

Environmental Ethics and Mental Health during COVID-19

COVID-19 Sürecinde Çevre Etiği ve Ruh Sağlığı

✉ Serhat Düzeci¹, ✉ Bahanur Malak Akgün¹

¹Ardahan University, Ardahan

ABSTRACT

As the cause of the COVID-19 pandemic, climate change, population density, ecological changes, etc. natural phenomena are shown. The physical, chemical, biological, socioeconomic, cultural and psychological effects of COVID-19 have been felt all over the world. COVID-19 negatively affects the environment with an unbalanced increase in medical waste and disposable products, while quarantine and pandemic measures have given an opportunity for nature to renew itself. The causes and consequences of COVID-19 have brought the concepts of environmental health and therefore environmental ethics to the agenda of healthcare professionals. As the environmental ethics attitudes and behaviors of health professionals develop, health professionals will be able to take initiatives to create these attitudes and behaviors in society. Environmental ethics has been evaluated in the context of public health, mostly in the physical health. However, environmental ethics is also very important in terms of community mental health. Living in an unhealthy environment threatens mental health. Because people want to live in a safe environment, every factor that threatens this trust poses a risk for mental health. There is actually literally no way to talk about happiness in an environment where there is no environmental order and nature is deteriorated and polluted. Therefore, we aimed to explain the concepts of environmental health, environmental ethics and mental health during the COVID-19 process. Thus, an important strategy development in the pandemic process can be achieved by enabling the assessment and management of the causes of the COVID-19 pandemic from a broader perspective.

Keywords: COVID-19, environmental ethics, environmental health, mental health

ÖZ

COVID-19 pandemisinin nedeni olarak iklim değişikliği, nüfus yoğunluğu, ekolojik değişiklikler vb. doğal olgular gösterilmiştir. COVID-19'un fiziksel, kimyasal, biyolojik, sosyoekonomik, kültürel, psikolojik etkileri tüm dünyada hissedilmiştir. COVID-19, tıbbi atık ve tek kullanımlık ürünlerin dengesiz artışıyla çevreyi olumsuz yönden etkilerken; karantina ve pandemi önlemleri doğanın kendini yenilemesine fırsat tanımıştır. COVID-19 neden ve sonuçları çevre sağlığı ve dolayısıyla çevre etiği kavramlarını sağlık çalışanlarının gündemine getirmiştir. Sağlık çalışanlarında çevre etiği tutum ve davranışları geliştikçe, sağlık çalışanları toplumda bu tutum ve davranışların oluşması adına girişimlerde bulunulabilecektir. Çevre etiği, toplum sağlığı bağlamında daha çok fiziksel sağlık boyutunda değerlendirilmiştir. Ancak çevre etiği toplum ruh sağlığı açısından da oldukça önemlidir. Sağlıklı bir çevrede yaşamamak ruh sağlığını oldukça tehdit etmektedir. Çünkü kişiler güvenli bir çevrede yaşamlarını sürdürmek isterler, bu güveni tehdit eden her etken ruh sağlığı açısından bir risk oluşturur. Çevre etiğini insan, acı, çevre ve canlı merkezli olarak dört başlıkta toplayan çalışmalar mevcuttur. Gerçekten de çevre düzeninin olmadığı, doğanın bozulduğu ve kirlendiği bir ortamda tam anlamıyla mutluluktan söz etme olanağı yoktur. Bu nedenle bu derlemede COVID-19 sürecinde çevre sağlığı, çevre etiği ve ruh sağlığı kavramlarını açıklamayı amaçladık. Böylece COVID-19 pandemisinin nedenlerini daha geniş bir perspektiften değerlendirmeyi ve yönetmeyi sağlayarak pandemi sürecinde önemli bir strateji geliştirme sağlanabilir. İleriki dönemlerde olası diğer salgın ya da pandemilerin oluşumunun ve yayılmasının önüne geçilebilir.

Anahtar sözcükler: COVID-19, çevre etiği, çevre sağlığı, ruh sağlığı

Introduction

Throughout the history of mankind, the world has witnessed several epidemics such as plague, smallpox, Spanish flu, and cholera, which killed many people in Europe. Other major virus threats include AIDS, Ebola, Crimean-Congo Hemorrhagic Fever since the 1970s, and SARS, MERS, avian influenza, swine flu, and Zika in recent years (Türkiye Bilimler Akademisi 2020). At the present time, people are once again confronted with the threat of a pandemic. The COVID-19 pandemic, which is accepted to have emerged in Wuhan, China in the last month of 2019, has spread quickly and has become the world's most serious health issue today (Akbiyık and Avşar 2020).

Address for Correspondence: Bahanur Malak Akgün, Ardahan University Faculty of Health Sciences, Department of Nursing, Ardahan, Türkiye **E-mail:** bahnur_mk@hotmail.com

Received: 21.02.2022 | **Accepted:** 21.09.2022

Because of the rapid spread of the pandemic, almost every department in the healthcare system dealt with COVID-19 patients. Due to the fast progression of the disease, the significance of early diagnosis, the reasons for disruption in the function of the health system, and patient triage for prevention of infection have all been critical issues throughout the pandemic (Özdemir et al. 2020). Unfortunately, sensitivity to community mental health and individual mental health has fallen behind the priority of these issues. However, panic, fear, anxiety, depressive emotions, tendency to violence, and post-traumatic stress disorder symptoms have been observed in humans throughout the pandemic (Sher 2020b, Tuncay et al. 2020, Brooks et al. 2020).

