Journal of medical & pharmaceutical Sciences (JMPS) • Vol 7, Issue 1 (2023) • P: 86 - 72
https://journals.ajsrp.com/index.php/jmps
ISSN: 2522-333X(Online) • ISSN: 2522-333X (Print)

The Experience of Newly Diagnosed Women with Breast Cancer in Oman

Zalikha Khamis Darwish Al-Marzouqi*[1] , Nawal Said Salim Al-Suraihi[1] , Aida Said Bakeet Al-Dhoani[2]

[1] Oman College of Health Sciences | Ministry of Health | Oman
[2] Suhar Hospital | Ministry of Health | Oman

Received:
24/10/2022
Revised:
01/11/2022
Accepted:
27/11/2022
Published:
30/03/2023

* Corresponding author:
z.yamani99@yahoo.com

Citation: Al-Marzouqi, Z. K., Al-Suraihi, N. S., & Al-Dhoani, A. S. (2023). The Experience of Newly Diagnosed Women with Breast Cancer in Oman. *Journal of medical and pharmaceutical sciences, 7(1),* 72 – 86. https://doi.org/10.26389/AJSRP.W241022

Abstract: Objective: It is well known that breast cancer have many impacts on women's personal and professional life; therefore, this study sought to explore the experience of newly diagnosed women with breast cancer in Oman. This study would help to understand women's knowledge, attitudes, views, beliefs with breast cancer and to understand the impact of breast cancer on their daily life. Methods: This study used a qualitative design, guided by a constructivist grounded theory approach. Semi-structured interviews with 20 women were conducted in the North Batinah Governorate of Oman. At the beginning of the data collection, purposive sampling relied on inclusion criteria was used. Then theoretical sampling was applied up to the point of data saturation. Results: The data from the interviews underwent constant comparative analysis and two main categories emerged from the data: "Knowing Breast Cancer" and "Being a Woman with Breast Cancer". The data revealed that many women (60%) had poor understanding on breast cancer and they did not know the risk factors and warning signs of breast cancer. The data also revealed that majority of women (80%) knew the importance of conducting breast self-examination but they did not perform breast self-examination because of their busy life. Also, the data showed that clinical breast examination was conducted rarely within the healthcare institutions and it was limited for those women who had warning signs of breast cancer. The daily life of women diagnosed with breast cancer was within the framework of anxiety. Many women expressed their worrying feeling about their health condition and their personal and professional life. Conclusion: knowing the experience of women newly diagnosed with breast cancer from different aspects could help to provide the necessary educational and supportive services.

Keywords: Breast Cancer, Perception, Awareness, Attitudes, View and Impact.

تجربة النساء المصابات حديثًا بسرطان الثدي في عمان

زليخة خميس درويش المرزوقي*[1]، نوال سعيد سالم السريحي[1] ، عايدة سعيد بخيت الضوعني[2]

[1] كلية عمان للعلوم الصحية | وزارة الصحة | سلطنة عمان
[2] مستشفى صحار | وزارة الصحة | سلطنة عمان

المستخلص: الهدف: من المعروف أن لسرطان الثدي تأثيرات عديدة على حياة المرأة الشخصية والمهنية. لذلك، سعت هذه الدراسة إلى استكشاف تجربة النساء المصابات حديثًا بسرطان الثدي في عمان. ستساعد هذه الدراسة على فهم معرفة المرأة ومواقفها ووجهات نظرها ومعتقداتها فيما يتعلق بسرطان الثدي وفهم تأثير سرطان الثدي على حياتهن اليومية. الطرق: استخدمت هذه الدراسة تصميمًا نوعيًا مسترشدًا بنهج نظرية بنّاءة. أجريت مقابلات شبه منظمة مع 20 امرأة في محافظة شمال الباطنة في عمان. في بداية جمع البيانات، تم استخدام أخذ العينات الهادف المعتمد على معايير الاشتمال. ثم تم تطبيق أخذ العينات النظرية حتى نقطة تشبع البيانات. النتائج: خضعت بيانات المقابلات لتحليل مقارن مستمر وظهرت فئتان رئيسيتان من البيانات: "معرفة سرطان الثدي" و "كونك امرأة مصابة بسرطان الثدي". كشفت البيانات أن العديد من النساء (60%) لديهن فهم ضعيف لسرطان الثدي ولا يعرفن عوامل الخطر والعلامات التحذيرية لسرطان الثدي. كما كشفت البيانات أن غالبية النساء (80%) يعرفن أهمية إجراء الفحص الذاتي للثدي لكنهن لم يقمن بإجراء الفحص الذاتي للثدي بسبب حياتهن المزدحمة. كما أظهرت البيانات أن الفحص السريري للثدي كان نادراً ما يتم إجراؤه داخل مؤسسات الرعاية الصحية وكان مقصوراً على النساء اللواتي ظهرت عليهن علامات تحذيرية لسرطان الثدي. كانت الحياة اليومية للنساء المصابات بسرطان الثدي في إطار القلق. أعربت العديد من النساء عن شعورهن بالقلق إزاء حالتهن الصحية وحياتهن الشخصية والمهنية. الخلاصة: معرفة تجربة النساء المصابات حديثًا بسرطان الثدي من جوانب مختلفة يمكن أن يساعد في توفير الخدمات التعليمية والداعمة اللازمة.

