

TRENDS OF COVID-19 IN INDIA- A REVIEW

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ABSTRACT

COVID-19 pandemic was caused by the SARS-2 corona virus and emerged as a risk to humans. The disease was first of all reported in Wuhan, China. The people suffering from the infection showed symptoms of pneumonia. With time the disease spread in other parts of the country and world. Initially, the information related to COVID-19 was limited. But with time more information related to the transmission and treatment of the virus came into existence. Due to scarcity of the medical resources lockdown was enforced in the country to control the spread of the virus. Lockdown showed a positive impact by reducing the number of cases but has a negative impact on the economy of the country. In this review we showed the trends of spread of COVID-19 in various states of India.

KEYWORDS: COVID-19, Coronavirus, Pandemic.

INTRODUCTION

The outbreak of severe respiratory illnesses in humans originally reported on December 31, 2019, was connected to a novel coronavirus (SARS-CoV-2) that originated in Wuhan, China. As of July 18, 2020, there were 13,876,411 confirmed cases and 593,087 fatalities worldwide in 216 nations.^[1] In all, 92 nations reported community transmission, 75 countries reported clusters of cases, including India, and 27 nations reported sporadic instances.^[1] Case definitions, management, and control methods have all been modified as data has become more readily available, which was not the case during the early stages of the epidemic. The majority of the cases that were first reported in India had a travel history from Wuhan, China.^[2] In the initial phase, the bulk of the patients (78 percent) were male and in the 30–69 year old age category (51 percent).^[3] The first laboratory-confirmed case of COVID-19 was reported on

January 30 in Kerala, with a history of travel from Wuhan. The first three cases were recorded towards the end of January and the beginning of February in the year 2020. Between February 4 and March 1, 2020, no instances were reported. Cases began to rise on March 2, 2020, in different states of India.^[4]

SCENERIO IN INDIA

In order to reduce the rising cases of COVID-19 lockdown was enforced all over the country. No doubt positive impact of lockdown was seen with considerable taper in the number of cases. But as the lockdown was uplifted a steep rise in the number of cases is seen. The second wave of coronavirus infections in India is the world's fastest growing, with the world's third-largest economy adding more cases each week than the United States and Brazil combined.

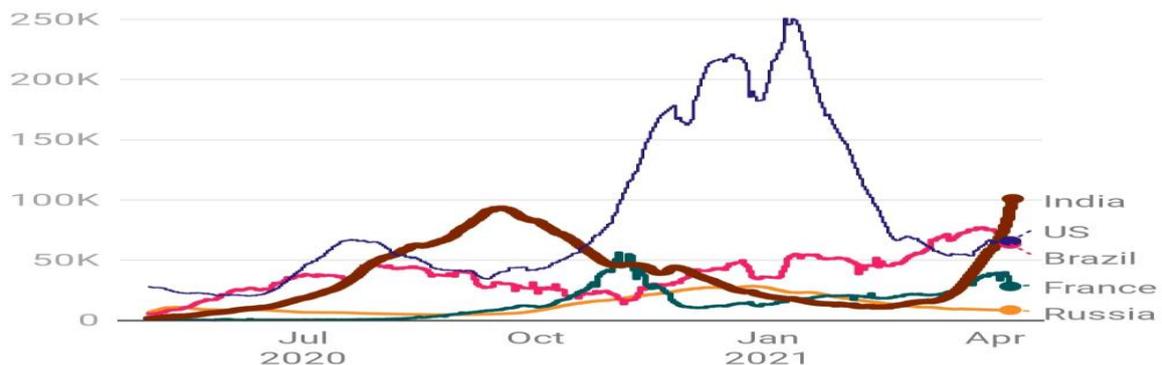


Figure 1: COVID-19 seven-day rolling cases of new cases India versus world.

