenting with symptoms. The NIV lab of Pune also was established very early with covid testing and next generation sequencing measures. Also, ICMR advised to conduct ECG (palpitations, chest pain syncope) during the course of prophylaxis [12]. The DGFT later had established a ban on the export of any personal protection equipment such as respiratory masks and other equipment of safety on the 31st January 2020. In spite of its excessively vast population and diversity, India continues to fight against the invisible virus with utmost courage with all its medical health care workers at its frontline. From the industrial point of view, India has grabbed its advantage particularly in the pharma industry, where India depends on 70% pharmaceutical ingredients [13]. For the purpose of building back the Indian economy the government has even taken an

initiative of spending a \$266 billion package which can improve 4% of the GDP [14].

2.1 IMPACT of the LOCKDOWN

More than 350 deaths were reported by 10th may 2020 due to various reasons. The Gross domestic product growth rate had fallen drastically. The major victims and sufferers were the migrant workers. Millions of migrant workers lost their source of income, suffered food shortages leading to starvation and despair. The government schemes ensured that the economically compromised people would get additional food and rations but the distribution chain said something else. Migrant workers left with no work and no money wanted to travel back to their native villages but due to travel ban they could not use public transportation and few of them decided to walk to their respective village. Many of them were arrested for violating the rules, some died of exhaustion or road accidents. On 1st may 2020 the indian government launched special trains for the migrant workers and other standar citizens but some fishy ticket fare business came into the light due to poor coordination between the state and railways. Even after these arrangements many migrant workers chose to travel back to their home villages on their feet. The country mourned to a tragic incident that killed several migrant workers sleeping on the railway tracks and showered sympathy on the poor by independently distributing essentials amd food packets to the poor. On 26th march 2020, the indian government declared that its going to pledge a relief package of 22.6 billion USD to help the poor population hit economically by the ongoing pandemic. However few activists and economists weren't in the favor and said that the major affected population was unable to avail the facilities.

2.2 Impact on the Nature

We all know how crucial the environment is for the development of the society. Man should have always looked for the environment but due to greedy needs of mankind we have always looked down upon our very own environment. Covid 19 has somehow caused a positive impact on the Environment. Somehow there were some positives of all the negatives of the contagious covid 19. People have witnessed this positive aspect in many form and out of which one was the free roaming of wild animals on the streets. Where all human activities were restricted we

witnessed many animals freely roaming around. Another form of positivity which was noticed was the concept of healing by nature. All the water bodies self cleansed themselves by their own natural form of healing. The river Ganga which had been a big controversy and had been there in every government's election manifesto about cleaning, was healing itself by its own virtue for the very first. Lacks of crore which was decided for its cleaning was saved. Not only in India but all around the globe, mankind has witnessed the self healing action of nature.

The quality of air significantly improved during the lockdown, rivers and water bodies became cleaner and the planet bloomed. Henk Bekedam, WHO representative to India appreciated the decision of lockdown. WHO Executive Director said that India must take all preventive measures along with the lockdown to prevent the second and the third wave of Covid-19.

3. RESUMING LIFE AFTER COVID 19 LOCKDOWN

As covid cases were reported throughout the world, the first measure to control covid 19 by most of the countries was a lockdown. On march 25 Bharat went into its strictest lockdown in history. Never such a step was expected from the government of India which was gradually unlocked in phases. Work places and offices saw a 72 percent fall in the staff movement. Even after relaxations (unlock phase) few offices and work places adapted a permanent work from home model still showing 15 percent less staff than usual. The country witnessed near about 30 percent rise from the base line around residential areas. However, movement started dropping each week. Grocery and pharmacy has reported the biggest resumption among all the sectors in India and has been a factor that offers some relief for the economic recovery of India. Lockdown was harsh on transient hubs too, showing a drop of 70 percent from the baseline but reported a gradual recovery. Recreation Centers witnessed a drop of 87 percent and parks recorded the drop to be as high as 54 percent. If the number of COVID-19 cases rises in the nation, it would be a disaster for India [15]. A number of articles on impact of Covid were reported. Anjankar et. al. reported on Review of the impact of covid-19 on medical education system [16]. Budhrani et. al. reviewed Impact of Covid-19 on Global Wealth [17]. Chawla et. al. reviewed impact of covid 19 pandemic on

tuberculosis [18]. Mujbaile et. al. reported on impact of covid 19 on pregnant women and child health [19-23]. Few more related studies on impact of Covid-19 were reported [24-27].

4. CONCLUSION

The year of 2020 was not a great year for everyone. Everyone suffered a loss in some form or the other. The decision of lockdown was one of the major decisions which had its own toll on the life of each and everyone around it. Some cherished the time of lockdown with their loved ones while some lost their loved ones, while the nature we all had spoilt at some time or the other had undergone the process of self healing in this period of lockdown. No one can comment on the pros and cons of lockdown but one can definitely say that due to this tough decision taken by the government of India, the number of covid cases came to a slow pause. India being the second largest country by population could be the most severely hit country but due to this decision of lockdown and the corporation of people along the government of India had let to decrease in the severity of the situation. The pandemic is not over yet but the vibe of positivity is back with the decrease in the number of covid hit cases and the rate of recovery has reached some new heights. With all of this being said and understood, we should still remember that the pandemic is not over yet though the situation is under control, we should all follow the protocols of social distancing and protect us and everyone around from the disastrous outbreak of coronavirus.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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