

The BMJ – Intended for healthcare professionals

Rapid Response:

<https://www.bmj.com/content/368/bmj.m1251/rr-8> (Published 18 April, 2020)

Is the World's Largest Lockdown still considered an Overreaction?

Dear Editor

2020 began with the COVID-19 pandemic, posing itself as a challenge for the health care system of every nation. It not only managed to penetrate the defenses of prepared nations but also rampaged many countries who failed to realize it as their threat at the earliest. Sooner or later most of the world countries started implementing extreme strategies to combat COVID-19 with their available resources and manpower. We intend to retrospectively look at the effect of one such extreme measure taken by India the nation-wide 21-day lockdown which is touted as one of the world's largest lockdown efforts.

Challenges unique to India:

India being a developing country with a growing economy and high population density, nation-wide implementation of prevention strategies needs greater effort. Moreover, public health infrastructures are already overloaded to meet the pressing demands of the people. The targeted high-risk elderly population of India is more prevalent with non-communicable diseases, further weakening their immune systems. It is a tradition to live as a joint family in India in large numbers, hence, implementation of social distancing measures pose a challenge in such scenarios.

Graded COVID-19 Control Strategy:

From 21st January 2020, India started its thermal screening of passengers arriving from China which was extended to include other COVID affected nations later on. India marked its first COVID-19 case on January 30, 2020. Despite being in great need of the personal protective equipment as a gesture of help India sent 15 tons of masks, gloves, and other emergency medical equipment by an Indian Air Force jet to help China. By March 3rd India stopped issuing new visas to foreigners and suspended all the existing visas of nationals belonging to COVID affected countries. Section 2 of the Epidemic Diseases Act, 1897 was implemented in every state chapter. 12th March marked the first COVID-19 death in India.

Indians returning from COVID-19 affected countries were quarantined for 14 days. On March 14th, the union ministry declared COVID-19 pandemic as a "notified disaster" under the Disaster Management Act, 2005 enabling the release of funds. National Institute of Virology isolated the strain of COVID-19 making India the 5th nation in the world to isolate the COVID-19 virus.[1] The next day the confirmed cases numbers crossed over 100. Hence, the Prime Minister of India declared a nation-wide 1-day self-inflicted curfew as a means to create awareness about COVID-19 on March 22nd. From March 24th onwards the

greatest lockdown has been implemented for 1.3 billion people of India for a period of 21 days. As a result, the doubling rate of the pandemic stepped down to six days, from a rate of doubling every three days noticed earlier.

The tradeoff between Health and Economy:

The lockdown initiated by the government of India was critiqued from various vantage points around the world. Some described this pre-emptive action a disproportionate exaggerated response. Some cautioned against the economic loss that the lockdown would bring about. On retrospective analysis, it is evident that the lockdown was implemented at the most appropriate time which prevented catastrophic devastations of the COVID-19 as in other countries considering the socio-economic and health status of the Indian population.

The Government and its state counterparts were most active during the lockdown period ensuring that these combat exercises do not affect the livelihood of the citizens of the country. The key measures worth a mention are the economic stimulus package for the people below the poverty line, swift recruitment of health-care manpower and creation of health infrastructure with isolation wards and ventilators, the rampant increase in the testing centers for effective identification of case clusters and breaking the chain of transmission and door to door surveillance measures for contact tracing by community-level health care workers

Indian Testing Strategy:

Indian Council of Medical Research (ICMR), the apex body for COVID-19 control in India has devised and revised the testing strategies of India from time to time based on strong scientific evidence from past and present pandemic response strategies utilized across the globe.[2] ICMR ensured appropriate utilization of available resources. Though some of its testing strategies were criticized globally, in the middle of the pandemic, they seem to have stood the test of time till now.

India started testing of symptomatic travelers and their contacts during the initial phase of the pandemic. It was also emphasized that all travelers and their contacts were quarantined irrespective of symptoms. Later, patients presenting with Severe Acute Respiratory Illness (SARI) were included for COVID-19 testing based on a pilot study. As the suspicions of community spread increased, the apex body now recommends testing of all cases with flu-like symptoms.[3]

Indian Lockdown Effect:

The results of India's rampant measures were evident from the World Health Organisation national status report figures.[4] On March 19th, the director of the Center for Disease Dynamics, Economics & Policy warned that India could be facing a "tsunami of cases within a few weeks". Applying the mathematical models to India, at the lower end of the estimate, he pointed out that there could be 300 million cases of which 4-8 million could be severe.[5] Our Government's stern actions defied the predictions and prevented the pandemic curve from raising its hold as in other European and American nations as shown by the daily positive

case figures of WHO. Some argue that India's low numbers are due to a low testing rate. But the cohort of Indian health care workers with a low infection rate compared to that of the global rate of infection among health care workers reflects the reality of our numbers and lack of significant community transmission. Indian positive cases curve is at a much lower level on a daily basis reflecting the efforts of the Government's pre-emptive and provocative measures to protect the people from the pandemic as shown in the graph below.

To conclude India devised its unique way of fighting COVID-19 pandemic by estimating the resources at its disposal along with the scientific wisdom gained from previous pandemics and initiated efforts with due consideration to the global recommendations. This model has proved to be very successful till now in combating the COVID-19 pandemic. It requires an extreme unified combat action plan based on sound scientific ideas disposed at the appropriate time to effectively manage the ongoing COVID-19 pandemic. We wish humanity shall combat the crisis and prevail in this pandemic, to quote its success stories in the future.

https://drive.google.com/file/d/1DaFKbsAFkY_wK7U5bug94ApgYWqm0xi0/view?u...

The authors declare no conflict of interest.

References:

1. Yadav PD, Potdar VA, Choudhary ML, Nyayanit DA, Agrawal M, Jadhav SM, Majumdar TD, Shete-Aich A, Basu A, Abraham P, Cherian SS. Full-genome sequences of the first two SARS-CoV-2 viruses from India. Indian J Med Res [Epub ahead of print] [cited 2020 Apr 15]. Available from: <http://www.ijmr.org.in/preprintarticle.asp?id=281471>
2. Gupta N, Praharaj I, Bhatnagar T, Thangaraj J, Giri S, Chauhan H, Kulkarni S, Murhekar M, Singh S, Gangakhedkar RR, Bhargava B, ICMR COVID Team. Severe acute respiratory illness surveillance for coronavirus disease 2019, India, 2020. Indian J Med Res [Epub ahead of print] [cited 2020 Apr 15]. Available from: <http://www.ijmr.org.in/preprintarticle.asp?id=282179>
3. ICMR COVID 19 testing strategy. Retrived from <https://icmr.nic.in/content/covid-19>. Accessed on 14.3.2020
4. World Health Organisation Coronavirus disease situation report retrieved from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situatio...> Accessed on 15.4.2020
5. Modelling the spread and prevention of Covid 19 retrieved from <https://cddep.org/covid-19/> accessed on 15.4.2020

Competing interests: No competing interests

Dr.Sathish Muthu
Assistant Orthopedic Surgeon
Government Hospital, Velayuthampalayam, Karur, TN, India.
157/1 MGR Nagar, Vengamedu, Karur, TN,
India. [@drsathishmuthu](https://twitter.com/drsathishmuthu), [@bmj_latest](https://twitter.com/bmj_latest).