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Experiences of Patients in Turkey with Breast Cancer throughout the COVID-19 Pandemic and their Coping Mechanisms: A Qualitative Study

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Abstract

This research was conducted in Turkey to determine the experiences and coping mechanisms of breast cancer patients during the COVID-19 pandemic. The research was conducted using qualitative descriptive phenomenology. Data were collected from ten patients via in-depth interviews through semi-structured questionnaires. Content analysis, incorporating a combination of deductive and inductive approaches, was conducted to determine the themes and subthemes. Interviews were transcribed verbatim, simultaneously with the analysis and collected data. The study data were categorized into 3 contexts, 7 themes and 39 subthemes. The first context titled "Problems accompanying the disease" includes the effects of the pandemic, the fear of being infected with COVID-19 and hospital-related themes. The second context titled "Coping strategies" comprises the themes of coping behaviors and healthy lifestyle behaviors. The last context is titled "Anxiety about being infected, and suggestions for the future". In the study, problems experienced by patients with breast cancer throughout the COVID-19 pandemic were investigated from a broad perspective. Patients treated in chemotherapy units constitute the vulnerable group affected by the pandemic most. Therefore, it is important to investigate the experiences of oncology patients, particularly of patients with breast cancer and their coping strategies, and to take necessary precautions accordingly.

Keywords Breast cancer · COVID-19 · Coping mechanisms · Turkey

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Introduction

The coronavirus (COVID-19) pandemic broke out in Wuhan, a city in China in late December 2019 (Wong et al., 2021; Yildirim et al., 2021; Zhang et al., 2022). However, the effects of the pandemic on health have been complex and multifaceted (Drury et al., 2021). Throughout this process, all health services, particularly oncology services, have been deeply affected (Alom et al., 2021; Drury et al., 2021; Hyland & Jim, 2020; K. Moran et al., 2020; Savard et al., 2021; Willan et al., 2020; Zhao et al., 2021). Patients with comorbid diseases such as cancer have constituted the group vulnerable to the negative effects of the disease most (Galica et al., 2021). Throughout the pandemic, patients with chronic diseases, including cancer, were often unable to access healthcare services.

Breast cancer is the most common cancer among women and is associated with the highest mortality rates. However, thanks to advances in early diagnosis and treatment, survival rates have increased in recent years. Breast cancer treatments can lead to changes in a person's physical appearance, sexuality, and fertility that interfere with their identity, attractiveness, self-esteem, social relationships, and sexual functioning (Ciria-Suarez et al., 2021).

Patients also report that they experience fatigue and sleep disturbances more. Side effects of the treatment, together with the prognostic uncertainty, cause women to have negative experiences such as stress in their relationships. In addition, anxiety, sadness, guilt and fear of death cause a decrease in the quality of life of patients with breast cancer (Ciria-Suarez et al., 2021).

Cancer patients are at higher risk due to COVID-19. Due to social distancing measures, quarantine measures and disruptions in routine care for cancer patients have clearly interrupted or delayed their treatment (Göral Türkcü et al., 2021; Liang et al., 2020; Paterson et al., 2020; Yu et al., 2020). It is highly likely that the quality of life of patients with breast cancer will be adversely affected by social isolation measures which cause them to experience feelings of loneliness and anxiety (Bartmann et al., 2021). In several studies, it has been reported that morbidity and mortality rates related to delays in breast cancer diagnosis and treatment are on the increase (İlgün & Özmen, 2022).

As in many other types of cancer, women affected by breast cancer experience challenges in managing the survival care due to the limited use of health resources and measures taken to minimize the risk of COVID-19 infection during the pandemic. Although the number of women recovering from breast cancer is increasing, many survivors have reported that cancer treatment affects their quality of life during the pandemic more than it did in the pre-pandemic period (Seven et al., 2021).

