



## Spread of coronavirus disease 2019 (COVID-19) during the lockdown in the Indian population and preventive measures

Milind Abhimanyu Nisargandha<sup>1</sup>, Shweta DadaraoParwe<sup>\*2</sup>

<sup>1</sup>Department of Physiology, Ashwini Rural Medical College, Hospital & research Centre Khumbhari Solapur, Maharashtra university of health Sciences, Nashik, Maharashtra, India

<sup>2</sup>Department of Panchakarma, Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Wardha, Datta Meghe Institute of Medical Sciences (DU), Nagpur, Maharashtra, India

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### ABSTRACT

Coronavirus disease 2019 (COVID -19) is the newly found virus in Indian population spreading all over the world through the seafood market of Wuhan, Hubei, China. Due to the spreading of coronavirus in Indian Government facing difficulty after the lockdown of one month in two phases, the number of patients is increased day by day. This is a very challenging task for the Indian Government, people are not strictly following the guidelines of the World Health Organisation. In India reported 26585 confirmed cases and 833 deaths due to COVID -19 in 31 states and union territories when the first case was found on 30th January 2020. The Government decided immediately to lockdown and closed all international borders, as per the WHO guidelines for a pandemic. The future directions to choose for people can fight with such type of pandemic. The present review emphasis is strictly on the WHO guideline's to prohibit spreading coronavirus in India. There is some gap of awareness in people which enhance spreading coronavirus even during the lockdown. This finding has cause to concern about the spread of coronavirus in this scenario during the lockdown, what farther primary prevention to be taken to avoid such transmission. The lockdown is already having a beneficial impact of flattening the epidemic curve for spreading this transmission and During Lockdown period in each state. Each state having sufficient time for finding COVID -19 Patient, people come in contact with the patient keeps them institutional isolation and declared that area infection hot spot at the district level.



\*Corresponding Author

Name: Shweta DadaraoParwe

Phone: +919403142270

Email: [drshwetaparve@gmail.com](mailto:drshwetaparve@gmail.com)

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### INTRODUCTION

In December 2019, several patients with pneumonia of unknown cause were identified in Wuhan, China ([Wang et al., 2020](#)). Coronavirus disease 2019 (COVID-19) is a newly recognised infectious disorder that has to unfold hastily all through Wuhan, Cuba, China, to other provinces in China and numerous countries around the sector. The variety of fatalities day by day due to COVID-19 is escalating. Previous studies have defined the general clinical traits and epidemiological findings of sufferers with COVID-19, and some of the medical observations have shown that the condition of some patients with COVID-19 deteriorates unexpectedly ([Lu et al.,](#)

2020) (Paules *et al.*, 2020). With the increasing range of confirmed incidences and the accumulating medical records, It is said that each symptomatic and asymptomatic patients with COVID-19 can play a function in ailment transmission via airborne and physical contact. This locating has induced an exquisite difficulty approximately the prevention of contamination unfolds. The medical capabilities of the infection are not unique and are frequently indistinguishable from those of other respiration infections, making it hard to diagnose. Given that the virus has a robust ability to spread among individuals, it's of top priority to identify or suspected sufferers as soon as viable the virus can also purpose a critical pandemic (Xu *et al.*, 2020).

The world is going through a challenging stage by the spreading coronavirus day by day near about 29,20,660, confirmed cases found, and 8,29,075 recovered unfraternally death due to the coronavirus 2,03,622 worldwide. In India start lockdown early stage due to this minimum spread of coronavirus in Indian population as compared to the USA, spin and Italy. One month in two-phase lockdown in India were decreased the patient number for breaking the chain of COVID 19. In Indian population unawareness and lack of information in pandemic disease lead to spread up to 26585 confirmed cases, and 5947 recovered, and death of patients due to COVID -19 is 833 <https://www.mygov.in/covid-19/?cbps=1> (2020). The authorities of India government ordered a national lockdown for one month, proscribing the movement of people as a safety measure.

The present work observes the importance of lockdown and its effective measures to control transmission association of underlying patients of COVID - 19 with outcomes of patients recovers with COVID-19 during the lockdown in the Indian scenario.

