


A Review on Impacts of COVID 19 Pandemic on Day-to-Day Life

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Abstract

The number of active cases of COVID 19 and deaths is markedly escalating. The pandemic had affected almost every aspect of our lives including geopolitics, health, economics, education and sociocultural events. However, the pandemic crisis besides its negative impacts succeeded in initiating some positive impacts as well. These are represented by increasing our awareness of the importance of daily hygienic practices, digital inequality, benefits of global collaboration in research and the search for a promising vaccine, online education, close family relationships and much more. This review addresses the impacts of COVID 19 pandemic on various important aspects of life.

Review criteria:

- Literature search and inclusion criteria were aim-based
- Each author searched articles related to his signed part.
- Key statements were supported by references and evidence from literature.
- Focus group reviewed different parts of the article

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Introduction

The outbreak of COVID-19, a disease caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARSCOV-2) occurred in an era characterized by advanced technology in mass media and communication resources. Such advances allowed people, in general, to follow the global news of this pandemic, be aware of its detrimental effects, and take protective measures as instructed by national and international health authorities. However, the coin has two sides and digital inequality sprang up where lack of technologies limited the access of certain population to advanced technologies and reduced their educational knowledge and information regarding the pandemic, governmental restrictions and protective measures to be taken to combat the crisis.¹⁻³ On the other hand, the crisis had a positive impact on population where technologies are available as it provoked a tendency to technology illiterate people to put an effort to learn the basics of skilled use of such technologies for work from home, social interaction, information follow up and educational purposes. It has been suggested that despite the major impact they are having on the spread of the epidemic, dealing with digital inequalities is currently not receiving enough attention from decision makers.⁴

Measures taken by governments such as shutdowns of not only international borders but also borders within each country to isolate areas of severe hit by the pandemic have remarkably reduced the spread of the virus. However, despite the first declaration by the World Health Organization (WHO) that described the pandemic as a global emergency in January, 2020,⁵ and the restrictions set by health authorities such as stay home, wearing masks and gloves, safe distancing, and avoidance of group ceremonies, many countries witnessed ignorance of such measures by their people. Such attitude significantly increased the number of active cases and consequent deaths. Some countries across the globe took the matter lightly at the beginning of

the global outbreak and even bragged of being free of cases to be struck later by the outspread of active cases and their health situation was worsened more by their lack of facilities to screen their own population. Still data from such countries remain unreliable due to the previous reasons and the clinical features such as the incubation period of almost two weeks during which cases may become asymptomatic. The dilemma of COVID 19 pandemic had been further worsened by the wide and wild emergence of various treatment regimens advocated by various health authorities across the globe and by health professionals and non-health individuals including high rank international officials. This review will address the impact of COVID 19 on various aspects of our daily life including health, geopolitics, economic, social, cultural and environmental aspects and education.

Methods

In this non-systematic review, we reviewed the literature on the crisis of COVID 19 and its influence on major aspects of our day-to-day life. This review is intended to be informative to clinician, researchers, students and the public on both the positive and negative impacts of the COVID 19 pandemic. The impact on Health, education, economics, geopolitics, social and cultural aspects, living environment will be discussed in details. The present review is essentially based on published articles that dealt with the influence of the pandemic on single or grouped aspects of life. The authors agreed in principle on the fact that despite the full documented and acknowledged negative impacts of the pandemic; it allowed governments, various institutional authorities, and the public to pinpoint the flaws in each of day-to- day aspects of life. Furthermore, it will help authorities to prioritize measures to avoid, or at least frame the most necessary precautionary measures to be followed when facing such a disaster. Each of the authors was assigned the literature search for an aspect or two that are believed to be

markedly affected by the pandemic. In such a way, the search and inclusion criteria were more focused around the aim of the review. The other two authors who made sure that key statements were supported by references and appropriate evidence before being included in the final compiled review reviewed the effort of each of the authors. The final draft was reviewed by all authors and approved for submission.

