



Psychological Effects of COVID-19 Process on Oncology Patients

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SUMMARY

The COVID-19 pandemic, which has affected the world as an important health problem for the past 2 years, has brought about high morbidity and mortality rates for cancer patients, and therefore, cancer patients have been defined as a vulnerable group in terms of the pandemic. With the rapid spread of COVID-19, many cancer patients had difficulty in accessing health services, were faced with the postponement or delay of their treatment and controls, or postponed their applications to health institutions for fear of COVID-19. As a result of the research, during this period, it was observed that the incidence of anxiety and depression increased in cancer patients and they experienced high levels of fear and distress associated with COVID-19. Among the main sources of these psychological problems are concerns about not being able to access health services, information needs, and problems related to caring, as well as fear of coronavirus sensitivity, difficulty tolerating uncertainty, and feeling lonely in relation to living socially isolated come to the fore. Understanding the psychological effect of COVID-19 on cancer patients can assist in planning care and meeting the psychological support needs of cancer patients during future crises.

Keywords: Cancer; COVID-19; fear of COVID-19; loneliness, uncertainty.

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INTRODUCTION

The coronavirus disease (COVID-19), caused by severe acute respiratory syndrome coronavirus 2, which has been affecting the whole world as an important health problem for the past 2 years, first appeared in Wuhan, China in December 2019.[1] It was declared a pandemic on March 11, 2020, by the World Health Organization due to the fact that it spread to 114 countries in a short time, causing more than 100,000 people to get sick and thousands of people to die.[2] On June 15, 2022, while the total number of COVID-19 cases in Turkey was 15,085,742 and the number of deaths due to COVID-19 was 98,896, the total number of cases in the world was 534,452,105 and the number of deaths was 6,314,523.[3]

The clinical symptoms of COVID-19 cause an inflammatory respiratory disease.[1] When symptoms become severe, they have serious effects that result in death.[4] With the emergence and rapid spread of the virus, risk factors were tried to be defined in a short time in terms of the fatality of this disease. Among the risk factors that increase the probability of adverse prognosis of COVID-19, one of the first identified features is having a chronic disease. Studies conducted with patients with cancer, in particular, draw attention to the fact that these patients may have COVID-19 more severe, and therefore, the risk of death may be higher. In a study examining the data of 1524 cancer patients in China, it is stated that the prevalence of COVID-19 is 2 times more in cancer patients when compared to the general population.[5] Dai.[6] In the study

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which they compared patients diagnosed with cancer having COVID-19 and people without a diagnosis of cancer having COVID-19, it was found that morbidity and mortality in terms of COVID-19 are higher in patients diagnosed with cancer.

For everyone, including cancer patients, stressors such as worrying about their own health and the health of their relatives;[7] as a result of restrictive decisions taken, having to lead a more isolated life, limited social support resources, and sudden life changes that will cause economic difficulties;[7,8] the lack of a definite treatment method for COVID-19 [4] and the uncertainty about when the process will end[9] cause psychological distress. On the other hand, with the pandemic, there have been situations such as postponing treatments and not being able to reach health institutions or physicians in terms of health. It is indicated that, in eight UK hospitals, the majority of patients with or suspected of cancer are unable to access healthcare, with a 60% reduction in chemotherapy attendance and a reduction to a large extent such as 76% in emergency referrals for early diagnosis.[10] Cancer patients, who are already struggling with a difficult disease process and heavy treatments, may be affected by the COVID-19 pandemic psychologically negatively, both due to the disruption of treatment and/or controls, and the unknown pandemic process, and they may experience high levels of anxiety, depression, post-traumatic stress disorder, and psychological distress.[11,12] Studies conducted before the COVID-19 pandemic shows that psychiatric disorders can be seen at rates ranging from 30 to 50% in patients with a cancer diagnosis, and it is stated that approximately 10-20% of these are adjustment disorders, 13.4-19.5% are depression and 5-17% are anxiety disorders.[13] In studies conducted during the COVID-19 pandemic, the incidence of anxiety in cancer patients is reported at varying rates between 36% and 61.5% and the incidence of depression 35-70.2%.[14,15] In a study conducted in Germany during the pandemic period, it is determined that individuals with cancer are more likely to report anxiety symptoms, suicidal ideation, and loneliness compared to other participants.[16] In a study evaluating the psychosocial perspectives of cancer patients receiving intravenous therapy in Israel, it was observed that 44% of patients reported high levels of COVID-19-related distress at the beginning of the first wave of the COVID-19 pandemic (March 2020).[17]