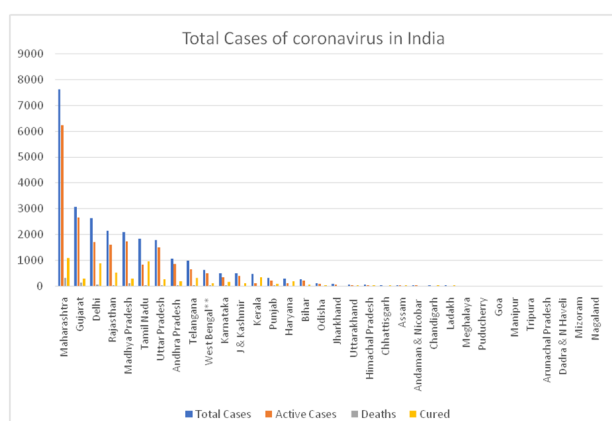


Figure 1: Total cases tally in India state wise

## METHODS STUDY DESIGN - TYPE OF STUDY OBSERVATIONAL

We retrospectively analysed the data of the patients with suffering from COVID 19 and observed them during the lockdown in the spread of Indian scenario after given proper guidelines of the World Health Organization (Mbikapathy and Krishnamurthy, 2020). COVID-19 Coronavirus cases in India during the lockdown period from 24th March 2020 to 26th April 2020.

### Data collection

The data were collected from the official database of Indian Government that tracking the latest state-wise updates of the COVID -19 infection in India population. The data was updated up to the 26<sup>th</sup> April 2020. COVID- 19 patients were categories in four group, namely total cases, active cases deaths and cured cases.

## RESULTS AND DISCUSSION

This review was designed and conducted for the duration of the lockdown to assess the transmission of the COVID 19 during the lockdown, we included information of the active cases, cases recovered and deaths during the lockdown in a month. It will definitely help for preventive measures during the lockdown. Table 1 show that entire data, from 24<sup>th</sup> Mach 2020 because of the first case of the COVID - 2019 coronavirus pandemic in India changed into pronounced on 30<sup>th</sup> January 2020, no more epidemic was suggested in India till date. The above Figure 1 shows the bars of a total number of registered, recovered cases and deaths; this trend varied every day.

The graph discovered that the trends in the cases registered at Indian hospitals changed into going upwards, and more number of corona patients were recorded in the final two weeks of March. This new record probably prompted because of the majority are travelled to homelands through public transports before the formal lockdown was implemented. The virus could spread via through this migration of humanbeing and Present signs on or after the time of incubation.

### Importance of lockdown

Since India imposed nationwide lockdown, many other countries have also ordered their citizen for self-isolation. The United Kingdom is the last European countries to imposed the lockdown, has seen higher numbers of newly COVID -19 patients found as compared to Italy. We can observe the COVID - 19 pandemic situation through searching into that

**Table 1: Total number of cases COVID -19 in Indian population after lockdown**

Total Cases Tally in India	26585	19805	833	5947
State Wise Break-down	Total Cases	Active Cases	Deaths	Cured
Maharashtra	7628	6229	323	1076
Gujarat	3071	2656	133	282
Delhi	2625	1702	54	869
Rajasthan**	2141	1590	38	513
Madhya Pradesh	2096	1716	99	281
Tamil Nadu	1821	838	23	960
Uttar Pradesh	1793	1505	27	261
Andhra Pradesh	1061	859	31	171
Telangana	991	658	26	307
West Bengal**	611	485	21	105
Karnataka	500	324	18	158
Jammu and Kashmir	494	376	6	112
Kerala	457	115	4	338
Punjab	309	220	17	72
Haryana	289	95	3	191
Bihar	251	203	2	46
Odisha	103	68	1	34
Jharkhand	67	51	3	13
Uttarakhand	48	22	0	26
Himachal Pradesh***	41	16	2	23
Chhattisgarh	37	5	0	32
Assam	35	15	1	19
Andaman and Nicobar Islands	33	22	0	11
Chandigarh	28	13	0	15
Ladakh	20	4	0	16
Meghalaya	12	11	1	0
Puducherry	8	4	0	4
Goa	7	0	0	7
Manipur	2	0	0	2
Tripura	2	0	0	2
Arunachal Pradesh	1	0	0	1
Dadra and Nagar Haveli	1	1	0	0
Mizoram	1	1	0	0
Nagaland	1	1	0	0
Total	26585	19805	833	5947

Data adapted from CORONAVIRUS COVID-19 Johns Hopkins live taker; COVID-19 Coronavirus Cases in India Updated on 26.04.2020 at 09:59 am

information during the lockdown. Around a month, some of the worst affected areas in the state-wide area in India imposed restriction, area infection hotspot at the district level.

