

COVID-19: A Double Edged Sword

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Once upon a time there lived no mankind but other species who literally ruled the world but then faced sudden mass extinction. Many theories prevail but none proved yet. Human race has been perennially interested in life before and beyond its existence. Eventually bacteria, virus, fungi, protozoa were all discovered, their morphology and structure discerned, various diseases caused by them identified and hence appropriate remedial measures invented in form of prevention and cure. A medical fraternity got formed among the mankind who specialized in diseases and its amelioration. They were healers and healed through medicine or surgery and various other preventive advices. Not only that there were researchers who experimented and invented drugs, vaccines and various modelling techniques to predict infectious disease epidemics and formulate appropriate strategies to contain them. Human beings have been affected by lot of virus, the most common being rhinovirus causing common cold and cough. Dreaded Nipah Virus, SARS Co, MERS Co infections also occurred and hence Coronavirus infection was not new. However, in recent past, novel corona virus, a seemingly mutated strain was seen to infect humans with a Ro (basic reproduction rate) of 2.4 and a higher case fatality rate especially among elderly. Respiratory symptoms, pneumonia and ARDS appeared very fast and rarely a patient could be saved once on a ventilator. In the month of December 2019, a large number of cases of pneumonia of unknown origin in the people of Wuhan, China were reported. Within few days, the Chinese health authorities confirmed that this was associated with a Novel Coronavirus 1 and was named CoronaVirus Disease 2019 (COVID-19) by the World Health Organization (WHO) and as declared pandemic and it is characterized by the symptoms of viral pneumonia such as fever, fatigue, dry cough and difficulties in breathing. This caused a panic at

its inception in Wuhan province of China where it affected thousands of people in a short time. It was initially thought that the 'contagion' was due to animal to human meat-eating practices and there was no human to human transmission.^[1,2]

However, after affecting and wiping off a considerable number of lives including eminent doctors from Wuhan province of China, the epidemic was seen fast spreading to the western world, especially Europe. The devastation caused in Italy, Spain, and France is beyond words and millions stood affected, testing COVID positive. Even superpowers like UK and America with the best health facilities could not be saved from the disease occurrence as the epidemic wave rose and all efforts to flatten the wave fell flat. Human to human transmission theory was established and all efforts to break the human chain of transmission were pledged. The world was in a crisis and WHO blew the siren declaring it a global emergency – a pandemic. Many laboratories were set up to develop a vaccine or drug to combat coronavirus however a breakthrough is yet to be. However comparatively fewer cases were reported in Russia and North Korea. India also was not saved from the mayhem and it was first tested positive for COVID-19 two months back. Many cases started reporting and almost all states got affected in a very short time. ICMR declared it was with WHO in collaboration to developed vaccines for the disease. There is yet no known cure to the disease. Prevention is the only cure and the best one as well. Hence terms like social distancing came into being. Isolation of cases and suspects, quarantine of asymptomatic exposed cases was advised. Maintaining basic hygiene and frequent handwashing was rigorously implemented. Not touching of face as it is a common practice was reinforced. Home quarantine was started. However, these terms and their implications was a new to people, especially in India where public health and preventive medicine is still a jargon. Health education and awareness was started at

every corner but majority turned a deaf ear to it initially. International travel history patients and their contacts started testing positive unanimously. Finally as the basic dictum of public health says governmental support and policy regulation along with strict enforcement acts makes its success, Govt. of India took strict and much needed action along with support from all state governments despite all odds.^[3,4]

International travel was banned, and then quarantines and isolations were advised for each and every appropriate case maintaining the guidelines given by Ministry of Health and Family Welfare (MOHFW), India & ICMR. Many premier hospitals like AIIMS, PGI closed general OPD and other hospitals also urged patients to come to hospitals only if emergency to reduce the footfall and hence the transmission. Fever screening was started after triaging in COVID-19 Fever clinic, which were opened as priority clinics in every hospital at every tier manned and manned by health care professionals with protective gears as per the guidelines. Satellite clinics at urban health training centres were opened where fever screening was initiated to reduce load at main hospitals. 3Ts of Test, Treat and Trace was followed universally with testing the patient, treating them and contact tracing vehemently. The patients were reassessed and reassured.

However, beyond hospitals quarantine and social distancing was still a distant dream. Hence aptly and appropriately centre and state announced Janta curfew, state lockdown, national lockdown, inculcating loss in crores but yet took the plunge for welfare of nation. Rations were announced for poor and it was strictly urged 'To not move beyond boundaries of home' and all school, colleges, offices, places of entertainment got shut down for indefinite time. Importance and public health relevance of preventive medicine was felt first time by the nation who now realized one man can save others by staying at home, health is a collective responsibility and integrated efforts with community ownership will go long way in fighting the menace.

