India Amidst COVID-19 Crisis: The Good, The **Bad and The Ugly**

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THE GOOD

Beating the statistics: With a population of over a billion, high population density with overcrowding especially in metropolis and underdeveloped health infrastructure, the projections for corona virus disease (COVID-19) pandemic were not in favour of India. Most statistical models had predicted over 5 lakh cases and more than 38,000 deaths and warned that India must prepare for a tsunami of COVID-19 cases.[1] The situation appeared to be grimmer given that the incidence of diabetes, hypertension and respiratory diseases due to tuberculosis and air pollution is higher amongst Indians which are known risk factors for severe disease and death due to COVID-19.[2] However, as of May 14, 2020, the total number of confirmed COVID-19 cases is 78003. With reported 2549 deaths, the case fatality rate (CFR) of 3.27% is currently one of the lowest in the world. Global media is baffled with this 'Indian exception' and numerous hypothesis have been put forth to explain the mystery behind India's lower death rates including younger population, climate, exposure to malaria, high BCG vaccination rates, less virulent strain of virus and even under-reporting of deaths. Though India might be missing some deaths and not diagnosing every patient correctly for COVID-19 but everyone concurs that the fatalities are unarguably low since one cannot hide

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mass deaths.[3] At the same time with over 26235 (33.63%) recoveries, India seems to be widening the gap between death and recovery. Finally, R0, which is the number of people that a single infected patient can transmit the virus to, is also down from 1.83 (Mar 27-Apr 6) to 1.23 (Apr 13-May 10). There are regional variations in these numbers with states like Kerala managing to 'flatten the curve' despite low testing levels while others like Maharashtra, Delhi, Gujrat and West Bengal continue to struggle in their fight against the pandemic. The "Bhilwara model" consisted of a complete curfew, house-tohouse surveys for cases, contact tracing, large-scale testing, and prevention of travel. The model helped in aggressively containing the disease and was successfully replicated in other places.[5]

Opportunity in adversity: The pandemic and consequent lockdown resulted in disruption of global supply chain thereby leading to reduction of inventory buffers and exposing vulnerabilities of Indian industry's supply chain. The current crisis provides valuable lessons to Indian manufacturing sector to be self-sufficient and become globally competitive by going local ('Glocal') thereby reducing dependency on China. There is no denying the fact that personal protective equipment (PPE) are essential armamentarium in the fight against COVID-19. When pandemic hit India in February, the country was an importer of PPE and had no local manufacturing capability. However, consequent to concerted efforts in just two months India has emerged as the world's second largest manufacturer of PPE producing over two lakh kits per day including development of world's first reusable PPE suit.[6] Indian pharmaceutical industry is ranked third largest in the world in terms of drug produced by volume and manufactures 60 percent of vaccines globally. During COVID-19 crisis, India has helped many nations by providing drugs and has the potential to play the role of 'pharmacy of the world' in future.[7]



Human and nature healing: Lockdown necessitated 'work from home' thereby giving the much-needed time for family-bonding and rekindled the sense of unity and empathy. It has also highlighted the fact that it is not the 'cost of living' that is expensive but rather the 'cost of lifestyle'. In absence of human intervention, nature seems to be healing. Pollution (air, water, noise, light) levels have lowered, the sky has become clearer, rivers have become cleaner, birds are chirpier and animals reclaiming space from human encroachment. These tasks could not be humanly achieved earlier even after investing billions of dollars.[8]

THE BAD:

Asymptomatic paradigm: Currently available data suggests that over 70% of patients infected with COVID-19 are asymptomatic which is much higher than rest of the world. Since such cases do not exhibit any symptoms, the real challenge is the difficulty in tracing and isolating them so that they do not transmit the virus to others. Such cases can only be detected by extensive testing. This fact is of concern in surgical setting where such cases not only have the potential of spreading infection to healthcare workers but are themselves at higher risk of complications and death after surgery. The positive aspect is that such patients have stronger immunity and therefore develop milder form of the disease without any need for treatment. Moreover, if such patients have sufficient antibody levels in their blood, they can become plasma donors and potentially save the lives of seriously ill patients. Finally, once the proportion of such individuals becomes significant within the population (perhaps more than 60-70%), it will lead to the development of herd immunity. It is early days and only time will tell whether such a paradigm turn out to be a curse or blessing in disguise.[9,10]

