



Review

Isolation, Quarantine, Social Distancing and Mental Health

İzolasyon, Karantina, Sosyal Mesafe ve Ruh Sağlığı

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Abstract: Objective: The COVID-19 pandemic directly affected more than 4 million people worldwide and indirectly affects the entire world due to its social consequences. There are methods such as isolation, quarantine, restriction of social distance, which are accepted all over the world to prevent the spread of infectious diseases considered pandemic. These practices, which are rapidly implemented in the modern age may be resulted in the mental health problems that affects individuals and societies for a long time. In this article, it is aimed to review the effects of these pandemic control practices such as isolation, quarantine and social distance on people's mental health.

These practices lead to different emotional responses such as anxiety and depressive symptoms in people. Depending on the type of coping strategies used to deal with stress and the severity of stress, these practices may cause several mental disorders including anxiety disorders, depressive disorders and stress-related disorders in vulnerable individuals. Delirium is seen frequently in COVID-19 as it has worse prognosis in older adults. People who lost their loved ones may face complicated griefs as the deaths occurs in isolated conditions. In addition, stigmatization, which has serious outcomes, is a dangerous situation that may occur against affected individuals in isolation or quarantine during this period.

It is important to keep these practices as short as possible, to support the society socially and economically, to facilitate access to the health system and to expand the mental health services in order to overcome this process with minimal damage.

Keywords: COVID-19, mental health, anxiety, depression, isolation, quarantine

Öz: Amaç: COVID-19 pandemisi dünyada 4 milyon üzerinde insanı doğrudan, hemen hemen tüm dünyayı ise toplumsal sonuçları nedeniyle dolaylı yollardan etkileyen bir süreç olarak hayatlarımıza girdi. Pandemi olarak kabul edilen bulaşıcı hastalıkların yayılmasını engellemek için tüm dünyada kabul gören izolasyon, karantina, sosyal mesafenin kısıtlanması gibi yöntemler bulunmaktadır. Modern çağda hızla uygulamaya geçirilen bu yöntemler enfeksiyonların yayılmasını ciddi biçimde engellese de, yarattığı ruhsal sorunlar bireylerin ve tüm toplumun yaşamını uzun süre olumsuz biçimde etkilemektedir. Bu yazıda izolasyon, karantina ve sosyal mesafe gibi uygulamaların insanların ruh sağlığı üzerindeki etkilerinin incelenmesi hedeflenmiştir.

Bu uygulamalar insanlarda başta kaygı ve depresif belirtiler olmak üzere, farklı emosyonel yanıtlara yol açmaktadır. Stresle baş etme biçimi ve stresin şiddetine bağlı olarak, yatkınlığı olan bireylerde bu uygulamalar başta anksiyete bozuklukları, depresif bozukluklar ve stresle ilişkili bozukluklar olmak üzere pek çok ruhsal bozukluğa neden olabilmektedir. COVID-19 enfeksiyonu yaşlı bireylerde daha kötü seyrettiğinden, bu bireylerde sıkça deliryum tablosu görülebilmektedir. Bu süreçte yaşanan ölümler izole ortamlarda olduğundan komplike yas gelişme riski yüksektir. Ek olarak, bireylere ciddi zararı olan stigmatizasyon bu dönemde izolasyon ya da karantinada olan bireyler için gelişebilecek tehlikeli bir durumdur.

Bu sürecin en az zararlı atlatılabilmesi için bu uygulamaların süresinin olabildiğince kısa tutulması, sosyal ve ekonomik açıdan toplumun desteklenmesi, sağlık sistemine ulaşımın kolaylaştırılması ve ruh sağlığı hizmetlerinin yaygınlaştırılması önemlidir.

Anahtar Kelimeler: COVID-19, ruh sağlığı, anksiyete, depresyon, izolasyon, karantina

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Isolation, Quarantine and Social Distancing

Pandemic is defined by the World Health Organization as large-scale epidemics that spread across millions of people from different countries. Pandemics have also guided history several times throughout the history of humanity for economic, social, psychological and economic reasons (1).

Since the date of infection, it has developed different practices that separate the individual with human disease from others in order to control infectious diseases. Isolation is a form of precaution that involves physical restraint methods, which is often required by law, to ensure that an individual with infectious disease is fully separated from individuals considered healthy. There is no need to shuffle the pages of history for this application. In our country, many hospitals still have separate services where tuberculosis patients are kept isolated. As we live these days, there are services that can be quickly converted into isolation services in an acute situation. Depending on the spread of the disease, the way of applying the isolation can change. In the period of COVID-19 pandemic we live today, isolation is applied in a way that requires the use of full personal protective equipment.