All nonurgent treatment appointments of cancer patients have been postponed throughout this period to prevent dissemination of the disease and to protect vulnerable groups (Weinkove et al., 2020; Willan et al., 2020). These vulnerable groups are also at risk of developing complications or even losing their lives due to infection (Dilawari et al., 2021). Disruptions in healthcare services are predicted to cause an increase in non-COVID-19 deaths, including cancer-related deaths, over the next decade (Bowen et al., 2021).

The results of several studies conducted with cancer patients throughout the pandemic revealed that 5.6% of cancer patients affected by the pandemic died (Wu & McGoogan, 2020). The risk of death concerning patients with cancer and infected with COVID-19 is 3.5 times higher than is that of other patients (Liang et al., 2020; Paterson et al., 2020). Data from China revealed that mortality rate was higher in patients with cancer than it was in patients without cancer (Younger et al., 2020). In addition, it was observed that all patients with cancer and particularly vulnerable populations had experienced financial difficulties due to the global pandemic and were much more affected by the pandemic (Thom et al., 2021).

All over the world, patients with cancer have had treatment-related problems because attention has been mostly paid to the pandemic and emergency health services. However, in a study conducted in Turkey, the patients with breast cancer did not experience any difficulties in receiving the outpatient clinic service, undergoing surgery, having postoperative adjuvant treatment and being followed up due to the pandemic (Ata Güler et al., 2021).

On the other hand, in another study conducted in Turkey, the follow-up and treatment of the patients were delayed for four weeks on average during the pandemic, and they stated their concerns about this issue (Ata Güler et al., 2021). In this process, an insignificant decrease was observed not only in the number of patients who presented to the oncology clinic but also that of the reconstructive surgery procedures (İlgün & Özmen, 2022).

There was a decrease in the provision of diagnostic services and meetings held by multidisciplinary breast surgery councils compared to previous periods. Video decrease in radiology imaging options, and biopsy results were reported as soon as possible (Seven et al., 2021). During this period, hospital visits were reduced. In order to minimize the infection risk of COVID-19, diagnostic procedures and surgical treatments were postponed, treatment protocols were changed, routine followups were postponed (Seven et al., 2021).

Patients with cancer may have developed strategies to cope with the pandemic and its effects throughout this process. However, access to assistance resources has become difficult due to the pandemic. The pandemic therefore presents an excessive overhead for patients with cancer that should not be ignored by healthcare providers; however, the number of clinical research studies focusing on the impact of the pandemic on patients with cancer is limited (Bartmann et al., 2021; Swainston et al., 2020).

In this process, African-American women generally have used their spirituality to cope with the psychosocial problems they are faced with (Hamilton et al., 2021). Coping mechanisms developed by the patients during the pandemic have led to a decrease in depression levels, and contributed to the management of stress, and psychological well-being. Oncology patients who are able to access these coping resources are more likely to endure the pandemic and social isolation thanks to their emotional coping mechanisms (Brivio et al., 2020).

Emotional coping mechanisms and turning to the inner world have been determined to reduce distress and depression, and to increase the quality of life. The pandemic may cause sadness, guilt, fear of death, stress and anxiety, which will have negative consequences on the quality of life of patients with breast cancer (Ciria-Suarez et al., 2021). Furthermore, social isolation associated with the pandemic may exacerbate depression, anxiety and sleep disorders and increase the need for medical care (Dilawari et al., 2021).

Patients may worry about proceeding with their treatments because they fear the effects of the disease. Accordingly, it is important to identify the difficulties experienced by women undergoing cancer and breast cancer treatment to plan the appropriate nursing care for these patients. It is essential that nurses who care for cancer patients during the pandemic understand them and provide individualized and evidence-based care. Within this context, oncology nurses especially should understand the psychosocial experiences of breast cancer patients during the pandemic and help them develop strategies to cope with the pandemic (Challinor et al., 2021).

In conclusion, in order to plan appropriate nursing care for patients, it is important to determine what difficulties women who undergo breast cancer treatment experience (Challinor et al., 2021). The number of qualitative studies focusing on the experiences of women with breast cancer throughout the pandemic is quite limited (Savard et al., 2021). The aim in this research was to determine the experiences of patients with breast cancer throughout the COVID-19 pandemic and their coping mechanisms.