The assumptions made regarding the cause of the pandemic are the factor that determine this priority. The Islamic Foundation for Ecology and Environmental Sciences (IFEES-Eco-Islam) (2020) states that past zoonotic outbreaks were caused by the same issue as COVID-19. For example, natural factors, such as climate and ecological changes, have been identified as other reasons for the COVID-19 pandemic, as indicated in other epidemics (Macar and Asal 2020, Mende and Misra 2021). Mende and Misra (2021) questioned the role of climate change as a possible cause of transmission of COVID-19 virus from animals to humans, claiming that climate change and the COVID-19 pandemic affect one another. Factors such as climate change and air pollution cause pollution as a consequence of rising carbon emissions, creating an ideal environment for the formation and spread of some viruses and bacteria. In this regard, environmental pollution causes new diseases and sets ground for them to be fatal (Aykaç et al. 2020). This approach naturally brought up the concepts of environmental health, environmental ethics, and mental health, as well as the significance of their connection with each other. Since environmental ethics can be defined as a theoretical discipline examining the principles that impact attitudes and behaviors which are effective in all types of environmental decisions, activities that are more or less related to the environment, works that must be done, and determining environmental practices. Some believe that the purpose of ethics is the same as the purpose of environmental ethics (Kılıç 2013, Does Jardins 2006). Accordingly, in addition to protection of nature, one of the purposes of environmental ethics is to make people happy. In this respect, achieving happiness seems to be the main and common purpose. There are studies that group environmental ethics into four categories: human, pain, environment, and life-centered. Indeed, it is not possible to talk about happiness in an environment where there is no environmental order and nature is deteriorated and polluted (Birden 2016). Individuals and communities that are sensitive to the environment and have environmental consciousness and awareness would be raised when individual and community mental health is assured. Because people with mental well-being are aware of their responsibilities and exhibit prosocial behaviors (Şengün 2007). One of the characteristics of these individuals is their awareness of environmental ethics (Liu et al. 2019).

Environmental health, and therefore the environmental ethics approach, should serve as a guide for us as health researchers in understanding the formation and spread of epidemics, as well as the dynamics of the periods that they take place. As environmental ethics attitudes and behaviors of healthcare professionals develop, they will be able to make interventions to develop these attitudes and behaviors in the society. Environmental ethics has mostly been assessed in terms of physical health in the context of public health and environmental health. However, environmental ethics is also critical for community mental health. Living in an unhealthy environment considerably threatens a person's mental health. Because people want to maintain their lives in a safe environment, any factor that undermines this trust poses a risk for their mental health (Akpınar 2020, Metin and Gül 2020, Akgün and Akgün 2017, Bahar and Aydoğdu 2015, Erden and Koyuncu 2014, Güler et al.1994). Therefore, the aim of this review is to explain the concepts of environmental health, environmental ethics, and mental health during the COVID-19 pandemic. Thus, by assessing and eliminating the causes of the COVID-19 pandemic from a broader perspective, an important strategy development may be realized during the pandemic. The formation and spread of possible other epidemics or pandemics can be prevented in the future.

COVID-19 and Environmental Ethics

Human beings that live a naturalistic lifestyle and consider themselves to be a part of nature have acquired human habits that rule, dominate, control, change, transform, benefit from and profit from nature as well as demolish, destroy, and harm it and cause irreversible changes in nature by developing a modern life perspective. Serious global environmental concerns have arisen as a consequence of what modern man has created in nature. However, except for people who are sensitive to environmental concerns or experts on the subject, these problems have not been seen as issues that society is sensitive to. However, the fact that the COVID-19 pandemic has brought both social structures and individual daily lives to a standstill has caused a great deal of confusion and uncertainty in many areas such as the economy, health, education, and politics. Therefore, it brought pre-pandemic perspectives up for discussion and required the development of a critical perspective on which mistakes caused these problems (Sofuoğlu Kılıç 2020).

The World Health Organization (WHO) (2021) states that changes in the atmosphere caused by climate change would cause vector-borne diseases such as malaria and dengue fever to spread over a large geographic area. A warming atmosphere can increase the frequency of infectious diseases. Insects carrying diseases will migrate to colder areas as a result of floods, increasing temperature, and humidity, causing disease spread (WHO 2021). IFEES-Eco-Islam (2020) states that past zoonotic outbreaks were caused by the same problem as COVID-19, and immune systems of wild animals reared in the farms for their trade got damaged, resulting in viral mutations, and that such breeding farms and animal trade should be stopped as soon as possible (IFEES-Eco-Islam 2020). Therefore, climate change, ecological changes, and other environmental problems have been identified as the root cause of the COVID-19 pandemic (Akyıldız et al. 2020, Morand and Lajaunie 2021). In other words, climate change triggers epidemics, which in turn cause further environmental destruction and pollution (İba Gürsoy 2021). Huang (2020) suggest that increasing urbanization in Asia has increased human interaction with wildlife, leading to epidemics such as COVID-19. According to Macar and Asal (2020), deforestation is causing the extinction of numerous wild animal and plant species. Because of habitat loss, animals are forced to migrate and come potentially into contact with other species or humans, leading to the spread of zoonotic viruses (Macar and Asal 2020, Wallace et al. 2020).

Some studies in the literature have described the COVID-19 pandemic as an 'Anthropocene disease.' These studies illustrate the significant effect of human activities on ecosystems and their correlation to a new ecological age characterized by its consequences for public health, society, and the environment (David et al. 2021, Carlson et al. 2021). As a result of the COVID-19 pandemic, paradigms like "one health" and "planetary health," which emphasize the connection between human health and the environment, have emerged. One health emerged in reaction to the threat of pandemic caused by SARS and avian influenza viruses. Planetary health, on the other hand, emerged as a response to the environmental crisis associated with human activities. The Report on the Protection of Human Health in the Anthropocene Era states that human beings' fundamental rights in the future would include health, livelihood, and survival, and these rights may be violated by great states. As a result, the present generation has an ethical obligation to preserve the health and well-being of future generations (Whitmee et al. 2015). Underlining the responsibilities of developed countries in climate change in the United Nations Framework Convention on Climate Change, can give an answer to the question of who will be responsible for ensuring environmental ethics, as in the case of climate change issue (Grasso and Page 2008). This does not mean that developing and underdeveloped countries are not responsible.

