

Pandemic of the Digital Era: COVID-19

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Abstract

One of the pandemics hits earth in each age as if it reminds us of the realities and essences of life's nature while confronting sudden death. In around 1720 with plague, cholera 1820, Spanish flu 1920, and COVID-19 (2019 coronavirus disease) 2020. As all beings are part of the ecosystem of the universe, nature will always try to keep a balance to stay alive for longer years.

General View for 21st Century

What happens to the world in the 21st century? Earth's population reaches 7.8 billion by 2020. Technological advances are trying to bring chips into and monitor the access into the brain, 3D genome engineering techniques are attempting to observe and produce the genome inside cells [1], robotics and artificial intelligence technology are seeking to displace manpower. Deepening global tensions are changing foreign relations and deep fissures within countries are exposing political tribalism with increased mobility and migration trends worldwide. On the other hand, the goals of the World Bank Organization, the world's first Sustainable Development Goals, have made marked progress on poverty reduction over the past decades. That is down from nearly 36 percent of the world's population in 1990 to 10 percent in 2015 [2]. The vast majority of people do not migrate across borders; much greater numbers migrate within countries (an

estimated 740 million internal migrants in 2009). Research shows another trade-off that people create as they consider the realities and possible risks of staying or moving away as dealing with environmental and climate stress. That also highlighted the importance of how various populations show both resilience and adaptive capability related to environmental settings [3].

Precedents of COVID-19

Increasingly visible connections between human well-being, other living things, and whole ecosystems caused a new discipline to emerge as planetary health. When human-being with increasingly constructing buildings invaded the habitat of wild animals, wild animals' living systems exposed the human places. Destroyed habitat provided ideal conditions for the emergence of coronaviruses [4,5] at the beginning of the decade of the 21st century. More interestingly, a group of scientists warned of the potential risk of SARS-CoV re-emergence from viruses currently circulating in bat populations and the need to apply this knowledge in preparing to treat future emerging virus infection in 2015 [6].

The starting point of the new COVID-19 pandemic was declared by the Chinese government as the “wet market” which was notorious for selling many wild animals (one selling fresh produce and meat). The new extreme acute respiratory syndrome coronavirus (SARS-CoV-2) has been shown to pose a major global health threat. The outbreak took off first in Italy and shortly after China, Europe was the continent most affected in terms of COVID-19 cases and deaths detected [7], later the US turned to the center of the pandemic. Wherever the pandemic, the general population's first responses towards coronavirus, a virus which nature is less known, mostly included extreme fear and a high degree of uncertainty and anxiety due to perception of health and future living risk.

Importance of the True Knowledge

The less known virus when spread over the world, reaching accurate knowledge gains more importance. For Covid-19; causative agent, pathogenesis and immune responses, epidemiology, diagnosis, treatment, management of the disease, control, and preventive strategies are identified with increasing knowledge in time [8] that also bring humanity together towards one global thread.

Rapid exchange of scientific knowledge is an important way to minimize public panic about COVID-19, and this is crucial to offering real-time feedback to better understand possible trends and the potential efficacy of different interventions [9]. Proven treatment for COVID-19 patients was desperately needed. But there was no drug that has been shown to be safe [10]. Treatment procedures ranged across a wide variety of countries. In addition to treatment effects, there have been several concerns related to disease spread, multi-organ involvement; dosage and side effects of medications. Another issue needed in the digital age was the prevention of flood of misinformation and the preservation of trust in health information on the internet, social media and academia.

Three New Rules of the COVID-19 and Their Social and Economical Impact

COVID- 19 has come with its unforgettable rules in this era of the people: Hygiene, physical distancing, and wearing a mask. A new normal implemented into our daily lives: from home, work, and school to street, common gathering places.

Good personal hygiene practices are necessary and hand-shaking has been discouraged. As a new way of polite greetings, some used to place their hands in their chests or to use their elbows or feet. Some of them have dismissed the presence of the virus and have continued to group together in social events, despite several warnings not to endanger their own lives and the people they encounter. Learned patterns of social activity tended to replicate even during taken precautions. Such behavioral patterns are more prevalent in countries that are used to socialize in communities (e.g. Italy, Spain and Turkey). Another facet showed themselves to be opposition groups against governments (e.g. the United Kingdom and the United States) both for the security and fairness of public health and for anti- measures activities.