Methods

Study Design

This qualitative research, which was carried out with a phenomenological design, was aimed at determining the experiences of patients with breast cancer receiving outpatient treatment in the chemotherapy unit throughout the COVID-19 pandemic and their coping mechanisms. Data were collected via in-depth interviews through semi-structured questionnaires. The data were gathered and reported according to the checklist created by the Consolidated Criteria for Qualitative Studies (COREQ) (Tong et al., 2007).

Before the study was started, the ethical approval was obtained from the Sinop University Human Research Ethics Committee (HREC Approval No: 2021/112). The research was conducted in accordance with the Declaration of Helsinki. In addition, after all the participants were informed about the study and told that the interviews would be recorded, their consent indicating that they volunteered to participate in the study was obtained.

Participants and Setting

Patients over the age of 18 years who were diagnosed with (nonmetastatic) nonrecurring breast cancer, and who presented to the chemotherapy unit in a hospital, a province in northern Turkey, and volunteered and gave their consent to participate in the research were included in the study. A preliminary interview was held with the patients with the aim of explaining the purpose of the study and requesting their permission for communication; then, patients were interviewed via telephone. The interview procedure was terminated (10 patients) when the concepts that could answer research questions started to be repeated.

Data Collection, Analyses and Synthesis

The interviews within the scope of this study were conducted by the researcher who was exclusively trained on qualitative research. A semi-structured questionnaire was developed based on the literature review (Ayvat & Atli Ozbas, 2022; Göral Türkcü et al., 2021; Gotlib Conn et al., 2021). The interviews held between October 2021 and December 2021 via telephone due to the pandemic were recorded. The collected data were then analyzed by researcher.

The interviewees asked the participants to repeat and summarize their words to confirm the accuracy of the information provided during the interviews. The data collected were then transcribed verbatim. The transcripts were further reviewed by the researcher several times. Research data were statistically analyzed using the Maxqda 20 software. Researcher created specific codes reflecting responses given during the interviews. These codes were shared and discussed, and finally 3 contexts, 7 themes and 39 subthemes were created. All data analyses were performed and reported in Turkish.

Results

Table 1 exhibits the sociodemographic characteristics of the participating breast cancer patients. Table 2 exhibits the contexts, themes and subthemes of the research. The data were categorized using the following three contexts: Problems accompanying the disease, coping strategies, and anxiety about being infected, and suggestions for the future.

Qualitative Findings

Context 1: Problems Accompanying the Disease

Theme 1: The Effects of the Pandemic

With the pandemic, a new era has begun for patients with breast cancer. As if fighting cancer were not enough patients have had to struggle with pandemic-induced problems which affected all aspects of their lives. Living with the pandemic, not knowing how long the disease will last, social isolation, side effects of the disease and many unknown factors related to the disease have caused patients to worry in this process.

The participants, hereby, drew attention to the effects of the pandemic. Twelve subthemes (family life, problems related to wearing masks, social life, financial

Participants Age Gender	Age	Gender	Marital Status	School	Occupation	The state of hav- Clinical stage ing children	Clinical stage	The state of having Denomination social security	Denomination
P1	30	Female	Single	University	Self-employed	No	Stage I	Yes	Muslim
P2	38	Female	Married	University	Officer	Yes	Stage I	Yes	Muslim
P3	42	Female	Married	University	Officer	Yes	Stage I	Yes	Muslim
P4	46	Female	Married	High School	Housewife	Yes	Stage II	Yes	Muslim
P5	41	Female	Married	High School	Housewife	Yes	Stage I	Yes	Muslim
P6	45	Female	Married	High School	Housewife	Yes	Stage II	No	Muslim
P7	48	Female	Married	High School	Housewife	Yes	Stage II	No	Muslim
P8	44	Female	Married	High School	Officer	Yes	Stage II	Yes	Muslim
P9	31	Female	Single	University	Self-employed	No	Stage I	Yes	Muslim
P10	32	Female	Married	University	Officer	Yes	Stage I	Yes	Muslim

