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Research Article

Exploring the Care Needs of Women With Breast Cancer and the Time From Diagnosis to Treatment: A Qualitative Study

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Background: Breast cancer is the most common type of cancer in Iranian women. Early needs assessment of patients at the time of diagnosis and across the phases of cancer treatment is essential to provide timely and appropriate supportive care. Therefore, the present study aims to explore the care needs of breast cancer patients from the time of diagnosis to treatment completion.
Methods: This qualitative research was conducted as a conventional content analysis, based on the Graneheim and Lundman approach. Eighteen participants, consisting of breast cancer patients, family members, oncology nurses, and oncologists, were selected using a purposive sampling method with maximum diversity. Data were collected using in-depth semistructured interviews and entered into the MAXQDA 2020 software for analysis. Lincoln and Guba's criteria for credibility, transferability, dependability, and confirmability were used to validate the research findings.
Results: The needs of women with breast cancer in the diagnosis and treatment phases were categorized into two and seven categories and five and 18 subcategories, respectively. The themes that emerged relating to women's needs at the time of diagnosis included psychoemotional and informational needs. The needs of women in the treatment phase were categorized into the following themes: informational, practical, psychoemotional, physical, spiritual, communication, and sexual needs.
Conclusions: This study provides valuable insights into optimal and patient-oriented supportive care, accounting for the numerous needs of patients with breast cancer. Healthcare providers should provide supportive care according to patients' needs and preferences, which will lead to the correct use of resources and cost reduction as well as improving the quality of life of cancer patients. Supportive care needs are culture-dependent. Thus, cultural issues must be considered when developing an effective supportive care program.

Keywords: breast cancer; needs assessment; qualitative study; supportive care needs; women

1. Introduction

Breast cancer is the most common type of cancer among women all around the world [1–4]. The incidence rate of this type of cancer varies up to approximately fivefold in various geographic regions, from 100 per 100,000 in Africa to 494 per 100,000 in Europe [5] and is expected to increase by 3 million worldwide by 2040 [6]. Breast cancer ranks first among the cancers diagnosed in women in Iran [7], accounting for 28.1% of malignancies in women [8]. Although early diagnosis programs and advancements in the effective and successful treatment of breast cancer have increased the number of

survivors of the disease [9–11], the diagnosis and treatment of breast cancer can have considerable adverse consequences for both female patients and their families [12].

A diagnosis of cancer is stressful for any individual, and although it is curable today, it is still regarded as a lethal disease in a considerable number of patients [13, 14]. Following diagnosis and during cancer treatment, patients experience a broad spectrum of physical, psychological, and social problems as well as various care needs, which cause substantial changes in women's quality of life [9, 15]. Nowadays, influential and high-quality care for cancer patients is considered to go beyond providing anticancer treatment, and care providers are required to pursue patients' care needs [16]. Hence, needs assessment of patients in the early phases of cancer is necessary to provide timely and appropriate supportive care [9].

Patient-oriented care, which is considered a criterion for high-quality care in individuals with cancer [16], is believed to be impossible without a correct understanding of the patient's needs [17]. Patient-oriented care is defined as providing respectful care that is responsive to the patient's needs, preferences, and individual values [13]. Supportive care needs can be described as cancer patients' perceived need for support with cancer-related issues [18, 19] that have not been adequately satisfied by the care system [20] and require additional caregiving actions or resources to achieve optimal well-being [10]. Supportive care needs refer to the assistance/actions or resources required by cancer patients and their families beyond medical, surgical, or radiation therapy interventions and encompass their physical, social, emotional, informational, psychological, and spiritual needs [21, 22]. Supportive care requires determining care needs using a patient-oriented approach and satisfying these needs on the continuum of cancer care [23]. Thus, the needs assessment was designed to detect needs and measure their importance for the patient. Needs assessment identifies the areas where patients feel that they need help, specifies the level of help required [19], and targets services [20]. From the patient's perspective, the quality of supportive care depends on the extent to which the needs are met; if the needs are to be adequately dealt with, they must initially be identified. A lack of care received by patients and their families and dissatisfaction with the care they receive may be related to inappropriate needs assessment [17].

Identifying the type and breadth of care needs of patients with chronic diseases and their caregivers is vital for formulating an appropriate care plan for nursing interventions [24]. Furthermore, a needs assessment to determine the set of skills required by nurses for providing services is necessary, and the set of nursing skills must be matched with these needs [25]. Numerous studies worldwide [21, 26–31] and in Iran in particular [32, 33] have evaluated the needs of patients with breast cancer using quantitative and qualitative approaches. The majority of the studies have been conducted quantitatively using the Supportive Care Needs Survey Short Form (SCNS-SF34). According to these studies, the most prevalent care needs are in the fields of health and information systems, psychological and physical needs, and daily activity. However, quantitative studies have not been able to describe patients' needs and concerns in depth. Moreover, these tools are general and describe nursing care for cancer patients as a whole, while patients with breast cancer have unique needs [14]. Women with breast cancer are suffering disease in a body organ that is of great importance to their identity and femininity, which can influence their supportive care needs during and after treatment [34, 35]. In Iran, women with breast cancer, unlike those with other types of cancer, often receive chemotherapy in the outpatient ward; therefore, they encounter problems and complications stemming from chemotherapy at home, meaning they have some special support needs. Furthermore, the five-year average survival period for breast cancer after diagnosis is longer than that for other cancers. This means that the coexistence of these patients with their disease will be extended; thus, caregivers need to pay more attention to the needs of these women [36]. The first step in planning supportive care services for cancer patients is to identify their needs. Supportive care needs are culture-dependent. Cultural diversity across the world and even within different regions of a country exerts a significant influence on the supportive care needs of patients with breast cancer. Consequently, the development of an effective supportive care program necessitates the consideration of cultural factors [37, 38]. In addition, breast cancer affects Iranian women at least one decade earlier than that in developed nations [32]. Younger patients are more likely to experience adverse effects associated with breast cancer treatment. Women undergoing invasive breast cancer treatment have an increased propensity for issues related to body image, sexual health, pregnancy, and lactation. This has encouraged the development of appropriate programs to meet these needs. Researchers aim to implement appropriate measures for planning care provision modules for these patients by identifying their specific needs and concerns and developing a comprehensive understanding of patients' primary concerns. This approach will enable medical personnel to address the main concerns of breast cancer patients while implementing suitable protective measures. These measures enhance the quality of care and lead to better quality of life. To our knowledge, no study has qualitatively examined the supportive care needs of women with breast cancer in referral centers in Tehran from diagnosis to treatment. Therefore, this qualitative study aims to explain the needs of patients with breast cancer during the diagnosis and treatment phases of the breast cancer care continuum.