الكلمات المفتاحية: سرطان الثدي، الإدراك، الوعي، المواقف، الرؤية والتأثير.

1. Introduction and Background

Cancer is a worldwide health problem and is regarded as a fatal type of disease. Breast cancer is considered one of the top ten morbidities and mortality causes among women.[1] Breast cancer is number one in 16 out of 22 countries worldwide.[2] and is the second leading cause of death.[3] It is a health-threatening problem among women.[4] In Oman, the same statistics are observed breast cancer is the second leading cause of death among Omani women and accounts for 32% of the total cases of cancers.[5] Breast cancer is commonly presented at a relatively young age and with an advanced stage of the disease.[6,7] Breast cancer is one of the cancers commonly encountered thus, awareness of risk factors, signs of cancer, and seeking early medical care and support could improve survival rates. Within healthcare institutions in Oman, there are several ways to detect breast cancer, such as ultrasound and mammography. Cancer Association in Oman also provides a mobile mammography bus during Breast Cancer Awareness (BCA) in October each year, which helps women to detect any breast abnormalities. In addition, one of the easiest ways to discover signs of breast cancer earlier is through breast self-examination (BSE). Unfortunately, the effectiveness of the services in Oman was not studied from the women's viewpoints.

Several studies showed an increased mortality rate among women with breast cancer. The reasons were a lack of knowledge about breast cancer's detection and some beliefs about breast cancer and its management.[3, 8, 9] Review of evidence about the reasons why women presented themselves late for breast cancer screening or did not seek medical care has been conducted in the Middle East region.[10] This study showed that age, cultural-traditional influences, and social and demographic factors as some reasons that hindered early screening and detection.[10] According to a study conducted in Iran, BSE used among women was low.[11] Likewise, breast cancer screening participation rates were low being new to the Middle East region.[11] Factors such as knowledge among women and healthcare professionals about breast cancer detection, healthcare professional recommendations for breast screening, socio-demographic factors, cultural faiths, religious activities, social support, accessibility of health services and perceived efficacy of breast cancer screening, all influenced screening behaviour among women.[11, 12] A study in Yemen revealed that women had good knowledge about breast cancer and inadequate awareness of breast cancer screening and screening practices.[13]

In Oman, very few research studies had conducted to assess women's awareness of breast cancer and its screening. Thus, exploring women's awareness of breast cancer and screening tests is critical. Furthermore, very few research studies investigated the experience of newly diagnosed women with breast cancer. Acknowledging women's experiences and their daily life with breast cancer could help the MOH pave the way for providing appropriate educational and supportive services to Omani women within healthcare institutions and the community.

2. Research Problem

According to the Ministry of Health statistics in Oman, breast cancer is the second leading cause of death among Omani women and accounts for 32% of the total cases of cancer.[5] Very few research studies have been conducted in Oman to assess women's awareness regarding breast cancer and its screening. Consequently, it is essential to explore what is going on regarding women's awareness of breast cancer and its screening. Furthermore, very few research studies investigated the experiences of newly diagnosed women with breast cancer. Thus it is very significant to explore what is going on regarding breast cancer from women's perspectives. Acknowledging women's experiences of breast cancer and its screening along with their daily life with breast cancer could help MOH to pave the way in providing appropriate educational and supportive services to Omani women within healthcare institutions and the community.