 Table 1
 Participants demographic characteristics

Context	Theme	Subtheme
Problems caused by the disease	Effects of the pandemic	Family life
		Problems regarding the use of mask
		Social life
		Economic problems
		Unhealthy diet
		Mental health problems
		Psychological distress
		Physical health problems
		Work life
		Quality of life
		Communication problems
		Quarantine and restrictions
	Fear of getting sick during the COVID-19 period	Fear of death
		Fear of getting sick
		Fear of transmitting to family
	Problems related with hospital	Finding place in the hospital
		Fear of cancer progression
		Disease complications
		Distance to hospital
		Not being able to get appointment or late appointment
		Treatment problems
		Evilure to receive examination

Table 2 (continued)		
Context	Theme	Subtheme
Strategies to cope with the disease	Coping behaviors	Motivation
		Positive thinking
		Indifference
		Surrender faith
		Disease prevention behaviors
	Healthy lifestyle behaviors	Self-examination
		Social activity
		Physical activity
		Healthy eating
Concerns about disease and suggestions for the future	Concerns about the future	Concerns about cancer
		Concern about vaccine
		Concerns about the pandemic not coming to an end
	Suggestions	Psychological support
		Taking up a hobby
		Socializing
		Protective measures
		Financial support

difficulties, unhealthy diet, mental, psychological and physical problems, work life, quality of life, communication problems, quarantine and restrictions) are included within the scope of this theme. Almost all interviewed patients admitted that they were affected by the pandemic. The participants complained that they were tired of staying in quarantine throughout this whole process, that the pandemic affected all their lives in general, that they were worried about their family members, that they were tired of wearing masks, that they had experienced financial difficulties and therefore they could not follow a healthy diet, that their work life was affected, that their quality of life was deteriorated and that they had communication problems.

"We are tired of staying at home. My son was also at home, preparing for university exams. The process was stressful for him as well. He gained weight. Even two sizes larger. He was no longer able to wear any of his clothes after the pandemic" (P/2).

"Working while wearing a mask is like a torture. Especially in the summer. I am receiving hormone therapy. I feel depressed as I have been going through menopause. I've already had hot flashes, however I have to wear a mask. I've suffered from asthma since childhood, wearing a mask is nothing but psychological pressure. It terribly wears us out" (P/1).

"They forced us to go on unpaid leave after 15 days. Inevitably, you feel financially depressed. Pandemic and related living conditions are very difficult" (P/1).

"I started experiencing problems with my hip joints because I had to sit all the time. My hip hurts a lot. I suffer a flat neck syndrome" (P/2).

"I work in the supermarket. I communicate with lots of people. I ask people not to take off their masks; this makes people look at me hostilely. People have become very angry and aggressive; they constantly argue with me" (P/1).

"The pandemic has caused disturbance, stress and anxiety in people. That is why people treat each other aggressively and unsympathetically; they are trying to reflect the negativities of this situation to each other. The persons whom I warn because they were not wearing a mask treated me as if they were going to beat me. People have come to a point where they will almost pull knives and kill each other. That is why I wonder if it's going to get worse while watching the news on TV; this worries me. Apart from the fact that the pandemic is not over yet, people's anger frankly scares me" (P/9).

Theme 2: The Fear of Being Infected with COVID-19

In this theme, although some of the participants stated that they were afraid of getting sick, some of them stated that they were used to this situation, and their experience with cancer diagnosis and treatment enabled them to confront and overcome this new situation. They also stated that the protective measures and social isolation they used previously enabled them to deal with the pandemic process better.

Patients stated that they most likely experienced the fear of death, fear of being infected and fear of transmitting the disease to their family members throughout the pandemic.

"A niece of ours passed away when the pandemic just broke out. The pandemic had not yet emerged in Turkey. A healthy person does not even think of death. One thinks he will never die. However, when a person is sick, he lives with the psychology of facing death any moment" (P/7).