Initially, face-covering usage was less observed except in Asia where citizenry was using masks in much higher numbers at baseline (presumably due to previous experiences with SARS) [11]. In the beginning, the Centers for Disease Control and Prevention (CDC) had indicated that healthcare workers and “people who have COVID-19 and display signs’, healthy people only while taking care of someone who was sick with the latest coronavirus should wear masks. The same was recommended to the World Health Organization (WHO) [12]. On April 3, CDC made a recommendation that people wear “non-medical, cloth masks” when it is necessary to be in public places to help avoid coronavirus spread [13].

Physical distance measures are taken to prevent mitigation of the pandemic; stay home and work online are encouraged. International/ national flights were forbidden. A lot of people have lost their jobs and are under financial pressure. The structure and social relations created by work have also been lost. Sudden and severe economic inequality has been caused by the launch of social and physical isolation programs, with pronounced decreases in international trade and local small business activity, as well as overall impacts that are likely to be felt [11].

Empirically, studies illustrate the important role of physical social interaction and emotional social connection in the survival of organisms [14] and according to Lieberman, social interaction is the most important need for human survival [15]. But new normal changed attitudes of social human beings in their lives and affected the mental health of them. People have realised the significance of mutual intimacy and emotional interactions in the faces of their peers and missed those former days.

Readiness of the Health System to a Pandemic

When the coronavirus arrives unexpectedly, the significance of the specific readiness of the health system to an urgent situation, how much budget given by governments’ on healthcare, expansion of health infrastructure capacity is more obvious. Relevant expression of Suleiman The Magnificent is recalled “There is no object as prestigious as the state among the people, but in fact, there is no happiness and wealth in the world like a breath of health.”

The UN Structure for the Immediate Socio-Economic Response to the COVID-19 Crisis states that “The COVID-19 pandemic is much more than a health problem: it affects at its heart communities and economies. Although the effects of the pandemic will vary from country to country, poverty and inequality will most likely increase on a global scale, making the achievement of Sustainable Development Goals much more urgent [16].

Countering With a Pandemic for the Frontline Health Workers and the Public

After the shock period, all health workers fought against the spread and care of the COVID-19 pandemic. At the cost of their lives, they worked to save the lives of coronavirus victims despite the lack of enough personal protective equipment, inpatient service capacity, and quarantine facilities. Many different sceneries appeared under the coronavirus dominance in accordance with the geographic, socioeconomic, and cultural unique features of each of the countries. People stayed in their homes as a measure to prevent the pandemic. Over the world, people supported each other to come over this situation via online platforms or from their balconies appear in concert trying to motivate each other. What people preserve inside their inner self is more apparent in these tough times. European healthcare capacity and systems faced severe pressure from coronavirus disease (COVID-19) [17]. While some of the patients were under the treatment, some of the patients could not even reach enough healthcare especially at the beginning of the pandemic for intensive care units in some of the highly prevalent cases of European countries and the US. Some elderly people can not gain access to ventilators, and even forsake their life for a younger one to survive. Health workers, patients, their loved ones, and all the others prayed to rescue from coronavirus. Solidarity makes people feel better in these times. Countries help each other by sending ventilators or personal protective equipment. Peer support, good family relationship, communication, and leadership, crisis management can be the important factors for resilience during the pandemic. As COVID-19 is set to be a chronic health issue, clinicians would be needed to maintain a high warning status for an extended period of time. Help obtained prior to and after an event is likely to affect whether clinicians experience psychological development or injury.

On the other hand, the tendency towards violence also increased [18] with accompanying economic stressors. Around the world due to social isolation and quarantine measures, reports of domestic abuse and family violence have increased [19]. For those who rely on daily social interactions, family gatherings, and group activities, such as sport or exercise, living in isolation will be a challenge to maintain their mental health. Most obviously, psychiatric sequelae from illness and sickness would also occur [20]. In Black, Latino, and Native American communities and among the poor in the United States, COVID-19 had disproportionate contagion and fatality. During the pandemic, toxic stress arising from ethnic and social inequality was magnified, with consequences for poor physical and mental health and socioeconomic performance [21].