2. Method

This study was conducted using a conventional content analysis approach. Conventional content analysis is a widely used inductive research method in nursing studies; it is used for objective description and interpretation of textual data, discovery of participants' understanding and experiences of daily phenomena, and production of knowledge based on participants' perspectives [39, 40].

2.1. Participants. The participants in this study were women with breast cancer, family members, nurses working in the oncology ward, and oncologists purposively selected from the oncology wards of two public educational hospitals in Tehran (Shohada-ye-Tajrish and Imam Hossein hospitals affiliated to Sahid Beheshti University of Medical Sciences as referral centers of cancer patients).

The inclusion criteria for patients were as follows: (a) patients with a definite diagnosis of breast cancer who were in the diagnosis and treatment phase of the breast cancer care continuum; (b) over 18 years old with no previous history of cancer; (c) aware of their cancer diagnosis and willing to participate in the study; (d) not suffering dementia; and (e) not having multiple cancers. The inclusion criterion for medical team members including nurses and oncologists was at least three years of work experience in the oncology ward. The inclusion criterion for family members was any person in the family that the patient had the closest relationship with or who accompanied the patient during treatment. The exclusion criterion was unwillingness to continue with the interviews.

2.2. Data Collection. The research objectives were initially explained to all participants; after obtaining verbal consent, face-to-face interviews were scheduled. Owing to patients' relatively long waiting time for treatment measures, the agreement with the patients was that the interviews would be carried out during this waiting time. The participants gave written informed consent for all interviews to be recorded with a voice recorder, and the patients were assured that their information would be kept confidential. All interviews were conducted by the first author using an interview guide developed for this study by M.S.Y. and M.I. (see supporting file (available here)) and in a quiet room in the oncology ward for 30–45 min. Individual and in-depth semistructured interviews were the preferred data collection methods. Data were collected over three months, from May to July 2023. The interviews began with an open and general question. Some of the interview questions were "What are your needs in the diagnosis phase of the disease that should be followed up?", "What were your needs during each stage of your treatment that you expected the healthcare providers to help you solve?", and "What problems and complications stemming from the treatment should be considered and pursued by healthcare providers?" The interviews proceeded based on the participants' responses; based on these responses, higher and more precise details were extracted via exploratory questions such as "What do you mean?" and "Please explain more in this regard." Sampling and data collection continued until data saturation was reached. Saturation occurs when adding further data is a repetition of previous data, and no new codes were found from the data. In this study, data saturation was found by up 14^{th} interview, and four other interviews were conducted to ensure that there are no new codes emerging.

2.3. Data Analysis. The researchers entered the transcripts into the MAXQDA 2020 software for data management including classification, repeated review, and comparison of different data and citations. Data collection and analysis were performed simultaneously. Qualitative content analysis was selected as the most appropriate methodology, as it facilitates systematic description and interpretation of data, while providing a structured framework to investigate the contexts, meanings, and interrelationships of care needs among breast cancer patients. This approach enabled the development of a conceptual map and a theoretical understanding of care needs and potential strategies to address these needs effectively.

Data analysis was performed using the conventional content analysis approach based on Graneheim and Lundman's approach, consisting of five steps: (1) recorded interviews were transcribed verbatim immediately after each interview; (2) the whole text was read several times to obtain a better and comprehensive understanding of its content; (3) the interviews' texts were divided into meaning units, which are groups of words and sentences that have equal meaning or are somehow related to a concept; these were condensed and coded; (4) the codes were compared and, according to their similarities, categorized into more comprehensive categories, and then subthemes were created; and (5) the subthemes were interpreted as themes at a higher level, and the hidden meaning of the data was identified [39]. The care needs areas in this study were analyzed under the guidance of the Fitch Supportive Care Framework and literature review. According to this framework, individuals with cancer experience countless care needs in various physical, psychological, informational, emotional, social, spiritual, and functional areas. The Supportive Care Framework has been designed as a tool for cancer care professionals to recognize the needs of cancer patients and to plan for service provision. According to a literature review, care needs are categorized into 11 areas [41–43].

2.4. Data Accuracy and Rigor. The Lincoln and Guba criteria of credibility, transferability, dependability, and confirmability were used to validate the rigor of the research findings [44]. Adequate and long-term interactions with the participants were used for data credibility. The primary investigator dedicated approximately 10 months to data collection and analysis, maintaining extensive engagement with the data throughout this period to ensure credibility. In addition, we also used member checking to ensure the credibility of the results. For this purpose, following the analysis, each interview transcript was presented to the respective participants for review, and their feedback was solicited to validate the data. Sampling continued until data saturation was achieved, and the most appropriate semantic unit was selected.