"I experienced anxiety and fear when I heard about people who lost their lives. I could not help thinking about what I would do if it happened to me; I wondered whether my immune system was strong enough to cope with this disease. A relative of ours had cancer. He could not go to the hospital as he was so afraid of being infected. He passed away a few months ago, but the cause of death was recurrence of the disease. When he visited the doctor, it was too late for everything; that is why he died in a short time" (P/9).

"Wearing a mask has unfortunately become a part of our lives. For example, I visited my family on the weekend; I had to sit with a mask all day. In fact, all our fear is to be infected with this disease and lose our beloved ones. I am afraid that something will happen to one of my family members. Because they have cardiac disorders, diabetes and high blood pressure" (P/5).

"I had to travel from Amasya (a city in northern Turkey) to Samsun (another city in northern Turkey); ticket prices were truly high. I had a lot of trouble with that. It was very difficult to find a bus. I spent a lot of money. Travel fees are too high" (P/9).

Theme 3: Hospital-Related Problems

In this theme, the patients were concerned about such issues as cancer treatments, appointments, etc. due to the pandemic. They complained about the progression of the cancer stage or being unable to have a chance for the detection of suspicious signs and symptoms of cancer due to the pandemic.

There were seven subthemes under this theme. The patients complained that they were unable to schedule an appointment, they had trouble being hospitalized, they were afraid of the progression of their cancer and other complications and they experienced problems due to distance, difficulty in accessing treatment and not being able to be examined throughout the pandemic.

"I am very afraid of the progression of my cancer. One of my children depends on me. I have concerns about his future. God knows when we will die. I would rather give my last breath before I get into a bad situation" (P/3).

"For example, I currently suffer side effects of the disease, I have osteoporosis. I am currently fighting with it. It progresses. I suffer from bone pains, lower back pains, backache" (P/9).

"It is truly difficult to schedule an appointment with the doctors. Some doctors do not even accept patients. Many people around me complain about the same problem. Ok, I understand their avoidance of contact; but at least they should listen to our complaints. They can stand at the door and talk with us" (P/3).

"Before the pandemic, it was much easier to schedule an appointment or be examined at the hospital. It is more difficult after the pandemic. Inevitably, we have to adjust everything; accordingly, this is very frustrating. We did not have this much trouble before, but we now have lots of problems in this regard. Everything about the hospital became difficult" (P/1).

Context 2: Coping Strategies

Theme 1: Coping Behaviors

For patients undergoing cancer treatment or for survivals of cancer, tackling or managing the pandemic posed another obstacle for them. In this process, patients utilized their experiences and learned coping mechanisms; however, finding coping resources during the pandemic was still a challenging process. Social isolation prevented patients from participating in activities they loved, which created a negative factor in coping with the disease.

There were five subthemes under this theme. The patients were determined to exhibit/adopt certain behaviors, such as getting motivated, positive mental attitudes, ignoring, surrender and faith, to prevent the disease.

"I usually try to motivate myself when I face a challenging situation; in this sense, I generally do not have much difficulty. However, most people directly become depressed in such situations. I think one should not feel depressed. That is why I was not that much affected" (P/9).

"I have already gained enough awareness while undergoing cancer treatment. I am not hung up on these issues, I do not care at all. So I developed such a coping mechanism. I do not mind the pandemic. So I do not care at all" (P/4).

"My words are to people who believe in God. I say that this calamity has come upon us by Allah. If Allah has commanded so, we have to live with it. Yes, perhaps it sounds simple, even trite, but God alone is the Lord of life from its beginning until its end. Whether a virus infects your body or cancer cells take over your body, you will not die if God does not want it so. I have been receiving cancer treatment for exactly 3 years, even 3.5 years. I'm not dead, I'm still alive. I have also been infected with COVID-19, and my quarantine is not over yet, but I'm still alive, I've survived. I believe in God; I take my precautions, and I leave the rest to God. Then, you do not need anything else" (P/1).

"I'm not worried. One will soon die if the term of his life expires. Before, I was puzzling my brain with this issue. I am currently living my routine life. A friend of mine had a heart attack and died on his way to work a week ago" (P/4).

