ANATOLIAN JOURNAL OF
HEALTH RESEARCH

Original Article

2024; 5(1): 42-48
http://dx.doi.org/10.61534/anatoljhr.1394597

Experiences of women with breast cancer receiving chemotherapy: A qualitative study

Kemoterapi alan meme kanserli kadınların deneyimleri: Niteliksel bir çalışma

Gül Dural[1]

[1]Fırat University, Faculty of Health Science, Internal Medicine Nursing Department, Elazığ, Türkiye

ABSTRACT

***Aim*:** This study was conducted to determine the experiences of women with breast cancer who were receiving chemotherapy.
Methods: The study was conducted with 15 women with breast cancer who were receiving chemotheraphy treatment in eastern Türkiye between December 2022 and April 2023, by using a qualitative descriptive design. Two forms were created by the researcher according to the purpose of the research and the population. The first form contains information of the participants, and the second form includes semi-structured interview questions. Inductive thematic analysis was used to evaluate the data. Ethics committee approval was obtained.
Results*:* Mean age of the women in the study was 47.26 ± 10.21. It was found that 53% of the women were university graduates, 93% were married, 67% were unemployed, 73% had average level of income, 66% had no comorbid chronic disease and 53% had stage two cancer. As a result of the thematic analysis, five themes and sixteen sub-themes were determined: The themes were; (1) Receiving the first diagnosis (2) Emotional experiences, (3) Changes in life, (4) Symptom management, (5) Sources of information during treatment.
Conclusion: It was found that receiving chemotherapy treatment created many problems, especially physical and emotional, in women with breast cancer. However, the women continued their treatment without giving up. The steps to be taken to define and understand these problems well will play an active role in women's coping with the disease effectively.

Keywords*:* breast cancer; chemotherapy; experience

ÖZ

Amaç: Bu çalışma kemoterapi alan meme kanserli kadınların deneyimlerini belirlemek amacıyla yapıldı.
Yöntem: Araştırma, Aralık 2022 ile Nisan 2023 tarihleri arasında Türkiye'nin doğusunda kemoterapi tedavisi gören 15 meme kanserli kadın ile niteliksel tanımlayıcı tasarım kullanılarak gerçekleştirildi. Araştırmanın amacına ve evrene göre araştırmacı tarafından iki form oluşturulmuştur. Birinci form katılımcılara ait bilgileri, ikinci form ise yarı yapılandırılmış görüşme sorularını içermektedir. Verilerin değerlendirilmesinde tümevarımsal tematik analiz kullanılmıştır. Etik kurul onayı alındı.
Bulgular: Araştırmaya katılan kadınların yaş ortalaması 47.26±10.21 idi. Kadınların %53'ünün üniversite mezunu, %93'ünün evli, %67'sinin işsiz olduğu, %73'ünün ortalama gelir düzeyinde olduğu, %66'sının ek kronik hastalığı bulunmadığı ve %53'ünün ikinci evre kanser hastası olduğu belirlendi. Tematik analiz sonucunda beş tema ve on altı alt tema belirlendi: Temalar; (1) İlk tanının alınması, (2) Duygusal deneyimler, (3) Yaşamdaki değişiklikler, (4) Semptom yönetimi, (5) Tedavi sırasındaki bilgi kaynakları.
Sonuçlar: Kemoterapi tedavisi almanın meme kanserli kadınlarda başta fiziksel ve duygusal olmak üzere birçok sorun yarattığı belirlendi. Ancak kadınlar pes etmeden tedavilerine devam etti. Bu sorunların iyi tanımlanması ve anlaşılması için atılacak adımlar, kadınların hastalıkla etkili bir şekilde baş etmesinde etkin rol oynayacaktır.

Anahtar kelimeler*:* deneyim; kemoterapi; meme kanseri

Introduction

Breast cancer is the most common cancer with a gradually increasing incidence globally and 2.3 million new cases in 2020 (WHO, 2020a). In Türkiye, breast cancer (23.9%) is the most common type of cancer in women (WHO, 2020b). Advancing age, negative lifestyle changes, genetic, hormonal and environmental factors have been found to be associated with breast cancer (Dsouza et al., 2018).

