



Research Article

## COVID-19- ITS PREPAREDNESS, SUCCESSES AND FAILURES

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### ABSTRACT

**Introduction-** COVID-19 is a communicable disease and can be passed through the droplets from nose or mouth when an infected person coughs or exhales and this is the main reason to maintain one meter (six feet) distance from the sick person. Coronavirus originated in China first, but the cases were reported all over the world within a ten-day timeframe. India went past Russia in total infections to become the third biggest hot spot of the virus. The number of cases is increasing sharply despite the lockdown measures imposed by the Indian government.

**Conclusion-** The trajectory of cases is very concerning in India. Testing needs to be ramped up significantly and paired with comprehensive tracing and isolation efforts.

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### INTRODUCTION

COVID-19 is a contagion belongs to the “Nidovirus family” which includes “Coronaviridae”, “Artieviridae” and “Roiniviridae” family, responsible for respiratory illness in humans which may cause common cold to more austere diseases such as “Middle East Respiratory Syndrome (MERS)” and “Severe Acute Respiratory Syndrome (SARS)”. The most common symptoms or traits of COVID-19 are fever, tiredness, dry cough, aches and pain, nasal congestion, running nose or sore throat. COVID-19 is a “communicable” disease and can be passed through the droplets from nose or mouth when an infected person coughs or exhales and this is the main reason to maintain one meter (six feet) distance from the sick person.

Coronavirus originated in China first, but the cases were reported all over the world within a ten-day timeframe. On 31 December 2019, Wuhan Municipal Corporation reported a cluster of pneumonia cases. India reported its first coronavirus case on 30 January 2020 in Kerala when a student returned from Wuhan (the epicenter of coronavirus) and since then the number of cases has been increasing exponentially. As on 13 July 2020, there were a total of 13,062,360 Coronavirus cases world over, 572,214 deaths and 7,610,533 cases had recovered. <sup>(1)</sup> Failure to stop coronavirus at source had led to its spread in almost all over the globe affecting 214 countries.

It is particularly interesting to note that Italy reported its first positive case a day after India while United Kingdom reported it on the same day, yet the total number of cases as well as associated fatalities is comparatively less in India.

The first death in India was reported of 13th March 2020, but on this day, total number of deaths in Italy was more than a thousand. In the 10th week since reporting of the first case, India reported 166 deaths while the United States of America reported 19 times more deaths in the same week. While other countries picked up an upward trend as early as the second week since their first recorded case, India did not witness any major rise until the 4th week since its first reported case. <sup>(2)</sup>

With four consecutive days of high records in new cases of Covid-19, India on 5<sup>th</sup> July 2020 went past Russia in total infections to become the third biggest hot spot of the virus, ranking only behind the US and Brazil. The country reported 24,422 new cases and 421 new deaths on that day, taking the total number of infections to 697,284 and fatalities to 19,700. As of 14 July 2020, India reported a total of 879,902 cases, 23,200 deaths while 554,907 cases had recovered. India was fortunate enough to have a lower mortality rate and a good recovery rate (60.77%) in comparison to these countries but the shies away in terms of coronavirus testing capacity. <sup>(3)</sup> Russia boasts of a testing capacity of 144,375 tests per million population, USA at 113,588 tests per million population, Brazil at 15,667 tests per million population while India has the testing capacity of only 7,224 tests per million population. <sup>(4)</sup> The death toll is a more effective indicator of country’s performance against the pandemic. Case counts are not a

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reliable indicator as there are many variables affecting it like number of tests, types of tests, false positives, false negatives associated with it, criterion for testing and repeat testing. Given the fact that testing rates are different on each day and the numbers are not standardized, daily deaths are a more stable indicator of whether there is a decline in the epidemic or not. <sup>(5)</sup>

#### ***Indian COVID-19 scenario – The lockdown***

Major cities such as Delhi and Mumbai are particularly badly affected, with hospitals struggling to accommodate critically ill patients. Maharashtra, one of India's most industrialized & prosperous state has both the most number of COVID-19 cases as well as deaths. More than 40% of infections were owing to travelers who returned from UAE. The state government did not start universal screening of international travelers after the initial spurt of cases. The whimsical attitude of civic authorities and lack of physical distancing added to the surge in case load. <sup>(6)</sup> The number of cases is increasing sharply despite the lockdown measures imposed by the Indian government. The rationale behind imposing the lockdown was to reduce the number of severe infections at one time and to expand health infrastructure including capacity building of healthcare providers. It also helps develop triage protocols to focus on severe cases, reduce mortality, and prevent hospitals from becoming foci of further COVID spread. The lockdown of two months in India brought more misery than gains for the purpose it was intended for. However, the very purpose of lockdown was refuted because the general population's anxiety about the disease is low leading to faster spread and higher infection rates. It brought misery to untold numbers of people especially the migrant labourers whose livelihood was destroyed and its consequences over the society and economy were irreparable. The decision to facilitate the return of migrant labourers to their hometowns was much delayed which created panic and uncertainty leaving them with no option but to walk on foot to their homes. The lockdown was announced almost suddenly leaving negligible time for the public to prepare. The testing capacity of laboratories and bed capacity of hospitals is far beyond the required levels and need to be enhanced. Apart from the lockdown, neither the government restricted or banned international flights nor resorted to compulsory quarantine of all inbound travelers during the initial stages of the coronavirus pandemic. As 'a stitch in time saves nine', the number and spread of COVID-19 would have been significantly reduced had this strategy been adopted well in time. The questionable quality of thermal scanners used for screening and travelers consuming paracetamol to reduce their body temperature further added to this agony.