3. Material and Methods

3.1 Study Design

This study used a qualitative design. A grounded theory approach was applied to develop concepts to explore the experiences of newly diagnosed women with breast cancer. The researchers communicated with the newly diagnosed women with breast cancer to interpret their real-world regarding their experiences, beliefs, views, and awareness. The women also discussed their daily life with breast cancer from their perspectives in more detail. Grounded theory is considered the most appropriate approach to investigate social relationships and actions when there are limited research studies on the factors that affect people's experiences.[14] It also allows people's lives to be seen holistically and from their perspectives.[14] It is a methodology for providing both a description and an explanation of social processes during people's interactions within the structure of a conceptualized theory through the systematic collection and analysis of data.[15,16]

3.2 Context

The researchers selected one healthcare institution in Sohar Wilayate in North Batinah Governorate in Oman (OPD breast clinic in one of the referral hospitals) to reach women newly diagnosed with breast cancer. North Batinah Governorate is considered the second governorate by population size. This healthcare institution is deemed the most appropriate site for gaining access to research participants to understand women's experiences with breast cancer.

3.3 Sampling Strategy

Purposive sampling based on inclusion criteria, women above 18 years of age and newly diagnosed with breast cancer, was used to recruit the participants. The researchers asked the participants about their perceptions and experiences with breast cancer and its screening. The researchers wanted to explore women's attitudes, views, and opinions about breast cancer and its screening. Therefore, variations had considered when recruiting women in this study. For example, various age groups, different residence places, variations in stages of treatment (surgical, chemotherapy, radiation) and differences in breast cancer's stages (stages one, two, three and four).

Also, theoretical sampling was used in this study and depended on selecting participants who could give more information. Theoretical sampling helps to develop the theory.[16] Thus, the initial sampling technique should identify research participants who meet the inclusion criteria for the concepts to be developed, and theoretical sampling helps researchers develop a theory. For this study, the researchers used purposive and theoretical sampling techniques.

3.4 Sample Size

In grounded theory, researchers cannot identify the sample size before researchers conduct initial data collection and analysis. The sample size is produced inductively until theoretical saturation occurs.[14, 15] For a research study that requests to know the perception and experience among a group of relatively similar individuals, 12 interviews should be adequate to reach saturation.[15,16] A sample of between 20-30 participants is commonly enough to achieve theoretical saturation in grounded theory.[14,15] In the current research, the researchers added participants until they obtained theoretical saturation. The researchers also stressed that nothing new emerged from the data.[14, 15] For this study, 20 participants were considered enough to reach saturation.

3.5 Data Collection Methods

Before starting the interviews, an initial interview topic guide was developed with a few questions related to breast cancer and its screening. The research questions were: What is the perception of Omani women of breast cancer? What do you know about breast cancer? What is the perception of Omani women of breast cancer screening? What do you know about breast cancer screening? Do you practice breast self-examination regularly? How do you practice breast self-examination? What is the daily experience of Omani women with breast cancer? How do you experience breast cancer? The researchers developed research questions according to the aim of the study. Also, two expert researchers in the MOH revised and approved the research questions. In grounded theory, the iterative method encourages researchers to develop interview questions and skills.[14,16]

The researchers used a topic guide to ensure that research questions were covered, which helped to meet the aim of the study. Discussions with the participants allowed the researchers to explore their views on breast cancer. After the first few interviews with women, it was clear that questions needed to be added to the topic guide to understand further issues. Therefore, the researchers amended the topic guide accordingly. For example, the researchers added a question related to support to the topic guide (Did you receive support from your family or community?).

The participants were recruited via poster advertisement by the recruiting nurses who were not working at a study site. The participant information sheet, describing the purpose of the research study, was given to participants who were interested in participating by recruiting nurses. Then, the recruiting nurses informed the researchers about the potential participants. Contact details of the potential participants were provided to the researchers by recruiting nurses. The researchers contacted the participants by telephone and answered their questions. They agreed on a time and place to conduct the interview. On the day of the interview, the researchers obtained informed consent before conducting the interview.