Thanks to advances in medicine and technology, the survival time has increased, while the visibility of problems related to diagnosis and treatment has also increased in patients with breast cancer. Being diagnosed with breast cancer affects much more than physical health for patients. Each patient experiences this process differently (Eti Aslan & Özdemir Aslan, 2019). Patients experience a cumulative burden of symptoms, dysfunction, and other concerns inherent in a slowly progressing, life-limiting, and life-threatening illness (Shamieh et al., 2022). 80% of the patients adapt to the new situation after the first diagnosis, and it was observed that 20-30% of the patients could not adapt to living with breast cancer one year after the diagnosis. Patients may experience both cancer-related symptoms and symptoms resulting from the methods used in the treatment (Eti Aslan & Özdemir Aslan, 2019). Chemotherapy is one of the most commonly used treatment methods in the treatment of breast cancer. Chemotherapy has an important place in the treatment of breast cancer and most of the patients experience chemotherapy-related symptoms (Eti Aslan & Özdemir Aslan, 2019; Öztürk & Kutlutürkan, 2021). The medication used in chemotherapy may cause sudden symptoms on patients such as hypotension, flushing on the face and body; short-term symptoms such as nausea, vomiting, stomatitis; and long-term symptoms such as fatigue, hair loss and sexual dysfunction (Nies et al., 2018). These symptoms may adversely affect functional capacities, roles and functions, activities of daily living, disease processes and treatment prognosis of patients (Kurt & Kapucu, 2018). The issue of how

Corresponding Author: Gül Dural, Fırat University, Faculty of Health Science, Internal Medicine Nursing Department, Elazığ, Türkiye.
Phone: +90 424 607 4573 E-mail: gulkaya2224@gmail.com
Received: 22.11.2023, Accepted: 28.03.2024
ORCID: Gül Dural: 0000-0002-8541-0150

and in what ways breast cancer patients manage the disease process is very important (Koçak et al., 2022). because even though mortality rates are lower in women with breast cancer than in other cancer patients, long-term survival may cause uncertainty and symptom burden caused by the side effects of treatment (Whisenant et al., 2021). Most of the studies conducted have focused on patients' symptom burden, interventional studies performed while providing symptom control, and patients' quality of life, body image, and some psychological reactions (Ecclestone et al., 2016; Graetz et al., 2018; Nies et al., 2018; Shamieh et al., 2022; Sikorskii et al., 2020; Suchodolska & Senkus, 2022; Whisenant et al., 2021; Zimmaro et al., 2022).

In addition to quantitative studies, qualitative studies are used to investigate how patients with breast cancer perceive the chemotherapy process, how they manage their emotions and the symptoms they experience during this process. This type of research allows nurses and other health professionals to understand patients' experiences better (Nies et al., 2018). Cancer causes patients to undergo a difficult and complex experience, both physically and mentally. It is important to understand what difficulties women with breast cancer who receive chemotherapy experience and to apply appropriate nursing interventions to these patients (Göral Türkcü et al., 2021). In the literature review conducted, very few studies were found on the experiences and symptom control of patients with breast cancer while receiving chemotherapy. It is thought that the results of the present study will contribute scientifically to nurses who care for patients with breast cancer who are receiving chemotherapy and to the literature in the field of nursing. The aim of this study is to research the experiences and symptom control of women with breast cancer who are receiving chemotherapy.

Methods

Study design

A qualitative descriptive design was used in this study to explore the experiences and symptom control of women with breast cancer who were receiving chemotherapy. Standards for Reporting Qualitative Research (SRQR) was used in reporting this study (O'Brien et al., 2014).

Setting and participants

This study was conducted in Türkiye. The sample consisted of women with breast cancer who received chemotherapy treatment and who volunteered to participate in the study. Purposeful sampling method was used by researcher in this study. In purposeful sampling, qualitative researchers choose the conditions that can teach them the most about the purpose of the study. In this study, inclusion criteria for purposeful sampling was determined as knowing the patient's diagnosis, being in the chemotherapy treatment process, being older than 18 years of age. Exclusion criteria were having communication problems and being treated for psychiatric illness. Interviews continued until data saturation was reached. Saturation criterion for stopping the interviews was determined as the absence of new themes after three consecutive meetings (Saldaña, 2020). In this study, data saturation was achieved with 15 participants.

Data collection

Data were collected through structured in-depth interviews from December 2022 to April 2023. Two forms were created by the researcher according to the purpose of the research and the population. The first form includes socio-demographic questions such as age, educational status, marital status. In the second form, data were collected from women with semi-structured interview questions. The second form included six open-ended questions designed to understand better the nature of symptom control and the experiences of women with breast cancer receiving chemotherapy. Preliminary interviews were conducted to understand whether semi-structured questions were sufficient to examine the subject. At the end of these procedures, anything that was not understood in the interview form was edited. Data obtained from the preliminary study were not reused. At the next stage, nurses were informed about the research and face to face interviews were held with those who agreed to participate in the research. All interviews were recorded by the researcher after obtaining permission from the patients. The interviews lasted between 25 and 30 minutes.