Impact on Health

The physical and psychological impact of the SARS-CoV-2 infection

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a highly contagious virus that has spread and caused a global pandemic. It is estimated that 2% of the carriers are perfectly healthy. However, 5-10% was estimated to develop an acute respiratory syndrome (ARDS). The effects of the pandemic have the potential to detrimentally affect society and burden the health care system.⁶ The clinical presentation can range from asymptomatic or mild to severe and even death. Mild manifestations of the illness include mild fever, dry cough, sore throat, nasal congestion, malaise, headache, and muscle pain, loss of taste and/or smell, diarrhea and vomiting. Moderate manifestations additionally include respiratory symptoms of shortness of breath with no signs of severe pneumonia, whereas severe clinical manifestations include severe pneumonia, ARDS, sepsis and septic shock.⁶ The effects of SARS-CoV-2 on the Central Nervous System (CNS) and mental health is still unclear. Evidence exists that the virus can penetrate the CNS through the olfactory and circulatory routes, which could explain the neurological manifestations of acute cerebrovascular disease, viral encephalitis, hypoxic encephalopathy, meningitis-encephalitis, infectious toxic encephalopathy, conscious disturbance, taste and olfactory disturbances.⁷ In a large study, SARS-CoV-2 patients exhibited several neuropsychiatric symptoms such as headaches, insomnia, encephalopathy, cerebrovascular

disease, as well as depression and suicidal ideation. It is debated whether the mental health conditions occur independently of the infection or is a result of the chronic low-grade inflammation that accompanies the infection.⁷ There are many reports of the patients' mental health being severely affected by the infection. A study has shown that SARS-CoV-2 has scored higher in the Hamilton Anxiety and depression scales compared to those of patients with pneumonia from other causes and healthy controls.⁷ Several reasons have been proposed by the authors to explain these results. Not only are patients of the virus experiencing physical and mental distress due to the illness itself, but also because of the concern for the potential infection of family members, the uncertainty of the characteristics of the disease, reports of deaths by the media as well as the prohibition of family and friends from visiting; preventing them from providing moral support.⁷

Disruption of healthcare services for non-communicable diseases

Governments from around the world have taken unprecedented measures to mitigate the serious effects of the pandemic. However, this has led to disruptions in other healthcare services in many countries, as non-urgent outpatient visits and one-on-one clinical visits were cancelled, as well as the redirecting of staff to help with COVID-19 patients. This is especially detrimental to patients with non-communicable diseases (NCDs), as they are at a higher risk of developing severe manifestations of SARS-CoV-2, are at a higher mortality risk and the infection may worsen the prognosis of their NCDs. Many high-income countries have included services for NCDs into their COVID-19 plans. However, most low-income countries have not.⁸ Patients also may be more hesitant to seek medical care due to fears of infection. There is also the issue of medication adherence. Monitoring of patients is essential; however, it is not as easy to

currently carry out. Moreover, many researches on NCDs have been halted or postponed. This could delay the progress in finding cost-effective interventions.⁹

Risk of exposure of HCWs and effects on mental health

Healthcare workers (HCWs) are at a high risk of being infected. Factors for increased risk include working in a high-risk department, exposure to an infected family member, inadequately washing hands, improper wearing of personal protective equipment (PPE), close and frequent contact with infected patients and in some cases unprotected exposure. Several studies have found that HCWs experienced symptoms of anxiety, depression and insomnia. Severe symptoms were especially found in nurses and women. There are many reasons for these disturbances: a fear of being infected and spreading the infection to family, a difficult work environment where difficult decisions need to be made on how to provide care to severely affected patients, working under extreme pressure and sometimes with limited resources.¹⁰

The psychological and physical impacts of lockdowns

Lockdowns and social distancing have been shown to be effective in reducing the number of cases. However, it is likely to have an impact on people's physical and mental wellbeing. The lockdown has the potential of physically impacting people, especially those with chronic diseases, through reduced physical activity, limited access to fresh food, limited exposure to sunlight, isolation and its effects on mental health.⁹ A study has estimated the prevalence of post-traumatic stress disorder (PTSD) symptoms as 7%.⁹ The frequent exposure to social media was found to be a risk factor in the development of psychopathological symptoms.⁷ One of the first steps taken by governments was to close schools and universities. Prolonged school closures have been shown to have a negative impact on children, as social contact is essential for

their development. It is especially detrimental if schools and parents are unprepared for home learning, and even more so for under-privileged students.¹¹

