Pandemics in general are not merely serious public health concern, rather these trigger disastrous socio-economic and political crises in the infected countries. COVID-19, apart from becoming the greatest threat to global public health of the century, is being considered as an indicator of inequity and deficiency of social advancement. As is implied in the name COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for disease, and 19 represents the year of its occurrence. Coronavirus is a single stranded RNA virus with a diameter ranging from 80 to 120 nm. The first modern COVID-19 pandemic was reported in December 2019, in Wuhan, Hubei province, China and most initial cases were related to source infection from a seafood wholesale market (Huang et al., 2020). Since then, the disease rapidly circled the globe and has eventually affected every continent except Antarctica. It has been categorized as a pandemic by the World Health Organization (World Health Organization, 2020). International Committee on Taxonomy of Viruses (ICTV) named the virus as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (Gorbalenya et al., 2020). According to WHO, in 2002–2003, more than 8000 people suffered and 774 died of a coronavirus, called SARS. In 2012, MERS-CoV pandemic broke out infecting more than 2494 persons and killing over 858 lives worldwide (World Health Organization, 2004, World Health Organization, 2013). Coronaviruses belong to a large diverse family of viruses. These can be categorized into four genera namely, α-, β-, γ-, and δ. All the previously discussed coronaviruses responsible for worldwide spread of pandemic, namely SARS, MERS-CoV and SARS-CoV-2 are β-coronaviruses.

Apart from COVID-19, the human civilization has witnessed at least five pandemics in the current century, e.g. H1N1 in 2009, polio in 2014, Ebola (out broke in West Africa in 2014), Zika (2016) and Ebola (Democratic Republic of Congo in 2019). Subsequently COVID-19 outbreak has been declared as the sixth public health emergency of international concern on 30 Jan 2020 by the WHO. These worldwide outbreaks triggered a large number of fatalities, morbidities, and cost billions of dollars (Allocati et al., 2016; Fan et al., 2019). Compared to other diseases and their respective burdens, COVID-19 is likely to cause as much or greater human suffering than other contagious diseases in the whole world. In addition, other global environmental changes such as soil degradation, ozone layer depletion, pollution, and urbanization, changing environment creates an indisputable threat to our planet and human health. Global warming has its roots in industrial development, with the huge release of CO2 during the industrial revolution and beyond, finally allowing the greenhouse effect to take place. To some extent COVID-19 outbreak may be considered as an indirect consequence of global environmental changes. Besides its upsetting effects on human life, the novel coronavirus disease (COVID-19) has the potential to significantly slowdown the economy not only of China, USA, or India but also of the world as a whole. Therefore, healthcare personnel, governments and the public in general need to show solidarity and fight shoulder to shoulder for prevention and containment of the pandemic (Yoo, 2020). In the present paper, our main focus is to highlight the impacts of COVID-19 on environment & society, and attempt has been made to point out the preventive routes for minimizing the risk factors.

COVID-19 pandemic

The outbreak of the new coronavirus infection, COVID-19 was initiated from the Hunan seafood market in Wuhan city of China in December 2019, and within a couple of months it has turned out to be a global health emergency. Live animals like bat, frog, snake, bird, marmot and

rabbit are frequently sold at the Hunan seafood market (Wang et al., 2020b). Genomic analysis revealed that SARS-CoV-2 is phylogenetically related to severe acute respiratory syndrome-like (SARS-like) bat viruses, bats could therefore be the possible primary source. Although the intermediate source of origin and transfer to humans is not clearly known, the rapid human to human spreading capability of this virus has been established. As per the latest update of WHO on 18 April 2020, the outbreak of COVID-19 had spread in more than 200 countries. Approximately 146,198 people had died after contracting the respiratory virus out of nearly 2,164,111 confirmed cases, whereas more than 402,989 people have recovered from the disease. These numbers are changing rapidly. The detailed up-to-date information about COVID-19, is available in the WHO website at https://www.who.int/emergencies/diseases/novel-coronavirus-2019.

More than 200 countries/regions have reported confirmed COVID-19 cases, including China, Italy, Iran, S. Korea, India, Switzerland, Taiwan, USA, Sweden, Singapore, Sri Lanka, France, Australia, Malaysia, Spain, United Arab Emirates, UK, Nepal, Finland, Netherlands, Japan, Belgium, Russia, Thailand, Philippines, Cambodia, and Germany . After hitting China in January 2020, COVID-19 severely out broke in countries like South Korea, Iran, and Italy in late February and early March, 2020. As far as the number of COVID infected patients is concerned, USA is at the top of the list followed by Spain. In USA, more than 30,000 people died of this disease. According to the report of the Chinese government and the WHO, the current outbreak has infected some 84,180 people in China out of which more than 4642 people have died so far as of April 18. The first case of coronavirus outbreak in India was reported on 30 January 2020 in Kerala's Thrissur district when a student had returned home from Wuhan University in China (Rawat and Mukesh, 2020). The Health Ministry of India has confirmed 14,378 cases of coronavirus infection and 480 deaths in the country so far on 18.04.2020. On the one hand the very high transmissibility of the virus is responsible for its worldwide spread, the improvement and accessibility of international travel & tourism could be a reason for its further worldwide spread on the other hand. Every year, different parts of the world organize various religious, socio-cultural, scientific, sport, and political mass gathering festivals. These types of mass gatherings are likely to exaggerate many of the risk factors of COVID-19, and have historically been associated with outbreaks of disease both in local and international levels. The emergence and spread of COVID-19 from Asia to the Americas, Africa and the Europe represent a global pandemic threat