Theme 2: Healthy Lifestyle Behaviors

During the pandemic, patients with breast cancer developed healthy lifestyle behaviors to cope with the disease. An active social life, physical activity and healthy diet were among the effective healthy lifestyle behaviors in this process.

There were four subthemes under this theme: self-examination for breast cancer, involvement in social life, physical activity and healthy nutrition.

"People should check their own symptoms and conduct breast self-examination. The risk of developing breast cancer is quite common. I regularly conduct breast self-examination. Early treatment saves lives. I recommend mammography. Women should periodically have mammograms without fear. For example, I drink water with lemon in the morning. At night, I consume yogurt with ginger and turmeric in it" (P/7).

"I regularly cleaned the doors. I drank lots of water with lemon and vinegar. I paid attention to hygiene. Before consuming the vegetables and fruits I brought from outside, I kept them in vinegar water. We immediately took a bath each time we came back home from outside" (F/8).

"I have rather spent time surfing on the internet. I shared posts about the dishes I prepared. Then, many of my friends started doing this as well. They opened their own Instagram addresses. They shared posts about their own dishes. So we actually tried to distract our attention" (P/2).

Context 3: Anxiety for Being Infected, and Suggestions for the Future

Theme 1: Concerns About the Future

The state of uncertainty induced by the pandemic causes patients to have anxiety and worry about the future. With cancer treatment and follow-up, this situation worsens even more (Cancer treatment and follow-ups even worsen this situation.)

There were three subthemes under this theme: concerns about cancer, concerns about vaccines, and concerns about the protracted pandemic.

"I am mostly concerned about major problems facing the country. I am afraid that our order will be disrupted and we will have nowhere to go. I am afraid of war" (P/6).

"I have concerns about my health. I am worried about falling into bed and suffering a lot of pain" (P/7).

"I am currently single and thinking of getting married. I want to have children. I have not been vaccinated, I am against vaccination. Do vaccines undergo a real inspection, who thinks that it is right to be vaccinated, who thinks that it is wrong? Let's suppose I'm vaccinated. What if the vaccine deteriorates my genetic structure? What if my child inherits a genetic problem? Inevitably, I have concerns about the future" (P/1).

"I think vaccination should be compulsory; people avoid being vaccinated unless there is any mandatory application. A lot of people are losing their lives, people have psychological problems, the government may provide support in this regard" (P/9).

"My concerns about the future are mostly related to protracted pandemic. When I go out, I see people acting as if the pandemic is over. No social distancing. No one wearing masks. Frankly, such a reckless attitude scares me because the pandemic is not over yet. I think the number of cases is much higher than the figures reflected in the media" (P/9).

Theme 2: Suggestions

In this theme, patients generally state their recommendations. The pandemic has increased physical, social and economic support needs patients received in the normal treatment process.

There were five subthemes under this theme. Patients were observed to develop suggestions about psychological counselling, hobbies, involvement in social life, protective measures and financial support.

"People diagnosed with cancer cannot receive any further psychological support throughout this process. One day you go to hospital and you directly learn that you have a cancer. Just hearing these words simply affects people very badly. There is no psychological support. It is like saying, "go care of yourself". If you cannot take care of yourself, you will have to live with your fears" (P/10).

"People have such a perception. They have gone hypochondriac. However, they should not limit their lives. I did not restrict my life, even when I got cancer" (P/6).

"Let us stay at home as much as possible. We should not make an attempt on others' lives. We should follow the rules by any means. We should be cautious. No one should act in a way that will harm anyone else. There are many people who go to visit someone else even though they know they are sick" (P/3).

"This pandemic has been going on for two years; we have been wearing masks. There were days when we could not find any mask. The most important thing is living healthy, healthy life is essential. If God has given us this calamity, we should be careful" (P/9).

"Our state should contribute to patients. People cannot afford these drugs. I advise people to engage in different activities to feel good about themselves. There are many ways people can stay away from stress and anxiety" (P/9).