In this study, semi-structured in-depth face-to-face interviews were considered the most effective method to collect data regarding the participants' perspectives on breast cancer and its screening. The researchers conducted semi-structured interviews with five participants who met the inclusion criteria. The initial data analysis exhibited the need to recruit more women for the study. Accordingly, the researchers added fifteen women to this study. The researchers intended to explore the perceptions and experiences related to breast cancer through interviews. Therefore, flexibility within an interview is essential when exploring new ideas about the phenomenon under study.[14] Using semi-structured interviews allow some flexibility.[17] For example, semi-structured interviews allow researchers to follow issues related to the research questions and clarify comments made by the participants.[17] Therefore, semi-structured interviews allow researchers to ask questions, in the same way, in greater depth to explore the issues under study.[17] For this study, the researchers recruited a total of 20 women who were newly diagnosed with breast cancer. Semi-structured interviews helped the researchers describe women's accounts and experiences related to being newly diagnosed with breast cancer to gain an understanding of their daily life with breast cancer.

All the interviews in this study were audio-recorded using a digital recorder. The researchers informed all the participants in advance about the use of recording equipment, and they consented to the researchers using a digital tape recorder. Audio recording enabled the researchers to focus on the interviews rather than writing notes, which might have distracted the researchers from listening to women's answers. The researchers made field notes after each interview regarding the issues that emerged and to enable reflection on the interview. The researchers wrote memos in their notebooks as soon as possible after they completed the data collection process. Before storing the participants' data, the researchers removed personal information. Interviews were anonymized and each participant was given a code number. The audio recording was deleted after the researchers' transcript of the data and all electronic data were kept in the encrypted server, access to which was password protected. In addition, all participants were informed that any publications and quotations would be attributed to pseudonyms to ensure anonymity.

3.6 Techniques to Enhance Validity and Reliability

The researchers reviewed transcripts for accuracy. The researchers transcribed the collected data and made sure to record every single word of the participants, so the findings emerged from the data, not from personal opinions. In this study, triangulation was employed, and data were obtained from different participants with different backgrounds, which offered a variation in the data. In addressing credibility, the researchers attempted to determine a true picture of the women's experience with breast cancer. To allow transferability, the researchers provided sufficient details of the context of the fieldwork, which enable the readers to decide whether the study environment is similar to their situation. Finally, to accomplish confirmability, the researchers took steps to demonstrate that findings emerge from the data and not their predispositions.

Reflexivity helps researchers to recognize presumptions and contributes to examining the influence of the researchers on the study participants and settings.[15] When the researchers were conducting the interviews, they were listening to the participants' perspectives and showed an interest in what they were saying. They were able to understand the perceptions of participants from their viewpoints. The researchers also maintained reflective records to limit their influence on the research process. The researchers adhered to the direction of constructivist grounded theory as part of an interpretation.[14] The grounded theory methodology admits reflexivity.[16] Therefore, throughout the data collection, the researchers wrote reflections on what went well and participants' reactions to each interview. This methodology helped the researchers to concentrate on the participants' words about their knowledge, beliefs and experience with breast cancer and its screening.

3.7 Characteristics of Research Participants

This research study was undertaken from June to December 2021. For this study, 20 participants' women were selected until theoretical saturation was obtained and no new data emerged. The majority of women were married and educated. Their age ranged between 20 to 52 years. Fifteen women were married, and five were single. The time since being diagnosed with breast cancer ranged from six months to one year. The women were on different treatment strategies such as radiation therapy, chemotherapy or surgical intervention (Table 1: Participants' Demographic Data).

Table 1: Participants' Demographic Data

No	Age	Marital Status	No of Children	Occupation Status	Level of Education	Duration of Diagnosis (Months)	Treatment	Family History of Breast Cancer	Seeking other treatment (Yes/ No)
1	22	S	0	Not working	Student	6	Surgery	Not known	Broad
2	40	M	6	Private	Secondary	8	Chemo	Not known	No
3	20	S	0	Not working	Student	6	Surgery	Not known	No
4	33	M	5	Government	Diploma	9	Radiation	Not known	Broad
5	30	M	2	Private	Secondary	12	Chemo	Not known	No
6	29	S	0	House wife	Bachelor	12	Surgery	Not known	Broad
7	33	M	5	House wife	Secondary	7	Chemo	Not known	No
8	38	M	7	Private	Secondary	6	Surgery	Not	Broad