As mentioned above, if awareness of environmental ethics is not established, negative outcomes for the environment (such as climate change and urbanization) and health (such as the COVID-19 pandemic) may occur. These negative outcomes might create a vicious circle by negatively impacting the environment and health. For example, the absorption of the SARS-CoV-2 virus into pollutants such as dust, soot, and PM in the air may cause it to spread across long distances (Qu et al. 2020). Furthermore, coronaviruses may survive in water and sewage for weeks (Casanova et al. 2009). These conditions increase the risk of infection and disease in healthy individuals. The SARS-CoV-2 virus was found positive in stool and urine samples from infected individuals. As a result, studies on the transmission routes of these wastes in settlements were conducted. These studies revealed that SARS-CoV-2 RNA was found in wastewater (Hindson 2020).

Some COVID-19 treatment medicines are regarded water pollutants. It is widely recognized that wastewater treatment facilities lack sufficient processes to treat these medications before they reach aquatic ecosystems. These pollutants have caused a wide range of biological impacts on animals and humans, including immunological, mutagenic, and reproductive changes. In recent years, there has been a continuous rise in chronic and infectious diseases associated with pollutant exposure (Espejo et al. 2020). Although the collective use of disposable protective equipment during the pandemic significantly prevents spreading of virus, it is not ecologically sustainable (Silva et al. 2020). Furthermore, when chemicals such as pharmaceuticals and disinfectants used for health and preventing infection are not used appropriately and are used excessively, their rates in wastewater increase. It is stated that discharging the used pharmaceuticals into receiving areas disrupts wastewater treatment processes and the natural microbial ecology (İba Gürsoy 2021).

Furthermore, the studies have revealed that the partial and total closures implemented during the pandemic significantly reduced the concentration of air pollutants and enhanced air quality. Diseases and transmission rates increase as air pollution levels increase. In a respiratory disease COVID-19, air pollution may increase the rate of SARS-CoV-2 virus infection (Frontera et al. 2020). During the pandemic, lockdown periods and isolation of patients and contacts decreased air pollution (Aslım and Tekindal 2021, Çobanoğlu 2020b) and water pollution in waters with intense urban contact. And this situation has led to the increase of the vitality in the waters and has revealed situations such as the revival of nature (Aslım and Tekindal 2021). Environmental noise has reduced as a consequence of a reduction in anthropogenic activities such as industrial, commercial,

and transportation (Mandal and Pal 2020). During lockdown and quarantine periods, waste in natural and urban areas, such as recreational and recreational places, reduced. The reduction in the usage of coal and oil has resulted in a reduction in the amount of carbon dioxide in the air. Furthermore, due to the restriction precautions imposed during this pandemic, wild animals returned to their original habitats due to human presence (Espejo et al. 2020). As a consequence, it has created a remarkable situation in terms of environmental ethics (Çobanoğlu 2020b).

Changes in people's habits and lives should continue to support an ecocentric environmental ethics understanding throughout this process (Aslım and Tekindal 2021). The COVID-19 pandemic period highlighted the lack of a holistic approach based on climate, environment, and health. Because the European Union was unable to handle the COVID-19 pandemic holistically, focusing on climate, environment, and health. The pandemic has no direct or indirect positive impact on the environment and climate policies of the European Union. As a result, it is important to incorporate existing environmental norms into future policies in an effective and integrated manner (Aras 2020).

Environmental Ethics and Community Mental Health during the COVID-19 Period

Mental health should be considered in chronic relationship with the living and non-living systems that surround the individual. Because a person is affected not just by his social correlations, but also biologically and psychosocially by his whole natural environment. Sucuoğlu and Karaş (2020), aware of this effect and interaction, attempted to draw attention to importance of the issue by sending a letter titled "Ecology and Psychiatry: A proposal for an interdisciplinary perspective" to the editor during the COVID-19 pandemic. There have been studies revealing the effects of environmental problems on mental health. It has been discovered that heat waves and air pollution, which are felt when global temperatures rise, have an impact on mental well-being (Malaspina et al. 2020). It has been found that air pollution is associated with an increase in the risk of Alzheimer's type dementia, and a decrease in cognitive functions (Peters et al. 2019, Ritz and Yu 2021, Delgado-Saborit et al. 2021). Changes in the ecosystem have an impact on human behaviors (Nettle et al. 2013). For example, the effects of urbanization, which is an ecosystem change, on mental health are known. Those born and raised in cities have more frequent and severe mental health problems, which start during childhood than those in rural areas (Bratman et al. 2019). Natural disasters associated with climate change, another other ecosystem change, are known to pose the risk of anxiety and mood disorders in those with low socioeconomic status (WHO 2014).

In this context, environmental ethics is the concept that will guide us in the management of the relationship between human and ecosystem in terms of ecology and community mental health during the COVID-19 period. Due to factors the disproportionate increase in population, unplanned industrialization, irregular urbanization, wars, artificial fertilizers, pesticides, and chemicals, the environment has reached a level that threatens the life of the organism. This is because these dangers enable people have realized that they have some moral responsibilities and obligations to the environment. For this reason, environmental issues have gone beyond traditional moral understanding (Kılıç 2013, Does Jardins 2006). Accepting the moral values of society allows a person to properly fulfill the obligations and responsibilities that are expected of him. This positively affects the individual's mental health and, as a result, the peace and happiness of society. Only healthy and happy people can create peaceful and happy societies (Şengün 2007).

Savulescu and Persson (2012) state that people today must have their moral development in order to avoid disasters. They added that the two big calamities that people would face are problems caused by climate change and a lack of natural resources (Savulescu and Persson 2012). As a result, the tendency to address environmental issues through ethical perspectives has grown in popularity. Thus, ethical behaviors have become more crucial for interventions to find more permanent solutions to environmental problems (Kılıç 2013, Does Jardins 2006). In environmental ethics, the moral responsibility of the individual is emphasized (Birden 2016). It has been stated that the more people believe they are responsible for a result, the more responsible they will feel. Based on the correlation between responsibility and causation, we cannot solve important environmental problems such as climate change today unless we adopt the idea that we are responsible for the consequences of our actions rather than the consequences of our negligence, and that if we share responsibility for a result with others, our own responsibility decreases (Savulescu and Persson 2012).