Trustworthiness

Standards for Reporting Qualitative Research (SRQR) was used in reporting this study (O'Brien et al., 2014). The researcher spent a great deal of time collecting, understanding and analysing the data. The researcher holds a PhD, has attended courses and has been trained in qualitative research. All interviews for the research data were conducted by the researcher. Then, he asked for the interview records from the faculty member at the Department of Nursing, who had a doctorate degree and was knowledgeable in qualitative research designs. Although transferability is limited in qualitative research, the authors sought to describe the method part of the study in detail, including the selection of participants, data collection, and data analysis to enable readers to evaluate the application of the data in other research (Guba, 1981).

Data analysis

Inductive thematic analysis described by Braun and Clarke was used to find the repetitive patterns of meaning in the data set and to describe them in a rich way. Data collection and data analysis were carried out simultaneously. Before analysis, personal describers were removed from the interview transcripts and the participants were given codes (N1,N2,N3, etc.). A six-stage, step-by-step process procedure was undertaken for thematic analysis. All interviews were read repeatedly by the researcher. Then, codes were created using the line-by-line coding method (Stage 2). After the codes were formed, themes were created using the inductive method (Stage 3). The resulting codes and themes were compared with the continuous data (Steps 4 and 5). In the final stage (Stage 6), the obtained qualitative data were reported (Braun & Clarke, 2006). Themes were not predetermined; they were derived from the data obtained.

Ethical approval

Ethical approval was obtained from the Fırat University Non-Interventional Research Ethics Committee of the (date: 04.11.2021, number: 2021/11-23). Participants were informed about the purpose of the study, and their verbal and written consent was obtained. This study was conducted in accordance with the ethical standards of the Declaration of Helsinki. Participation in the study was voluntary and all personal information of the patients was kept confidential.

Results

Participants' demographic and medical characteristics

Fifteen women with breast cancer who received chemotherapy participated in the study.

Tablo 1. Demographic information of participants

P	Age	Education status	Marital status	Working status	Income status	Presence of chronic disease	Stage of cancer
N1	30	University	Married	W	Average	N	2
N2	61	Primary school	Married	NW	Average	Y	3
N3	58	Primary school	Married	NW	Average	Y	3
N4	52	High school	Married	W	High	N	4
N5	52	High school	Married	NW	Average	Y	2
N6	32	University	Married	W	Average	N	2
N7	47	Primary school	Single	NW	Average	Y	2
N8	32	University	Married	NW	Average	N	2
N9	32	University	Married	W	Average	N	2
N10	61	Primary school	Married	NW	Average	Y	4
N11	51	University	Married	NW	High	N	4
N12	60	University	Married	NW	High	N	2
N13	26	University	Married	W	Average	N	2
N14	61	University	Married	NW	High	N	3
N15	54	High school	Married	NW	Average	N	4

Note: P = Participants; NW = not working; W = working; Y: Yes, N: No.

The mean age of the 15 women included in the study was 47.26 ± 10.21. It was found that 53% of the women were university graduates, 93% were married, 67% were unemployed, 73% had average level of income, 66% had no additional chronic disease and 53% had stage 2 cancer.

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

Five main themes emerged from the data obtained: Receiving the first diagnosis, emotional experiences, changes in life, symptom management, and sources of information during the treatment (Table 2).

Tablo 2. Themes and subthemes

Themes	Subthemes
Receiving the first diagnosis	Breast self-examination
	A general medical check-up
Emotional experiences	Crying
	Fear
	Regret
	Anxiety
	Rejection
Changes in life	Symptoms
	Social isolation
	Body image
	Economic burden
Symptom management	Strict adherence to treatment
	Resting
Sources of information during the treatment	Health personnel
	Internet
	Social environment

Theme 1: Receiving the first diagnosis

In this theme, the experiences of women who received chemotherapy when they were diagnosed with cancer were determined. The sub-themes of this section are breast self-examination and a general medical check-up.

Subtheme 1: Breast self-examination

In this sub-theme, women stated that they referred to a health institution after suspecting the mass they palpated after breast self-examination at home every month.

‘’I was married for two years and wanted to have children. I noticed a mass in my breast as a result of my breast self-exam. In the hospital, I learned that I had breast cancer.” (N13)

“One day, when I was doing a breast self-exam after a shower, I noticed a mass in my breast. I told my husband and we went to the hospital the next morning. I learned that I had breast cancer.” (N4)

Subtheme 2: A general medical check-up

In this sub-theme, women generally stated that they were diagnosed when they went to a medical examination after the doctor was suspicious and examined. Some women stated that when people around them were diagnosed with breast cancer recently, they were worried about this situation and went to a medical check-up and they were diagnosed.

