

## Impact of Covid-19 in India

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### ABSTRACT

India is the second largest populous country suffering from the pandemic due to Corona Virus. Social separation and lockdown rules were implemented, but they had a negative influence on economic situation of our country. While there was a negative toll on the economy and the human interaction of our country, environment was the only sector which was positively impacted. During early December in 2019, the first Corona Virus epidemic was announced in Wuhan, Hubei Province, the WHO (World Health Organisation) declared an outbreak a Public Health Emergency of International Concern (PHEIC) on 30th January, 2020, and on 20th February, 2020, WHO formally recognised this epidemic of coronavirus disease as COVID-19, where CO stands for Corona, VI-Virus D-Disease, and 19 for 2019 as that was the year this infection first caused an epidemic.

The Severe Acute Respiratory Syndrome Coronavirus 2 causes COVID-19 disease (SARS-CoV-2).

The Corona Virus Disease outbreak introduced not only illness and death, but also hitherto new difficulties including as public health, food availability, deadly interactions, and the global economy. It paved the way for the entire globe to face new challenges that no one could have predicted.

**Key words:** COVID - 19, Environment, Economy, India, Impact, Population, Disease, Pandemic, lockdown

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### INTRODUCTION

Coronaviruses are enclosed RNA viruses with a crown-like shape that can range in diameter of 60 nanometers to 140 nanometers in size and are prevalent in animals, including humans and birds. Coronaviruses have been found to mutate and recombine, resulting in diseases of the respiratory, gastrointestinal, hepatic, and nervous systems. Coronavirus includes seven strains, including OC43, 229E, NL63, and HKU1; SARS-CoV-19 (Corona Virus Disease being the most recent), SARS-CoV and MERS-CoV, the first four of which produced moderate respiratory sickness in infected humans, while the other three caused human death. SARS claimed the lives of almost 8000 people in 2002–03, with 774 of them dying.

SARS-CoV-2 is an animal derived corona virus with an approximately eighty percent sequence which it shares with the SARS-CoV [1]. The disease has an incubation time of three days (ranging from day zero to

approximately a month), with probable asymptomatic transmission [2,3], according to current evaluations. COVID 19 patients in India were formerly caused due to an international source rather than spread in our country. First 3 individuals testing positive for Corona Virus were in Kerala on the 30th of January and the 3rd of February, as they came back from Wuhan, China. 2 other infected individuals were reported one month later on 3rd of March; one coming back from Italy, Europe and the other in Hyderabad, Telangana visiting United Arab Emirates [4]. A couple other cases were reported in Jaipur, Rajasthan on the same day [4].

On March 16, 2020, MoHFW offered different treatments such as a 1-meter social distance to reduce the pace and spread of Corona Virus Disease spread in a community, which eventually led to a decrease in disease transmission, mortality and death. Cities such as Delhi, Bengaluru, Indore, Hyderabad, Chennai, Kolkata and Jaipur, Ahmedabad and Bhopal were identified as COVID-19 hotspots, each having four large metropolises, accounting over forty percent of COVID-19 instances in the country. It's suspected that the condition accelerated in a greater number of youngsters under the age of ten and elderly adults diagnosed with various health concerns.

India's population density, which is nearly three times that of China, is the most difficult obstacle in eradicating

COVID-19. The situation might be far terrible in slum areas, where population density can surpass 250 000 persons per square kilometre, creating social isolation difficult. Admittedly, the attitude and behaviour of some citizens has been a major impediment in India's fight against COVID-19; there have been indications of citizens concealing their travel history to avoid quarantine, as well as people taking part among otherwise forbidden huge cultural occasions. Despite the quick renovation of the health-care infrastructure, with around two thousand dedicated COVID-19 centres located throughout the country in a little span of time, the physician shortage will not be overcome instantly. India has 0.8 physicians per 1000 people, compared to 4.1 in Italy, 1.8 in China, 4.1 in Spain, 1.1 in Iran, and 2.6 in the United States.

COVID-19 killed patients not just via viral infection, but also through economic and emotional breakdown, with developing nations suffering from poverty and malnutrition. To deal with the illness, India instituted sixty-eight days 4-phased shutdown which commenced on March 24th and subsided on May 31st. Given the present COVID-19 configuration, it's still not clear whether the virus or the associated unemployment is more prevalent in India. Thus, concluding the topic by saying that how India is trying to prepare to cope up with, dealing with the present state, negative consequences on the economics, human beings, and the ecosystem, as well as different approaches designed to battle this disease.