Environmental ethics is described as the body of knowledge that explains how people's moral correlations with their natural environment should be and is expected to examine this correlation systematically (Kılıç 2013, Does Jardins 2006). Environmental ethics is an attempt to find solutions to environmental problems emerging from individual moral views as well as social and public policies. In this case, environmental ethics must identify what

people are responsible for and justify these responsibilities (Does Jardins 2006). Because environmental ethics is a significant component that affects attitudes and behaviors in determining environmental decisions, actions, and practices (Sönmez 2017).

The theory of environmental ethics, on the other hand, argues that moral principles should manage and do manage people's attitudes toward the natural world (Does Jardins 2006). Approaches to environmental ethics are addressed into three main titles: human-centered (anthropocentric) ethics, life-centered (biocentric) ethics, and ecocentric (holistic environment) ethics. The interests and demands of people are prioritized over all else in nature in the human-centered approach. According to this view, non-human beings have no intrinsic value. Other natural beings are things that people may use for their own purposes and needs. As a response to the anthropocentric ethics, biocentric ethics emerged. Humans cannot have superiority over other living things, according to this approach. Other living things have an intrinsic value since they are alive. Human beings are only obliged to respect other living things. Because all biotic living things are valuable in the biocentric ethics understanding, and all living creatures have moral capacity because they are alive. The ecocentric ethics understanding has stepped forward the biocentric ethics approach, and inanimate beings have now become ethical concerns. According to the ecocentric approach, every creature in the universe (plants, animals, and other ecosystem members) is an element of the life cycle. Each being has different functions as well as equal rights. According to this understanding, man is not the ruler of nature, but only a part of the ecosystem. Although humans differ from plants and animals since they are conscious, they share a common origin with other living things as living creatures. As such, humans are an inseparable part of nature (Akalin 2019).

In the struggle against COVID-19, there has been a need to question "how" the struggle would be carried out, with what attitudes and behaviors it would be managed, in other words, the ethical dimension of the issue. For fighting against the COVID-19 pandemic, a bioethical pandemic management has been recommended; in which developments are shared with the public with openness, transparency, and realism; everyone is treated equally, personal autonomy is ensured in cases of quarantine and isolation, and proportional and measured sacrifice is expected in the name of public health; solidarity and cooperation are supported between people, hospitals, units, and countries; governments can meet needs of the society through accountability, economic life is supported with mutual cooperation and solidarity, and individuals in the society exhibit humanitarian, pluralistic, respectful, and responsible attitudes and behaviors towards the environment, biosphere, biodiversity, and future generations in accordance with human rights and dignity (Ülman 2020, Çobanoğlu 2020a). During the pandemic, young people put their contact information at apartment entrances to help the old people. Such respectful and responsible attitudes and behaviors have shown the importance of solidarity in overcoming COVID-19 within an ethical framework. COVID-19 showed that in terms of bioethics and environmental ethics, we must balance the value of life and the profitability of the capitalist system and anthropocentric policies cannot be isolated from other living beings (Çobanoğlu 2020b).

Unfortunately, throughout the pandemic, both disrespectful and irresponsible attitudes and actions were observed. For example, the implementation of curfews due to the high death rates of those aged 65 and over has led people to perceive people over 65 as "the disease itself" (Malak-Akgün and Aydın 2021, Çobanoğlu 2020b). Isolating patients is morally acceptable; however, it is also important that treatments be carried out in line with human dignity. The fact that during the COVID-19 pandemic young people ignored the disease and organized corona parties, risking the lives of the elderly, forced the director general of the World Health Organization, Tedros Ghebreyesus, to make statements emphasizing the fact that young people are not invincible and can become sick and pass away.

Environmental problems, as well as the COVID-19 pandemic, have worsened social injustices. Both the COVID-19 pandemic and climate change have posed a threat to vulnerable groups that are particularly the poor and lack necessary resources to cope with disasters across the globe. Putting these groups at higher risk has resulted in class segregation in numerous aspects (Milani 2020). Even when low-income and uninsured people had COVID-19 symptoms, they were nonetheless susceptible to the pandemic because of testing and treatment costs (Saad-Filho 2020). Women, Afro-Americans, and native Americans have made up the great majority of the unemployed ones in the United States of America, one of the countries most affected by the COVID-19 pandemic. It has been stated that the majority of people who died in the COVID-19 pandemic as a result of the effect of socioeconomic inequality are Latino, Afro-American, and native American (Yates 2020).

The COVID-19 pandemic has highlighted international interdependence while shaking ontological security throughout the world. It has created challenges for the sense of self, identity, daily activities and institutionalized routines that keep individuals and societies ontologically secure. The pandemic interrupted everyday routines, trust correlations, and freedoms, triggering deep concerns throughout the society (Gülseven

2021). Furthermore, advanced communication and information technologies were used in the identification of the disease throughout the pandemic; however, this situation has brought about surveillance discussions. It has been observed that the surveillance carried out within the scope of COVID-19 precautions provided legitimacy in a concerning atmosphere (Tokgöz Şahoğlu 2020). As a result, the pandemic has brought about a new social structure. Briefly, as a consequence of this pandemic, political, economic, social, and social life has attempted to keep up with an unusual new process. The pandemic spread considerably faster in metropolitan areas than in the rural regions. In this context, when the disease initially broke out, there was a massive migration to rural areas, with an atmosphere of panic (Malak-Akgün and Aydın 2021).

The term that best describes this new social structure is active society, and people living in society should be world citizens. Being a world citizen means being a person who keeps up with the times, and is active, respected, free, and able to move. It has been proposed that under this kind of citizenship, knowing no one would result in an open, volatile, and atomized social formation, and therefore it has been claimed that this formation will give the citizens a sense of security. It is stated that citizens who are unable to participate in mobility cannot be citizens with full rights in society. This kind of citizen is more likely to experience isolation and marginalization (Mamzer 2020). The direct and indirect biological, psychological, and sociological effects of climate change and irregular urbanization on societies and individuals, which is one of the leading environmental health problems of the 21st century, and the mental health effects of the COVID-19 pandemic, which is one of its biological effects, have demonstrated that mental health professionals should raise awareness on this issue. Collaboration of psychiatric nursing and other health sciences, with the discipline of ecology, may raise awareness on this issue and be determinative in the creation of an effective preventive mental health policy.