COVID-19 and global health

The relationship between human health and disease is neither a new concept, nor a new subject. The emergence COVID-19 in China at the end of 2019 has caused a large global outbreak and is a major public health issue. This virus is highly infectious and can be transmitted through droplets and close contact. The human to the human spreading of the virus occurs due to close contact with an infected person exposed to coughing, sneezing, respiratory droplets or aerosols. These aerosols can penetrate the human body (respiratory system) via inhalation through nose or mouth (Phan et al., 2020;聽Riou and Althaus, 2020). The clinical spectrum for individuals with COVID-19 infection ranges from mild or non-specific signs and symptoms of acute respiratory illness such as fever, cough, fatigue, shortness of breath, to severe pneumonia with respiratory failure and septic shock, which are very similar to other coronavirus diseases (Backer et al., 2020). The presenting features of COVID-19 disease in adults are pronounced. It is a matter of great importance to clarify the correlation between COVID-19 and immune-rheumatologic patients. Taking into consideration the quick and frantic spread of the epidemic, health of rheumatic patients is a matter of prime concern.

COVID-19 being a respiratory disease, damage of the tissues of Lungs is quite obvious, but there is report that other organs and tissues may also be affected. Since viral shedding in plasma or serum is common in respiratory tract infections, there is a possibility of transmission of coronaviruses through the transfusion of labile blood products. COVID-19 is a major public health concern for the world's population and is a leading cause of hospitalization and death, particularly for middle and old age people in the affected countries.

COVID-19 and economy

Loss of lives due to any pandemic causes definite irretrievable damage to the society. But apart from this, COVID-19 has severely demobilized the global economy. In order to restrict further transmission of the disease in the community, many of the affected countries have decided to undergo complete lock down. Major international flights and also all types of business transports have been deferred amid different countries. Due to lockdown all domestic flights, railway service (except goods trains), bus, truck, and vehicles transports are suspended with special exemption to those associated with essential commodities. In almost all the COVID-19 stricken countries, entire educational, commercial, sports and spiritual institutions are closed. Industries are suffering a lot as many of these excepting those related to essential amenities, are closed for a long time in many countries. People belonging to the tourism and transportation industry are also facing utmost difficulties. Production level has gone very low. Economy of many so called powerful countries are now facing the threat of high inflation and increasing unemployment as a result of lack of productivity and excessive expenditure for the treatment and rehabilitation of the COVID-19 victims and their families (OECD Interim Economic Assessment, 2 March 2020). Lockdown will directly affect the GDP of each country in the major economics. For each month there will be an approximate loss of 2% points in annual GDP growth. The tourism sector alone faces an output decrease as high as 50% to 70%. According to World Trade Organization (WTO) and Organization for Economic Cooperation and Development (OECD) have indicated COVID-19 pandemic as the largest threat to global economy since the financial emergency of 2008–2009. Some of the experts are even saying that human civilization has not faced such an unprecedented emergency after the World War-II. So, COVID-19 has undoubtedly put forth a remarkably bad effect on the day to day life of the entire human society and also on the world economy.

COVID-19 and global environment

From the very beginning of civilization, human beings gradually started manipulating the nature for its own benefit. In order to satisfy the demand of increasing population industrialization and urbanization became inevitable, and the obvious significance was proved to be detrimental on the global environment. Further, environmental concerns include air pollution, water pollution, climate change, ozone layer depletion, global warming, depletion of ground water level, change of biodiversity & ecosystem, arsenic contamination and many more (Bremer et al., 2019; Coutts et al., 2010). Global warming is a result of the increasing concentration of greenhouse gases (CO2, CH4, N2O etc). Out of the desire to drive the nature as per their own whims and desire, human beings started destroying the nature in numerous ways. As an inevitable consequence environment pollution has become a big issue of the present day.

But, due to the unusual outbreak of COVID-19, almost every big and small cities and villages in the affected countries like China, Taiwan, Italy, USA, France, Spain, Turkey, Iran, Germany, S Korea, U.K, India, Australia and many more, is under partial of total lockdown for a long period of time

ranging from a few weeks up to a few months. All local and central administrations worldwide have literally put a ban on free movement of their citizens outside their home in order to avoid community transmission The various religious, cultural, social, scientific, sport, and political mass gathering events like, Hajj, Olympics etc. are cancelled. Various types of industries are not functioning, all types of travels are cancelled. Meanwhile, efforts to restrict transmission of the SARS-CoV-2, by restricting the movement have had an outstanding environmental effect. Due to non-functioning of industries, industrial waste emission has decreased to a large extent. Vehicles are hardly found on the roads resulting almost zero emission of green-house gases and toxic tiny suspended particles to the environment. Due to lesser demand of power in industries, use of fossil fuels or conventional energy sources have been lowered considerably. Ecosystems are being greatly recovered. In many big cities the inhabitants are experiencing a clear sky for the first time in their lives. The pollution level in tourist spots such as forests, sea beaches, hill areas etc. is also shrinking largely. Ozone layer has been found to have revived to some extent. The pandemic has displayed its contrasting consequence on human civilization, in the sense that, on one hand it has executed worldwide destruction, but created a very positive impact on the world environment on the other hand.

Conclusion

Environment change is one of the biggest and most vital challenges of the 21st century. In spite of all their efforts to restore the nature during the last few decades, humans could only move a few steps forward. But during the last few months, consequences of the pandemic have successfully recovered the environment to a large extent that should definitely set positive impact on global climate change. Whatever be the cause or origin, the occurrence of COVID-19 has emphasized to improve the mutually-affective connection between humans and nature. At this point of time, it is indispensable to control the source of disease, cut off the transmission path, and use the existing drugs & means to control the progress of the disease proactively. Like all the preceding disasters on the earth, let all be optimistic enough that, human beings will definitely win over the pandemic in due course of time, but they should know the limits to which they can thrust nature, before it is too late.

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