Maharashtra has emerged as the epicentre of the pandemic once again, with the richest state accounting for more over half of the daily additions. Maharashtra has seven of the ten districts with the most cases. As a

result, the state administration has had to suspend all non-essential services, close shops and restaurants, and encourage businesses to work from home for the next month.

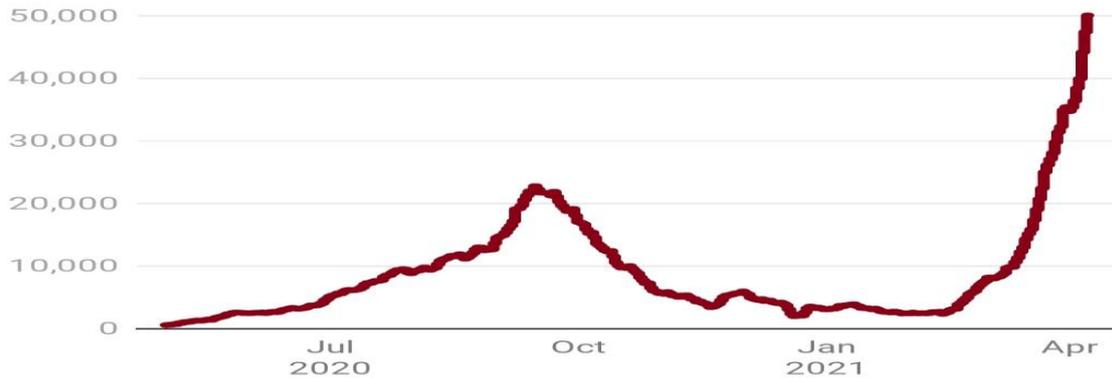


Figure 2: Seven-day rolling average of new cases in Maharashtra.

Punjab and Chhattisgarh also showed an increase in the number of cases. In the previous several weeks, they've added the majority of Covid-19 instances after Maharashtra. In Punjab, the average weekly case count

increased from 240 in February to more than 2,700 in April, while in Chhattisgarh, it increased from 250 to more than 2,400.

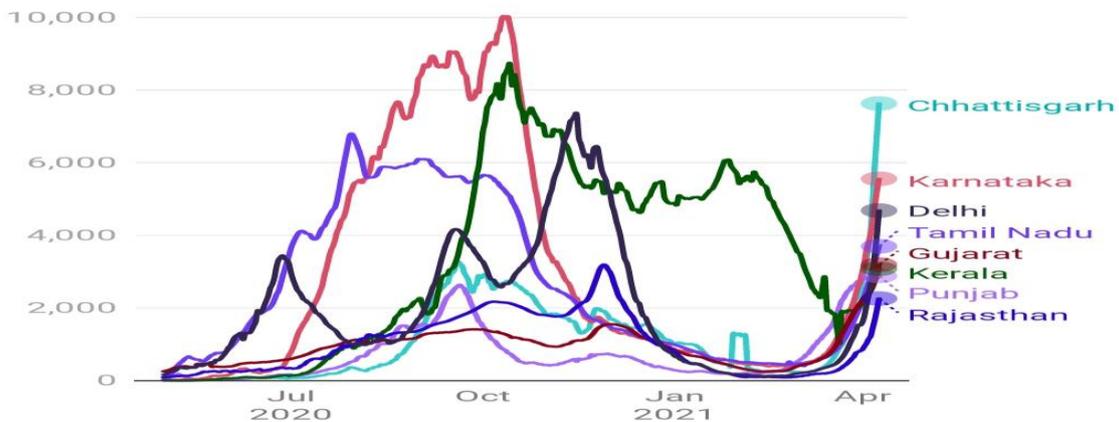


Figure 3: Seven-day rolling of large outbreaks in different states of India.

As the virus spreads at a rapid pace, the rate of positives among states has also increased. Positive rates of more

than 8% have been reported in newer hotspots such as Chhattisgarh, Madhya Pradesh, Chandigarh, and Punjab.