Mental Health during the COVID-19

The circumstances in which we live and work are the essential elements affecting our health and well-being. It is known that uncontrollable economic, social, and environmental factors pave the way for the development of mental and physical health problems. Intensive working hours, the pandemic unit, a large number of patients in the hospital, coworkers diagnosed with the disease, lack of personal protective equipment, and the uncertainty of treatment protocols have all increased the psychosocial impacts on healthcare professionals (Chen et al. 2020). The pandemic increases feelings such as powerlessness, helplessness, loneliness and hopelessness. COVID-19, which has been circling the world for a long time, has caused a collective trauma (Çubuk 2020). In a study on healthcare professionals in China during the pandemic period, 50.4% of 1250 healthcare professionals had psychiatric symptoms such as depression, 44.6% anxiety, 3.4% insomnia, and 71.5% stress (Tuncay et al. 2020). People began to spend more time on social media throughout the pandemic. False, unpleasant, and inaccurate news in the media has had a harmful impact on mental health (Wang et al. 2020). Densities were encountered in the emergency services and outpatient clinics of hospitals as a consequence of misinformation, causing anxiety and stress in society (Holmes et al. 2020). As the period of quarantine measures prolonged throughout the pandemic, psychological impacts such as depressive symptoms, anger, anxiety, stress, post-traumatic stress disorder, despair, and loneliness increased (Sher 2020b, Tuncay et al. 2020, Brooks et al. 2020).

Situations such as the long quarantine period, the individual's or one of his/her family members' anxiety about undertaking an infection, the inadequacy of medical care, inability to meet basic needs, and inability to obtain transparent information from authorities about the process or a decrease in the information received have all increased to the negative psychological effects of quarantine on individuals (Courtet et al. 2020, Ammerman et al. 2021). Infected people were followed in isolated rooms or intensive care units in hospitals, with just a few visits from hospital staff. The idea of being away from loved ones and catching a disease whose treatment is not clear and known to be fatal has caused symptoms such as loneliness, hopelessness, stress and anxiety. It has been reported that the male patient, who was quarantined after being thought to be positive in the first COVID-19-related suicide cases reported in India, committed suicide, and the male patient who was quarantined with the suspicion of COVID-19 in India committed suicide by jumping from the hospital window (Thakur and Jain 2020). Five COVID-19-related psychosis cases who applied to the emergency department were recorded in the first two weeks of the mandatory state-imposed lockdown application in Spain. Two of these cases were suicide attempts, had no previous psychotic attack, and had no family history of psychosis (Valdés-Flórida et al. 2020). A correlation was shown between COVID-19 infection and suicidal behaviors and thoughts. Suicidal thought was determined to be associated with physical safety concerns and general distress (Ammerman et al. 2021).

Suicidal behaviors in people undergoing the disease may be associated with psychological and neurobiological factors. COVID-19 treatment was administered in isolated hospital rooms or intensive care units. Patients in intensive care units are at risk of developing post-traumatic stress disorder, depression, sleep disorders, and

cognitive impairment, all of which are predisposing factors for suicide (Sher 2020b). Long-term hospitalizations, treatment uncertainty, separation from loved ones, and an inability to acquire transparent and satisfactory information about the process have all resulted in negative psychological impacts in patients receiving treatment in the hospitals due to COVID-19. PTSD symptoms, which are a predisposing factor for suicide, were determined to have increased significantly in 96.2% of survivors in China (Bo et al. 2020). Suicidal behaviors were triggered in COVID-19 survivors by psychosocial stressors such as the existence of long-term physical symptoms, job loss, and financial difficulties (Sher 2019c).

It was determined that 4 of 19 cases who committed suicide in Pakistan during the pandemic had a fear of infection, and all of them had economic problems (Mamun and Ullah 2020). In addition to the effects of quarantine and isolation measures during the pandemic, economic recession, unemployment, and poverty have resulted in negative psychological effects (De Vogli et al. 2019). It has been determined that those who are extremely afraid of becoming infected with the disease have taken precautions to prevent the spread of COVID-19 without considering the health of others, the contaminated materials such as masks and gloves have not been thrown into the trash, and those who have been in denial due to an inability to effectively cope with the fear of pandemic and death have not had tendency of caring about their own and others' health (Malak-Akgün and Aydın 2021). Following the pandemic, the closure of small and medium-sized businesses in undeveloped and developing countries has raised unemployment. Inappropriately increased prices for food and cleaning products after the lockdowns caused a negative psychological effect on individuals with poor financial conditions (Bhuiyan et al. 2021).

For societies adapted to noise, hurry, and bustle, the silence, deserted streets, motionless restaurants, empty concert venues, and closed shops, which were repercussions of the pandemic, caused depression. With the presence of a crisis that will lead everything to be out of control at any time, the depression has become ontological; that is, it has shaken the individual's trust relation with the cosmos. Because the new social structure established by developments is distinct from the fast-flowing social life. Silence has shown individuals that there is a problem. It has created a feeling of imaginative inadequacy and incompatibility with the current reality. Fear emerged when the noise quieted down and everyone pulled away. In the urban area, depressive feelings and a drastic change, in reality, were evidently observed. These feelings have been especially depressing for urban residents, leading to mood changes (Mamzer 2020). As a result, the COVID-19 pandemic should be addressed in terms of ontological security (Şahin 2022). The primary concerns caused by the pandemic include the fear of failing to reach health institutions, the panic about food shortages, the possibility of transmission of the COVID-19 virus, the fear of infecting others with virus, and the fear of losing relatives. Furthermore, failure to knowing when the pandemic will end or how long life would be interrupted has increased fears (Gencer 2020).

Many people have suffered numerous losses as a result of the COVID-19 pandemic, including illness, death, and economic and social problems. Individuals faced the deprivation of imaginary objects such as freedom and socialization, as well as the values attributed to them, even if they did not experience anything as tangible as the loss of a loved one or job loss during this period. Along with their imaginary objects, people have lost their identities, feelings, selves, and social roles. And they mourned for all these. In this context, the world went through sadness and despair without even realizing its episodes, in a traumatic condition it had never witnessed before (Çubuk 2020).