Another measure used to prevent spread in infectious situations is quarantine application. It is separation from healthy and contactless individuals. Quarantine application is a form of application. It is an application implemented in the cholera epidemic that occurred in the 19th century and in many epidemics that occurred after it. There are also centers established for this purpose in our country. In fact, there is a district called Quarantine in Izmir and Quarantine Island. Quarantine can be done at the place where the person is noticed (for example, on board, if he has arrived on board), or in his own home. On the other hand, that neighborhood, district and even the city can be quarantined in localized places where multiple cases are detected.

Another form of protection measures is social distance application. In today's sense, social distance is the measures that increase the physical distance between individuals in a way that prevents transmission. It includes measures such as canceling events such as big concerts, sports events, closing schools, closing shopping malls, making arrangements to increase interpersonal distance in markets, public transportation, public institutions and organizations (2-4).

Mental Health Problems Following Isolation, Quarantine and Social Distancing

In pandemic, there is no single explanatory model that can be used to understand the mental problems that develop as a result of isolation, quarantine and social distance practices. These conditions are prolonged, fear of being infected, frustration and boredom, lack of resources (such as food, water, medicine, clothing), insufficient information, economic problems, stigma are the main causes of stress in this period (5,6). All these and other reactions to stressors deserve an explanation that requires multiple perspectives, consisting of a combination of biology, social and individual psychology, and socioeconomic conditions. The biological effects of infection on the individual and the severity and course of the disease create different reactions. Similarly, if the infection is caused by a factor that does not have much data about COVID-19, it increases social and individual anxiety as it contains too much uncertainty in terms of both social and individual psychology. Psychological causes in different axes such as personality structure, coping mechanisms and accompanying psychiatric diseases will affect the response to isolation conditions. The cultural infrastructure of the society, the way of social structuring, and religious beliefs can be determinative in the response of individuals to the isolation, quarantine or social distance practices applied during the pandemic process. Many economic components will be important in the spiritual response of the individual, such as how all these practices affect the economy of the society and the individual, whether individuals are supported by the state in this process, whether they need this support, whether they have lost profession due to this situation. Although the history of the pandemic is as old as the history of humanity, the effect of modern methods used to spread the pandemic on human psychology has not been explored enough to make detailed comments on all these factors.

In the next part of the article, the mental reactions and diseases caused by the methods implemented to prevent the spread of pandemics will be discussed.

Depression, Anxiety and Grief

Isolation, as opposed to disasters experienced in the past and bringing the society together physically and socially, makes it necessary to fight the crisis alone (7). It involves a complete separation of infected individuals with those who are not infected. People contacted are often health workers in full personal protective equipment and the time spent communicating with them is very limited.

Medical data that can be obtained from healthcare professionals are also very limited, especially in pandemics such as COVID-19, which is newly developed and that the data is not sufficient in terms of medical aspects. It is more difficult for some individuals to cope with this uncertainty than others, and as a result, different anxiety disorders may occur. In addition, the fear of being infected and infected due to the high risk of transmission of the virus, as a result, excessive cleansing, and behaviors such as repetitive testing of the virus, even if the risk of transmission is minimal, may arise. If social activities, which occur less due to social distances, do not take place electronically, or if social support systems are generally weak, people cannot express their feelings and may become more isolated and experience more anxiety. In addition, individuals may feel lonely because they are away from their support systems due to sudden starting isolation, quarantine and social distance applications. Although there is abundant time to finalize piled up tasks, individuals might experience difficulties at focusing on their job or the activities that they perform in order to relax since this is frequently observed. This might induce both anxiety and depressive symptoms. The feeling that the control that they have over their own life is taken from their hand might lead to emotions such as anger, unhappiness and anxiety with variable intensities. The lack of any positive finding concerning medical treatment despite of prolonged time, isolation, and extended time under quarantine and social distance rules, increasing number of cases might create hopelessness feeling. Such epidemics experienced by whole society and status of being isolated at homes or hospitals might induce desperation feeling on individuals. Especially the ones under isolation might experience the process as a traumatic event by feeling that they are facing death in along with an intense desperation. When the stress that individual experience exceeds the capacity of her/him, symptoms pertaining to psychiatric disease can be observed. During this period, many symptoms such as sleep disturbances, constant anxiety about the effects of the virus, feeling the psychological and physical symptoms of anxiety (such as palpitations, shortness of breath, sweating, flushing or chills), frustration and anger bursts due to uncertainty in the situation, fear of die or desire to die, pessimism, despair, unwillingness, changes in appetite can occur.