“The World Health Organization (WHO) confirms that the incubation period (i.e., time elapse between exposure of a pathogenic organism to symptom first appearance) of COVID-19 outbreak is 14 days” (Chintalapudi *et al.*, 2020).

Short-term prohibition cannot act as an alternative to long-term containment and check interventions. For other pandemic outbreaks, the idea of wave patterns has been previously identified. These waves will take several months to feel (Simonsen *et al.*, 2018; Flahault, 2020).

### Less mortality due to lockdown

Form above figure shows less death in the Indian population; it is due to the early decision of self-isolation and physical distancing. Quarantine has now been imposed in Italy, United States, Australia, France, Germany, Switzerland and others.

Other countries delayed lockdown shows evidence, “Today (31st March 2020), 854,307 COVID-19 confirmed instances are consisting of 42,016 deaths were reported international. Three More than 190 international locations were affected, with big outbreaks in the United States (US), Italy, Spain, China, Iran, France, and others. In Italy, the death toll from coronavirus jumped over 15,000 deaths seeing that quit of February and is still ongoing, while the number of infected instances from the USA surpass approximately greater than half Million population. Due to the easy spreading of COVID-19, maximum countrywide governments inclusive of Italy introduced lockdown, and those aren't allowed to come out from their homes. As of this, almost 3.5 Billion worldwide population went into self-isolation” (Gilbert, 2020).

“Data indicate that the European countries may not have been well prepared to contain the COVID-19 case spread. Many of the current cases in Europe can be traced back to northern Italy and Iran, the two main COVID-19 epicentres outside of Eastern Asia” (Khosrawipour *et al.*, 2020).

### Preventive measures

COVID-19 is a severe pandemic which is facing each nation. This result went into the lockout of around half of the global population. India is currently facing a severe epidemic of immense death and mortality. We envisaged development within the duration of reported cases and recovered population in case of amounts if the current lockdown could continue for another two months. The finding of

this review, maybe intended to preventive measure and avoid transmission, growth in recovered coronavirus cases could be possible.

The scale of the overall research seems to correspond with an understanding of the observed countries' severe health risks. “As the number of public cases has risen with the implementation of containment measures, one may conclude that testing is itself part of the containment strategy” (Salath *et al.*, 2020; Wilder-Smith *et al.*, 2020).

### Further primary preventions during and after lockdown

Social distancing - Breakdown the chain of transmission or reduce the speed of transmission of coronavirus. Face mask- decrease the risk of infection as well as transfer to another person. Vulnerable population - geriatric people or children are at high risk of mortality more. They shall remain at home. Regular screening of all older adults shall be done for ones in a week. Congregation places: Educational institutions, cinema hall, shopping centres theaters societal gathering, restaurants park religious palaces, public events shall remain closed. Public transport - public transport should be restricted it should be under the observation of competent authorities. Special consideration should give to the Medical consumable supply. During strict lockdown enforcement of restricted vehicle movement on holiday. Corona warriors: every person works as corona warriors.

“We know from retrospective analysis that travel restrictions can positively impact case development, as observed in past SARS or Ebola outbreaks” (Camitz and Liljeros, 2006; Peak *et al.*, 2018).

### CONCLUSIONS

In this review, we concluded that precaution should be taken to prevent the spread of coronavirus (COVID -19) during the lockdown. The lockdown already has a positive impact of outbreak curve flattening, but more significant preventative measures are required to avoid coronavirus transmission. The cost of enhanced surveillance, tracking, touch tracing, and self-isolation is high soon. In the longer term, therefore, faster regulation will increase social distance, often avoid public transport, routine mask use, and hand wash. Congregation places for coronavirus transmission remain closed for six months.

### SOURCES OF DATA

In this study, all the data of the patients are from official websites of Government of India. <https://www.>

mygov.in/covid-19/?cbps=1 (2020)

### Conflict of Interest

There is no conflict in this review article.

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