

SIGNIFICANT IMPACT OF COVID-19 ON **HUMAN BEINGS**

Dr (Prof)Raju Vaishva



Dr Abhishek Vaish

Dr Raju Vaishya (MS, MCh Liverpool, FRCS (London), FACS) Dr Abhishek Vaish (MS, MCh, DNB, MNMAS, Dip SICOT)) Indraprastha Apollo Hospitals, New Delhi 110076, India



Background

COVID-19 is a new disease for human beings, which is caused by SARS-COV-2 (Coronavirus). It originated from wild bats (a zoonotic disease) in China in late 2019, and spread across the globe crossing all the national boundaries and affected the population of the entire world in around 240 countries. It did not differentiate between rich and poor, caste and creed, and affected everyone equally. It has been almost two years since the onset of the COVID-19 pandemic, but still, there is no clear answer to its origin in China. It is estimated that more than 115,000 health care workers have died globally due to COVID-19, between January 2020 and May 2021, according to a report by the WHO1. countries have experienced record outbreaks of Coronavirus infection recently (e.g., Russia, Ukraine, and Greece). It is to be noted that more than half of the total number of cases have happened in European countries. Incidentally, Eastern Europe is among the countries with very low vaccination rates. Fortunately, the number of new cases has reduced in the majority of countries³. At last, we have been seeing some light at the end of a long and dark tunnel after two years of the start of this pandemic, as we might have left the worst of the pandemic behind. This has happened only because of the vaccination, and natural exposure. Still, we must not lower our safety guard of using face masks properly, maintain adequate social distancing, and frequently do hand sanitation.

S.N.	COUNTRY	POPULATION	TOTAL CASES	INFECTION (in percent)	DEATHS	MORTALITY (in percent)
1	USA	333,622,477	47,336,614	14.19	775,218	1.64
2	INDIA	1,398,309,456	34,366,614	2.46	461,043	1.34
3	BRAZIL	214,598,567	21,880,439	10.20	609,484	2.78
4	UK	68,367,364	9,301,909	13.60	141,805	1.52
5	RUSSIA	146,018,963	8,795,095	6.02	246,814	2.81
6	TURKEY	85,563,348	8,231,679	9.62	72,127	0.88
7	FRANCE	65,468,526	7,217,484	11.02	117,910	1.63
8	IRAN	85,442,889	5,987,814	7.01	127,999	2.14
9	ARGENTINA	45,755,353	5,296,781	11.5	116,104	2.19
10	SPAIN	46,779,233	5,025,639	10.74	87,504	1.74

Table 1: Statistical details of the COVID-19 cases in the 10 worst affected countries (Source: Worldometer -Coronavirus)²

Magnitude of the public health problem

The total number of confirmed COVID-19 cases, across the globe, has crossed 250 million mark, recently ^{2,3}. The 1st 50 million cases occurred within one year of the start of the pandemic, whereas the following 200 million cases took lesser than a year, indicating the rapid increase in the COVID-19 cases in the latter half of the pandemic. In most of the worst affected countries, around 10% of the population was infected and it has caused mortality in 1-2% of the infected individuals (Table 1). Considering the population of these countries the number of infected people and the deaths caused by it is mammoth high. Almost after two years after its onset, the infections are still rising in 55 out of 240 affected countries. Some eastern European Globally there have been recurrent waves of COVID-19, with the subsequent waves much stronger and lethal. This was mainly due to not observing adequate safety precautions, inadequate or no vaccination and the emergence of variants of concerns of SARS-COV-2 virus (e.g., Delta, Alfa and Omicron variants) which were highly transmissible and could evade or bypass the host immunity. Ultimately, we may now see the end of this pandemic in the near future, but still, the disease would likely persist as an endemic disease in near future.

Based on the severity, SARS-COV-2 variants have been classified into three main groups⁴ (Table 2):

I) Variant of High Consequence (VOH)

- II) Variant of Concern (VOC)
- III) Variant of Interest (VOI)

OPINION =



Use of technology in combating the pandemic

Several innovative and modern technologies have been used effectively in combating the COVID-19 pandemic. The important technologies used include Artificial Intelligence (AI), Telemedicine, Smartphone application, Internet of Things (IoT), and Robotics, etc. 8,9,10,11 These have not only helped in the detection of new cases, monitoring the diseased but have also helped in providing early and correct treatment for the COVID patients, especially in remote areas.

