

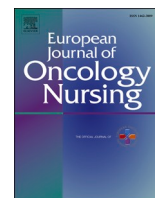


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Experiences and coping strategies of women receiving treatment for breast and gynecological cancers during the COVID-19 pandemic: A qualitative study

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ABSTRACT

Purpose: The aim of this study was to examine experiences and coping strategies of women receiving treatment for breast and gynecological cancers during the COVID-19 pandemic.

Methods: A descriptive, phenomenological approach was adopted. The study included 15 women receiving treatment for breast and gynecological cancers in the chemotherapy center of a university hospital. Data was collected with a descriptive characteristic form and semi-structured in-depth interviews.

Results: Data analysis revealed three main themes: Problems, protection and coping. The main theme of 'problems' was grouped into four categories: living with anxiety and fear, social isolation, physical difficulties, and financial difficulties. 'Protection' was grouped into four categories: decreased stigmatization, increased preventive measures, increased communication between family members, and keeping distance. Coping was grouped into four categories: religious practices, social support, positive thinking, and hobbies.

Conclusions: The participants were found to experience psychosocial, financial and physical difficulties. However, they also mentioned positive aspects of the pandemic: elimination of stigmatization due to the obligation for everyone to wear a mask, lack of visits due to the lockdown and enhanced communication with family members due to increased time spent at home. Religious practices, social support, positive thinking and spending time on hobbies were helpful to cope with the problems experienced during the pandemic. The results of this study can guide nurses in offering high-quality nursing care and counseling to women treated for breast and gynecological cancers during the pandemic.

1. Introduction

Cancer is usually associated with such concepts as pain, suffering, trouble and death (Gorman et al., 2018). Cancer patients experience many psychosocial problems during their treatment (Tan et al., 2002; Mullen and Mistry, 2018). The diagnosis of cancer also has psychological effects and women diagnosed with cancer often have anxiety, depression and a decreased quality of life (Wyatt et al., 2012; Saklı and Demir Zencirci, 2013; Watts et al., 2015; Mielcarek et al., 2016; Uçar et al., 2018; Kurt and Can, 2018). It is reported in the literature that designing and utilizing interventions directed towards eliminating psychosocial problems of cancer patients can improve their skills to cope with the problems and increase their adaptation and the quality of their

life (Yazgı and Yılmaz, 2020).

The ongoing COVID-19 pandemic not only has been stressful for everyone but also has led to psychological problems in the sensitive group cancer patients (Savard et al., 2021; Hyland and Jim, 2020; Moran, Brooks and Spoozak, 2020). According to results of the studies performed with cancer patients during the pandemic, 5.6% of the cancer patients affected by COVID-19 died (Wu and McGoogan, 2020) and the risk of death was 3.5 times higher in cancer patients contracting COVID-19 than that of other affected patient groups (Liang et al., 2020; Paterson et al., 2020). It is stated in the literature that patients receiving chemotherapy, radiotherapy, immunotherapy, antibody treatments and target specific cancer therapies likely to affect the immune system are vulnerable to COVID-19 throughout the world (Paterson et al., 2020;

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WHO, 2020). Based on this evidence from the literature, it is clear that cancer patients are at more increased risk due to COVID-19 and that social distancing measures, quarantines and disruptions in routine care services for cancer patients interrupt or cause delays in cancer treatment (Paterson et al., 2020).

Cancer can cause patients to experience a difficult and complex process both physically and mentally. It is important to determine what difficulties women receiving treatment for cancer have in order to plan appropriate nursing care for these patients. There have been few qualitative studies on what women with breast and gynecological cancers experience during the COVID-19 pandemic (Savard et al., 2021). Gynecological cancers, jeopardizing women's health, are very common after breast cancer (Bray et al., 2018; WHO, 2018).

2. Objective

The present study aimed to examine experiences and coping strategies of the women receiving treatment for breast and gynecological cancers during the pandemic.

3. Methods

3.1. Study design and methodology

The study has a descriptive, phenomenological design as described in a study by Edmund Husserl (1931). The purpose of using Husserlian's phenomenology is to better understand the cancer experience of each woman and the nature of each experience in a sample (Lopez and Willis, 2004). Phenomenological studies are frequently performed to elucidate health issues. To exemplify, what exactly individuals with a chronic disease experience and what meaning they attribute to their disease are discovered (Grove et al., 2013). The report about the present study was written according to the Standards for Reporting Qualitative Research (SRQR) (O'Brien et al., 2014).