A study conducted with hospital personnel on early days of the pandemic reported that the majority of them did not want psychological support, but rather wanted longer rest periods and additional protective equipment. In the same study, healthcare professionals were afraid of infecting their families and lacked the ability to cope with individuals who had nonadherence to treatment due to their poor psychological condition (Chen et al. 2020). Healthcare professionals have encountered increasingly significant ethical concerns during the COVID-19 pandemic, which has damaged their professionalism. As a result, it is recommended that governments and healthcare stakeholders take an effort to promote ethical sensitivity in response to the pandemic, while also taking into consideration the factors that negatively affect ethical sensitivity (Mert et al. 2021). It has been emphasized that the underlying reasons for these ethical concerns should be investigated through studies in the fields of bioethics and social sciences, as factors such as a lack of personal protective equipment and the risk of contracting the virus cause healthcare professionals to reconsider their true ethical responsibilities (Aslım and Tekindal 2021).

It has once again been revealed that being socioeconomically advantageous is required in order to be able to implement the suggestions made by researchers during the pandemic, such as staying positive, doing awareness exercises, attempting to maintain mental resilience, and maintaining social and cultural relations. It has been observed that people who are most in need of adopting these recommendations do not have access to many

activities that allow these recommendations to be implemented (Sucuoğlu and Karaş 20206). For these reasons, some suggest the pandemic is preparing people to adapt to future cross-border threats, including climate change (Milani 2020).

Conclusion

There can be no environmental order or environmental health in a society that does not follow environmental ethics, thus resulting in environmental pollution. As a result, in this society, it is impossible to talk about positive mental health. As a consequence, in a society where there is no community mental health, it is impossible to act in accordance with environmental ethics. The only way to break this vicious circle as healthcare professionals are to increase our knowledge about the issue and conduct research and practices based on the environmental ethics approach. The environmental ethics approach should serve as a guide for researchers to understand the formation and spread of epidemics, as well as the dynamics of these periods. In an environment where environmental health is essential for healthcare professionals, healthcare professionals must examine this subject in depth. Because it is important to raise environmental ethics awareness among healthcare professionals and society, as well as conduct numerous studies. As a result, this review is expected to serve as a guide for researchers who would conduct studies on environmental ethics in the future.

In brief, environmental issues in the COVID-19 pandemic may be thought to be a reason of the pandemic. It is also an important factor in its spread. Some of the many precautions taken due to the pandemic decreased environmental pollution (such as noise and air pollution) or increased environmental pollution (such as chemicals such as pharmaceuticals and disinfectants, disrupting the natural microbial ecological balance). The pandemic process has also affected many psychosocial factors and mental health. Given these considerations, it is plausible to argue that environmental ethics improve mental health since it affects environmental health. Therefore, primarily moral development, psychosocial variables such as individual and community mental health are crucial to eliminate the causes of the pandemic and adopt the environmental ethics approach. As a consequence, we can assert that environmental ethics has appeared as a significant concept in the establishment of community mental health during the COVID-19 pandemic.

References

- Akalın M (2019) Çevre Etiği -Çevreye Felsefi Yönelimler. Ankara, İKSAD Publishing House.
- Akbıyık A, Avşar Ö (2020) Coronavirüs enfeksiyonu hastalığının (COVID-19) epidemiyolojisi ve kontrolü. İzmir Katip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi, 5:109-116.
- Akgün BM, Akgün M (2017) Terapötik ortamda gürültü kontrolü. Psikiyatride Güncel Yaklaşımlar, 9:431-440.
- Akpınar YZ (2020) Çevre hakkı ile ilgili uluslararası gelişmelerin Türk Hukukundaki düzenlemelere etkisi. Kaçkar Sosyal Bilimler Dergisi, 1:9-18.
- Akyıldız HÇ, Özmen A, Evcı Kiraz ED (2020) Evaluation of Covid-19 from climate change and gender perspective. City Health Journal, 1:6-11.
- Ammerman BA, Burke TA, Jacobucci R, McClure K (2021) Preliminary Investigation of the association between COVID-19 and suicidal thoughts and behaviors in the US. J Psychiatr Res, 134:32-38.
- Aras M (2020) Post-Covid sürecinde Avrupa Birliği'nin çevre döngüsü. EURO Politika, 4:227-236.
- Aşım G, Tekindal MA (2021) COVID-19 pandemisinin etik yönleri ve veri analitiği üzerine bir değerlendirme. Türkiye Diyabet ve Obezite Dergisi, 5:226-232.
- Aykaç N, Çalışır HC, Yorgancıoğlu A (2020) İklim değil yaşam krizinde TTD'nin COVID-19 pandemisine ekolojik bakışı. In Her Yönüyle COVID-19 (Eds O İtil, GA Ergur, N Köktürk, Y Havlucu, M Akgün):14-26. Ankara, Türk Toraks Derneği.
- Bahar Z, Aydoğdu NG (2015). Çevre, sağlık, araştırma ve hemşirelik. Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi, 8:119-122.
- Bhuiyan AI, Sakib N, Pakpour AH, Griffiths MD, Mamun MA (2021) COVID-19-related suicides in Bangladesh due to lockdown and economic factors: case study evidence from media reports. Int J Ment Health Addict, 19:2110-2115.
- Birden B (2016) Çevre etiğinde bireyin ahlaki sorumluluğuna kısa bir bakış. Türkiye Biyoetik Dergisi, 3:4-14.
- Bo H-X, Li W, Yang Y, Wang Y, Zhang Q, Cheung T et al. (2020) Posttraumatic stress symptoms and attitude toward crisis mental health services among clinically stable patients with COVID-19 in China. Psychol Med, 51:1052-1053.
- Bratman GN, Anderson CB, Berman MG, Cochran B, De Vries S, Flanders J et al. (2019) Nature and mental health: An ecosystem service perspective. Sci Adv, 5:eaax0903.
- Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N et al. (2020) The psychological impact of quarantine and how to reduce it: rapid review of the evidence. Lancet, 395:912-920.
- Carlson CJ, Albery GF, Phelan A (2021) Preparing international cooperation on pandemic prevention for the Anthropocene. BMJ Glob Health, 6:e004254.