To enhance transferability, the researcher provided a comprehensive description of the platform, the methodology for participant selection and characterization, the data collection procedures, and the analytical process, thereby enabling readers to assess the applicability of the findings to alternative contexts. Furthermore, the presentation of rich and detailed findings, accompanied by appropriate quotations and authentic documents, served to augment the

transferability of the research. In addition, sampling with maximum diversity regarding demographic characteristics increased the transferability.

To increase dependability, the codes extracted from each interview were peer-checked by colleagues and experts in this field. In addition, rapidly transcribing data, rereading, and constant comparative analysis were used to ensure the dependability of the results. Furthermore, the data collection process, consisting of interviews, was conducted as quickly as possible, and all study participants were queried on the same subject area.

To observe the unbiased interpretation and identify confirmability, the coding and data analysis processes were performed by the authors separately; they then reached a consensus through discussion. Peer checks were also used to increase data confirmability. To do this, codes and data analysis were assigned to three faculty members who were competent in qualitative research, and the coding process was approved.

2.5. Ethical Considerations. This research was extracted from a Ph.D. dissertation approved by the Ethics Committee of the Shahid Beheshti University of Medical Sciences (code of ethics: IR. SBMU.PHARMACY.REC.1401.105). The research objectives were explained to all participants, and oral and written informed consent was obtained from all participants included in this study for data collection and interview recording. The participants were assured that their information would be kept confidential.

3. Results

3.1. Participant Characteristics. Twelve breast cancer patients, two family members, two oncology nurses, and two oncologists were interviewed. The mean age of the cancer patients was 49.6 years. Approximately 60% of breast cancer patients were married and urban residents. The majority were housewives (67%) and had an educational level of diploma or lower. More information on the participants' demographic characteristics is presented in Tables 1, 2, 3.

Based on the results of the conventional qualitative content analysis process, the needs of women with breast cancer in the diagnosis and treatment phases were categorized into two and seven themes and five and 18 subthemes, respectively.

3.1.1. Diagnosis Time Needs. The themes that emerged concerning the needs of women with breast cancer in the diagnosis phase included psychoemotional and informational needs.

3.1.1.1. Psychoemotional Needs. This category includes the psychoemotional needs of patients at the time of diagnosis of the disease.

3.1.1.1.1. Management of Emotional Feelings. All the female interviewees stated that facing a cancer diagnosis was associated with fear and stress for them and that they had shown different emotional reactions at this phase. Crying, shock, feeling stunned, thoughts of death, worrying about the future, anger, etc., were some instances of these reactions that need support.

> "At the time when I was diagnosed with cancer, at first I felt so bad; I cried." (Patient 5)

3.1.1.1.2. Need for Emotional Support From the Family. The diagnosis of cancer is a stressful occurrence that induces various degrees of emotional distress in women; therefore, they were aware of the emotional support necessary to deal with their psychological distress. The women believed that psychoemotional support of the patient at the time of diagnosis is essential and that the individuals who provide most of this support are primarily family members. They stated that the presence of family members alongside the patient, encouraging and paying attention to her, resulted in positive energy, motivation for treatment, and treatment continuation. Some mothers stated that the only reason for their treatment was to survive for the sake of their children because they had witnessed their children's interest in and efforts to treat their mothers. Inducing a sense of importance in the patient regarding the family becomes a motivation for patients to tolerate the pain and suffering from the treatment.

> "In my opinion, the presence of the family members is very important. In particular, it is really needed to raise the patient's morale psychologically." (Patient 6)

3.1.1.1.3. Need for Emotional Support From the Medical Staff. The women stated that, besides the family, the medical team should also provide the patient with emotional support in different ways. They recounted that when the medical team had informed the patients of the diagnosis of cancer, it had been without any empathy for the patient, with no preparation of the patient for hearing the unpleasant news, acidly, and in a frustrating way. Participants believed that this method led to more negative feelings, stress, anxiety, and a lack of treatment continuance. According to the women, counseling services, including the presence of a psychologist, can help relieve the discomfort associated with the diagnosis and treatment of the disease. A psychologist needs to talk with the patient and raise her morale before starting the treatment; the patient must also be able to express her feelings, and treatment dimensions beyond the physical should be considered.

> "In any case, the word 'cancer' is fearful. There should be someone who talks to the patient and hearten her, not just saying that it is cancer so you should go and remove it." (Family member 1)

3.1.1.2. Informational Needs. This category encompasses patients' understanding of informational needs at the time of diagnosis.

3.1.1.2.1. Need for Information for Timely and Effective Treatment of Cancer. In general, most participants reported that at the time of diagnosis, no information was provided or

Table 1: Characteristics of patients.

Participant	Age	Marital status	Number of children	Education	Occupation	Place of residence	Performed treatments
1	39	Married	2	Bachelor	Housewife	Tehran	Surgery/chemotherapy/radiation therapy
2	54	Married	1	Bachelor	Medical staff (retired)	Tehran	Surgery/chemotherapy/radiation therapy
3	52	Married	4	Illiterate	Housewife	Bojnurd	Surgery/chemotherapy/radiation therapy
4	50	Married	3	Elementary school	Housewife	Tehran	Chemotherapy
5	62	Widowed	3	Elementary school	Housewife	Jiroft	Surgery/chemotherapy/radiation therapy
6	60	Married	1	Master	Housewife	Tehran	Surgery/chemotherapy/radiation therapy
7	55	Married	1	Elementary school	Housewife	Khorramabad	Surgery
8	28	Single	—	Bachelor	Employee	Lorestan	Chemotherapy
9	64	Widowed	2	Illiterate	Housewife	Eslamshahr	Surgery/chemotherapy/radiation therapy
10	52	Divorced	3	Guidance school	Worker	Tehran	Diagnosis phase
11	38	Married	3	Diploma	Qur'an teacher	Qom	Surgery/chemotherapy/radiation therapy
12	42	Divorced	2	Diploma	Housewife	Varamin	Surgery

Table 2: Characteristics of patients' family members.