The studies conducted on this field are the ones performed during SARS, MERS and Ebola epidemics. Psychological effects of quarantine experience were studied among 1912 people during SARS epidemic occurred in Canada at 2003. In this study, the most frequent mental reactions that individuals reported were emotions such as

boredom, isolation, frustration, discomfort, anxiety, loneliness and fear. In this study where the Post Traumatic Stress Disorder (PTSD) symptom was also screened in individuals using the Impact of Events Scale (IES), the number of individuals scoring 20 and above with this threshold was 148 (8). In another study of 129 people in Canada, individuals who scored 20 points or more, which were the threshold points for PTSD, were examined using IES. Accordingly, it has been shown that 28.9% of individuals have PTSD and the risk of developing PTSD symptoms is higher as the quarantine period increases. In the same study, depressive symptoms were also evaluated and 31% of cases were diagnosed with depression (9). In a study conducted in China regarding COVID-19, it was observed that the participants' negative emotions increased, positive emotions and quality of life reports decreased after the pandemic (10).

It is pointed out that some groups are particularly at risk both in data from previous pandemics and in studies investigating the overall effects of social isolation. Isolation processes for children and adolescents, elderly individuals, minorities, people with low socioeconomic status, people with psychiatric illness, past traumatic event such as retention pose a risk for the development or increase of mental problems (11-13). Apart from all these groups, the COVID-19 pandemic, taking place after some stressful events that refugees experienced such as bureaucracy, poverty, racism and adaptation to the host country after their migration process, is a very challenging process. Obtaining information about the subject in a language other than the mother tongue, daily lifestyle difference, living in refugee camps where social distance will be difficult to implement and access to health services are among the main factors. These factors increase the risk of psychiatric disorders that may occur in refugees (14). In addition, psychic reactions may occur frequently in prisons where collective living is inevitable and support systems are not strong. However, it should be kept in mind that being in isolation due to a virus that spreads rapidly and has fatal consequences, whether in the risky group mentioned or not, involves a serious threat perception.

It is known that mortality is higher in older adults compared to younger people. Some of these people are hospitalized and isolated. They lose their life away from their families, relatives and friends. These people are at risk of developing complicated grief (15,16).

Delirium

Delirium is a fluctuating neurocognitive disorder with acute onset which is characterized by a decline in consciousness, cognitive functions and orientation. It is

mostly related with underlying medical condition and it has high mortality rates (17). Hyperactive delirium is related with mood changes, disturbed treatment compliance and psychomotor agitation whereas hypoactive delirium is related with stupor and lethargy. Hypoactive delirium is often disregarded by the treatment team. However, hyperactive type delirium can be easily noticed by the medical team as the patient has significant agitation and this makes treatment difficult. The presence of hyperactive delirium, especially in pandemic conditions, can cause serious medical and medico-legal problems, causing failure to comply with isolation conditions and disruption of treatment compliance. Conditions that cause delirium are generally the underlying medical diseases and / or environmental conditions. Therefore, the actual treatment of delirium is provided by treating the underlying cause.

The risk of developing delirium is higher in older adults when compared to younger adults. As mentioned above, in addition to many medical conditions, environmental conditions such as isolation is a risk factor for delirium. In an unfamiliar and unstimulated environment, older adults may lose the ability to evaluate the truth and orientation may be lost especially if they already have cognitive problems. In addition, the reasons such as the separation of the older adults from their daily routine in isolation, staying away from social ties, not being able to fulfill their religious or spiritual rituals, not expressing their own feelings and thoughts, and prolonged immobility may increase the risk of delirium during isolation (18). Excitation may be observed when the intense anxiety under these conditions cannot be appropriately relieved. These people may refuse treatment and attack healthcare workers. Since such situations can lead to very dangerous consequences in pandemic conditions, older adults should be monitored in terms of delirium occurrence during isolation. They should be provided with audio and / or video calls with their relatives, and they should have a clock in their rooms and these rooms should not be too bright. It is very important for the treatment team to introduce themselves, tell the date and time, ask how they are and inform their medical condition in a way that the person can understand (17-21). If medical conditions are handled and conditions can be met, it may be a more appropriate approach for these individuals to maintain their treatment in isolation under conditions they are accustomed to (such as home, nursing home). In addition, considering the developments in communication tools in today's conditions, teaching elderly people to use different communication channels may prevent them from being socially isolated in both isolation and quarantine conditions.

Problems Caused by Personality Traits

The reactions of individuals with different personality traits to isolation, quarantine and social distance practices may be different. Personality traits are dimensional traits that consist of the personality and determine the reactions of the person. Neuroticism is a personality trait that is characterized by rapidly responding to stressful situations in the form of anxiety, irritability and depression. If this personality trait prevails, the individual responds to isolation, quarantine and social distance practices with symptoms such as intense sickness anxiety, anxiety about their loved ones, misinterpreting their physical symptoms, and taking extreme precautions. However, the responses are not limited to these symptoms (22-24). On the contrary, other individuals may believe that the events will affect others rather than themselves, and that they are less at risk for various reasons that is called unrealistic optimization bias. Although the prevalence and structural validity of this feature in the society is not clear, it can be observed that individuals who are thought to have this feature tend not to comply with isolation, quarantine and physical distance practices. They can insist on maintaining their own routines and they may have less compliance to treatment in isolation. The level of anxiety in these individuals will be lower during the measures of isolation compared to other individuals. In addition, these individuals are at risk of transmitting infection due to their behavior (2). Although not specific to these individuals, the rate of full compliance with quarantine conditions was found to be approximately 16% (8).