- Casanova L, Rutala WA, Weber DJ, Sobsey MD (2009) Survival of surrogate coronaviruses in water. *Water Res*, 43:1893-1898.
- Chen Q, Liang M, Li Y, Guo J, Fei D, Wang L et al. (2020) Mental health care for medical staff in China during the COVID-19 outbreak. *Lancet Psychiatry*, 7:e15-6.
- Courtet P, Olié E, Debien C, Vaiva G (2020) Keep socially (but not physically) connected and carry on: Preventing suicide in the age of COVID-19. *J Clin Psychiatry*, 81:e1-3.
- Çobanoğlu N (2020a) COVID-19 Pandemisi ile değişen yaşamlar ve toplumsal değerlerimiz. *Avrasya Sağlık Bilimleri Dergisi*, 3(COVID-19 Özel Sayı):90-94.
- Çobanoğlu N (2020b) Bireysel, profesyonel, toplumsal, bilimsel ve siyasal etiği yeniden sorgulatan COVID-19 Pandemisi. *Anatolian Clinic the Journal of Medical Sciences*, 25 (Özel 1):36-42.
- Çubuk B (2020) COVID-19 ile gelen kayıp nesne, yas ve depresyon. *Yalova Sosyal Bilimler Dergisi*, 10:90-99.
- David PM, Le Dévédec N, Alary A (2021) Pandemics in the age of the anthropocene: Is 'planetary health' the answer? *Glob Public Health*, 16:1141-1154.
- Delgado-Saborit JM, Guercio V, Gowers AM, Shaddick G, Fox NC, Love S (2021) A critical review of the epidemiological evidence of effects of air pollution on dementia, cognitive function and cognitive decline in adult population. *Sci Total Environ*, 757:143734.
- De Vogli R, De Falco R, Mattei G (2019) Excess suicides due to the global economic crisis in Italy: an update. *Epidemiol Prev*, 43:111.
- Does Jardins JR (2006) Çevre Etiği- Çevre Felsefesine Giriş (Çeviri R Keleş). Ankara, İmge Kitapevi.
- Erden C, Koyuncu FT (2014) Kalkınma ve çevresel sağlık riskleri: Türkiye için ekonometrik bir analiz. *Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 6:9-23.
- Espejo W, Celis J.E, Chiang G, Bahamonde P (2020) Environment and COVID-19: Pollutants, impacts, dissemination, management and recommendations for facing future epidemic threats. *Sci Total Environ*, 747:141314.
- Frontera A, Martin C, Vlachos K, Sgubin G (2020) Regional air pollution persistence links to covid19 infection zoning. *J Infect*, 81:318-356.
- Gencer N (2020) Pandemi sürecinde bireylerin koronavirüs (Kovid-19) korkusu: Çorum örneği. *Uluslararası Sosyal Bilimler Akademi Dergisi*, 4:1153-1173.
- Grasso M, Page EA (2008) Climate change, justice and future generations. *Int Environ Agreem*, 8:183-186.
- Güler Ç, Çobanoğlu Z, Baskı B (1994) Sosyal Çevre. Ankara, Sağlık Bakanlığı.
- Gülseven E (2021) Identity, nationalism and the response of Turkey to COVID-19 pandemic. *Chinese Political Science Review*, 6:40-62.
- Hindson J (2020) COVID-19: faecal-oral transmission? *Nat Rev Gastroenterol Hepatol*, 17:259.
- Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L et al. (2020) Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. *Lancet Psychiatry*, 7:547-60.
- Huang H (2020) COVID-19 and the environment: Reflections on the pandemic in Asia. *EnviroLab Asia*, 4:2.
- İba Gürsoy S (2021) Krizler çağı: COVID-19 salgını ve iklim krizi. *Alternatif Politika*, 13:656-679.
- IFEES-Eco-Islam (2020) What can we learn & do differently in the future. Available from: <http://www.ifees.org.uk/wp-content/uploads/2020/04/ifees-message-2020.pdf> (Accessed: 26.07.2022).
- Kılıç S (2013) Çevre Etiği. Ankara, Orion Kitapevi.
- Liu Q, Cheng Z, Chen M. (2019) Effects of environmental education on environmental ethics and literacy based on virtual reality technology. *The Electronic Library*, 37:860-877.
- Macar OD, Asal UY (2020) COVID-19 ile uluslararası ilişkileri yeniden düşünmek: Tarih, ekonomi ve siyaset ekseninde bir değerlendirme. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi*, 19:222-239.
- Malak-Akgün B, Aydın A (2021) Türkiye'de Covid-19'a yönelik ilk psikososyal tepkiler: Bir içerik analizi. *Turkish Journal of Family Medicine and Primary Care*, 15:581-593.
- Malaspina D, Howell EA, Spicer J (2020) Intergenerational echoes of climate change. *JAMA Psychiatry*, 77:778-780.
- Mamun MA, Ullah I (2020) COVID-19 suicides in Pakistan, dying off not COVID-19 fear but poverty? -The forthcoming economic challenges for a developing country. *Brain Behav Immun*, 87:163-166.
- Mamzer H (2020) Postmodern society and COVID-19 pandemic: Old, new and scary. *Society Register*, 4:7-18.
- Mandal I, Pal S (2020) COVID-19 pandemic persuaded lockdown effects on environment over stone quarrying and crushing areas. *Sci Total Environ*, 732:139281.
- Mende M, Misra V (2021) Time to flatten the curves on COVID-19 and climate change. Marketing can help. *J Public Policy Mark*, 40:94-96.
- Mert S, Sayılan AA, Karatoprak AP, Baydemir C (2021) The effect of COVID-19 on ethical sensitivity. *Nurs Ethics*, 28:1124-1136.
- Metin AE, Gül A (2020) Türkiye'de çevre etiğinin yasal ve kamusal çerçevesi. *Siirt Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8:252-268.
- Milani CR (2020) COVID-19 between global human security and ramping authoritarian nationalisms. *Geopolítica(s)*, 11:141-151.