3.2. Settings and participants

The study sample included women receiving treatment for breast and gynecological cancers in the chemotherapy center of a university hospital in Aegean region of Turkey. The purposive sampling was employed. In purposive sampling, qualitative researchers select cases that can teach them a great deal about the purpose of the study. The following inclusion criteria were utilized for purposive sampling in the present study: age of over 18 years, ability to speak and understand Turkish and lack of a psychiatric disease. The exclusion criteria were the age of under 18 years, receiving treatment for psychiatric diseases, speaking a language other than Turkish, and declining to take part in the study. As recommended in the literature, the sample size was determined by continuing to collect data until the same data repeatedly appeared and until no new information emerged (Houser, 2016; Grove et al., 2013). The study was completed on 15 women administered treatment for cancer.

3.3. Data collection

Data was collected with in-depth interviews. The interviews were conducted by a female researcher experienced in qualitative research (SGT). She was working as a research assistant at a university at the time of the study. The researcher offered information about the study to women given treatment for cancer in the chemotherapy center and fulfilling the inclusion criteria. The women accepting to participate in the study were interviewed through an online platform (Zoom or Skype) selected by them due to the pandemic. To create a silent and comfortable environment, the interviews were held at a time determined by the women. Each woman was interviewed once.

The data collection tools utilized were a general characteristic form

and a semi-structured interview form. The general characteristics form was created by the researchers in light of the literature. The form was composed of questions about the treatment received by the women and sociodemographic features like age and occupation. The semi-structured interview form was composed of three questions: What difficulties did you have while receiving treatment for cancer during the pandemic? How do you think the pandemic affected your disease? How did you cope with the difficulties you experienced? The interviews were voice recorded after informed consent was obtained from the women. Each interview lasted 14–33 min.

3.4. Data Analysis

Data about sociodemographic features were expressed in numbers and percentages. All the data collected through the semi-structured interview form was analyzed by utilizing the content analysis as described by Graneheim and Lundman (2004). Data analysis was performed by two researchers separately. First, the researchers individually read the data. Next, they divided it into meaning units. The meaning units refer to words, sentences or paragraphs involving interrelated contents and contexts. Then each content was summarized and each meaning unit was assigned a code. After that, the codes were compared and contrasted and classified into categories. Following categorization, themes were determined and named (Graneheim and Lundman, 2004). Finally, the researchers discussed the categories and themes, agreed on the ones best explaining the data and wrote the study report. Obtained findings and quotes from the participants were presented without making any changes.

3.5. Trustworthiness

The study was reported according to the Standards for Reporting Qualitative Research (SRQR) (O'Brien et al., 2014). The reliability of the findings was achieved by adopting the strategies determined by Colorafi and Evans (2016): credibility, transferability, dependability, and confirmability. All the researchers had a PhD, attended courses and received education about qualitative research and were experienced in this type of research. To achieve dependability, all the interviews were conducted by the same researcher. Obtained data were analyzed by two researchers independently. To ensure credibility, the participants were encouraged to express their opinions comfortably. The interviews were conducted online in an atmosphere where only the researcher and the participant were available and felt comfortable. During the interviews, sufficient time was allocated for each participant so that they could express what they thought. The interviews were ended when the same data repeatedly appeared and when the satisfactory point was reached. Regarding the validity of the study, purposive sampling was used. Originality of the data was kept and the data was reported extensively and in the accompaniment of direct quotes from the participants.

3.6. Ethical considerations

The ethical approval was obtained from the Ethical Committee of Noninvasive Research at the university where the study was conducted (Ethical approval date/number: 23.06.2020/12 and protocol no: 60116787-020/37911). The participants were briefed about the objectives, benefits and risks of the study and confidentiality of the data. Oral informed consent was obtained from all the participants.

4. Results

4.1. Participants' demographic and medical characteristics

The mean age of 15 women included in the study was 42.67 ± 10.21 years. Out of 15 women, six (40%) were primary school graduates, five (33.3%) were high school graduates and four (26.7%) were university

graduates. Thirteen women (86.7%) were married. Six women (40%) had gynecological cancers (four had ovarian cancer and two had cervix cancer) and nine (60%) had breast cancer. All the women were receiving chemotherapy in the daycare unit. Seven women (46.7%) had a familial history of cancer. The primary sources from which most of the women received information about the COVID-19 pandemic were the Internet and television. Two women (13.3%) had had COVID-19 before initiation of the study. The women were asked to rate the fear they experienced about contracting COVID-19 on a 10-point scale and the mean fear score of the women was found to be 6.27 ± 2.92 .