Difficulties in Individuals with Pre-existing Psychiatric Conditions

Social distancing, quarantine and isolation may have different effects on people with psychiatric disorders during this time. Those circumstances could increase stress levels, therefore, individuals who have major depressive disorder, bipolar disorder, schizophrenia may experience an exacerbation of the disorder, increased risk of suicidality, difficulties in reaching out for a medical doctor or examination, disrupted drug compliance and symptoms including disturbances on circadian rhythm and reduced personal care.

During isolation, people with alcohol and substance misuse may have withdrawal symptoms which could be life-threatening. Thus, habits of alcohol and substance use should be examined amid pandemic; if necessary, detoxification must be performed (25).

Contamination obsessions and cleaning compulsions are widely seen in obsessive-compulsive disorder. Throughout pandemic, the severity of symptoms could

increase in obsessive-compulsive disorder. Increased symptoms could be presented as spending more time on cleaning, doing more rituals on cleaning (particularly on handwashing), stockpiling masks and disinfectants; since these behaviors could be regarded as normal by other people, symptoms could worsen more (26).

Stigmatization

Stigmatization is another condition that could cause problems among people who get recovered from the infection. Stigmatization is an act that may cause being shunned by society because of a feature, facing discrimination due to stereotyped thoughts, social isolation and losing social status as a result of those. Stigmatization is frequently seen in psychiatric disorders and infectious diseases with chronic and lethal consequences. Individuals who are infected with HIV have been shunned and this still continues with the reduced rate (27). Although there are fewer people who have been affected compared to COVID-19; since its high infectivity and mortality, stigmatization from the micro and macro environment has been causing psychosocial distress on people infected with the Ebola virus (28,29).

Treated individuals at hospitals under isolated conditions could also be stigmatized by their family and left lonely. Despite of existing proper conditions for isolations, they could be rejected from their own home. Families could tend to hide the state of a recovered person, since they could think that they would be left alone or ashamed in case of any disclosure of an infected person. Even though healthcare workers are seen as heroes by media or authorities, they could experience stigmatization as well. Healthcare workers who work at intensive care units, inpatient or outpatient units for pandemic and contact with patients could be faced discriminative attitudes in their neighborhoods or buildings that they live in. They could be forced not to use common spaces or to move out. Some of these people could live without their family and be isolated for different periods, particularly when they see themselves as exposed to high viral load. Because of the aforementioned reasons, they may have to deal with mild to severe mental problems (25).

Treatment Approaches

Psychological first aid and teaching people how to cope with mental stress are highly important as conducting quarantine and isolation during and after the pandemic (30). Psychological support could help to diminish excessive anxiety in the early phases of pandemic, it has also beneficial effects on traumatic experiences including witnessing death and losing the loved ones in

the later phases. Psychological first aid contains checking and leading for basic needs in a respectful, understanding, patient and supportive manner. These provide self-esteem protection and the sense of holding the control of decisions and life. There are additional interventions including the normalization of symptoms of stress and bereavement, awareness of own mental status and physical symptoms, teaching relaxation and breathing techniques in psychological first aid. People who practice those interventions and still have existing psychiatric symptoms and functional impairment must get psychiatric help (31-33).

As researches with SARS reveal, stress-related disorders could arise during the time of infectious diseases. In the case of stress-related disorders, cognitive-behavioral therapy or similar approaches could be used to reduce symptoms via online systems throughout pandemic (13,34).

Conclusion and Recommendations

One of the most important interventions to prevent unfavorable effects of quarantine, isolation and social distancing on mental health is providing accessible information for everyone. Information should be provided to the whole society and all individuals who are in quarantine or isolation in their homes or at hospitals by healthcare organizations. Wide evaluations of these practices and rapid supply are necessary for the mental health of individuals. Society's, risky individuals' and healthcare workers' access to personal protective equipment must be organized in a fast and sustainable way. Accessible, free, preferably online supportive systems for mental health should be employed and arrangements should be done for supervision and sustainability of these systems. Facilities with less infection risk should be ready for people who have pre-existing or newly diagnosed psychiatric disorders. There should be procedures for people who have been using drugs and the need for long term pharmacotherapies due to their psychiatric disorders. Providing information, psychiatric evaluation and rapid implementation of psychiatric support systems are important for the prevention, detection and treatment of mental problems which could be caused by restrictions during pandemic.

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