A major setback to corona control measures was the central Delhi's Markaz event where the Tablighi Jamaat congregation was linked to 4291 cases of the country's 14,378 cases accounting almost 30% of the caseload. But India is not the only country to suffer due to Tablighi Jamaat workers unwittingly turning their sect into country's super spreaders for coronavirus. In several countries- mostly in south and south-east Asia- the Tablighi Jamaat has been linked to 3,000 more cases and these counts are likely to increase further. <sup>(7)</sup>

#### ***Regional battles won***

When many regions of our country were battling the pandemic, a few Indian states have been victorious enough in defeating the COVID-19 pandemic. Kerala was successful enough to flatten the COVID-19 curve because of its strong public health system, clear risk communication and community participation. Kerala was the first state in India which informed about COVID-19 infection and also implemented lockdown in the state much before it was announced nationwide using the Triple lock containment strategy. It involves traditional method of restricting movement of people in the district by putting up barricades, human surveillance by deploying officers outside residence of patients & several apps for tracing, delivery of essentials & medicines. Movements of COVID-19 positive patients and their primary and secondary contacts were monitored by the use of an application named CovidSafety. Meghalaya's triumph over coronavirus must be credited to the state's ASHA workers who raised community awareness about preventive measures against COVID-19 such as hand washing, wearing masks/face covers, maintaining physical distance and through active case search with timely access to testing and treatment. The Meghalaya government also conducted door-to-door testing in red zones, supported farmers and MNRGA (Mahatma Gandhi National Rural Employment Guarantee Act) workers and nearly 50,000 people were quarantined in the state. Many of Northeastern states have been able to maintain COVID-free status for long. Goa scripted its own success story through intensified testing, intensive contact tracing, quarantine of foreign travelers and contacts and door-to-door survey thus becoming the first coronavirus free Indian state.

#### ***Success stories around the world***

With much of the world still overrun by the pandemic, there are a handful of countries that have either largely avoided or quickly recovered from COVID-19. Some countries mostly small and remote had no coronavirus cases at all. Vietnam, a country of 93 million people has an impressive coronavirus record for 268 cases and zero deaths. <sup>(8)</sup> The government opted for a low-cost strategy of rapid identification and isolation of infected individuals and tracking of their contacts via a mobile app. Vietnam was one of the first countries to close its border with China, even though its economy is highly dependent on China. New Zealand won the battle against coronavirus as there is no widespread, undetected community transmission. Throughout the outbreak, the country has reported 19 coronavirus deaths in total – meaning four deaths per one million population owing to one of the toughest lockdowns in the world. <sup>(9)</sup> South Korea from being one of the worst-hit countries, hailed as a role model for successfully containing the outbreak due to the strategy of widespread testing and intensive contact tracing. South Korea went on to build drive-through COVID-19 testing centers, COVID-19 testing tents, at-home testing kits, external quality assessment services to screen hospitals and health institutions before they are certified to test patients for the virus. Slovakia has the lowest death rate per capita in Europe. The country enforced one of Europe's harshest and earliest lockdowns, including early bans on international travel as well as all public, religious, cultural and

sporting events. Germany has shown several elements of success across the four phases of preparedness and response framework. The country's incredibly strong enabling environment, including a good local public and health care system and expert scientific institutions, has largely contributed to this broad-based progress. Bhutan, a small nation in the Himalayas, has successfully averted the COVID-19 crisis with no reported coronavirus-related fatalities. The country contained the pandemic despite limited resources. There are still a handful of countries with zero reported cases of coronavirus, mostly among Pacific Islands in Oceania like Vanuatu, Samoa, and Micronesia was quick to implement travel restrictions and some of them also enforced lockdowns.

## CONCLUSION

The trajectory of cases is very concerning in India and our country's population density may be a contributing factor. Testing capacity has increased over the past few months but it is still far too low. Testing needs to be ramped up significantly and paired with comprehensive tracing and isolation efforts, particularly given what is now known about the potential for asymptomatic or pre-symptomatic spread. There is also a need for real support to states that currently do not have the infrastructure required to meet an increase in number of cases.<sup>(10)</sup> Continued regional/area-specific lockdowns are needed as the epidemic will progress from the more populous states to less populated states. Lockdowns should be guided by testing and serological survey data and should be planned on a rolling basis.<sup>(11)</sup>

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