No	Age	Marital Status	No of Children	Occupation Status	Level of Education	Duration of Diagnosis (Months)	Treatment	Family History of Breast Cancer	Seeking other treatment (Yes/ No)
								known	
9	34	M	3	House wife	Diploma	12	Chemo	Not known	Broad
10	27	M	4	Government	Bachelor	10	Surgery	Not known	No
11	24	S	0	House wife	Secondary	12	Surgery	Not known	Broad
12	30	M	1	Government	Secondary	6	Chemo	Not known	No
13	52	M	8	House wife	Secondary	8	Radiation	Not known	Broad
14	36	M	5	Government	Diploma	9	Surgery	Not known	No
15	27	M	3	Government	Diploma	10	Surgery	Not known	Broad
16	29	M	6	Private	Secondary	12	Surgery	Not known	Broad
17	25	S	0	Government	Diploma	7	Surgery	Not known	Broad
18	36	M	5	Government	Bachelor	9	Radiation	Not known	No
19	41	M	4	House wife	Secondary	12	Surgery	Not known	Broad
20	44	M	6	Private	Secondary	6	Chemo	Not known	No

4. Data Analysis

The researchers transcribed all data and used constant comparative analysis during data analysis. In grounded theory, data collection and analysis are conducted at the same time.[18] The researchers use theoretical sampling to focus and feed the constant comparative analysis of the data.[14] At first, the researchers created categories using open coding.[14,15] Within each category, the researchers find several subcategories.[14,15] Coding is the first phase to make analytic interpretations and it shapes an analytic structure from which the researchers build the analysis.[15] During initial coding, the goal of the researchers is to remain open to all potential theoretical directions indicated by readings of the data.[16] This primary step in coding moves the researchers across later decisions about defining the core conceptual categories.[14] For this study, the initial coding produced over 140 codes, which needed to be grouped and structured. Line-by-line coding was performed by reading the data systematically, and accordingly, data was coded. Line-by-line coding was done by giving a name to each line of the gathered data.[20] Furthermore, a constant comparative approach was used by comparing data with each other to find out similarities and differences.[16] In this phase, the researchers compared the data with each other to generate conceptual categories.[16]

The second major step in coding is focused coding.[16] Here, the researchers gathered the data in a new way to develop the most outstanding categories of data from earlier codes.[16] Coding provides the researchers with a focused method of viewing data and helps the researchers to gain a deeper understanding of the phenomenon under study.[16] Two concepts were developed in this study and named under the themes in the result section. These themes or categories were "Knowing Breast Cancer" and "Being a Woman with Breast Cancer".

5. Ethical Approval

The approval of the proposed study was obtained from the MOH Ethical Committee in the Sultanate of Oman (RERAC 4/ 2021). Before conducting the study, the design and purpose of the study were discussed with the Nursing and Midwifery Department in the Directorate General of Health Services in the North Batinah Governorate. The reason was that the researchers wanted to get permission to use study allocation and to obtain all facilities to conduct this study. Informed consent was obtained from all participants, and they were insured confidentiality.

6. Results

The data from the interviews underwent constant comparative analysis and two categories or themes were established "Knowing Breast Cancer" and "Being a Woman with Breast Cancer".

6.1 Knowing Breast Cancer

This theme explores women's understanding of risk factors and warning signs of breast cancer. It also explores women's understanding and knowledge about breast self-examination and clinical breast examination. Many women in this study had low awareness of breast cancer and its dangerous signs. 12 out of 20 women (60%) did not know the warning signs of breast cancer. They also did not know the risk factors and the warning signs of breast cancer. Many women stated that *"I do not know about the risk factors of breast cancer or the warning signs and how to discover them, I did not learn that".* Participant 3 said that *"I have very few knowledge about breast cancer signs like when I have like a lump, not much information".*

However, some women, especially those above 40, know some warning signs of breast cancer. They believed that breastfeeding work as a protective method to prevent breast cancer. One of the women stated:

"I learned from my mother that breastfeeding is good for women and it can protect us from breast cancer if we continue breastfeeding our babies, I know that skin changes and bleeding in the breast are considered to be one of the warning signs of breast cancer" **(Participant 1).**