In the studies examining the psychological effects of COVID-19, in cancer patients, problems such as fear of virus sensitivity, difficulty in tolerating the un-

certainty brought by COVID-19, and feeling lonely in relation to social isolation, as well as concerns about health-care interruptions and information needs come to the forefront. In the next part of this article, the fear of COVID-19, uncertainty, and loneliness, which are the main themes for patients diagnosed with cancer from the COVID-19 pandemic process, and their effects will be discussed.

Fear of COVID-19

Fear is a primitive emotion that emerges in the face of a real or perceived threat and is one of the most characteristic features that distinguish contagious diseases from others.[18] Because pandemics can trigger feelings of fear, desperation, illness, and death in individuals. Fear takes place also among the most frequent psychological consequences of COVID-19, one of the deadly outbreaks.[19] During the COVID-19 process, it is observed that individuals are afraid of being infected and having the illness severely, losing their lives, having their loved ones to get the illness, and being stigmatized by others when they get sick.[20] Fear, which is a functional emotion to cope with a potential threat at a certain level, becomes dysfunctional and compels individuals when it is a lot according to an actually existing threat.[21] There are studies reporting that some individuals experience disproportionate fear during the COVID-19 pandemic[22] and that the fear of being infected may even lead to suicidal ideation [23]. In terms of mental health, the fear of COVID-19 has attracted so much attention that it is defined as Corona phobia at the clinical level.[24] In studies, fear of COVID-19 is found to be associated with depression, generalized anxiety disorder, and suicidal ideas.[25]

On the other hand, the COVID-19 pandemic has affected the health system all over the world, and cancer patients have come to the fore as one of the vulnerable groups who are at risk of having the disease more severe if they catch the virus. There are studies reporting that cancer patients diagnosed with COVID-19 have more severe symptoms and complications than those not diagnosed with cancer.[26] There was a period, in which cancer patients became very anxious due to reasons such as the presence of other comorbidities during the COVID-19 process, having to take immunosuppressive treatments, increased risk of infection, postponement of surgical interventions, the possibility of getting the disease on the way to and from the hospital, difficulties in accessing treatment due to the travel restrictions, changing treatment units due to conversion of some hospitals into pandemic hospitals, shifting health per-

sonnel to other areas, or absence of health personnel in health institution due to the illness.[27] COVID-19, which creates fear of infection and death even in individuals who do not have health problems, may cause much more intense fear for cancer patients. While anxiety about the course and treatment of cancer was high before COVID-19, the fear level of patients may increase due to the knowledge that the virus affects the elderly, those with lung cancer and those with impaired immune systems adversely. With an increase in the level of fear, the decisions of individuals may become more emotion-oriented, and in this case, it may lead to fatal consequences such as rejection of oncological treatments in a special population like cancer patients. [27] In a study conducted with cancer patients in Turkey, 40.1% of the participants reported that they do not apply to emergency services unless it is necessary, and 40.8% reported that they are afraid of this process.[28] In another study, it was reported that approximately one-third of cancer patients experience some delay in their treatment and this situation leads to higher levels of concern, anxiety, and depression in patients.[29]