#### **Covid 19 impact in India**

Certain factors, while theoretical, point to a limited transmission of the COVID-19 pandemic in India, including as hot climate, malaria endemic, widespread BCG (*Bacillus Calmette-Guérin*) vaccination, and the age-old Native custom of greetings with *Namaste* rather than a hug or hand shaking. Many firms are now manufacturing COVID-19 kits in the United States, decreasing the cost of testing. Although screening rates are far less than in wealthier nations, they are comparable to neighbouring developing countries like as Thailand, Indonesia, Myanmar, the Philippines, and Pakistan. Furthermore, the number of people aged seventy in India is only 3.3 percent, compared to 11.9 percent in China and 37.6 percent in Italy; so, the overall mortality rate in India should be low. Finally, India is the largest global production (and supplier) of hydroxychloroquine, the drug that has been demonstrated to be effective in the pandemic.

On March 22nd, 2020, Mr. Narendra Modi, the Prime Minister of India encouraged citizens to observe the fourteen hour Janata curfew. The first phase of India's 21-day shutdown began on March 24th. Movement in supermarkets and pharmacy, recreation and retail, transport for trips to parks, and workplaces was decreased by 64.2 percent, 70.51 percent, 65.6 percent, 46.17 percent, and 60.03 percent, respectively [5], because of this lockdown. Due to the rapidly rising number of individuals testing positive for Corona Virus

Disease, the Government of India eventually ordered a second phase lockdown until 3rd of May on 14th of April [6], which was then prolonged until 17th of May and then implemented till 31st of May [5]. To ensure that the lockdown was followed strictly and was more powerful, India enacted the Epidemic Disease Act of 1897, including a quarantine statute.

The century-old provision allows nation to screen travelers travelling by rail or ship (air transport would not be a choice now this act was enacted) as well as quarantine candidates in hospitals, emergency shelters or other measures in view of preventing the transmission of dangerous Corona Virus Disease [7]. This, however, pales in contrast to North Korea's legislation, which required the use of the army to impose a lockdown [8,9]. Judging by the current pattern in India, the infected number of patients by the Corona Virus Pandemic reached 107 on 15th of March, post the first reported case announced on 30th of January, the number of infected individuals has been progressively increasing ever since. Individuals testing positive for the Corona Virus Disease in India increased by ten times in fifteen days (15th to 30th March). As of March 30th, India had reported 1071 cases, including 29 fatalities.

According to the Indian Council of Medical Research (ICMR), if social distance and recommended quarantine initiatives are implemented correctly, India may reduce incidences by 62 percent. Another study found that if the virus spreads unchecked, India might have about 13 lakh cases by mid-May. This number, however, can be decreased by increasing testing, adhering to tight procedures, and enforcing limits. Nonetheless, on the 18th of May, the count of individuals testing positive for Corona Virus Disease in India had risen to 1,01,139.

Formerly, it was assumed that India was managing effectively as there was a small number of patients testing positive for COVID-19 due to confined spread throughout a lockdown and social separation [10], but by the ending of all lockdown phases in India, it had a total of 1,90,648 known patients, including 5407 fatalities caused by this virus. The pandemic has an impact on both developed and developing regions in India. Initially, all of India's major metropolitan areas and provincial capitals were pinnacles of the disease. People among both cities and suburbs, but at the other hand, have been devastated. Corona Virus Pandemic has also resulted in a negative influence on existence of humans.

Furthermore, the unforeseen lockdown on March 24, 2020, pushed lakhs of migrant workers to confront an uncertain outcome lacking family, food, or a job. More than 50 million people from West Bengal, Punjab, Bihar, Madhya Pradesh, Odisha, Uttar Pradesh, Rajasthan, and Assam often moved to Delhi and Maharashtra for work. As a result of this lock down enforcement, these workers were pushed to leave their towns and return to their rural communities. Because there were no transit choices, daily wage labourers alongside pregnant females, older citizens, and young children were forced to

walk [11]. As a result, following India's division in 1947, the country saw the second-largest reverse movement in its existence. As a result of the COVID-19 pandemic and poverty, migrants are expected to face substantial mental issues [12].

Workplace directions like work from home (WFH) have been advocated in India, although it is only acceptable for urban upper- and middle-class folks and problematic for the rural agro - based populace. Furthermore, India currently lacks computer and internet connection in areas which are hard to reach, making this WFH difficult [13]. The education system in India has also come to a halt because of Corona Virus Disease. Due to a shortage of resources, schools and universities were shut during the lockdown, which hampered the entire teaching and learning process and education system [14].

In India, medical facilities were at a crucial juncture. Under normal circumstances, available beds per 10,000 people were 3.2 in rural areas and 11.9 in urban areas [15], which had to be increased to accommodate COVID-19 patients. Because of the hectic schedule for COVID-19 patients, some interruption along with inconsistencies in the other treatments were found. Little problems arose during the administration of the children's immunisation programme for meningitis, tuberculosis, hepatitis B, tetanus, pneumonia, whooping cough, and diphtheria [16]. Individuals experienced disruptions in renal dialysis and chemotherapy services. Tuberculosis (TB) continues to be the leading cause of mortality in India, owing to malnutrition caused by poverty. During the lockdown, patients have seen a significant rise in the number of Tuberculosis patients, and they are even sensitive to COVID-19 infection [17]. Nonetheless, to handle the COVID-19 patients; colleges, hotels as well as stadiums were converted into isolation wards and railway carriages were turned into quarantine facilities.