“A very close friend of mine was diagnosed with breast cancer. When I went to bed that day, I had a mass in my hand. I thought it might be normal, but I was scared at the same time. 10 days later, I went to the hospital and found out that I had breast cancer.” (N1)

“When my aunt was diagnosed with breast cancer, I wanted to go for a check-up. My breast had an orange appearance. My biopsy result was malignant.” (N8)

“I can say that I found out that I had breast cancer by accident. I was feeling sluggish and went to the hospital. They suspected of cancer and my biopsy result was malignant.” (N9)

Theme 2: Emotional experiences

In this theme, the emotional experiences of women who received chemotherapy were determined. The sub-themes of this section are crying, fear, regret, rejection and hope.

Subtheme 1: Crying

In this sub-theme, the women stated that they cried when they first received the diagnosis and learned that they needed chemotherapy treatment.

“I have a 10-year-old son. When I first found out, he said, "Mom, will this disease kill you?" We cried all day with my son. After the second cure, my hair started to fall out, which made me cry a lot. In short, it’s a terrible feeling." (N1)

Subtheme 2: Fear

In this sub-theme, the women stated that they were always very afraid of cancer and that’s why they felt so much fear when they were diagnosed. Some women also stated that they were afraid for their families when they thought about how they would live without them. However, one of the women stated that she had no fear and even went to the chemotherapy treatment with a smile.

“I was scared because we’ve always heard bad things about cancer”. (N2)

“You are afraid, most of all, of dying. My husband and I have been married for 31 years and I am most afraid of leaving him alone. He is very sad; I do not want him to be sad”. (N5)

“I was very scared at first. But as soon as I recovered and searched for treatment, I convinced myself that I needed to recover immediately.” N(14)

“Receiving a cancer diagnosis didn't scare me that much. Even on the way to chemotherapy, I went laughing.” (N4)

Subtheme 3: Regret

In this sub-theme, the women stated that they regretted not living their lives more fully and healthily. Some of the women stated that they regretted not going to the health institution sooner when they were suspicious.

“I wish I had gone to the hospital earlier; I had not waited so long. I have regrets.” (N3)

“I wish I had gone to the hospital earlier, maybe I would have found out sooner. It is very difficult to be diagnosed with cancer.” (N10)

Subtheme 4: Rejection

In this sub-theme, the women stated that they could not accept the cancer diagnosis and chemotherapy treatment for a long time.

“*When I was first diagnosed, I couldn't accept it. I have never been married, I attributed the reason to this a little bit. It is said that single women are more likely to get breast cancer.” (N7)*

“At first I could not accept it; it was very difficult. But when the treatment gave positive results, I believed it.” (N15)

Subtheme 5: Hope

In this sub-theme, the women stated that it was very difficult to receive chemotherapy treatment, but they had high hopes for recovery and they sincerely believed it.

“I am really sad. I wanted to have children, but I found out that I have cancer. But now that everything is going well, I am hopeful.” (N13)

“I have children and I am worried about them. But I believe I will get through it and I am hopeful.” (N6)

Theme 3: Changes in life

In this theme, the experiences of women who were receiving chemotherapy related to the changes in their lives while receiving chemotherapy treatment were determined. The sub-themes of this theme are symptoms, social isolation, body image and economic burden.

Subtheme 1: Symptoms

In this sub-theme, the women stated that they experienced too many symptoms related to chemotherapy. The women stated that they mostly experienced symptoms of pain, nausea, weight loss, hair loss and fatigue. They stated that they had difficulties in maintaining their daily activities because of these symptoms.

“They said I would get six courses of treatment. After the second course, my hair fell out. I experienced nausea, vomiting, bone pain and weakness. Of course, when my breast was removed, I fell into an incredible void.” (N1)

“I had a lot of bone pain when I had metastasis later on. When hair loss, nausea and vomiting were added, my life became unbearable.” N(13)

Subtheme 2: Social isolation

In this sub-theme, the women stated that their social life either decreased or ended completely. In addition, some women stated that they felt very lonely during this process and that they gradually became lonelier.

“I was in the hospital during that period. My social life decreased, I had my hair shaved, I lost weight, I ate less. Sometimes I couldn't even drink water.” (N2)

“I had difficulty going through this process. My social life is over, but it doesn’t matter. I had my hair shaved, I lost a lot of weight”. (N5)

“I had my hair shaved, avoided going into crowded places against the risk of infection. I became even more lonely.” (N7)

Subtheme 3: Body image

In this sub-theme, the women stated that having their breasts removed as a result of surgical treatment affected their body image negatively and they were highly affected by this situation. Some women also stated that symptoms such as hair loss and weight loss due to treatment affected their body image negatively.

