

Impact of COVID-19 on Humanity

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Abstract

Coronavirus disease 2019 (COVID-19), is a contagious disease induced by severe acute respiratory syndrome coronavirus 2 (SARS-COV-2). The first case was identified in Wuhan, China, in December 2019. It has since spread worldwide and became a pandemic in March 2020. Added to this, is the emergence of a mutant SARS-COV-2-viral strain (B.1.1.7) in the UK in December 2020 and B1.526 in March 2021. COVID-19, is spread between people during close contact via small droplets, produced by coughing, sneezing, talking and singing. It's also airborne, requiring particulate matter for transmission. A person can become symptomatic or remain asymptomatic. COVID-19 can be prevented by social distancing and the wearing of cloth face masks, surgical masks, respirators, or other face coverings to control droplet transmission. Even though a vaccine, manufactured by Pfizer and Moderna and approved by FDA, is now commercial. The entire world awaits widespread inoculation. COVID-19 has affected humanity in many facets: health, socially, economically and in education. In health, tremendous burden has been placed to save patients life as the number of mortality and morbidity cases increases across the globe. To date, 89,603,838 million cases have been reported with over 1,926,228 deaths with 49,708,126 recovered cases. The economy of every country has been affected, as there have been severe job cuts, lockdown, decrease in world trade, border shut down etc. Production and productivity have significantly fallen across the globe in every sector. In the education sector, many universities, primary and secondary schools around the globe have resorted to online teaching, as opposed to "Face to Face" teachings. While this, to a large extent, is effective at the University level, it's not so at primary and secondary schools. COVID-19 has dramatically changed the social fabric of societies around the globe. Social gathering is prohibited, as denounced by the World Health Organisation (WHO) and the United States Centre for Disease Control (CDC). Many restaurants and other business places have been operating within the curfew periods. Church gathering have also been prohibited. At the moment, we must adhere to protocol enacted by WHO and CDC, whilst we await the confirmatory use of the vaccine.

Keywords: COVID-19; SARS-COV-2; Health; Social; Economic; Health sector

Introduction

COVID-19 is an infectious new disease induced by severe acute respiratory syndrome coronavirus 2 (SARS-COV-2), a novel virus [1] and a mutant of SARS-COV-1. The outbreak was first identified in Wuhan, China, in December 2019, though there is speculation that the virus could have originated elsewhere [2,3]. The outbreak was declared a Public Health Emergency of International Concern on 30th January 2020 and a pandemic on 11th March by WHO. As of 15th November 2020, more than 54.1million cases have been confirmed, with more than 1.31 million deaths [4,5]. The virus is primarily spread between people during close contact via small droplets, produced by coughing, sneezing, talking and singing. The droplets usually fall to the ground or onto surfaces, rather than travelling through air over long distances. As of June 2020, research has shown that speech-generated droplets may remain airborne for tens of minutes, providing the opportunity for the virus to be further spread by particulate matter in the atmosphere 6,7. People may become infected by touching a contaminated surface and then touching their face Airborne transmission can also occur indoors, in high risk locations, such as in restaurants, choirs, gyms, nightclubs, offices, and religious venues, often when they are crowded or less ventilated. It also occurs in hospitals, often when aerosol-generating medical procedures are performed on COVID-19 patients [6,7].

Since, the ACE-2 receptors permeate several organs in the body, and the virus binds to ACE-2 receptors via its spike S proteins, it has resulted in several complications such as acute respiratory distress syndrome (ARDS), cytokine storm, multi-organ failure, septic-shock, pneumonia, and blood clots, with eventual death, unless the immune system can produce

the requisite antibodies to kill the virus. Amongst, the symptoms experienced are fever, chills headache cough, fatigue, shortness of breath and loss of sense of smell and taste, sore throat, congestion or runny nose, nausea or vomiting, diarrhea, muscle or body aches. In health, a person can become symptomatic or asymptomatic [8-10].

COVID-19 currently can be diagnosed on the basis of symptoms and confirmed using reverse transcription polymerase chain reaction (RT-PCR) testing of infected secretions. Chest CT scans may be helpful to diagnose COVID-19 in individuals with a high clinical suspicion of infection [11-13]. COVID-19 can be prevented by social distancing and the wearing of cloth face masks, surgical masks, respirators, or other face coverings to control droplet transmission. Indoor transmission may be decreased with well-maintained heating and ventilation systems to maintain good air circulation and increase the use of outdoor air [6,7].