Participant	Relation with patient	Age	Marital status	Number of children	Education	Occupation	Place of residence
13 (family member 1)	Husband	48	Married	2	Bachelor	Self-employed	Tehran
14 (family member 2)	Daughter	31	Single	—	Bachelor	Housewife	Tehran

Table 3: Characteristics of medical team members.

Participant	Age	Marital status	Number of children	Education	Work experience	Place of residence
15 (Nurse 1)	33	Single	—	Bachelor	8 years (3 years in oncology)	Tehran
16 (Nurse 2)	40	Married	1	Bachelor	18 years (3 years in oncology)	Tehran
17 (Oncologist 1)	52	Married	1	Specialist	22 years	Tehran
18 (Oncologist 2)	38	Single	—	Senior resident	4 years	Tehran

the information provided was very limited. The participants complained about the absence of a guide to provide information regarding the treatment process; they believed that providing information and awareness at the time of diagnosis was necessary to alleviate misconceptions about the disease and treatment and therefore speed up the start of the treatment process. Some patients explained that they had believed the disease to be incurable, and some had turned to herbal therapies based on the advice of botanical professors. All these cases were due to unawareness of the available treatments, leading to delayed effective treatment. The patients stated that if they had obtained relevant and comprehensive information about their disease at the point of diagnosis, they would have been able to cope with the breast cancer and make informed treatment decisions.

> "My lump was one centimeter. When I discovered it, I went to my professor. He said that some of these lumps could be removed using herbal medicines. I took herbal medicines and my lump grew to two centimeters. I am one of those who have suffered losses due to unawareness. Actually, if I knew, I would not take herbal medicine for one month so that I would not change my one-centimeter lump into two centimeters." (Patient 1)

3.1.1.2.2. Need for Information for Emotional Support. According to many of the patients, if a patient is given information at the time of diagnosis, the distress at the time of diagnosis will be eliminated, which will increase the patient's morale. They also felt that this information would allow patients to accept the disease and start beneficial treatment as soon as possible.

> "In my opinion, if there is awareness and training, it will be easier to accept the disease, and the discomforts at the time of diagnosis will also be eliminated." (Patient 12)

3.1.2. Treatment Time Needs. The themes that emerged concerning the needs of women with breast cancer in the treatment phase included: (1) informational needs; (2) practical needs; (3) psychoemotional needs; (4) physical needs; (5) spiritual needs; (6) communication needs; and (7) sexual needs.

3.1.2.1. Informational Needs. The most common need that emerged from the interviews was the need for information. These informational needs are linked to the nature of the disease, types of treatment and aftercare, complications of treatments and ways to manage them, nutrition, training for sexual issues, critical facets of treatment, and awareness of support resources in the community.

3.1.2.1.1. Need for Information About the Nature of the Disease. Some participants stated that they lacked sufficient awareness about the cause of the disease, the way the disease progressed, and the disease prognosis, and they wanted more information.

> "Doctors and nurses always used to ask us in their questions, 'is there anyone in your family who has cancer?' However, none of the people in this family had this condition. No one in our family had breast cancer, but we were told that this disease was hereditary. Yes? Is it right?" (Patient 4)

3.1.2.1.2. Need for Information About Types of Treatment, Complications, and Ways of Managing Complications. Most participants had undergone surgery before or after chemotherapy in the form of breast-conserving surgery or mastectomy and had completed chemotherapy or were undergoing chemotherapy and radiation therapy sessions. In most patients, chemotherapy culminates in complications such as nausea, vomiting, bone pain, diarrhea, constipation, weakness, and lethargy, while radiation therapy results in common complications such as burns and swallowing disorders. The majority of the patients expressed that they needed the treatment path to be clear from the beginning and that the necessary awareness of the required treatments and the aftercare should be provided to the patients so that they were not confused and knew what to expect in the next stage of treatment. With regard to surgery, patients need information about the type of surgery, length of recovery time, postsurgery care and exercises, and the reason for and duration of exercises. For chemotherapy, patients need to be aware of the drugs used, the complications they may experience, and coping strategies. For radiation therapy, they should be aware of the nature of treatment, duration, complications, and ways of managing these complications.

> "The complications of chemotherapy were terrible for me. The severe gastrointestinal symptoms, nausea, vomiting, weakness, lethargy, severe bone pain, and constipation that I am now struggling with are horrible. I did not know it had such complications. No one told me about it." (Patient 8)

> "After radiation therapy, my throat was burning and I could not swallow anything at all. I remember exactly that I was crying during the day and night. I thought that the

disease had spread to another organ. I was in another city, and I had to go to Tehran. The doctor said 'no, it is not something important, it is because of the radiation.' Well, no one had explained to me about the complications of radiation therapy previously. If I had been told from the beginning, it would have been much better and I would not have been so stressed." (Patient 9)

3.1.2.1.3. Need for Information About Nutrition. Most of the female interviewees stated that information about diet was either not provided by the healthcare workers at the time of treatment or was limited. They had many questions regarding diet that were not answered, such as "What can I eat and what should I avoid? What foods are useful in fighting cancer? What substances are effective in reducing the treatment complications?" Some participants also expressed that they had received nutrition-related information in communication with peers in treatment sessions and would have liked to obtain more information from a specialist. One patient stated that their family used to prepare hot-natured foods to fight the cold nature of cancer, based on the prevalent view derived from traditional medicine, which was not consistent with the condition of the disease.