“They said I would get six courses of treatment. After the second course, my hair fell out. I experienced nausea, vomiting, bone pain and weakness. Of course, when my breast was removed, I fell into an incredible void.” (N1)

Subtheme 4: Economic burden

In this sub-theme, the women stated that they had to quit their jobs during chemotherapy treatment, which created an economic burden.

“My work life is completely over. My social life has been reset.” (N11)

“I quit my job when I had weakness, nausea and vomiting. Of course, it is economically challenging.” (N12)

Theme 4: Symptom management

In this theme, the experiences of women who were receiving chemotherapy regarding symptom management were determined. The sub-themes of this section are strict adherence to treatment and resting.

Subtheme 1: Strict adherence to treatment

In this sub-theme, the women stated that they fully adhered to their treatment in order to cope with the symptoms they experienced (N8,N6,N11,N14,N15). They stated that they did not miss their pharmacological treatments and that they regulated their daily activities such as nutrition as required by their treatment.

“I managed my symptoms with the medications and diet prescribed by my doctor”. (N8)

“I use my medication regularly”. (N6)

Subtheme 2: Resting

In this sub-theme, the women stated that they mostly rested to cope with their symptoms.

“I rest a lot. I restrict my visits.” (N15)

“I rest. I use my medication”. (N14)

“I rest. I spend time with my children.” (N11)

Theme 5: Sources of information during the treatment

In this theme, it was determined from which sources the women who received chemotherapy received information during the treatment. The sub-themes of this section are health professional, internet and social environment.

Subtheme 1: Health professional

In this sub-theme, the women stated that they mostly received information about their diseases and treatments from health personnel (doctor-nurse).

“The nurses and doctors at the hospital gave the necessary information. I have also benefited from the experiences of other people with cancer.” (N3)

“I got information from the health personnel in the hospital and from my environment”. (N2)

Subtheme 2: Internet

In this sub-theme, the women stated that they frequently consulted the internet to get information about chemotherapy.

"I get information from health personnel and the internet". (N1)

"I get information from health personnel and the internet". (N15)

Subtheme 3: Social environment

In this sub-theme, the women stated that they consulted their social environment especially in coping with the symptoms they experienced while receiving information about chemotherapy. Some women stated that they consulted women who had a similar diagnosis with them.

"I got information from the health personnel in the hospital and from my environment". (N2)

"I get information from health personnel and my environment". (N13)

Discussion

The results of this study, which was conducted to examine the experiences of women who were receiving chemotherapy treatment, were discussed in the light of the literature.

The present study showed how women who received chemotherapy treatment were diagnosed with cancer. Some of the participants stated that they referred to a health institution as a result of the mass they noticed during breast self-examination, while others stated that they were diagnosed with breast cancer as a result of the tests carried out by the doctor. Methods such as breast self-examination, clinical breast examination and mammography are the methods used when diagnosing breast cancer. Breast self-examination is an easy, inexpensive, effective and important method for early diagnosis. It is known that women who do not use this method may be diagnosed with delay (Rahman et al., 2019). In a study by Dsouza et al. (2018), it was stated that women with breast cancer do not have knowledge about early diagnosis and therefore they are diagnosed late. In a systematic review study conducted by Smit et al. (2019), it was stated that some of the women palpated a mass, but did not go to the doctor immediately. It was also stated that some women went to the doctor as soon as they noticed the mass, but felt a high level of fear and anxiety until the diagnosis was finalized. The results of the study mostly show similarities with the literature. It can be said that being diagnosed with breast cancer is a very difficult experience for women, and performing breast self-exams during this process can eliminate delays in diagnosis. This study showed the emotional experiences of women who were receiving chemotherapy treatment. The participants stated that they had emotional experiences of crying, fear, regret, anxiety, rejection, and hope. The diagnosis of breast cancer is a surprise for every woman, regardless of age and social status. They may feel hopeless, embarrassed, and discouraged by what they have heard before about breast cancer and they may cry (Iddrisu et al., 2020). In a study by Dsouza et al. (2018), it was found that women experienced fear because cancer is a deadly disease that may recur. In a study, it was found that women had very different emotional experiences. For example, some women stated that their brains almost stopped working and they were in shock, some women stated that they were very afraid and this left a traumatic effect on them. One of the women stated that she was not sure she could ever experience chemotherapy again, and it was a very, very painful experience (Smit et al., 2019). In a study by Iddrisu et al. (2020), it was found that some of the women with breast cancer could not accept the diagnosis and directed their anger towards the healthcare professionals, almost all of the women cried, felt depressed and experienced emotional instability while being diagnosed. Results of the studies conducted and the results of the present study show similarity. In the context of these results, it can be said that breast cancer can be a disease that can have devastating effects for women from all walks of life, and that women can do anything to get themselves together after a little sadness, while at the same time they can also give up everything and become depressed.