Unfortunately, India has urban slums, a famous one Dharavi in Mumbai where density of population is very high and despite all measures social distancing is difficult to follow. Prisons, orphanages, child welfare homes, domestic helps, migrant labours are few unorganized sector which need stringent laws and rehabilitations to practice social distancing in true measures. Testing by ICMR has been said on Day 5 and Day 14 along with contact tracing. Infectious disease modelling are predicting a flatter curve with stringent enforcement of all the measures, however the cases are on rise and epidemic curve is yet to fall. Human chain transmissions and fomites identified as major cause all efforts are focussed to contain the infection and limit the spread. A community transmission in a country like India with high density of population may prove disastrous and fatal in large proportions. However Indians having the population pyramid with less elderly yet and demographic dividend being high a stringent lockdown is expected to cause miraculous results.^[2,5]

A Protagoras Paradox exists where prevention is the only cure and lockdown with testing and tracing seems the only remedy but again the cure may weigh down heavily on the population in terms of economic and financial implications if the lockdown persists. A difficult call to take the world sincerely awaits a vaccine or a drug which will help us tide over the crisis.

But as every cloud has a silver lining the air has cleared, waters are blue as before, all life forms except humans are roaming free, unafraid after long. The amazons are breathing, the Australian forests are thriving and swans are seen on Venice back waters. Global warming is no more an issue, wars have stopped, and air pollution indicators are favourable. Animal planet is thriving and lots of manmade technological disasters which had devastating impact on climate and environment has got reverted in this short span. It's as if our mother earth has locked the sinners and by using her autoimmunity is cleansing herself.

Trapping up humans inside their own made houses have made people panic but also introspect. People are spending majority of time indoors and hence the interpersonal relationships are improving. Cost of living has come down as places to unnecessarily spend like casinos and malls are closed. Moreover, children are spending quality time with their family and Indian families in absence of domestic helps are becoming more self-sufficient. Plight of doctors in recent past was very pathetic and they suffered grievous injuries, even death in hands of mob. People used to fight in name of religion and huge riots broke out in country till few months back. This crisis made people realize death is imminent and doctors are the only healers who treat despite everything, irrespective of caste, creed, religion, notwithstanding all odds, even risking their life and family in the process. Though mortality from COVID is maximum for health care workers globally, it does not deter their spirit to treat mankind even in resource constraint settings.

Nonetheless COVID-19 is a grim reality and if India enters into stage of community transmission cases will be on rise. The number of patients getting admitted with severe acute respiratory symptoms or attending fever screening clinics can act as surrogate indicator of the real crisis in absence of factual data. Intensified preventive measures, contact tracing and testing is the only hope. With disillusioning social media messages at hand and death at each door step people are afraid to even open their doors.^[5]

Researchers are working and a breakthrough is probably on the way. Challenge remains to stay disease free in the duration within and inculcate newer lifestyle modifications like practising basic hygiene, social distancing and frequent handwashing. Moreover, international organizations like United Nations and WHO should take strong actions to identify the cause contain the spread and ensure a safer world for all. Prevention is the only options for COVID-19 at present for the general public and health-care workers without any effective treatment. The need for an hour is to prevent and reduce

the community transmission of the COVID-19 by hand hygiene, social distancing, quarantine and good nutritious diet rich in Vitamin C to boost immunity and access to testing, isolation and treatment facilities in the population with underlying diseases conditions so as to reduce the overall morbidity and mortality globally. Praying for a COVID-19 free World.

References:

1. Hui DS, Azhar E, Madani TA, Ntoumi F, Kock R, Dar O et al. The continuing 2019-nCoV epidemic threat of novel coronaviruses to global health – the latest 2019 novel coronaviruses outbreak in Wuhan, China. *Int J Infect Dis* 2020;91:264-66.
2. World Health Organization (WHO). Pandemic Influenza Severity Assessment (PISA): A WHO guide to assess the severity of influenza epidemics and pandemics. Geneva: WHO; 2017. Available from: <https://apps.who.int/iris/bitstream/handle/10665/259392/WHO-WHE-IHM-GIP-2017.2-eng.pdf?sequence=1> [Last accessed on 5th Mar. 2020]
3. Liu Y, Gayle AA, Wilder-Smith A, Rocklöv J. The reproductive number of COVID-19 is higher compared to SARS Coronavirus. *J Travel Med*. 2020;27(2):taaa021.
4. Ji Y, Ma Z, Peppelenbosch MP, Pan Q. Potential association between COVID-19 mortality and health-care resource availability. *Lancet Glob Health*. 2020;S2214-109X(20)30068-1.
5. Zhang H. Early lessons from the frontline of the 2019-nCoV outbreak. *Lancet*. 2020;395(10225):687.



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