4.2. Themes and categories emerging from the data obtained at in-depth interviews

Three main themes emerged from the data obtained: problems, protection and coping (Table 1).

4.2.1. Problems

The theme problems was grouped into four categories: living with anxiety and fear, social isolation, physical difficulties and financial difficulties.

4.2.1.1. Living with anxiety and fear. Most of the woman reported feeling afraid of contracting COVID-19 during their cancer treatment and resultant delays in their treatment. They were also afraid of the inability to recover and dying due to the virus or death of their family members and friends.

... I'm still worried about catching the infection. Since both kids of mine go to school, I feel more worried ... I'm very frightened and worried now ... To explain, my treatment may not be completed and cancer may show progression. (37 years old, breast cancer)

One woman said that her doctor and the health staff responsible for her treatment may die from COVID-19 and that her treatment may remain incomplete.

... To be frank, I'm worried that something bad may happen to Mrs. A. (her doctor) and the health staff, who are also my friends. My treatment should not be left unfinished ...” (32 years old, cervical cancer)

Some women reported experiencing sleeplessness due to their worries about contracting COVID-19. One woman expressed feelings of loneliness and fears of being left by her husband and of death as in the following:

I've had difficulty in sleeping during the pandemic. I experienced sleeplessness since I wondered about what would happen to me, whether I would have COVID-19, whether my treatment would remain incomplete if I caught COVID-19 and whether cancer would recur if I caught the disease ... Even a healthy person feels worried

while going out and I've had to be careful and tried my best to protect myself. I felt lonely at home and was afraid of being left and dying. (32 years old, cervical cancer)

One woman said she was obsessed with cleaning due to the fear of contracting COVID-19:

I became a very diligent person ... For example, when I recognize even a particle of dust on my child's hands, I feel awful. That is to say, I feel annoyed the moment I see it ... When the child's clothes are dirty or when he spills things on the ground, I start cleaning. (37 years old, breast cancer)

One woman commented that she had conflicts with members of her family due to her worries about contracting COVID-19:

My illness had already caused the members of my family to be intolerant. Besides, with the emergence of COVID-19, I fell into something unknown and life-threatening. This made everyone in the family feel uneasy. Violation of hygiene principles by a family member can quickly turn into a conflict due to my fear and worries. (44 years old, breast cancer)

Most of the women admitted that they were worried about contracting COVID-19 in hospital and that their worries increased since other individuals in the society did not obey the rules set to prevent transmission of COVID-19.

People do not care about the physical distance in hospital. Actually, physical conditions are not very appropriate. For example, there can be long queues in front of the room where blood specimens are collected. That is to say, I felt quite worried in hospital. (60 years old, breast cancer)

4.2.1.2. Social isolation. Some women noted that social isolation-related precautions taken during the pandemic had a negative impact on recovery from cancer.

If there weren't the COVID-19 pandemic, we could get over cancer. Because as long as we are in lockdown, we think about cancer and COVID-19. Things that shouldn't occur or are impossible to appear come to our mind. If there weren't COVID-19, I would go out and look around the stores and markets ... The lockdown made the treatment process more difficult. Since I couldn't go out and meet my friends, it became more difficult to get over cancer. (32 years old, cervix cancer)

4.2.1.3. Physical difficulties. Some women reported that they continuously took precautions like cleaning the house, so resultant increases in housework caused physical difficulties.

I experienced a transition from normal daily life routines to a lifestyle requiring extreme caution for hygiene. Naturally, it is exhausting. (44 years old, breast cancer)

One woman reported that since she could not have sufficient physical activity due to social restrictions, she became more unfit and experienced muscle atrophy.

Inability to go for a walk or do sports caused something ... I was physically active for years, but I feel as if I'm becoming unfit and something has happened to my muscles. I feel guilty since I can't do sports. (40 years old, breast cancer)

4.2.1.4. Financial difficulties. Most of the women reported having financial problems since many businesses went bankrupt and they were unemployed during the pandemic.

Table 1
Themes and categories.