The Indian economy, which was already suffering from poor development in the past financial year, will be badly harmed by the lockdown and the pandemic. Significant financial losses have been forecast during the lockdown, and the economy is expected to decline by 10-20 percent as a result. Interrupting healthcare and monitoring during this period may be harmful to individuals with type 2 diabetes, coronary artery disease, and other chronic non-communicable illnesses, potentially leading to more economic losses in the years ahead due to the rise in global burden of disease and complication hardships. It is projected that health and nutrition indicators would deteriorate because of the pandemic's rising socioeconomic disparities. Furthermore, the tuberculosis-diabetes syndemic may intensify, increasing morbidity and death and hence monetary damage.

Dread, uncertainty, poverty as well as economic disturbances are just some of the concerns that can result in substantial psychiatric discomfort in people due to COVID-19 [18]. Famine, hunger, and poverty are still

issues in India, and they will rise due to the pandemic. People are prone to become dissatisfied due to lack of jobs and opportunities, resulting in chronic stress, despair, substance abuse, self-harm, and alcoholism.

When limited resources are attributed to pandemic containment, mental health issues and their betterment usually takes a second seat. Historically, each infectious illness epidemic or pandemic has resulted in a significant mental health setback. Even after a year of Ebola response, indications of PTSD which is Post Trauma Stress Disorder were more frequent in the 2014 Ebola epidemic. A similar image may be found in the global HIV pandemic. The frequency of mental diseases among HIV-infected people has been reported to be much greater than in the general population. As a result, the likelihood of Post Trauma Stress Disorder as an attribution of the Corona Virus Disease might become a significant issue to the country's psychological well-being. Individuals suffering from drug addiction and dependence issues may notice a deterioration in their psychiatric well-being because of this pandemic, because the healthcare system concentrates primarily on emergency treatments. The environment and pharmacy are the one which are healing and growing nowadays during Covid.

In India, air pollution is major and has a deleterious influence on human health, resulting 3,50,000 new children suffering from Asthma and 16,000 premature deaths per year. This is due to the prevalence of nitrogen dioxide and particulate matter with sizes ranging from 2.5 to 10 m in the air, which are created by the burning of fossil fuels, notably in India's transportation sector [19,20]. All kinds of transportation, including air travel, as well as industries that contribute significantly to air pollution, were suspended because of the lockdown. Therefore, the air quality significantly improved.

According to the International Energy Agency, in the first four months of 2020, use of coal was 8% lower than the usual. Moreover, during the shutdown, the water quality of the Ganga was enhanced. South Asian River Ganges Dolphins, which are critically endangered, have also been observed returning to the Ganga after thirty years. Thousands of flamingos have gathered in Navy Mumbai. The birds typically visit the area every year, but locals have observed a significant rise in their numbers this year. The Uttarakhand Pollution Control Board also declared that the water from Her-ki-Puri in Hardwar is "fit for drinking after chlorination" due to the river's lack of industrial waste [21].

## CONCLUSION

COVID-19 has had a disastrous impact on India, and most citizens will face unemployment as a result of the combined fear and lockdown scenario, resulting to malnutrition, hardship, and psychiatric illnesses. Whilst it is uncertain if the most serious hazard to which People are exposed on a regular basis is coronavirus or poverty. So far, COVID-19 appears to have a neutral impact on society, including the commerce, society, and ecology.

It is impossible to believe that the traumatic memories of the COVID-19 outbreak will be quickly or entirely forgotten. The citizen's trust in the governmental body may deteriorate. Because a third wave is possible, there is no need to cheer or follow any model.

All latest research shows that the prevalence of comorbidities is related with a poor result in COVID-19 patients. Diabetes Mellitus is more prevalent in Indian COVID-19 patients than in people from other nations. However, although ranking third in the world in terms of the number of patients testing positive for the Corona Virus Disease, there is very little published data on the frequency of comorbidities and related outcomes from India. Especially since the majority (ranging from 26 to 76 percent) of COVID-19 patients may be asymptomatic, as acknowledged in certain surveys from Kuwait, India, China and Italy, it is recommended that low-income countries such as Brazil, Africa, and India which have an overburdened medical infrastructure with limited resources and an average socioeconomic status implement a firm rule for developing cost effective assessment techniques to detect, assess, recognize, and home quarantine of asymptomatic patients.

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