Cancer patients, who have to receive life-saving treatments on the one hand, and on the other hand, who have to be in the hospital environment, where the virus can be intense, starting from the vehicles that they use to reach the treatment, which may have psychological difficulties due to the fear and anxiety of being exposed to the high risk of infection Erdoğan[30] examined the level of fear of COVID-19 in 486 cancer patients and found that 66.8% of the patients are very afraid of the coronavirus, and 66.3% are afraid of losing their lives due to the coronavirus Steel[31] stated that one of the most important determinants in the negative evaluation of the pandemic process by cancer patients and even their relatives is the fear of having COVID-19. In a study examining psychological distress in adolescent and young adult cancer patients from different countries, it was found that approximately 60% reported feeling more anxious than before COVID-19.[32]

The results reported in terms of the factors affecting the COVID-19 fear levels of cancer patients are contradictory. There are studies reporting that unlike the general population, fear and anxiety disorders are not correlated with age or gender in cancer patients,[33] as well as studies[34] where the level of fear of COVID-19 is higher in women than in men. According to the data in the literature, it is stated that the fear score of cancer patients over the age of 65, who are considered to be at risk for COVID-19, is higher.[35] In studies dealing with the relationship between different types of can-

cer and fear of COVID-19, it is stated that fear of the risk of contagion of COVID-19 infection may be the reason for refusing surgical operation in breast cancer patients.[36,37] In terms of the cancer stage, the COVID-19 fear scale scores of patients without metastasis were found to be higher than the scores of patients with metastatic disease for 1-5 years.[30] This result is interpreted as the cancer-related vital concerns of metastatic cancer patients may be of higher priority than COVID-19, and it is based on the concern that the successful outcome of early-stage patients' cancer treatments will be disrupted due to COVID-19 infection. It is important that patients are adequately informed by health-care professionals so that they can cope with the fear of COVID-19. Patients whose fear of getting the virus is observed to be disproportionate to the existing situation should be directed to mental health professionals for psychological support or treatment.

Uncertainty

The pandemic that broke out with the COVID-19 virus continues to have a negative impact on community mental health, as it affects many people all over the world, the virus is constantly mutating and its spread has not been fully brought under control yet. As one of the factors that play a role in the emergence of the negative psychological effects of the pandemic, the uncertainty experienced in this process, and the difficulty of tolerating this uncertainty come to the fore. Uncertainty can be experienced when faced with a new situation that does not contain clues, as well as when faced with a complex situation with many clues or a situation where different clues lead to different information.[38] Since the duration, scope, and expiry date of the measures are not clear, the pandemic period is perceived by individuals as an uncertain process.[39] Pandemic periods cause uncertainty and anxiety as they contain new, complex, and unresolvable experiences for individuals.[40] Continuing changes in knowledge about the pandemic, with new results observed, contribute to questions and doubts, as well as confusion, increasing uncertainty and anxiety about guidelines and preventive efforts.[41] In addition to these experiences, the perception of uncertainty experienced during pandemic periods due to the unpredictability of the expiry date can lead to emotional difficulties such as fear, stress, anxiety, and depression. [42] In a study on uncertainty and its psychological effects, it was found that the stress of uncertainty during COVID-19 is positively correlated with depression and anxiety symptoms.[43] In a study conducted by Ben Salah[44] during the COVID-19 pandemic and includ-

ed 3786 participants from 94 different countries, it was observed that higher perceived uncertainty is correlated with more depression and anxiety symptoms.

While the uncertainty experienced during and after treatment for cancer patients can leave room for hope, it can also contribute to the emotional distress and anxiety experienced during the cancer process.[45] Considering that they already experience an uncertainty about the treatment process and results of the disease due to the nature of cancer, the perceived threat and related psychological distress of cancer patients may increase with the addition of the uncertainty originating from COVID-19 to this uncertainty.[46] It is determined that cancer patients experience distress with the “unknowns” of the future, such as whether they will be infected with COVID-19 during the pandemic, whether this infection will be fatal, and when their cancer care will return to normal.[47,48] If not managed properly, this distress may lead to impaired functionality and problems of compliance to treatment,[49] poorer symptom management, and impaired health-related quality of life.[50,51] To reduce the psychological and emotional distress caused by uncertainty, it is asserted that the communication of clinicians with patients and the support they give patients will help patients cope with uncertainty and find ways to tolerate uncertainty.[52] Communication strategies that clinicians can use to help patients manage uncertainty include exploring patient concerns, normalizing uncertainty, helping patients regain a sense of control, being clear about what is known and not known, and stating possible outcomes. At this point, recognizing and reflecting on the feelings of patients with an empathetic attitude, emphasizing that they are not alone and reassuring them can contribute significantly to emotional well-being.