Themes	Categories
Problems	Living with anxiety and fear
	Social isolation
	Physical difficulties
	Financial difficulties
Protection	Decreased stigmatization
	Increased preventive measures
	Increased communication between family members
Coping	Keeping distance
	Religious practices
	Positive thinking
	Hobbies
	Social support

My husband closed up his shop. My doctors have always warned me not to use mass transportation. They have advised me to travel to hospital by car. I've had to take a taxi. It costs about 100 Turkish liras. That's why we have had financial difficulty. (37 years old, breast cancer)

4.2.2. Protection

The participants reported that some situations created by the pandemic positively affected and protected them. The theme protection was grouped into four categories: decreased stigmatization, increased preventive measures, increased communication between family members and keeping distance.

4.2.2.1. Decreased stigmatization. Some women commented that since everyone is wearing a mask due to the COVID-19 pandemic, they have got rid of staring eyes of others and that since no one can understand they are cancer patients, they are happy.

I've tried my best to keep my illness secret. Now, everybody is wearing a mask just like me. If the pandemic didn't appear, only we (cancer patients) would have to wear a mask. Everybody looks similar; wearing a mask has had a positive influence on me ... Nobody has been able to understand I'm a cancer patient. (22 years old, ovarian cancer)

Before the pandemic when other people weren't wearing a mask, everybody was staring at me ... Since the pandemic started, I've been able to receive treatment for my illness without being recognized ... I can say that this has been advantageous for my psychology. (44 years old, breast cancer)

4.2.2.2. Increased preventive measures. Most of the participants reported that if they were receiving treatment for cancer at a time other than the pandemic, they might feel more worried about contracting infections (infections other than COVID-19). In Turkish culture, people commonly visit their ill neighbors and relatives at their homes to say get well soon. Since everyone is on the alert during the pandemic, they are already paying more attention to the hygiene rules and keeping their distance. In addition, the decrease in home visits, the increase in social isolation and other protection measures might have reduced the concerns of the women about contracting the infection.

Extreme attention to hygiene shown by everybody actually made my life easier psychologically. I haven't had to warn people around me about hygiene or ask them to keep the distance." (44 years old, breast cancer)

It has been quite easier for me to receive treatment for cancer during the COVID-19 pandemic ... If the pandemic hadn't appeared, my friends could have more frequently visited me. My friends and relatives hearing about my illness could have wanted to see me or visited me to express their good wishes or asked me whether I needed anything. However, the pandemic prevented these visits, which was advantageous for me. (48 years old, breast cancer)

One woman admitted that prevention of people from socializing and their obligation to stay home have made her happy.

Seeing the photographs of my friends going sightseeing or having fun on social media could have made me unhappy, but all people have had to stay home since the outbreak of the pandemic, so no one can go out or have fun. It sounds egoistic, but it has made me happy. (47 years old, breast cancer)

4.2.2.3. Increased communication between family members. One woman commented that spending time at home due to social isolation during

the COVID-19 pandemic increased communication between members of her family and allowed her to get to know her father better.

When my father had a shop, he used to leave home earlier in the morning and come back late in the evening. Due to the COVID-19 pandemic, he didn't go to work, so I spent a lot of time with him and got to know him. (21 years old, ovarian cancer)

4.2.2.4. Keeping distance. A few participants reported that the pandemic conditions allowed them to distance themselves from people they did not want to meet, and they were positively affected by it.

Our relationships with others were unnecessarily intimate before the pandemic: now we have put a certain distance, which is very good since it has decreased our unnecessary interactions. (21 years old, over cancer)

4.2.3. Coping

Coping was grouped into four categories: religious practices, social support, positive thinking and hobbies.

4.2.3.1. Religious practices. All the women utilized religious practices for coping.

During an invocation, one can repeat the names of God a certain number of times ... It is similar to yoga or meditation. I did it as part of my religious practices ... but it rehabilitates my spirit. (21 years old, ovarian cancer)

I tend to pray and read the Qur'an more nowadays. There is nothing to turn to any more except praying. (32 years old, cervical cancer)

4.2.3.2. Social support. Most of the women emphasized the role of social support in coping, especially support from family members.

My only coping strategy is to think about my two children. I was worried that something bad might happen to them, but my worries and fear have disappeared as I have seen that they are happy and with me. They are the only ones I depend on." (37 years old, breast cancer)

My husband, family, parents, friends and people around me have always supported me, but my child is the most important reason why I pull through." (34 years old, cervical cancer)

4.2.3.3. Positive thinking. Most of the women used positive thinking to cope.

I prefer to talk to myself. I say I will definitely get better and overcome cancer, which will go away like a visitor, and I will return to my normal life and continue doing sports. I also think life will not go on like this. I feel motivated then. (40 years old, breast cancer)

4.2.3.4. Hobbies. Some women utilized the activities they like to cope including reading, going for a walk and cooking.

I walk on the balcony. I spend time doing things at home. I cook meals and bake a cake or a pie. I try keeping myself busy ... (40 years old, breast cancer)

I read a book and watch TV in order not to focus on my illness. I'm at home and actually there is nothing else to do. (60 years old, breast cancer)

5. Discussion

In this qualitative study about experiences and coping strategies of women receiving treatment for breast and gynecological cancers during the COVID-19 pandemic, three main themes appeared: problems, protection and coping.