Impact on other health problems

During this pandemic, the non-covid medical problems, especially the non-communicable diseases (e.g., cancer, heart and kidney diseases, and diabetes) have taken a severe beating and were not attended duly12.

Economic impact of COVID-19 pandemic

Covid-19 has not only affected human lives significantly and adversely but has also caused severe economic impact globally. In a recent world bank blogs has reported more than 120 million people have been pushed into poverty in 2020, due to the impact of the COVID-19 pandemic¹³. In a recent report of the United Nations (UN) it is brought out that the COVID-19 pandemic has led to an even more sharply unequal world. The development gains for millions in the poor countries are reversed. The global economy has experienced the worst recession in 90 years. And, the most vulnerable segments of the societies are disproportionately affected. It is estimated 114 million jobs have been lost during this pandemic 14.

Albert Einstein has rightly said "Learn from yesterday, live for today, hope for tomorrow. The important thing is not to stop questioning." It implies well for COVID-19 and for any such calamities in the future.

References

- WHO DG Dr Tedros confirms at least 115,000 health workers have died due to pandemic. 24th May 2021: https://www. icn.ch/news/icn-reaction-who-dg-dr-tedros-confirms-
- least-115000-health-workers-have-died-due-pandemic Worldometer-Coronavirus. Accessed on 8th November 2021: https://www.worldometers.info/coronavirus/
- Abraham R, Biswas R. Global COVID-19 cases hit 250 million, eastern Europe infections at record levels. Reuters. Accessed on 8th November 2021: https://www.reuters.com/

- business/healthcare-pharmaceuticals/global-covid-19-
- cases-near-250-million-delta-surge-eases-2021-11-07/ World Health Organization. Tracking SARS-COV-2 variants. 31st May 2021. https://www.who.int/en/activities/ tracking-SARS-CoV-2-variants/
- Vaishya R, Sibal A, Malani A, Singh SK, Das S. Emergence of COVID-19 variants among ChAdOx1 nCoV-19 (Recombinant) Vaccine recipients. Indian J Med Res 2021; 10.4103/ijmr.ijmr_2061_21
- Iyengar KP, Vaishya R, Jain VK, Ish P. BAME community hesitancy in UK for COVID-19 vaccine; suggested solutions. Postgrad Med J. 2021;doi:10.1136/ postgradmedj-2021-139957
- COVAX. World Health Organization. Accessed on 20th November 2021. https://www.who.int/initiatives/actaccelerator/covax
- Vaishya R, Javaid M, Khaleel I, Vaish A, Iyengar KP. Modern technologies for combating the pandemic of COVID-19. J Industrial Integration Management 2021; doi: 10.1142/ S242486222150010X
- Kar S, Chawla R, Haranath SP, Ramasubban S, Ramakrishanan N, Vaishya R, Sibal A, Reddy S. Development and Validation of a multivariable prediction model using Machine Learning to predict the outcome of admitted COVID-19 patients. Scientific Reports - Nature June 2021; 11: 12801: 01-10. doi:10.1038/s41598-021-92146-7
- Javaid M, Haleem A, Vaish A, Vaishya R, Iyengar KP. Robotics applications in COVID-19: A review. J Industrial Integration Management. 2020; 5 (4): 441-51. doi:10.1142/ S2424862220300033.
- 11. Bahl S, Singh RP, Javaid M, Vaishya R, Suman R. Telemedicine technologies for confronting COVID-19 pandemic: A Review. J Industrial Integration Management 2020; 5(4): 547-61. doi: 10.1142/S2424862220300057
- 12. Vaishya R, Sibal A, Shivakumar P. Severe impact of COVID-19 pandemic on non-COVID patient care and health delivery: An observational study from a large multispecialty hospital of India. Indian J Med Sc 2021; 73(2): 159-63. doi:10.25259/ IJMS_211_2021
- 13. Updated estimates of the impact of COVID-19 on global poverty: Looking back at 2020 and the outlook for 2021. World Bank blogs. Accessed on 10th November 2021. https://blogs.worldbank.org/opendata/updated-estimatesimpact-covid-19-global-poverty-looking-back-2020-andoutlook-2021
- COVID-19 could lead to a lost decade for development. United Nations. https://www.un.org/en/desa/un-covid-19could-lead-lost-decade-development