Low testing rates: As compared to rest of the countries, the number of tests conducted in India per million population is woefully inadequate. This is further compounded by people refusing to be tested due to stigma attached to the disease. Having said that, it is also a fact that testing the population is strategically, financially and logistically an impractical undertaking. In balance perhaps targeted, intelligent testing is a reasonable strategy. At the time of imposition of lockdown, India was conducting 539 tests per million people and ranked 52nd among countries in terms of the testing rates. The testing

level has since been ramped-up with India now conducting 758 tests per million, making it the 24th ranked country in terms of tests per million as of May 3.[11] The Indian Council of Medical Research, has supported its strategy by stating that it is continuing to test despite low yield rate (number of positive cases detected for each test conducted) of 24 and has not so far paid a heavy price in terms of fatalities.[5]

THE UGLY:

Economic lockdown: Like rest of the world, lockdown has stalled the Indian economy resulting in unemployment and shortages. The poorest of the poor have been hit the hardest resulting in 'migrant worker crisis' thereby exposing the deep economic divide between the haves and have-nots. Hopefully, economic stimulus package of 266 billion USD (10% GDP, fifth-most substantial in the world) announced by the government might help the country's economy tide over the crisis. [12]

'Infodemic' crisis: As India is fighting its war against COVID-19, there is an emerging threat of misinformation and fake news. This 'infodemic' is perhaps more dangerous than the threat of pandemic because such misinformation creates a sense of negativity, insecurity and panic amongst vulnerable and technologically-naive public. Such misinformation mostly relates to causes, symptoms, spread and cures of COVID-19, government documents and misrepresentation of comments, photos and videos of politicians, and conspiracy theories with communal angles. The problem is relevant since the number of active internet and social media users in India is second to China in the world. Despite intensive efforts by social media giants and government to curb the menace, there is a pressing need for individual-based efforts at community level.[13,14]

Who will heal the healers: It is well accepted that healthcare workers are at risk of not only getting COVID-19 infection but also developing severe form of disease. The situation is compounded not only by shortage of PPE but also by the misuse of this precious commodity by those who do not need it. So far, 548 doctors, nurses and paramedics have been infected in India with COVID-19.[15,16] It is relevant since in addition to the risk of death, infected healthcare workers have to be quarantined and hospital has

to be shut down, thereby increasing the burden on healthcare system. Moreover, such healthcare workers may inadvertently spread the disease to other patients. To complicate matters healthcare workers have been physically attacked, abused, stigmatized, ostracized, denied accommodation by their landlords and their funerals attacked by mobs thereby denying them dignity even in death.[17,18] This one time the government has come to the rescue of healthcare workers by making harassment, physical assault and destruction of property cognizable and nonbailable offences during the period of epidemic.[19] However, the bigger question remains that what will happen to the safety of healthcare workers once the epidemic is over. How will the healers heal others unless they themselves feel safe first?

In all probability, COVID-19 is here to stay and is not going to disappear due to lockdown. Lockdown has helped in containing the disease so far and given us the precious time to ramp up capacity to fight the disease and now every citizen has to follow the rules with a sense of social responsibility to keep us safe. There is no definitive drug or vaccine yet for COVID-19. In keeping with the theory of survival of the fittest, we have to accept and adapt to this 'new normal' of maintaining social distancing, frequent hand wash, covering face with mask and avoiding gatherings.