Cancer patients have experienced not only stress primarily caused by the diagnosis of cancer but also increased worries due to the fear of contracting the COVID-19 infection and negative feelings like uncertainties about the pandemic (Peteet, 2020). In the present study, the women, receiving treatment for breast cancer, were found to experience intense worries about catching COVID-19 and fears about withdrawal of their treatment and death of themselves, their relatives and their doctors. Besides, they had many psychosocial problems like sleeplessness, hygiene-related obsessions, conflicts with members of their families and loneliness due to their fear of contracting COVID-19. Consistent with this finding, Hyland and Jim showed that cancer patients felt worried, afraid and disappointed due to COVID-19 (Hyland and Jim, 2020). In a qualitative study with patients with breast cancer, Savard et al. revealed that the patients had increased psychological distress and worries about contracting COVID-19 (Savard et al., 2021). Hintermayer et al. found that cancer patients were worried about inaccessibility of treatment, diagnostic tests and/or follow-up care (Hintermayer et al., 2020). Colomer-Lahiguera et al. also reported that patients were worried about delays in their treatment and afraid of dying or death of their family and friends during the pandemic (Colomer-Lahiguera, 2021). It can be useful to take precautions in oncology units of hospital against the pandemic and to increase the number of units providing cancer patients with psychological support in order to decrease the patients' worries. Cognitive behavioral therapies and awareness-raising interventions can also be recommended to alleviate anxiety in cancer patients (Peteet, 2020).

In the current study, violation of the rules about precautions against COVID-19 and irresponsible acts of people were found to increase worries of the women. Compatible with this finding, Moran et al. found in their qualitative study that women with gynecological cancers receiving chemotherapy felt stressed out when they met people refusing to wear a mask or keep the physical distance during the COVID-19 pandemic (Moran et al., 2020). In the study of Hintermayer et al. the patients felt disappointed since people did not take precautions like social distancing seriously and risked other people's lives (Hintermayer, 2020). In the present study, some women also felt worried about being infected with COVID-19. Similarly, Savard et al. reported that patients with breast cancer considered the risk of contracting COVID-19 at hospital higher (Savard et al., 2021).

Interruptions of routine activities and of meaningful experiences due to COVID-19 can be especially devastating for individuals already having a life-limiting condition (Hyland and Jim, 2020). Unlike evidence in the literature, the women included in the present study explained that social isolation due to COVID-19 caused them to continuously think about their illness and COVID-19, which had a negative effect on their recovery from cancer.

In the current study, one woman doing sports regularly commented that she felt physically unwell since she could not maintain her physical activity during the pandemic. Hintermayer et al. found that cancer patients were worried since social isolation caused delays in their activities which helped them to cope with cancer (Hintermayer, 2020). The patients also noted that they could not take advantage of their free time because of prohibition of social gatherings and travels. Savard et al. also found out that social isolation led to psychological distress during cancer treatment (Savard et al., 2021).

In the present study, most of the women were found to have financial problems due to closure of many businesses and unemployment during the COVID-19 pandemic. Congruent with this finding, Colomer-Lahiguera et al. demonstrated that COVID-19 had negative financial outcomes due to the loss of jobs in cancer patients (Colomer-Lahiguera

et al., 2021).

Stigmatization leads individuals to feel inadequate and less respected and to experience a loss of social status and discrimination (Yıldız and Dedeli Çaydam, 2020; Link and Phelan, 2001). What underlies stigmatization of cancer patients is cultural beliefs, prejudices, association of cancer with death and negative attitudes such as perceiving cancer as contagious (Yıldız and Dedeli Çaydam, 2020; Öcel, 2017). Conflicting with the literature, the present study showed that the women receiving treatment for cancer during the pandemic did not experience stigmatization since everyone in the society had to wear a mask. There have not been any studies providing evidence about prevention of stigmatization thanks to wearing a mask. Stigmatization of cancer patients damages their social identity and has a negative impact on their social and psychological wellbeing (Yıldız and Dedeli Çaydam, 2020; Öcel, 2017). Patients experiencing internalized stigmatization can have the negative feelings of low self-esteem, embarrassment, social isolation, fear and social rejection (Öcel 2017; Ernst et al., 2017). Negative perceptions in the society must be changed to minimize stigmatization of cancer patients. It is thought that the society was sufficiently informed about the purpose of wearing a mask and that prejudices and stigmatization about individuals wearing a mask decreased to some extent after the outbreak of COVID-19.