"Something that has become prevalent, the traditional medicine, based on which the families give, for example, hot-nature food. Well, I am not a person eating hot-nature food at all; then my sister, and others used to give me such edibles. After completing the second chemotherapy session, I threw all of them away. I said, 'What are these you are giving me? Well, these are all sugars that you give me. Why should I eat them?' And then, I realized that I should not have eaten them." (Patient 2)

3.1.2.1.4. Need for Training for the Effects of Treatment on Sexuality. Some women pointed out that cancer treatment and its complications led to changes in their sexual relations and emphasized the importance of providing information and training their partners regarding possible sexual changes that may occur due to cancer treatments.

"Actually, their self-confidence declines both due to their appearance changes stemming from mastectomy and hair loss and due to the drugs they take that reduce sexual desire and, therefore, they cannot have a relationship similar to a normal individual. These issues should be taught and the patients should be told that this is the treatment route and they may face such problems." (Oncologist 2)

3.1.2.1.5. Need for Information About Critical Facets of Care. All care providers believed that for a better treatment outcome, the patient should be given a series of important information at the time of treatment, including the importance of avoiding fever and infection, hygiene issues, performing timely tests, and adherence to the protocol recommended by the doctor.

"Since the immune system weakens because of chemotherapy drugs, health issues should be taught to prevent infection, for example, not to go to very crowded and public places and wear a mask due to the coronavirus outbreak." (Nurse 2)

3.1.2.1.6. Need for Awareness of Support Resources in the Community. Many patients reported that they had faced problems with paying costs and that if there are charities or support resources in the community, medical staff should refer patients to those places to supply part of the costs.

"Introduce these charities to those who have a poor financial status and have no caretaker, similar to me. It is beneficial for them to help. Last week, I heard that the Ashura Charity helps. I took my drug invoices, and they paid some of my drug costs. It is very good if you introduce them." (Patient 5)

3.1.2.2. Practical Needs. This category involves financial issues and difficulty in access to healthcare systems.

3.1.2.2.1. Financial Issues. One of the common groups of needs for most patients is financial needs. These needs are concerned with treatment-related costs, particularly the cost of drugs, additional costs including the management of complications at home, the cost of family and children, the cost of renting a house, the cost of commuting to the hospital, etc., which all impose problems on patients and their families. Some patients were not covered by insurance, and some types of insurance did not cover all drugs. Some patients stated that they needed financial help from benefactors and institutions to pay the costs, and some decided to quit treatment. Most patients could not pay the costs of private centers and had to wait a long time to receive treatment measures.

"I am a pensioner. I have problems with the costs of my medicine. My husband died 40 years ago. My children buy my medicines, although I know they hardly cover their costs." (Patient 9)

3.1.2.2.2. Difficulty in Access to Healthcare Systems. Most patients pointed out that, in addition to the costs, preparing the medicine also involved difficulty. They stated that they could not find these drugs in most places and had to stand in long queues at centers for special diseases. Furthermore, since the two selected hospitals in Tehran are the centers for cancer treatment in the country, many patients travel from other cities to Tehran and have problems with accommodation in Tehran due to the long distance; they need support to receive timely treatment. In addition, commuting to Tehran itself is difficult for some patients.

"For example, preparing the drug endoxan takes a long time and is very difficult; not every pharmacy has this drug. In some places, I had to call in advance, and then as soon as I arrived, they said it was out of stock." (Patient 11)

"I come from another city. I do not have any places here to stay. I sleep in the park at night. One night, I had to go to the house of one of my relatives, another night I had to go to the Imam's shrine, and I spend my days in the park, too. It is very difficult for me as a patient." (Patient 7)

3.1.2.3. Psychoemotional Needs. This category includes the need for positive body image and emotional support during treatment.

3.1.2.3.1. Need for Positive Body Image. Some patients stated that they were uncomfortable with treatment-related changes in their appearance. These changes are related to physical changes due to chemotherapy, such as hair and eyebrow loss, as well as mastectomy. These changes have led to changes in their body image, decreased self-confidence, and disrupted marital relations.

"During chemotherapy, when hair and eyebrow loss occurs, it is very difficult and uncomfortable for a woman. You think to yourself, 'what do my husband, the individuals around me, and my children think about me?' When you see that your skin color changes and when you go in front of the mirror, you see you are not the previous person." (Patient 11)

3.1.2.3.2. Emotional Support During Treatment. Care providers and patients believed that emotional support is important for treatment continuation and adherence. Both patients and caregivers highlighted emotional support from the family and medical team, as well as communication with the peer group, in this regard. The patients believed that it is better to hold meetings in which recovered patients introduce themselves and convey their experiences so that other patients will be motivated to continue the treatment.

"Another thing that I have noticed is that the presence of cancer patients in the inpatient ward and their communication with other patients greatly affects their morale. Outpatients take medicine for a short time and go, so they are not in much contact with other patients, but inpatients who are hospitalized for at least 48 hours talk to other patients and raise each other's morale, which is really effective in accepting the disease and continuing treatment." (Nurse 1)

3.1.2.4. Physical Needs. This category encompasses two subcategories: physical comfort and the need for proper nutrition.