Effects on humanity

COVID-19 has affected humanity in many sectors: health, social relations, the economy and education. This is compounded by greater transmissibility via the emergence in the UK of a new viral strain of SARS-COV-2, resulting from mutation, B.1.1.7. Even though, a vaccine has now been manufactured by Pfizer and Moderna and is being dispersed around the globe, we wait to see the effect of mass vaccination. In the health sector of every country of the world, Covid-19, has resulted in dramatic high mortality and morbidity and presents an unprecedented challenge to public and private health sectors. Globally, as of March 4th, there are 115,580,899 confirmed cases, deaths: 2,567,976 and the number of recovered cases being 65,332, 965. The country most seriously affected are the United States, followed by Brazil. In the USA, the state of California seems to be the most highly affected. In Guyana, the number of confirm cases are: 8,699, deaths: 199 and recovered cases: 8,047. These figures are ascending daily. It has resulted in hospital being flooded with patients, increasing number of ICU beds, increasing number of mechanical ventilators, which are very costly and has put tremendous strain, financially on the health sector [14-16] and government. COVID-19 has destroyed the social fabrics of societies around the globe. Socialization is prevented as WHO and CDC imposed a 6 feet social distancing to prevent transmission of the virus. The initial response to COVID-19 was a total lockdown. Non-essential services have been terminated in many countries of the Caribbean and the rest of the world. Hospitals, fuel production, electrical power, public sanitation and law enforcement are part of the essential services that haven't been suspended across the Caribbean and most countries of the globe. Many restaurants, bars etc., supermarkets can only operate within the curfew periods. Restaurants and other dining places have been operating on a "take away" service. In many countries of the Globe and in the Caribbean, the 6PM to 6AM social curfew has been imposed, whereas in some countries, its 10PM to 4AM. In addition, churches around the globe have been closed, with church services online. Covid-19 restrictions have also, resulted in civil unrest in the USA, with the loss of lives.

The education sector of every country has been affected to a very large extent. Many universities across the Caribbean and around the globe have resorted to online delivery, rather than the "face mode" delivery to see the realization of their curriculum. Most have been using the zoom/moodle platform. While this has worked well for courses with theoretical components, it presented a challenge for courses that have a practical component. Thus, students have had to pursue virtual laboratory session and thus not been able to have the actual "hands on" experience. It's the nursery, primary and secondary schools that are affected seriously, in comparison to the universities. Nursery schools are closed across the globe, whereas students in primary schools are taught online to some extent. Thus, COVID-19, will create an education vacuum in societies in years to come.

Economically, COVID-19, has affected the economy of all countries across the globe. Many jobs have been decimated in the developed world and developing countries. Millions of livelihoods are at risk. Countries, like the USA have seen the most job loss, followed by European countries. Companies and manufacturing industries have been operating on a "skeleton staff". Job loss/cuts are also seen in the Caribbean, but not to that extent seen in the developed countries. Production and productivity across the various sectors have declined significantly. Due to fewer companies operating across the globe, there has been a decrease in world trade. Border closures, trade restrictions and confinement measures have been preventing farmers from accessing markets, including for buying inputs and selling their produce, and agricultural workers from harvesting crops, thus disrupting domestic and international food supply chains and reducing access to healthy, safe and diverse diets. Tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year. Millions of enterprises around the globe face an existential threat. Nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods. Informal economy workers are particularly vulnerable since the majority lack social protection and access to quality health care and have lost access to productive assets. Without the means to earn an income during lockdowns, many are unable to feed themselves and their families. For most, no income means no food, or, at best, less food and less nutritious food. As breadwinners lose jobs, fall ill and die, the food security and nutrition of millions of women and men are under threat, with those in low-income countries, particularly the most marginalized populations, which include small scale farmers and indigenous peoples, being hardest hit [14,15]. Internationally, millions of waged and self-employed agricultural workers, while feeding the world, regularly face high levels of working poverty, malnutrition and poor health, and suffer from a lack of safety and labor protection as well as other types of abuse. With low and irregular incomes and a lack of social support, many of them are forced to continue working, often in unsafe conditions, thus exposing themselves and their families to additional risks. Income losses have also forced them to resort to negative coping strategies,

such as distress sale of assets, predatory loans or child labor. Migrant agricultural workers are particularly vulnerable, because they face risks in their transport, working and living conditions and struggle to access support measures enacted by governments. Guaranteeing the safety and health, as well, as better incomes and protection, of all agriculture food workers, from primary producers to those involved in food processing, transport and retail, including street food vendors, will be critical to saving lives and protecting public health, people's livelihoods and food security. Countries in the Caribbean that depend heavily on tourism are greatly affected.

Conclusion

COVID-19 has affected humanity in many sectors: health, social relations, the economy and in education, in a devastated way. In health, tremendous burden has been placed to save patients life as the number of mortality and morbidity cases increases across the globe. Added to this, is the increasing economic burdens imposed on the health sectors. More finance has to be allocated to fund hospital settings. The economy of every country has been affected, as there has been severe job cuts, lockdown, decrease in world trade, border shut down etc. Production and productivity have significantly fallen, globally. In the education sector, many universities, primary and secondary schools around the globe, have resorted to online teaching, as opposed to "Face to Face" teachings or "Face mode" teaching. While this, to a large extent, is effective at the University level, it's not so at primary and secondary schools. An education vacuum have been created worldwide. Covid-19 has also destroyed the social fabrics of societies around the globe. At the moment, the entire world populace must follow the COVID-19 protocols denounced by WHO and CDC, whilst we await the confirmatory use of the FDA approved vaccines to eradicate this planet threatening disease.

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