Discussion

Data with regard to patient experiences are very important to mitigate the impact of COVID-19 and to ensure high quality nursing care. The main purpose of this research was to evaluate the risks perceived by patients related to COVID-19 and patient experiences related to cancer care using a qualitative approach.

Research results are categorized under three main headings: problems brought about by the COVID-19 pandemic, coping strategies and suggestions for the future. In the present study, the patients expressed their views on social isolation and quarantine imposed during the pandemic. They also mentioned economic difficulties they experienced. Restrictions on cancer-related services cause difficulties in accessing supportive care services (Drury et al., 2021; Willan et al., 2020). Individuals with cancer were found to be more likely to face complications related to COVID-19; accordingly, it was concluded that there is a relationship between social isolation and mortality (Casanova et al., 2020; Dilawari et al., 2021; Drury et al., 2021; Liang et al., 2020; Savard et al., 2021; Yu et al., 2020).

Staying at home and spending more time with family members throughout the pandemic, social isolation and other preventive measures have been determined to positively affect women undergoing cancer treatment (Göral Türkcü et al., 2021). In accordance with the findings herein, it was found that many businesses had to shut down throughout the pandemic, and the problems experienced due to unemployment caused negative financial results for patients with cancer (Colomer-Lahiguera et al., 2020; Nixon et al., 2021). The resulting economic fallout caused significant hardships (Galica et al., 2021; Thom et al., 2021).

A review of studies conducted with Chinese and European populations revealed that the prevalence of depression, anxiety and stress symptoms in patients with cancer increased significantly throughout the pandemic (Zhao et al., 2021). Some women included in the present study also stated that they were worried about being infected with the disease. Similarly, Savard et al. (2021) reported that patients with breast cancer were at greater risk of being infected with COVID-19 in the hospital (Savard et al., 2021). In the present study, the patients also stated that they had problems related to the hospital throughout the pandemic and that they were afraid of being infected (Savard et al., 2021).

Studies have indicated an increase in missed medical appointments during the pandemic. Approximately 50% of breast cancer survivors experienced problems in medical care due to the pandemic and faced the fear of recurrence (Dilawari et al., 2021; Éva et al., 2022). The most striking finding in this regard was that individuals undergoing cancer treatment were worried about delayed treatment rather than being infected with COVID-19. In addition, delay in treatment may cause anxiety in cancer patients (Gotlib Conn et al., 2021).

Many patients reported that they did not want their treatment to be delayed to prevent possible cancer recurrence and that they were afraid of the prognosis of the disease. It was observed that breast cancer patients whose cancer treatments were interrupted due to the COVID-19 pandemic had higher levels of psychological distress. Of the patients, those whose treatment protocols were not amended also stated that they were worried about the risk of being infected when they visited the hospital for their treatment (Peteet, 2020; Savard et al., 2021). This result was in line with findings of other studies indicating that uncertainty with regard to postponed cancer treatment would cause stress and anxiety in patients.

Consistent with the results of our study, a literature review revealed that patients with breast cancer were worried about delays in their treatment due to the pandemic, and they feared the loss of family members and friends (Colomer-Lahiguera et al., 2020). In the present study, the patients were worried due to the uncertainty of the effects of the pandemic. Patients with cancer have been determined to feel anxious, scared and disappointed due to COVID-19 (Hyland & Jim, 2020). In addition, it has been determined that the fear of being infected with COVID-19 brings about many psychosocial problems, such as insomnia, obsessions about hygiene, conflicts with family members and loneliness. A qualitative study conducted on patients with breast cancer indicated that patients'

psychological distress and anxiety levels due to being infected with COVID-19 were elevated (Colomer-Lahiguera et al., 2020; Savard et al., 2021).

In the present study, the patients experienced stress because of people who did not comply with the social distancing and mask rules. In line with the findings of our study, it was concluded that patients with cancer receiving chemotherapy felt stressed when they were surrounded by people who refused to wear masks and to maintain social distancing throughout the COVID-19 pandemic (Göral Türkcü et al., 2021; Moran et al., 2020). The patients who participated in our study stated that they developed healthy lifestyle behaviors to cope with the pandemic. These and other similar studies revealed that patients have developed certain healthy lifestyle behaviors to cope with the pandemic (Radcliffe et al., 2022).