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REFERENCES:

- Sharma R. Projection: 38,220 deaths, 5.35 lakh COVID-19 cases in India by mid-May. The New Indian Express. 2020 Apr 23. Available from: https://www.newindianexpress.com/nation/2020/apr/23/projection-38220-deaths-535-lakh-covid-19-cases-in-india-by-mid-may-2134087.html
- 2. Chotiner I. How COVID-19 Will Hit India. The New Yorker. 2020 Apr 1. Available from: https://www.newyorker.com/news/q-and-a/how-covid-19-will-hit-india
- 3. Ganguly S. India must prepare for a tsunami of coronavirus cases. BBC News. 2020 Mar 19. Available from: https://www.bbc.com/news/av/world-asia-india-51962813/india-must-prepare-for-a-tsunami-of-coronavirus-cases
- 4. Biswas S. India coronavirus: The 'mystery' of low Covid-19 death rates. BBC News. 2020 Apr 28. Available from: https://www.bbc.com/news/world-asia-india-52435463
- 5. Khullar A. Why India shouldn't mimic the West in the fight against coronavirus. Quartz India. 2020 Apr 26. Available from: Available from: https://qz.com/india/1843604/india-shouldnt-mimic-the-us-or-europe-in-its-coronavirus-fight/
- 6. PTI. India ramps up production of COVID-19 protective gears, medical equipment. The Week. 2020 May 1. Available from: https://www.theweek.in/news/india/2020/05/01/india-ramps-up-production-of-covid-19-protective-gears-medical-equipment.html
- 7. Dadhich COVID-19 A. The pandemic Indian industry. and the pharmaceutical European Pharmaceutical Review. 2020 Available from: https://www. 22. europeanpharmaceuticalreview.com/ article/117413/the-covid-19-pandemic-and-theindian-pharmaceutical-industry/
- 8. Kashyap R. Mother Earth is Rebooting. Times of India. 2020 Apr 25. Available from: https://timesofindia.indiatimes.com/readersblog/spice-in-life/mother-earth-is-rebooting-14169/
- 9. Reddy KS. India's high number of asymptomatic

- cases worrying, and herd immunity is far off. The Print. 2020 Apr 24. Available from: https://theprint.in/opinion/indias-high-number-of-asymptomatic-cases-worrying-and-herd-immunity-is-far-off/407931/
- Thacker T. No symptoms in 80% of Covid cases raise concerns. The Economic Times. 2020
 Apr 21. Available from: http://www.ecoti.in/OYEIkY60
- 11. Alexander S, Devulapalli S. Everything you wanted to know about India's test numbers, in five charts. Live Mint. 2020 May 10. Available from: httml
- 12. Web Desk. How does Modi's COVID-19 package compare to spending by other countries? The Week [Internet]. 2020 May 12. Available from: https://www.theweek.in/news/biz-tech/2020/05/12/how-does-modis-economic-package-compare-to-spending-by-other-countries.html
- 13. Banerjee P. Covid misinformation curve shows no signs of flattening. Live Mint. 2020 Apr 27. Available from: https://www.livemint.com/news/india/covid-19-misinformation-curve-shows-no-signs-of-flattening-11587888207849. https://html
- 14. Kant A. The infodemic on social media around Covid calls for a multi-pronged approach. The Indian Express. 2020 May 11. Available from: https://indianexpress.com/article/opinion/columns/coronavirus-fake-news-social-media-infodemic-6403577/
- 15. Sabarwal H. 548 doctors, nurses, paramedics infected with Covid-19 across India: Report. Hindustan Times. 2020 May 6. Available from: https://www.hindustantimes.com/india-news/548-docs-nurses-paramedics-infected-with-covid-19-across-india-report/story-o2pM3w2adM4g3PXI6TBlkN.html
- Pandey V. Coronavirus: India's race against time to save doctors. BBS News. (2020 Apr 13. Available from: https://www.bbc.com/news/world-asia-india-52215071

- 17. Pandey V. Coronavirus: India doctors 'spat at and attacked'. BBC News. 2020 Apr 3. Available from: https://www.bbc.com/news/world-asia-india-52151141
- 18. Ellis-Petersen H. Mobs stop Indian doctors' burials: 'Covid-19 took his life, why take his dignity?' The Guardian. 2020 Apr 29. Available from: https://www.theguardian.com/world/2020/apr/29/mobs-stop-indian-doctors-burials-covid-19
- ET Bureau. Cabinet okays ordinance to protect frontline workers. Economic Times. 2020 Apr 22. Available from: http://www.ecoti.in/8IVJEZ