Loneliness

Interpersonal interaction and communication are important and universal needs of people. Lack of face-to-face contact and being away from other people can lead not only to physical distance in relationships but also to emotional loneliness. As a subjective concept, loneliness can be a situation that everyone experiences from time to time, therefore inevitable and personally painful. During the COVID-19 pandemic, many governments banned social and physical activities, especially meeting face-to-face and in groups, and loneliness became a current issue intensively as a result of obligatory isolation around the world. Social isolation and loneliness can have negative psychological and even physical effects. Studies conducted before the pandemic process

demonstrate that isolation, and especially loneliness, is associated with poor coping skills, weaker immunity, and a higher risk of death.[53,54]

In cases of medical illness, especially in groups that are considered at risk for COVID-19, such as cancer patients, isolation experiences based on restrictions, or efforts to take precautions can be experienced much more intensely. Isolation processes can cause individuals to be deprived of social sharing and support resources. It was found that this situation has a significant impact on people living with cancer who seek or receive support from their social environment.[55] It was revealed that cancer patients and survivors experience increased loneliness during the pandemic compared to family members and the general population[56,57] and worsening mental health, including depression, anxiety, and stress.[58] In a study dealing with cancer patients and their caregivers, it was reported that the most important determinant of negative evaluation of the pandemic process is experiencing more loneliness. [31] Ciężyńska[59] found that cancer patients living alone have a higher risk of anxiety. In a longitudinal study that started before COVID-19 and included the pandemic process, it was indicated that cancer patients have a high risk of suffering depression during COVID-19, and feelings of isolation are the most important risk factors for depression in this process.[55] In this study, pre-COVID-19 loneliness explains depression at the level of 12%, while it is determined that those who experienced loneliness during the pandemic are at 4.5 times higher risk in terms of existing depression symptoms. As a result of a study comparing cancer patients and people without a cancer diagnosis, it was reported that loneliness experienced during the pandemic is correlated with an increase in depression and anxiety symptoms and high-stress levels, and also, there is no difference between participants with and without a cancer diagnosis.[60] Online support groups or peer groups can be organized for cancer patients so that they can cope with the feeling of social isolation and loneliness. Such sharing can encourage patients to share their feelings as well as relieve the feeling of loneliness. If the feeling of loneliness is accompanied by symptoms of depression and anxiety, it would be appropriate to refer these patients for psychological treatment.

CONCLUSION

Psychological approaches and mental health services are an important part of the medical treatment of cancer

patients. The COVID-19 pandemic process is not over yet and it continues to affect our lives. In such processes, the reflections of psychologically negative experiences of vulnerable groups such as cancer patients can range from momentary emotional reactions to serious anxiety and depression. In the current pandemic or in new crisis situations affecting the health system that may develop in the future, psychological problems should not be ignored when considering how to reduce the medical problems experienced by cancer patients. For this purpose, psychological interventions should be planned to improve patients' coping skills, and these should be for reducing fear of COVID-19, improving the level of tolerance for uncertainty, reducing the feeling of loneliness, and enriching social interaction. From the point of view of the oncological treatment team, asking patients about their experiences during the pandemic and sharing up-to-date information helps them to realize the psychological strain caused by the fear, uncertainty, and loneliness experienced by the patients during the pandemic process, and thus can help them cope.

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