3.1.2.4.1. Physical Comfort. Patients and caregivers mentioned that cancer treatment, particularly chemotherapy, has a strong physical effect. The most prevalent symptom in all patients was gastrointestinal complications, including nausea, vomiting, diarrhea, and constipation. Other symptoms include weakness, lethargy, weight loss, anorexia, hair loss, hot flashes, and sleep disturbances that require support.

"When I completed the first chemotherapy, my stomach felt weird. I just liked going somewhere and tearing everything from the top of my stomach to the bottom. I felt so much burning, I was so annoyed." (Patient 1)

3.1.2.4.2. Need for Proper Nutrition. Caregivers stated that because of the weakness of the immune system and prevention of weight loss, patients should have appropriate nutrition during treatment so that they have enough physical strength for chemotherapy and can receive the proper dose.

"The patients must have proper nutrition so that they can get the required calories and not lose weight so that they have enough physical strength for chemotherapy." (Oncologist 2)

3.1.2.5. Spiritual Needs. This category encompasses the two main subcategories of achieving peace and finding meaning and purpose in life.

3.1.2.5.1. Achieving Peace. Several patients had turned to spirituality after being diagnosed with cancer and explained that communication with God, the Qur'an, and Ahl al-Bayt were effective both in accepting the disease and in achieving peace through communication with God and gratitude. As a source of hope and peace, communication with God and spirituality both reduced negative feelings stemming from the cancer diagnosis and facilitated dealing with the challenges and complications of treatment.

"Now that I am sitting here and taking drugs, I keep saying God's names. I say 'Ya Shafi'1 and 'Ya Man Esmohu Davaa Va Zekrohu Shafaa'2 because God is aware of all things in the world. The same things helped me calm me. Otherwise there would be no one to help me. Neither my father nor my mother knew about my disease to raise my morale and give me motivation." (Patient 11)

3.1.2.5.2. Finding the Meaning and Purpose of Life. Patients stated that this world is not eternal and is fleeting and that the meaning and purpose of life is to develop and achieve human internal strength and power.

". . .Because God does not wish bad things for individuals, and if anything, it is definitely for the human's development. Maybe not everyone can accept this word, but I personally grew very much mentally and spiritually during my disease." (Patient 6)

3.1.2.6. Communication Needs. The communication needs category consisted of three subcategories: improved quality of communication with healthcare providers, telephone communication, and communication with peer groups.

3.1.2.6.1. Need for Improved Quality of Communication With Healthcare Providers. Most patients were dissatisfied with the quality of their communication with the care providers. Visiting assistants instead of specialist physicians, assistants who did not respond to patients' problems, crowded

hospitals, staff visiting multiple patients simultaneously, lack of physicians' time, and lack of explanation by doctors were among the reasons for patient dissatisfaction. Patients wanted to be treated respectfully and have their questions responded to patiently.

> "All the time, the assistants performed everything. When I went to the assistant, he said 'how many sessions have you been to radiation therapy?' I said, for example, seven sessions. He said 'it is ok; go ahead.' He did not ask any questions. I said, I was burned; my blood sugar was falling, and so on. He said, 'No matter if it burns, it will burn anyway'." (Patient 3)

3.1.2.6.2. Need for Telephone Communication. Patients explained that in order to manage the complications of the treatment, particularly chemotherapy, they were required to have telephone communication with an informed individual so that they did not have to go to the clinic or hospital to manage the complications even though they were unwell. Telephone communication is necessary for consultation and answering questions.

> "To control the complications of chemotherapy and radiation therapy, it would be very good if they give us the phone number of an informed individual, like during the coronavirus time. Once, it affected my stomach and digestion. I called the same woman who was responsible; she told me to take drugs. Thank God, I got better after taking them." (Patient 1)

3.1.2.6.3. Need for Communication With Peers. Some participants stated that they had received part of the information concerning treatment, particularly awareness of support resources, from communication with peers. In addition to sharing their treatment experiences with other patients, peers positively affected patients' morale.

> "Those who are here lose their morale, but when they see the patients who were infected and recovered, they become hopeful and motivated to go ahead. I wish they would come and talk or at least prepare a report about those individuals and broadcast in chemotherapy sessions through a video projector." (Patient 11)

3.1.2.7. Sexual Needs

3.1.2.7.1. Need for Improving Sexual Relations. Some participants stated that the complications of various treatments, such as surgery and chemotherapy, caused problems with their sexual relations. Treatment such as mastectomy and side effects of medicines such as vaginal dryness, decreased sexual desire, and menopause resulted in changes in sexual relations, which were not adequately considered and supported by the medical team.

> "In any case, mastectomy is considered a disability that influences an individual's life and sexual relations. However, there are reconstruction methods that can be performed." (Oncologist 1)

4. Discussion

The perceived needs of patients with breast cancer vary in different phases of the cancer care continuum. According to previous studies [45, 46], patients have the highest level of care needs in the first year after diagnosis, that is, in the diagnosis and treatment phase of the cancer care continuum; if cancer does not recur, these needs gradually decrease. The high level of care needs in these times is justifiable because of the psychological impact of revealing the cancer diagnosis and the physical impact of various treatments and their complications. However, most studies have focused on identifying and satisfying the needs of cancer survivors [47–49]; few have addressed needs at the key times of diagnosis and treatment. Hence, the current study has aimed to explain the needs of Iranian women with breast cancer during the diagnosis and treatment phases.