Part of the restrictions imposed was forcing non-essential workers to work from home. Many were discharged and other had a harder time to find jobs. In a study, it was found that those who stopped working during lockdown had high levels of distress.⁷

Engaging in health protective behaviors

The trust in governments, scientists and doctors are important when it comes to engaging in health protective behaviors such as social distancing, wearing masks and washing hands. However, many studies suggest that social media encourages the belief in conspiracy theories and discourages people in engaging in health protective behaviors. A study has found that older people were less likely to believe in conspiracy theories and were more likely to engage in health-protective behaviors, because they consume more of broadcast media and use less of social media.¹² On the other hand, misinformation can create fear and lead to extreme behaviors, such as discriminating, mistreating and even attacking HCWs, as they are seen as a risk to society.⁰⁸

Positive health effects of COVID-19 pandemic

The COVID-19 pandemic has had a positive impact that will most probably shape the future of the healthcare system for the better. Anecdotal observations have found fewer extremely premature births during lockdown. A possible explanation offered is that an increase in hygiene and home confinement could have decreased inflammation in women, which is a risk factor for premature birth. Reduced physical exertion due to work, reduced travelling and reductions in incidents of minor accidents and other traumas could also be contributing to decreased preterm births.¹³ The pandemic will help the healthcare system and HCWs to be better prepared for

future pandemics. A study found that HCWs taking care of COVID-19 patients had experienced growth, increase in affection and support for one another and feelings of professional responsibility.⁷

Impact on Geopolitics

The political consequences of the COVID 19 are not easily predictable. However, the lesson that is widely agreed upon and to be taken is that political attitudes and practices must change to maintain a safe world for all. Efforts must be made to reduce inequality in its various facets including political power, health, digital, social, poverty. This is to be a priority; we must work through international agencies to improve the conditions of living in under-resourced countries otherwise we shall have pandemic areas that cannot be completely isolated from the rest of safe areas across the globe. The gaps in inequality must be reduced and in addition to health, more focus on climate, economy and sustainability is required in order to achieve a wider and more beneficial recovery. The world is despite distances small and open to challenges that if we succeed in tackling them wisely, we can wisely and appropriately combat any future health crisis of the sort. Preparedness requires cooperation between countries and strict regulations and control of scientific research in the area of virology and biological warfare. The catastrophic year 2020 witnessed environmental disasters such as wildfires in USA, Australia and Brazil, civil wars in Syria, Iraq, and Libya, the continued oppression and torture of Muslim Rohingya in Myanmar and Muslims of China, the catastrophic Beirut explosion, hunger in several countries and such tragedies were topped by the COVID 19 breakout. A crisis in one country should be looked upon as a global crisis and the United Nations and concerned international authorities must never turn a blind eye on such tragedies anywhere. Focus should be on people and communities and the human must be respected regardless of ethnicity, religion, color, race or

gender. We became accustomed to bloodshed on television and mass media and life continues while the oppressed suffer, the poor becomes poorer and the rich becomes richer. Among the positive impacts of the pandemic are the collaborative efforts observed within scientific communities and educational institutes, the sympathy and cooperative spirit among people and societies.

The world is in dire need of strong, empathic and humanitarian leadership that works for humanity and not reelections. Woods of Oxford put right in saying “Poor leadership results in bad outcomes, whatever the political system”.¹⁴

Leaders must overlook their political differences and mistrust and grasp the opportunities for global cooperation in all aspects of fighting the pandemic and initiate efforts and future plans to improve if not avoid the consequent negative impacts of COVID 19 on life in general and across the globe. Disasters such COVID 19 outbreak revealed the real needs of the people to a decisive leadership and many governors and leaders lost their credibility and appeared as fragile failures in times of crisis. We have but to agree with Bishop and Roberts that the exceptional measures taken by governments, the private sector and individuals in response to the COVID-19 pandemic will profoundly impact our geopolitical environment.¹⁵

Impact on Economic

The massive drop in the price of oil in March 2020 that was the result of Russia’s refusal to reduce production which was challenged by the opponent decision of Saudi Arabia to increase production and reduce prices did not increase the demand on oil where most importing countries were rather busy with the COVID 19 crisis.¹⁶ However, the fact that some countries may have grasped the chance to increase their oil reserve at such slashed prices should not be excluded. Economy worldwide did not appear to benefit from such reduction in oil prices during the

pandemic mainly because of social distancing and lockdown of factories, malls, restaurants, cinemas and theatres, transport means and other crowd functioning facilities. Various industries were badly affected with massively reduced turnovers especially in the light that the work from home solution does not apply to such industries. In addition, the termination of contracts of employees and their redundancy negatively impacted their living conditions, their health and familial and societal interactions and relations.