A literature review similarly indicated that patients have engaged in knitting and different activities to cope with the pandemic (Galica et al., 2021). Throughout this process, patients have benefited from their own experiences along with many other learned coping strategies to cope with the pandemic. One example in the literature described a patient who had engaged in fishing as a coping mechanism throughout his cancer treatment (Galica et al., 2021). Another study concluded that the most frequently used individual coping strategies of patients were acceptance, distraction and taking action (Galica et al., 2021).

The patients who participated in our study turned to spirituality and religious rituals in order to cope with the pandemic. In line with the findings of our study, it was reported that patients with cancer have focused on religious beliefs to cope with existential concerns arising from the pandemic (Peteet, 2020). In another study, it was concluded that patients with cancer developed coping strategies such as praying, focusing on spirituality and religion, going for a walk instead of going to the gym and meeting friends while maintaining physical distance (Hamilton et al., 2021; Moran et al., 2020).

A literature review revealed that many patients are rather hopeful and confident in managing their life challenges, even though they are worried about being infected with COVID-19 (Zhao et al., 2021). Colomer-Lahiguera et al. (2020) reported that patients with cancer were resilient and resorted to positive coping strategies they learned from their experiences with cancer (Colomer-Lahiguera et al., 2020). One study indicated that female patients resorted to coping strategies such as taking precautions against COVID-19, getting support from a health professional and avoiding talking about the disease (Göral Türkcü et al., 2021; Savard et al., 2021).

The patients in our study also expressed their concerns about the future and their suggestions. A literature review alternatively revealed that social support, financial support to be provided for low-income individuals and psychological support would not only alleviate clinical and psychological symptoms but also improve the survival rate of patients with cancer (Dilawari et al., 2021; Éva et al., 2022). Making use of digital communication throughout the care services provided to patients with cancer, improved care services and hygiene practices were found to be effective in coping with the disease even after the COVID-19 pandemic was over (Göral Türkcü et al., 2021).

Limitations and Strengths of the Study

Firstly, only ten breast cancer patients were interviewed. Therefore, the results obtained from the present study are applicable only to the breast cancer patients surveyed and cannot be generalized to other patients with cancer. Second, due to the risk of contracting the disease, interviews with the participants was conducted not in person but over the telephone. This situation may be considered a limitation due to the design of the research. Third, the study was conducted in locally; therefore, its results cannot be generalized to the whole of Turkey.

Conclusion

While the COVID-19 pandemic poses a global threat to public health, patients receiving cancer treatment constitute the population who are mostly affected by the pandemic. Patients with breast cancer are exposed to many risks (infection, social isolation, difficulty in accessing health services, economic distress, etc.) due to the pandemic. The patients who received treatment and were included in our study had the opportunity to express their problems related to the pandemic broadly. From this point of view, it is possible to suggest that comprehensive planning is needed to protect patients from the risks associated with COVID-19 and to ensure that they continue their cancer treatment and care. Patients should also be protected from the major psychosocial effects of the pandemic and delays regarding treatment. In order to minimize the effects of both the pandemic and diseases to occur in the future on cancer patients, different platforms such as telemedicine, telenursing, remote consultancy, training and conference can be used. Helping patients manage their expectations and fears and identifying and dealing with issues and concerns that arise during treatment are of great importance. In this process, patients can be provided with professional nursing support to reduce their psychosocial problems and strengthen their ability to cope with stressful situations. The study not only provides information about the experiences of the patients with regard to the pandemic and their coping mechanisms throughout this process but also constitutes an example for future studies.

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Declarations

Conflict of interest There are no conflicts of interest.

Ethical Approval This study was performed in line with the principles of the Declaration of Helsinki. The research was ethically approved by the Sinop University Human Research Ethics Committee (HREC Approval No: 2021/112).

Informed Consent Informed consent was obtained from all the participants included in the study.

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