On the other hand, very few women (n=8) had good knowledge about the risk factors and the warning signs of breast cancer (40%). They knew that an unhealthy lifestyle increases the risk of cancer in general. They also gave some examples of unhealthy lifestyles which increase the risks for cancer such as poor nutrition, not conducting regular exercise and not maintaining a healthy weight. One of the women said:

"I learned in the school when I was a student that a good lifestyle could prevent cancer…I also learned from the nurse in the school that eating a healthy diet and doing exercise, and maintaining a healthy weight can prevent cancer from the occurrence" **(Participant 5).**

Other women indicated that changes in breast skin and secretion from the nipple are considered to be some warning signs of breast cancer. Other women also said the pain in the breast and under the axillary were two warning signs of breast cancer. Two women stated that

"Yes, I knew some warning signs of breast cancer….I knew that if I have some changes in the skin of the breast like if the skin became like orange skin, this was considered a warning sign… also if there is a secretion from nipples like blood secretion, this was also considered to be a warning sign and I need to go to the hospital for treatment" **(Participant 9).**

"I know the pain in the nipple or breast, and axillary could be some warning signs of breast cancer" **(Participant 20).**

A question was asked about how the women discover that they have breast cancer, and one of the women stated:

"I knew that I had breast cancer when I felt pain under my axillary and my breasts. I mean, the nipples started bleeding that time, I went to the clinic. Then the doctor did for me a breast examination and lots of investigations, that time I knew that I had breast cancer" **(Participant 10).**

The data revealed that many women had poor understanding on breast cancer. Many of women (60%) did not know the risk factors and warning signs of breast cancer. Few women (40%) demonstrate understanding of the risk factors and warning signs of breast cancer.

The data of this study found that many women (n=16) understand the importance of conducting breast self-examination, but they don't practice breast self-examination because they don't know how to conduct breast self-examination (80%).

"I understand that it is important to check breast…..I don't know how to do breast self-examination." **(Participant 12).**

Few women know the conduct of breast self-examination (n=4) (20%). However, when asked if they were conducting breast self-examination every month, they replied that they were not doing this examination regularly every month due to their busy lives with their family. The women provided many excuses for not conducting breast self-examination on a regular base. For example, one of the women stated:

"I have lots to do at home, and I cannot find time to do breast self-examination... I knew it is important to conduct breast self-examination every month and at a specific time... but I am busy, and I forgot to do breast self-examination" **(Participant 7).**

In this study, many women (n=13) (65%) reported that healthcare professionals were not conducting clinical breast examination during clinic visits, especially during and after pregnancy when they attended antenatal and postnatal clinics. They stressed that healthcare professionals did not even ask them about their breast condition when they visited the clinics. The healthcare professionals asked them if they were breastfeeding or not. One of the women stated:

"No one asked me about breast changes, no doctors or nurses conducted breast examination for me...only when I felt pain, they referred me to a hospital for treatment...When I was following up during pregnancy they did not conduct breast examination" **(Participant 17).**

On the other hand, one unmarried woman stated that she felt shy discussing her breast condition with the surgeon in the clinic because the surgeon was a man. She did not even allow him to conduct a breast examination because it is considered to be "haram" according to the woman.

"I felt shy when the doctor told me that he need to do a breast examination for me. I did not allow him....it is haram, so I refused and he referred me to a hospital for treatment" **(Participant 6).**

The data revealed that the majority of women (80%) knew the importance of conducting breast self-examination, but they do not know how to conduct breast self-examination. Only 20% of the women know how to do breast self-examination, but they forgot to conduct breast self-examination because of their busy like with their families. Also, the data showed that clinical breast examination was conducted rarely (65%) in health care institutions, and it was limited to those women who discovered by chance that they had warning signs of breast cancer. For unmarried women, the data revealed that feeling shy to expose breasts and dealing with a male surgeon was challenging to conduct clinical breast examinations.

6.2 Being a Woman with Breast Cancer

This section explores women's experiences with breast cancer. It illustrates the daily life of women diagnosed with breast cancer. It also illustrates the support women received from their families, healthcare professionals and the community. In addition, this section explores psychological and social impacts on women diagnosed with breast cancer. This includes the impact of breast cancer on women's personal and social life.