According to the results of this study, it was found that women with breast cancer who received chemotherapy experienced changes in their lives due to the symptoms they experienced, social isolation, changes in body images and economic burden. Despite improved prognosis and modern advances in treatment, living with breast cancer has significant impacts on women's lives (Smit et al., 2019). Women with breast cancer both have a chronic, life-limiting disease and they also have to experience a lot of symptoms related to their treatment (Shamieh et al., 2022). The presence of many symptoms all at the same time in patients affects the patients negatively and causes delays in the treatment processes (Kurt & Kapucu, 2018). In their study, Ertin and Kurt (2022) found that patients with cancer experienced nausea and psychological symptoms the most, and as the severity of these symptoms increased, their quality of life decreased. In the study of Dsouza et al. (2018), it was found that women were concerned about hair loss and body image related to mastectomy. In the same study, it was stated that these situations also caused social restriction. Body image is defined as women's perceptions and feelings about their bodies, as well as their self-observation, social interactions, and beliefs. A disorder in body image negatively affects the psychosocial life of women and causes changes in their lives (Peerawong et al., 2019). In the study by Iddrisu et al. (2020), it was observed that women with breast cancer became incapacitated because they experienced physical weakness while receiving chemotherapy. At the same time, some of the women stated that they did not look attractive and their body image deteriorated due to mastectomy, breast prosthesis and using wigs because of hair loss. In the study of Dsouza et al. (2018), it was found that women had difficulties in terms of the costs of treatment and needed financial support. In a study by Chiaranai et al. (2022), it was found that women had to cope with economic difficulties. In the results of other studies, it was found that women with breast cancer experienced negative situations in their business life and had economic difficulties (Saeed et al., 2021; Vardaramatou et al., 2021). The results of the present study show similarities with the literature. In this context, it can be said that women with breast cancer who receive chemotherapy experience changes in their lives due to many reasons, especially their treatment. It can be said that these changes have very severe effects and it is very difficult for women to cope with them.

The results of the present study showed that women with breast cancer who received chemotherapy were confident in adhering to the treatment recommended for symptom management and preferred to get plenty of rest. In the study of Chiaranai et al. (2022), it was found that women had difficulty in accepting the diagnosis, but they adapted to the treatment because they wanted to get well. In addition to fully complying with the treatment regimen recommended by the doctors, women also tried alternative treatments (eg, herbal cures), and some of them quit smoking and alcohol and supported their treatment with a diet consisting of healthy organic food. In the study of Gallups et al. (2018), it was found that patients with breast cancer adhered to treatment, while only working status and having a comorbid chronic disease caused non-adherence to treatment. There is a similarity between the study results and the literature results. Based on these results, it can be said that women with breast cancer care about their treatment regimens and try to achieve the highest level of compliance.

Results of the present study showed that women with breast cancer who received chemotherapy preferred to receive information from health personnel, the internet and their social environment during their treatment. In the literature, it is seen that the sources of information for patients with cancer are healthcare professionals, the internet and media organs, and the experiences of other patients. Most cancer patients have insufficient information about the disease and treatments, and the most reliable source of information on this issue is health professionals (Gencer et al., 2021). In the study of Başkale et al. (2015), it was found that patients with cancer first obtained information from the doctor and then from the internet. The results of the present study show similarity with the literature. Looking at these results, it can be said that women with breast cancer trust the health workers the most in getting information about their diseases.

Limitations

This present study is a qualitative study and the findings cannot be generalized to the whole population. However, it can be said that this study conducted with semi-structured questions was able to reflect the experiences of women with breast cancer who received chemotherapy.

Conclusion

As a result of the study, it was shown that patients generally noticed a mass in their breasts after palpation and then referred to a health institution. Patients were found to experience many emotional experiences such as crying, fear and regret both when they were diagnosed and when they started chemotherapy. The patients stated that their lives had changed due to disease-related symptoms they experienced, social restrictions, changes in body image and economic burden. However, despite all these negativities, the patients adhered to their treatment and continued. In this process, they tried to obtain reliable information from the internet and social environment after health workers, especially doctors and nurses. In line with these results, it is recommended that nurses provide training to patients about chemotherapy treatment and its possible side effects before the treatment starts.