In the present study, increased care with hygiene, decreased visits, spending more time with family at home and social isolation and other preventive measures during the pandemic were found to have a positive effect on the women receiving treatment for cancer. Likewise, in a qualitative study by Moran et al. one participant reported that she felt lucky since her illness coincided with the pandemic (Moran et al., 2020). The participant explained that she did not miss anything and had the comfort of working from home since everybody was exposed to the same restrictions. Lombe et al. also revealed themes about positive changes after the COVID-19 pandemic like using digital communication during care for cancer patients, improved human relations and good hygiene practices (Lombe et al., 2021). The women included in the present study also mentioned that social isolation and prevention of visits due to the pandemic had a positive effect. According to Islamic culture, it is important to visit ill people at their home. It is recommended by Islamic culture that Muslims should show interest in people around them both on their good and bad days regardless of their religion and nationality and that ill people should not lead a life isolated from the society (Çolak, 2011). Besides, visiting ill people is considered as a worship and expressing best wishes for a speedy recovery and having ill people feel pleased are of great importance in Muslim societies (Çolak, 2011). However, prohibition of visits due to the pandemic was found to be favorable by the women in the present study since it allowed them to protect themselves against infections.

All the women included in the study were found to cope with the problems they experienced during the pandemic through religious practices, social support mainly from family members, positive thinking and hobbies. Cancer patients have been reported to put emphasis on religious sources to cope with existential worries resulting from the pandemic (Peteet, 2020). Moran et al. found in their qualitative study that patients with gynecological cancers developed creative coping strategies like visiting the church online, going for a walk instead of going to the gym and meeting friends by keeping the physical distance (Moran et al., 2020). In the study of Hintermayer et al. cancer patients were found to use similar strategies such as acknowledging the importance of the family and the society, developing personal coping strategies, feeling relieved thanks to their religious beliefs and talking about the things felt grateful for (Hintermayer et al., 2020). Colomer-Lahiguera et al. reported that cancer patients were resistant and adopted positive coping strategies they learned from their experiences with cancer (Colomer-Lahiguera et al., 2021). Savard et al. showed that the women utilized coping strategies like following precautions against COVID-19 (wearing a mask in enclosed public places), receiving support from a professional, avoidance of talking about

COVID-19 and giving up watching news programs (Savard et al., 2021). It is important that professional support strengthens coping with stressful conditions due to the diagnosis and treatment of cancer.

5.1. Limitations

This research is a qualitative study and obtained findings cannot be generalized to the whole society. Every country's strategy to deal with the pandemic is different, which affects what women with cancer experience during their disease.

6. Conclusions

Health professionals offering oncological care can play a role in the evaluation of psychosocial difficulties and access to psychosocial care services. The results of this study can guide nurses in provision of high-quality nursing care and counseling for women treated for breast and gynecological cancers during the pandemic. Distance counseling and education through telemedicine and digital and online tools during the pandemic can decrease the risk for cancer patients. Cognitive, behavioral therapies and awareness raising interventions could be used to reduce psychosocial problems and eliminate misbeliefs of the patients about their care. It is necessary to change negative opinions and perceptions of the society to decrease stigmatization of cancer patients. It is crucial to offer professional nursing support to strengthen coping with stressful situations caused by the diagnosis and treatment of cancer. Further studies in different cultures are needed to understand whether cultural factors change experiences and coping skills of cancer patients.

CRedit authorship contribution statement

Sinem Göral Türkcü: Study design, Data curation, Data Collection, Formal analysis, Data Analysis, Manuscript Writing. **Elif Uludağ:** Study design, Manuscript Writing, Writing – review & editing. **Pınar Serçekuş:** Study design, Formal analysis, Data Analysis, Manuscript Writing. **Sevgi Özkan:** Manuscript Writing, Writing – review & editing. **Arzu Yaren:** Manuscript Writing, Writing – review & editing.

Declaration of competing interest

The authors report no conflicts of interest.

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