The daily life of women diagnosed with breast cancer was within the framework of anxiety. All women expressed their worried feeling about their health condition. They were worried about dying from breast cancer. According to women, they felt shocked when they received the news that they had breast cancer. They correlated death with cancer. Thus, they felt anxious and worried about their health status. One of the women stated:

"I felt shocked when the doctor and the nurse told me that I have breast cancer. I did not believe that, and I was crying….I felt anxious about my health, and I was thinking that I will die because of this disease" **(Participant 14).**

Also, many women felt anxious about their health condition due to their uncertainty about treatment within Oman. They felt the necessity to travel broadly to seek another advanced treatment. According to them, there is no advanced treatment for breast cancer in Oman thus, they wanted to go to India, Thailand or Jorden for further treatment. One woman stated:

"I am worried about my health condition, and the doctor told me that he will do surgery for me, I do not want to do surgery, there is advanced technology for treating cancer in other countries, and I am planning to go to India, Thailand or maybe Jordon. My sister contacted the doctors in these countries, and they said that they have another alternative way rather than surgery" **(Participant 18).**

Many women felt fear and anxiety about the future of their work (n=12) (60). They expressed their worries about the effect of breast cancer on their work. They were worried about being treated for a longer time. They also did not want to retire because of breast cancer. Participant 11 said:

"I have had breast cancer for a year, and I am on treatment. I am working in a governmental section. The manager will not give me emergency leave or annual leave forever. I am worried about my work, and I do not want to retire, I need money" **(Participant 11).**

In addition, some women (n=7) (35%) felt worried and fearful about their ability to take care of their family, especially their children. They said that they felt tired after receiving chemotherapy and that they were feeling sleepy most of the daytime. They could not care for their children or do household activities. They felt worried that their children needed them and that they could not be able to provide help. For example, one of the women said:

"I feel worried because I cannot help my children while they were studying, I feel sleeping because of my condition and treatment" **(Participant 19).**

Most of the women (n=18) (90%) expressed that their family members were supportive. They said their husband was trying to help them as much as possible. They stated that their husbands were helping with household activities and shopping. Also, they took care of the children while the women were sleeping or resting.

"I have a lovely husband and he is taking care of me when I was sick. He is helping me in cleaning the house, washing clothes, shopping. He was taking care of my children" **(Participant 1).**

The majority of women (n=19) (95%) agreed that healthcare professionals were not supportive. They said that healthcare professionals were given health education after being diagnosed with breast cancer. According to women, healthcare professionals had given them late appointments for follow-up of care and procedures like a mammogram. One of the women stated:

"They are not supportive. Late appointment for visiting doctor and x-rays. People would die because of these late appointments. Healthcare professionals were only educating me when I was diagnosed with breast cancer, not before that" **(Participant 2).**

Many women in this study felt isolated from the community. According to them, they were not going out of the house because some of their neighbours were feeling empathy for them and women did not like that. They were praying to them and saying good words. Others were staring at them when the women were going out of their houses.

"I do not want to go out because I feel that my neighbours were staring at me with their sad faces on my condition and they were praying for me, so I did not want to go out of my house" **(Participant 8).**

The data revealed that the daily life of women diagnosed with breast cancer was within the framework of anxiety. Many women expressed their worried feeling about their health condition and their personal and professional life. Other women had been isolated from social activities due to breast cancer.

7. Discussion

The results of this study indicated that awareness about breast cancer and its screening remains low in Oman, which leads to the consequent underutilization of breast cancer screening services. The results of this study are compatible with those of the United Arab Emirates study in which breast cancer screening services were observed to be underutilized among women and mainly utilized to diagnose women with breast lesions.[20] In Oman, breast cancer screening services are available for free within the MOH healthcare institutions. Regrettably, women are not referred for breast cancer screening in healthcare institutions. Generally, women in Arabic countries regard healthcare institutions as a places to go only when they feel ill or have symptoms.[20] Moreover, 65% of women identified that healthcare professionals were not performing breast examinations during clinic visits unless the women developed warning signs of breast cancer. Consequently, this perception is considered an obstacle to health promotion actions to acquire high participation rates. This low participation rate has implications for the success of screening programs by MOH. Studies have indicated that with improved knowledge, screening uptake can be increased, especially breast cancer screening. [20,23]