The principal findings of this study demonstrate that women with breast cancer require psychoemotional support and knowledge relating to the disease and treatment at the time of diagnosis. Receiving psychoemotional support from the family and medical team and finding out information were the most crucial strategies for patients to accept and adapt to the disease and speed up beneficial treatment. Consistent with the current research, Landmark et al.'s study [50] reported that the most common need of patients at the time of diagnosis was psychoemotional and informational support. In Beatty et al.'s study [51], the authors also pointed out the need to have supportive individuals in the family and medical team. Patients with breast cancer must deal with a stressful event that has a significant influence on their life. In Iranian culture, the family plays an important role in comprehensively supporting and taking care of family members, and the presence or absence of family support strongly impacts patients' will and motivation to cope with the disease. Strong psychological support from family can reduce distress and emotional reactions. Thus, care providers should determine the degree of family support and participation and talk to patients about the effect of psychological support. Furthermore, patients considered the presence of supportive individuals in the medical team to be necessary. Since Iranian care programs are mostly focused on solving physical and medical problems and less attention is paid to the psychological needs of patients, the presence of a psychologist or nurse guide who can provide emotional support to the patient at the time of diagnosis is essential for managing emotions.

Most women in our study reported that they had not been provided with enough information regarding the nature of the disease and effective treatments to make an informed decision when starting treatment. The patients explained that providing information provides emotional support and adaptability to the disease; by alleviating misconceptions about the disease and treatment, it prevents delays in treatment due to unawareness. In Chua and Tan [13] study, consistent with the findings of the present

study, patients were requested to undergo a counseling session at the time of diagnosis, with information about coping with the disease and communication skills presented to patients and families in the counseling session. According to the study by Villarreal-Garza et al. [52], as soon as cancer is confirmed, patients have medical questions about topics including the cause of the disease, the disease phase, proper treatment, and the prognosis of the disease; this is consistent with the findings of the current research [52].

Based on the findings of our study, patients have many informational needs at the time of treatment, as they need to make informed decisions and manage treatment challenges. These needs include information about the nature of the disease, types of treatment and aftercare, complications and ways of managing them, nutrition, and sexual issues; this is consistent with the findings of other studies. According to the study by Foà et al. [36], women need more explanation about the treatments and tests performed [36]. In a study by Villarreal-Garza et al., it was found that women needed information about surgery, chemotherapy, radiation therapy, and the complications of these treatments, and they wanted to receive this information before starting any type of treatment [52]. In general, in the current study, the most common needs of patients in the treatment phase were found to be informational needs, particularly the complications of treatments and their management, which leads to increased participation and self-care. When a patient has access to high-quality information proportionate to individual needs, participation in treatment, self-management of the disease, and adherence to treatment will increase. Hence, by holding training classes and counseling sessions with care providers, this critical need for patient support can be met. On the other hand, given the crowding in hospitals, lack of time for doctors and nurses to present complete and comprehensive information, and lack of appropriate conditions for holding face-to-face classes on a regular basis, it may be better for virtual training to be used. Telephone communication with a nurse navigator, online classes, and the use of virtual networks provide more opportunities to establish better and constant communication between patients and healthcare providers and to prevent the spread of incorrect information, which is particularly important for patients with breast cancer who undergo outpatient chemotherapy and deal with the problems and complications of chemotherapy at home. The nursing paradigm in the 21st century global era has evolved through technological advancements to address the needs of distance efficiency and cost constraints. Telenursing presents a viable solution to these challenges [53]. Telenursing intervention, a subset of telehealth, encompasses the provision of nursing services to patients in remote locations using telecommunication technologies, including mobile phones, the Internet, and web-based conferencing. Specifically, telephone communications and video conferencing systems are the most extensively utilized methods for interacting with patients to deliver remote clinical care, education, and follow-up for individuals with cancer. The implementation of telenursing has the potential to enhance access to healthcare, elevate the quality of services, mitigate the demand for emergency services, and reduce associated costs [54, 55].

Our findings regarding the practical needs of cancer patients are consistent with previous studies [56]. A shortage of financial resources is one of the prevalent needs faced by cancer patients with regard to paying treatment-related costs; if the patient is not covered by insurance, the problems become more serious. Financial toxicity (FT) refers to the negative impact of the financial burden associated with cancer treatment on patient well-being, fiscal stability, and overall health. Factors contributing to FT include direct medical costs (such as drugs, hospitalization, and clinical services), direct nonmedical (traveling and food), and indirect costs (employment loss). Compared with other chronic diseases, cancer patients are at risk of higher direct nonmedical and indirect costs, which are generally not covered by insurance [57, 58]. In this study, although the highest costs are related to chemotherapy drugs, for patients who live in small cities and have to travel to Tehran for medical treatment, the costs of commuting and accommodation in Tehran can sometimes exceed the costs of treatment. In addition to the costs of medicine and treatment, there are also family expenses, housing rent, etc.; patients sometimes feel that paying for their family's needs is more important and may refuse treatment as a result. These problems are particularly pertinent for women who are the heads of their families and have to stop working for a while when starting treatment. All these factors can lead the patient to require help from individuals and charities to pay their costs. Thus, a financial navigator would be useful to guide patients toward the financial resources in the community. Nurses should introduce patients to benefactors and charities in society and inform them of the facilities provided by insurance for patients with special diseases.

Similarly to the present study, according to Akuoko, Chambers, and Yates in 2022 [59], women need housing support to adhere to scheduled appointments because of the long distance to the place of treatment. Considering that treatment decisions are sometimes made based on geographical area rather than the patient's interests, providing cheap or free accommodation during treatment periods both reduces treatment costs and increases treatment adherence and family members' companionship because they are not afraid of the extra cost.

Another common and significant practical need is the problem of finding medicine; the shortage of medicine has caused many problems for patients. Some drugs, such as endoxan, are delivered to drugstores in limited quantities, and so acquiring the drug requires several visits to the drugstore or a long delay. Considering Iran's pharmaceutical sanctions, we suggest that governments and health policymakers take measures to solve this problem. Contracts with pharmacy companies for the mass production of drugs of the same quality as foreign samples could possibly lead to easier access to drugs.