The International Labor Organization's Fundamental Conventions (ILO) declared that "The COVID-19 crisis impacts on both the demand and the supply sides of the labor market, and it has major implications for the goal of ensuring full employment and decent work, in particular, the crisis is pushing many families into poverty and increasing existing inequalities".¹⁷ Despite the unpreparedness at both national and international levels to face the shock of the unemployment and lockdown of production in various industries, relief programs should be a priority to focus on not only from the point of view of economic recovery but from the humanitarian side as the shock of the crisis had severely negatively affected the low and middle class people. Their redundancy will reflect badly and costly on health, social and cultural aspects. It is rather imperative to suggest that any well planned relief programs to recover the industries and work conditions in a country would not only be beneficial to the industrial sector but to the workers, their health and socioeconomic status and the entire community at large if these programs considered the human as the center of their interest. Slashed interest rates by central banks of many countries with the aim to increase demand on loans and consequently public spending did not seem to achieve reasonable recovery of the economy. Governments again intervened by injecting billions of dollars to revive the situation; however, the picture is still far from ideal and the situation is somewhat cloudy. This is partly due to income cuts and the tremendous losses of

jobs and the escalating unemployment. Unemployment in some countries such as China and France witnessed some increase in hiring rates as a result of ease in shutdown and it is hoped that a more significant recovery occurs elsewhere.

Long term unemployment has detrimental effects on physical and mental health, and it has been associated with increases in mortality.¹⁸ This is certainly stressing on the view that any long term plans should prioritize human welfare, where focusing on job retention and developing educational and training programs to help unemployed to gain new skills in order to secure newer jobs. Worldwide efforts must collaborate to reduce digital inequality and illiteracy, increase availability of smart devices and internet access particularly in poor countries to help increase the awareness of all of health information, regulatory restrictions during pandemics, follow up with online education, secure work from home jobs if need arise and practice distant family and social interaction.

Impact on Social and cultural Aspects

The COVID 19 pandemic is affecting the public of any community and causing unprecedented disruptions of familial, social and cultural communications and relations. The shutdown and isolation and social distances have significantly reduced the spread of the virus and reduced the escalation of death cases when they are strictly followed by the population of any community, but it had negatively impacted familial and social interaction. Just like other sides of our daily life, the crisis had effectively increased digital technology use and interaction but severely reduced face-to-face interaction even among members of the same family. Frontline healthcare professionals attending hospitals and isolation centers they themselves were isolated from their families. Death tragedies in the healthcare professions just like other sectors were enormous and the families of deceased ones suffered greatly their losses. They were emotionally and physically

depressed by the separation from their close relatives and loved ones who they were not able to properly pay their respect and tribute to their farewell. The shutdown may have the advantage of bringing again family gathering into life at least for some part of the day, increased their interaction and allowed sharing and caring to appear in its most shining beautiful way. Such feelings were ignited more by the passionate thinking of family members stranded overseas or in quarantine centers whether governmental or private. The shutdown had its impacts were reflected on the societies and spiritual and religious practices of people as mosques and churches were shutdown, transport was effectively stopped, weddings and funerals were avoided. However, thanks to the digital era, digitally literate people communicated through social networks, ceremonies, workshops and conferences were held online. Digital inequality again stretched its neck during the crisis, where not all parents were able to afford the highly priced smart devices for their children to follow their education programs online. A problem that was even further aggravated by the parents losing their jobs or has sharp cuts of their income. The digital inequality in today's life should be reduced to zero and we should all advocate "Digital equality for all" as a priority in our fight to combat not only health or environmental disasters but digital illiteracy across the globe.