Conflict of Interest

I declare that there is no conflict of interest.

Acknowledgements

I thank you all the participants.

Sources of Funding

This research did not receive any specific funding from external agencies.

Ethics Committee Approval

This study was approved by Fırat University Non-invasive Research Ethics Committee (date: 04.11.2021, approval no. 2021/11-23). All patients gave verbal informed consent before participating in the study.

Informed Consent

Written consent was obtained from the participants.

Peer-Review

Externally peer-reviewed.

Author Contributions

G.D.: Conceptualization, Methodology, Formal Analysis and Investigation, Writing - Original Draft Preparation, Writing - Review and Editing.

References

Akgül Başkale, H., Serçekuş, P., & Partlak Günüşen, N. (2015). Investigation of cancer patients' information sources, information needs and expectations of health professionals. *Journal of Psychiatric Nursing*, *6*(2), 65–70. https://doi.org/10.5505/phd.2015.49091

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101.

Chiaranai, C., Chularee, S., & White, J. S. (2022). Lived experience of breast cancer survivors: A phenomenological study. *Journal of Nursing Research*, *30*(6), E247. https://doi.org/10.1097/jnr.0000000000000518

Dsouza, S. M., Vyas, N., Narayanan, P., Parsekar, S. S., Gore, M., & Sharan, K. (2018). A qualitative study on experiences and needs of breast cancer survivors in Karnataka, India. *Clinical Epidemiology and Global Health*, *6*(2), 69–74. https://doi.org/10.1016/j.cegh.2017.08.001

Ecclestone, C., Chow, R., Pulenzas, N., Zhang, L., Leahey, A., Hamer, J., ... & Verma, S. (2016). Quality of life and symptom burden in patients with metastatic breast cancer. *Supportive Care Cancer*, *24*(9), 4035–4043. https://doi.org/10.1007/s00520-016-3217-z

Ertin, B., & Kurt, S. (2022). Evaluation of symptom control and functional quality of life in Turkish patients with cancer during chemotherapy. *European Journal of Oncology Nursing*, *61*(November), 102239. https://doi.org/10.1016/j.ejon.2022.102239

Eti Aslan, F., & Özdemir Aslan, E. (2019). Meme kanserli hastalarda psikososyal sorunlar ve hemşirelik yaklaşımları. *Türkiye Klinikleri*, *5*(1), 51–54.

Gallups, S. F., Connolly, M. C., Bender, C. M., & Rosenzweig, M. Q. (2018). Predictors of adherence and treatment delays among African American women recommended to receive breast cancer chemotherapy. *Women's Health Issues*, *28*(6), 553–558. https://doi.org/10.1016/j.whi.2018.08.001

Gencer, H., Serçekuş, P., & Özkan, Ö. (2021). Information sources of cancer patients. *Gümüşhane University Journal of Health Sciences*, *10*(3), 568–573.

Göral Türkcü, S., Uludağ, E., Serçekuş, P., Özkan, S., & Yaren, A. (2021). Experiences and coping strategies of women receiving treatment for breast and gynecological cancers during the COVID-19 pandemic: A qualitative study. *European Journal of Oncology Nursing*, *54*, 102045. https://doi.org/10.1016/j.ejon.2021.102045

Graetz, I., McKillop, C. N., Stepanski, E., Vidal, G. A., Anderson, J. N., & Schwartzberg, L. S. (2018). Use of a web-based app to improve breast cancer symptom management and adherence for aromatase inhibitors: a randomized controlled feasibility trial. *Journal of Cancer Survivorship*, *12*(4), 431–440. https://doi.org/10.1007/s11764-018-0682-z

Guba, E. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Technology Research and Development*, *29*(2), 75–91.

Iddrisu, M., Aziato, L., & Dedey, F. (2020). Psychological and physical effects of breast cancer diagnosis and treatment on young Ghanaian women: A qualitative study. *BMC Psychiatry*, *20*(1), 1–9. https://doi.org/10.1186/s12888-020-02760-4

Koçak, A. T., Arslan, S., & İlik, Y. (2022). Posttreatment experiences of breast cancer survivors in Turkey: A qualitative study. *Seminars in Oncology Nursing*, *38*(6), 151351. https://doi.org/10.1016/j.soncn.2022.151351

Kurt, B., & Kapucu, S. (2018). The effect of progressive relaxation exercise on chemotherapy symptoms in breast cancer patients : Literature review. *Mersin Üniversitesi Sağlık Bilimleri Dergisi*, *11*(2), 235–249.