The patients suggested that in addition to the time of diagnosis, psychoemotional support should continue during the treatment, particularly at times when patients face appearance changes stemming from the treatment. Many

women believe that their breasts play a critical role in their beauty and femininity and so losing them is very difficult. Furthermore, in addition to the changes in body image, mastectomy causes changes in the way clothes are worn and reduces sexual desire in some women. Consistent with the present study, the study by Patiyal, Pandey, and Kumar in 2023 [60] revealed that mastectomy negatively affects women's body image, self-confidence, and sense of femininity. The patients in the current study emphasized receiving emotional support from the family, medical team, and peer group, which is consistent with the findings of Ghaemi [61] and Beatty [51]. Although mastectomy is upsetting and difficult for some patients, some stated that they dealt with it more easily when they were told about the necessity of surgery for survival. Similarly, care providers can explain various breast reconstruction methods so that patients can choose the most appropriate method. Furthermore, introducing individuals who have passed through the same treatment path helps a patient's ability to adapt to the disease, culminates in raising morale and motivation to continue the treatment, and provides a new viewpoint for patients.

In line with the study of Klungrit, Thanasilp, and Jitpanya [14], patients stated that they needed support from the medical team and family to cope with the physical complications of chemotherapy. Providing the patient and their family with coping strategies and ways of managing complications before starting treatment, communicating with healthcare providers, and supporting family members in daily affairs when the patient is struggling with physical symptoms can help the patient with comfort.

Consistent with the present study, in studies conducted by Leão et al. [62], Taleghani, Yekta, and Nasrabadi [63], and Edis and Kurtgöz [64], women resorted to spirituality in order to achieve peace, hope, and treatment will; they achieved disease acceptance using this approach. The women regarded their illness as the will of God and a means of divine testing for humans, and they believed they had no other option but to submit to it. Some women regarded illness as a way of promoting human growth and excellence. As Iranians, the patients' view of the concept of God is that God is wise, and all His actions, including the occurrence of illness, are based on the wisdom that man is unaware of. From the patient's perspective, both pain and treatment come from God, and one should seek refuge in Him in times of hardship. The results of the current research demonstrate the importance of holistic care; in addition to physical and mental needs, the spiritual needs of women should also be taken into account. In such comprehensive care, care providers would be required to identify and respect women's spiritual needs using certain practical guidelines, leading women to perceive the meaning and purpose of life.

Based on the findings of the study, many women expressed their dissatisfaction with the communication with healthcare professionals, particularly oncologists and assistants; they wanted a more effective and better relationship in order to facilitate the exchange of information and a better identification of needs. In line with the present study, the research by Cai, Masaki, and Shi [21] demonstrated that patients preferred timely communication and wanted care providers to respond to medical doubts and reduce discomfort. In the study of Remmers, Holtgräwe, and Pinkert [65], patients expressed that they needed a respectful care relationship in which they were treated as human beings. These findings show the need to improve communication skills among healthcare providers, particularly in the areas of active listening and empathy, which can promote patient satisfaction, understanding of health issues, and treatment adherence.

Most patients mentioned that they were not aware of the probable effects of treatment on their sexual relations. Similar to the findings of the present study, McClelland's study [66] indicated that women needed to be aware of the natural impacts of cancer treatment on sexual relations and to know that other women also struggled with such problems. Various factors, which have not been considered, influence women's sexual relations during treatment; these include mental and physical factors and treatment complications such as hormone suppression, mastectomy, and its effects on self-confidence. None of the medical team members have paid enough attention to this facet of women's needs, and because talking about sexual issues is still taboo in Iran, women refuse to express these needs. It is suggested that women be provided with an opportunity to discuss their sexual issues and concerns in a safe environment. In addition, information should be provided to women, particularly to share with their husbands, regarding possible sexual changes due to cancer treatment. Body reconstruction through medical technology, training spouses in renegotiating sexual relations, training strategies to improve intimacy, and sexual counseling could help improve sexual relations.

4.1. Strengths and Limitations. Explaining the needs of patients with breast cancer can provide new insights for healthcare professionals and policymakers, helping them to meet patients' needs more effectively. The limited number of participants restricts the generalizability of the findings. However, it is worth mentioning that caution in generalization is one of the limitations of all qualitative studies, including content analysis; therefore, utmost effort has been made for data robustness in order to understand the content in depth. Furthermore, since these two selected hospitals are the largest referral centers for cancer patients throughout Iran, the participants' experience of patients' needs is probably widespread.

5. Conclusion

The role of supportive care is to identify the particular needs of the patients. Identifying care needs gives care providers a better understanding of the needs, concerns, and problems of cancer patients when improving care interventions. Overall, the results of this study have demonstrated that women with breast cancer face numerous needs during the diagnosis and treatment phase; these have not been appropriately considered by the healthcare system. Possible

solutions require interdisciplinary collaboration, continuous communication with patients, and an expansion of the role of nurses in the Iranian care system, which would provide patient-oriented care based on the needs of cancer patients.

Data Availability Statement

The datasets analyzed during the current study are not publicly available because of ethical considerations but are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare no conflicts of interest.

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Endnotes

[1]Meaning "healer" in English; one of the names of God.

[2]Meaning "you are the one whose name is the medicine and your memory is the healing" in English.

Supporting Information

Additional supporting information can be found online in the Supporting Information section. *(Supporting Information)*

Interview Guide Questions, given as Supporting file.

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