Impact on Education

With the COVID 19 outbreak, schools, universities and other educational institutes were shut down and their reopening is still not foreseen soon in many countries. According to UNESCO, temporary closure of educational institutes in most countries impacted 60% of students' population in the world while localized closures implemented by other countries impacted additional millions of learners. Princess Laurentien of the Netherlands, UNESCO Special Envoy on Literacy for Development reported that already there are globally around 773 million youth

and adults deficient in basic levels of literacy and numeracy, and two-thirds of them are females.²⁰ Those illiterate youth and adults must have suffered a great deal before and after the COVID 19 crisis. In addition, digital deficiencies and illiteracy as mentioned before may have negatively impacted their day-to-day fight against the pandemic. These facts again call for a consideration of not only human welfare from the point of view of health but of literacy to be a priority in long term planning of governments and international organizations particularly in areas in which poverty is widespread. The shutdown of educational institutes forced educators and learners to resort to online education and the crisis of COVID 19 lead to the development of various innovative strategies of distant teaching/learning to compensate for the in-class learning. However, despite the numerous advantages of digital online education, again it was not available to all and even those who have the resources for digital education they could not cater for the needs of all their children. With loss of jobs and income cuts thousands of parents, if not more, were facing the challenge of whom, among their children, to provide with facilities to follow up with his/her digital online classes. On the other hand, many schools were willing to return only transport but not tuition fees, in order not to keep teachers' jobs to continue distant online education.

The pandemic crisis and the educational challenges were not without some advantages. The crisis demolished reluctance to learn digital skills and even teachers who were digitally illiterate took up the challenge and learned through hands on workshops and online activities in order to provide distance education effectively. Governments and educational institutes worldwide cooperated to develop remote professional training programs for teachers, administrators and learners. Most governments worldwide adopted programs and plans to recover effective education. The United Arab Emirates (UAE) provided free home internet connection for those

who do not have it. An eLearning platform “In This Together Dubai” was launched by Knowledge and Human Development Authority to facilitate online classes for school students amid the COVID-19 outbreak and the implemented distant learning programs by the Ministry of Education.²¹ Among the problems that faced effective digital education is the practical and training classes that are essential components of several educational programs and it has to be conducted on campus, while keeping the safety of both teachers and students a paramount. A similar problem was experienced with graduate students carrying out experimental research in small spaced research labs. These problems were, in general, solved by applying safe distancing, shift-based working schedules and implementing strict safety measures from a must COVID 19 testing to use of all protective measures.

Impact on living environment

The COVID 19 pandemic made us all in dire need for a more flexible and appropriate changes in our living environment, starting with our homes, streets, malls, airports, shops, buildings of educational institutes, transport systems, restaurants, saloons and places of routine daily activities such as gymnasiums and parks. All such sites must be designed to have clean easily sanitized areas. Homes must be ready to offer a place for isolation without affecting the privacy and comfort of other family members. We should aim at having a space at home for working from home. Public places must account for social distancing and so the working places must take such precautionary measures into consideration. The large world in a crisis seems small and the containment of the pandemic in one country helps in reducing the spread of the virus. We should have learned from this disastrous experience otherwise our losses were worthless. In every country, all national priorities must be reviewed for a post COVID 19 era. Future strategies must be revised to include measures and plans for a better and easily modifiable living environmental

design. Efforts in these directions to combat any unpredictable disasters must be collaborative governmentally led but public in essence.

Limitations

Since COVID 19 pandemic influenced almost every aspect of the daily life of all people across the globe, it is only imperative that this review did not address all the positive and negative impacts of the pandemic.

Conclusion

The COVID 19 pandemic influenced almost every aspect of our daily life. It changed, among others, the facet of health, geopolitics, economy, education, movement, and social aspects. However, the disaster alarmed us of measures to be prioritized in any national and international strategies for a safer future. The world had suffered and still suffering a great deal of the negative impacts of the pandemic but the lessons we learnt are of great value in combating unpredictable future disasters of the kind. The burden in the present fight should not be carried on by only health authorities but by all private and public organizational sectors. The public must actively contribute to the efforts of fighting the pandemic by strictly following the directions of their health authorities and actively contribute to their national strategies for the post COVID 19 pandemic.

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