Nies, Y. H., Ali, A. M., Abdullah, N., Islahudin, F., & Shah, N. M. (2018). A qualitative study among breast cancer patients on chemotherapy: Experiences and side-effects. *Patient Preference and Adherence*, *12*, 1955–1964. https://doi.org/10.2147/PPA.S168638

O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for reporting qualitative research: A synthesis of recommendations. *Academic Medicine*, *89*(9), 1245–1251. https://doi.org/10.1097/ACM.0000000000000388

Öztürk, E. S., & Kutlutürkan, S. (2021). The effect of the mobile application-based symptom monitoring process on the symptom control and quality of life in breast cancer patients. *Seminars in Oncology Nursing*, *37*(3), 151161. https://doi.org/10.1016/j.soncn.2021.151161

Peerawong, T., Phenwan, T., Mahattanobon, S., Tulathamkij, K., & Pattanasattayavong, U. (2019). Body image transformation after breast cancer diagnosis and treatment in southern Thai women. *SAGE Open Medicine*, *7*. https://doi.org/10.1177/2050312119829985

Rahman, S. A., Al-Marzouki, A., Otim, M., Khayat, N. E. H. K., Yousef, R., & Rahman, P. (2019). Awareness about breast cancer and breast self-examination among female students at the University of Sharjah: A cross-sectional study. *Asian Pacific Journal of Cancer Prevention*, *20*(6), 1901–1908. https://doi.org/10.31557/APJCP.2019.20.6.1901

Saeed, S., Asim, M., & Sohail, M. M. (2021). Fears and barriers: problems in breast cancer diagnosis and treatment in Pakistan. *BMC Women's Health*, *21*(1), 1–10. https://doi.org/10.1186/s12905-021-01293-6

Saldaña, J. (2020). *Qualitative data analysis strategies*. In Patricia Leavy (Ed.), The Oxford handbook of qualitative research (2nd ed., pp. 876–911). Oxford University Press

Shamieh, O., Alarjeh, G., Li, H., Abu Naser, M., Abu Farsakh, F., Abdel-Razeq, R., ... & Guo, P. (2022). Care needs and symptoms burden of breast cancer patients in Jordan: A cross-sectional study. *International Journal of Environmental Research and Public Health*, *19*(17), 10787. https://doi.org/10.3390/ijerph191710787

Sikorskii, A., Niyogi, PG., Victorson, D., Tamcus, D., Wyatt, G. (2020). Symton response analisis of a randomized controlled trial of reflexologi for sympton management among woman with advanced breat cancer. *Support Care Center*, *176*(28), 13, 1395–1404. https://doi.org/10.1007/s00520-019-04959-y.Symptom

Smit, A., Coetzee, B. J. S., Roomaney, R., Bradshaw, M., & Swartz, L. (2019). Women's stories of living with breast cancer: A systematic review and meta-synthesis of qualitative evidence. *Social Science and Medicine*, *222*, 231–245. https://doi.org/10.1016/j.socscimed.2019.01.020

Suchodolska, G., & Senkus, E. (2022). Mobile applications for early breast cancer chemotherapy-related symptoms reporting and management: A scoping review. *Cancer Treatment Reviews*, *105*, 102364. https://doi.org/10.1016/j.ctrv.2022.102364

Vardaramatou, F., Tsesmeli, A., Koukouli, S., Rovithis, M., Datsou, M. M.-, & Stavropoulou, A. (2021). Exploring women's experiences after breast cancer diagnosis. A qualitative study. *Perioperative Nursing*, *10*(2), 193-207.

Whisenant, M. S., Coombs, L. A., Wilson, C., & Mooney, K. (2021). Symptom-related patient-provider communication among women with breast cancer receiving chemotherapy. *European Journal of Oncology*, *55*, 1–14. https://doi.org/10.1016/j.ejon.2021.102064

WHO. (2020a). The global cancer observatory - all cancers. https://gco.iarc.fr/today/home Erişim Tarihi: 06.07.2021

WHO. (2020b). *Globocan-Global cancer incidence, mortality and prevalence*. https://gco.iarc.fr/today/data/factsheets/populations/792-turkey-fact-sheets.pdf Erişim Tarihi: 06.07.2021

Zimmaro, L. A., Sorice, K. A., Handorf, E. A., Daly, M. B., & Reese, J. B. (2022). Understanding clinical communication about mood disturbance symptoms among breast cancer patients: A mixed methods analysis. *Patient Education and Counseling*, *105*(7), 2089–2095. https://doi.org/10.1016/j.pec.2022.02.004