This qualitative research study explored the impact of breast cancer on women. The daily life of women diagnosed with breast cancer was within the framework of anxiety. Indeed, women all over the world had stated the same emotion of shock, distress and anxiety.[21, 23] They were worried about dying from this disease. According to women, they felt shocked when they received the news that they had breast cancer. They linked death with cancer. Many women expressed their worried feeling about their health condition and their professional life. For many women in this study, breast cancer mean "death". This result was found in a systematic review, in which many participants were reporting worrying about death due to worrying about the spread of cancer to other parts of their bodies.[22] In addition, many women felt fearful about their ability to take care of their family, especially their children, due to the effects of treatment on their bodies. This result was found in a systematic review, in which participants reported the effect of chemotherapy on their physical and psychological aspects such as loos hair and decreased sexual desire.[23] Therefore, social support from family, friends, healthcare professionals and the community is needed to help women to overcome the negative effects of anxiety and complications of breast cancer and its treatment. Healthcare professionals should support women during challenging times like bad news and treatment to reduce the negative impacts of breast cancer on women's lives and decrease physical complications. Healthcare professionals should motivate women to utilize their religion and spiritual activities to help women cope with their illnesses.

Many women felt isolated from the community, and they were not going out of the house because they did not want others to feel empathy for them. Some women believed that society watched them with pity[22] which in turn caused low social interaction and isolation from the community. Negative attitudes toward cancer patients are common in some communities where cancer patients were viewed as people who were unable to make any contribution to the community.[24] Social isolation was found to increase the risk of mortality rate among patients diagnosed with breast cancer due to lack of access to support from relatives or friends.[25] The study also revealed a lack of support from healthcare professionals and the community as a whole for women diagnosed with breast cancer. Thus, women were seeking treatment a board in different countries like Thailand, India and Jordan, to get alternative and advanced treatment than surgery. This finding was found in a scoping review, where the women at this review were travelling to different countries to reconfirm the diagnosis and seek other treatment methods.[22] The reason for travelling abroad may be to get hope for a cure for breast cancer by using a different treatment which is not available in their country. However, travelling to other countries for treatment is expensive and not all women can afford it, thus they obtained treatment within healthcare institutions in Oman.

8. Conclusion

The data from the interviews underwent constant comparative analysis and different themes were established. Two main themes emerged from the consistent analysis of the data: "Knowing Breast Cancer" and "Being a Woman with Breast Cancer". These themes were identified through the understanding gained from data collected from different perspectives. The data revealed that many women in this study had a poor understanding of breast cancer. Many women did not know the risk factors and warning signs of breast cancer and its screening. Few women in this study demonstrate an understanding of the risk factors and warning signs of breast cancer. The data of this study found that many women understand the importance of conducting breast self-examination. They also knew the methods of conducting breast self-examination. However, they were not doing this examination regularly every month due to their busy life within their personal and professional scopes. This study showed the importance of providing comprehensive educational and supportive programs for women diagnosed with breast cancer within healthcare institutions and the community. The Ministry of health must play a vital role in providing comprehensive educational and supportive programs for women diagnosed with breast cancer.

9. Recommendation

The Ministry of Health in Oman should develop educational and supportive programs for women with breast cancer. These programs should be implemented within all healthcare institutions in Oman. Also, breast self-examination should be enhanced and taught to all women especially the young women during their study at secondary schools. Further research studies on the perception and experience of Omani women on breast self-examination should be conducted, especially young women, to understand their perspectives regarding breast self-examination and if they know how to conduct BSE. Also, the policy makers in Oman, should implement a clear policy to support working women with certain illness like breast cancer.

Acknowledgement

Exceptional thanks and appreciation go to our colleagues, Dr. Alia Al-Momani from Jordon Nursing College, Dr. Samira Al-Rasbi from Sultan Qaboos University Hospital and Ms. Asma Al-Yamani for their review of the manuscript. We would also like to express our appreciation for the role of the Ministry of Health in Oman in supporting the authors while conducting this study. We express our thankfulness to all the participants for their precious contributions and information in this research.

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List of Abbreviations:

MOH: Ministry of Health

BSE: Breast-self Examination

OPD: Out Patient Department

PIS: Participants Information Sheet

BCA: Breast Cancer Awareness