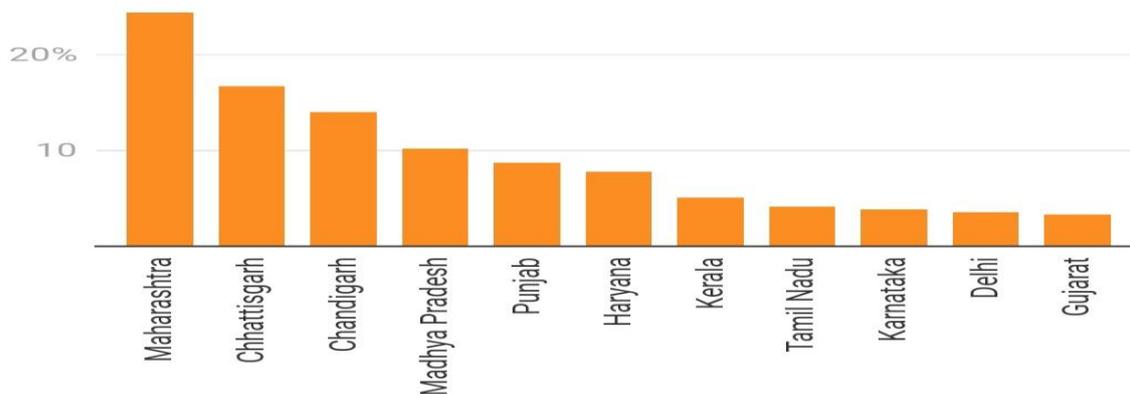


Figure 4: Percentage of confirmed cases /100 tests.

The country's mortality rate also rises, with daily fatalities reaching a six-month high. In the first week of

April, Maharashtra had an average of 250 daily deaths, followed by Punjab with an average of 58 fatalities.



Figure 5: Death toll rises in India.

The increase in coronavirus infections coincides with the discovery of novel variations in the nation. According to the Health Ministry, India recorded 807 instances of the UK variety, 47 instances of the South African strain, and one case of the Brazilian strain as of March 30.

Factors Responsible for Transmission of Covid-19

Various epidemiological factors were responsible for the conversion of an epidemic into a pandemic. A strong correlation exists between the person who carries the disease, virus and environment in a time period.^[5] Religious places (Markaj) can be considered as one of the factors that is responsible for the spread of the disease in India.^[6] Socio-cultural practices can be considered as a double-edged sword as it helps to spread and control the disease. In India, people live in joint families; well-cooked homemade food helps in the recovery from a disease. On the other hand, in slum areas, people live in small rooms, share cigarettes and drugs, which spread the disease. Population density of the country is responsible for the transmission of the disease.^[7] Researches showed that contaminated surfaces act as an etiological factor for the transmission of the disease. Viruses do not have a tendency to replicate outside the cell. Viruses transfer into the host by touching the contaminated surfaces.^[8]

Preventive and Control Measures

According to the World Health Organization^[9] the various measures to prevent the transmission and control the disease are as follows.

- Clinical triage should be used by health care facilities to ensure that suspicious patients are identified and isolated, according to the IPC recommendations.
- Hand and respiratory hygiene, disinfection of patient care equipments, use of personal protective equipment, environmental cleaning, and safe disposal of biomedical waste should all be included in the standard precautionary measures for all patients.

- Separate room for COVID-19 patients and in case of unavailability of single room patients should be kept on separate beds with adequate distance.
- In order to prevent the transmission of infection the entry of the attendants should be restricted.
- Travelers from the affected countries should be quarantined for an appropriate period of time.

CONCLUSION

From the above data, we can conclude that the second wave of COVID-19 was more dangerous as compared to the first one. In the second wave, the infection spread in the villages of the country. To avoid a future increase in instances, India has to adopt tougher COVID-19 suitable conduct, since this might overload hospital facilities. To avert a serious spread of illnesses, the authorities should consider closing schools, universities, banning public gatherings, and rallying, among other things.

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