There are also urgent, clear and efficient steps that can be taken to reduce the harmful impact of the coronavirus pandemic on mental health. Ensuring effective and reliable contact from government agencies, research organizations and mental health services, and offering funding for these individuals in the general community without jobs, will all benefit [22].

Burnout of the Frontline Health Workers and General Public Anxiety

The longer the pandemic era, the more health workers are tired. According to a systematic review and metaanalysis which examines the psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and the general public reported the prevalence of anxiety and depression was greatest among patients with pre-existing conditions and COVID-19 infection (56% [39% -73%] and 55% [48% -62%]) and was comparable between healthcare staff and the general population and studies from China, Italy, Turkey, Spain and Iran identified higher-than-pool prevalence among healthcare workers and the general public [23]. Besides, a study from Turkey stated that healthcare workers' levels of hopelessness and state anxiety were greater than those of non-healthcare workers. Hopelessness levels of nurses are higher than physicians, and levels of state anxiety are higher than those of both physicians and other healthcare staff. The levels of anxiety and despair were higher among women, those living with a high-risk person at home during the pandemic, those who had difficulty caring for their children, and those whose income decreased. Anxiety levels are an important predictor of hopelessness [24]. Risk factors for health workers for mental health problems were including feelings of insufficient help, self-health issues, fear of carrying infection to family members or others, and lack of fast access to occupational health testing if required, loneliness, feelings of insecurity and social stigma, overwhelming workload or unstable attachment [25]. Interventions need to be introduced urgently to encourage the mental well-being of health care workers exposed to COVID-19, and to improve prevention and intervention measures by educating mental assistance and crisis management health care practitioners [25].

Quarantine and the Time Allocated for Loved Belongings

We got used to taking our roles in society and suddenly daily lives of all of us changed. These times were compulsory to stop and rethink our duties which seemed necessary for us. A high level of uncertainty has come to our lives with its gains and losses. Enduring uncertainty harbors a possible increase in self-esteem ability while going through our lives and thinking about the reason for our existence.

This quarantine time may be one of the most time allocated for our families except those who are at the frontline health workers for interaction with the families. Within the normal stream of life, maybe the time for each other is not as much as the time of COVID-19 times. These interactions have increased awareness of each other. Endurance ability for experiences and each other is also increased. On the other hand, for those living alone, isolation and loneliness risk is also increased. While quarantine measures protect against the spread of coronavirus, they may cause severe psychosocial stress and can contribute to or exacerbate mental illness [26].

These difficult times have also connected worldwide, online meetings and online education were forwarded as measures to prevent the mitigation of the disease. Many institutions and universities opened their lectures in online platforms that make it easy to access the information. Connection to the internet turns to a mandatory for mass education. Social media usage increases the potential to make new online connections with friends, as well as improve oneself in a desired direction with a wide range of freely accessible courses with an opportunity of online meeting with the experts of that area. Although the rapidly evolving nature of social networking technology continues to challenge these scholarly changes, the urgent need for attention

to this phenomenon is highlighted by the fact that it is reshaping how many human beings initiate and/or sustain virtually every form of ethically essential social bond [27].

Return to Everyday Life

All the former pandemics ended. Leaders who use a well-considered method with an incremental approach to easing restrictions will be able to gradually restart the functioning of society under their influence while at the same time maintaining most of the benefits of public health achieved through the current locking procedures. COVID-19 Color-coded risk management platform, informed by the resilience of the public health system; Maslow advocates for hierarchy, and the social determinants of health will provide a systemic framework for this to happen. Achieving this would reflect a mature whole-of-society approach to COVID-19 that would go a long way toward alleviating post-crisis accountability [28].

Conclusion

Each crisis comes with a reminder to all human beings to strengthen the union and unsharp our counterproductive sides. The lesson came with coronavirus seems easy three rules that reminds us the importance of the social bonding, health and hygiene, but a difficult lesson hard to operate globally, results in many losses. While we are in a digital era, the essences of nature and human being are always same; the governments and technological developments must put these essences to the center in the consideration to leave to a part of the ecosystem, next generations, a livable earth.

Conflicts of Interests

Author has no conflict of interest to declare

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