- Morand S, Lajaunie C (2021) Outbreaks of vector-borne and zoonotic diseases are associated with changes in forest cover and oil palm expansion at global scale. *Front Vet Sci*, 8:661063.
- Nettle D, Gibson MA, Lawson DW, Sear R (2013) Human behavioral ecology: Current research and future prospects. *Behav Ecol*, 24:1031-1040.
- Özdemir M, Taydaş O, Öztürk MH (2020) COVID-19 enfeksiyonunda toraks bilgisayarlı tomografi bulguları. *Journal of Biotechnology and Strategic Health Research*, 4:91-96.
- Peters R, Ee N, Peters J, Booth A, Mudway I, Anstey KJ (2019) Air pollution and dementia: a systematic review. *J Alzheimers Dis*, 70:S145-S163.
- Qu G, Li X, Hu L, Jiang G (2020) An imperative need for research on the role of environmental factors in transmission of novel coronavirus (COVID-19). *Environ Sci Technol*, 54:3730-3732.
- Ritz B, Yu Y (2021) Invited perspective: Air pollution and dementia: Challenges and opportunities. *Environ Health Perspect*, 129:081301.
- Saad-Filho A (2020) From COVID-19 to the end of neoliberalism. *Trimest Econ*, 87:1211-1229.
- Savulescu J, Persson I (2012) Moral enhancement. *Philosophy Now*, 91:6-8.
- Sher L (2020a) Are COVID-19 survivors at increased risk for suicide? *Acta Neuropsychiatr*, 32:270.
- Sher L (2020b) COVID-19, anxiety, sleep disturbances and suicide. *Sleep Med*, 70:124.
- Sher L (2019c) Resilience as a focus of suicide research and prevention. *Acta Psychiatr Scand*, 140:169-180.
- Silva ALP, Prata JC, Walker TR, Campos D, Duarte AC, Soares AM, Rocha-Santos T (2020) Rethinking and optimising plastic waste management under COVID-19 pandemic: Policy solutions based on redesign and reduction of single-use plastics and personal protective equipment. *Sci Total Environ*, 742:140565.
- Sofuoğlu Kılıç N (2020) Covid-19 Küresel Salgınına Eko-Dini Tepkiler: Çevre Hareketleri Üzerine Sosyolojik Bir İnceleme. *Karamanoğlu Mehmetbey Üniversitesi Edebiyat Fakültesi Dergisi*, 3:116-127.
- Sucuoğlu PŞŞ, Karaş H (2020) Ekoloji ve psikiyatri: Disiplinlerarası bir bakış önerisi. *Klinik Psikiyatri Dergisi*, 23:86-88.
- Sönmez D (2017) Eğitim ve öğretim alanındaki çevre etiği tez çalışmalarının incelenmesi. *Gaziantep Üniversitesi Eğitim Bilimleri Dergisi*, 1:55-66.
- Şahin B (2022) Ontolojik güvenlik bağlamında Covid-19 pandemisi. *Erzurum Teknik Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 14:81-96.
- Şengün, M. (2007). Ahlaki gelişimin psiko-sosyal dinamikleri. *Ondokuz Mayıs Üniversitesi İlahiyat Fakültesi Dergisi*, 23:201-221.
- Thakur V, Jain A (2020) COVID 2019-suicides: A global psychological pandemic. *Brain Behav Immun*, 88:952-3.
- Tokgöz Şahoğlu C (2020) Covid-19 ile mücadelede konumsal gözetimin kurumsallaşması. *Kültür ve İletişim*, 23:310-341.
- Tuncay FE, Koyuncu E, Özel Ş (2020) Pandemilerde Sağlık çalışanlarının psikososyal sağlığını etkileyen koruyucu ve risk faktörlerine ilişkin bir derleme. *Ankara Medical Journal*, 2:488-501.
- Türkiye Bilimler Akademisi (2020) TÜBA COVID-19 Pandemi Değerlendirme Raporu. Ankara, Türkiye Bilimler Akademisi Yayınları.
- Ülman YI (2020) COVID-19 enfeksiyon hastalığı salgınına biyoetik açıdan bakış. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi*, 3:365-371.
- Valdés-Florido MJ, López-Díaz Á, Palermo-Zeballos FJ, Martínez-Molina I, Martín-Gil VE, Crespo-Facorro B et al. (2020) Reactive psychoses in the context of the COVID-19 pandemic: Clinical perspectives from a case series. *Rev Psiquiatr Salud Ment*, 13:90-94.
- Wallace R, Liebman A, Chaves LF, Wallace R (2020) COVID-19 and circuits of capital. *Mon Rev*, 72(1):1-13.
- Wang C, Pan R, Wan X, Tan Y, Xu L, Ho CS et al. (2020) Immediate psychological responses and associated factors during the initial stage of the 2019 coronavirus disease (COVID-19) epidemic among the general population in China. *Int J Environ Res Public Health*, 17:1729.
- Whitmee S, Haines A, Beyrer C, Boltz F, Capon A, Ferreira de Souza Dias B et al. (2015) Safeguarding human health in the anthropocene epoch: report of the Rockefeller foundation-Lancet commission on planetary health, *Lancet*, 386:1973-2028.
- World Health Organization (WHO) (2021) Climate Change and Health. Geneva, World Health Organization.
- World Health Organization (WHO) (2014) Gender, climate change and health. Geneva, World Health Organization.
- Yates MD (2020) COVID-19, economic depression, and the black lives matter protests. *Mon Rev*, 72(4):14-33.

Authors Contributions: The author(s) have declared that she has made a significant scientific contribution to the study and has assisted in the preparation or revision of the manuscript

Peer-review: Externally peer-reviewed.

Conflict of Interest: No conflict of interest was declared.

Financial Disclosure: No financial support was declared for this study.