

# Psychosocial Impact of Breast Cancer Diagnosis Among Omani Women

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## ABSTRACT

**Objectives:** The aim of this study was to explore different psychosocial impacts on Omani women diagnosed with breast cancer. **Methods:** Semi-structured individual interviews were conducted with 19 Omani women diagnosed with breast cancer to describe the impact of the disease on their personal and social life. Women were recruited from wards and out-patient clinics at the Sultan Qaboos University Hospital, Muscat. **Results:** Four main themes emerged. These were: a) factors related to psychological distress of the disease and uncertainty (worry of death, interference with work and family responsibilities, searching for hope/cure, travelling overseas); b) reactions of family members (shocked, saddened, unity, pressure to seek traditional treatments); c) views of society (sympathy, isolation, reluctant to disclose information); and d) worries and threats about the future (side effects of chemotherapy, spread of the disease, effect on offspring). **Conclusion:** Breast cancer diagnosis has several devastating psychosocial impacts on women in Oman. Healthcare professionals working with women with breast cancer should be aware of the different psychosocial impacts of the disease on women's lives. Appropriate measures must be taken by the decision makers whenever needed, including enforcing positive views and support of Oman's society towards women with breast cancer.

**B**reast cancer is one of the most common cancers worldwide, accounting for 16% of all female cancers in 2012.<sup>1</sup> Nulliparity, increased life expectancy, urbanization, and adoption of Western lifestyles have been shown to increase the incidence of breast cancer.<sup>2</sup> The estimated number of deaths from breast cancer in 2004 was 519,000 women; the majority of whom were from developing countries including the Arabic nations.<sup>1</sup>

Oman is one of the developing Arabic countries located on the south-eastern tip of the Arabian Peninsula. The total population of Oman is 2.8 million based on the 2010 census, of which 1.9 million people were expatriates. Approximately 36% of Omanis were below the age of 15 and only 2.4% were above the age of 65. The median age of Omanis was 21 years.<sup>3</sup>

In Oman, breast cancer is the most common cancer among females: it accounts for approximately 16.4% of all cancers in women.<sup>4</sup> However, the majority of women in Oman tend to present with advanced stage

of the disease at a young age. Survival rate is low even though up-to-date treatment methods are applied.<sup>5</sup> Similar to other developing countries, the awareness of breast cancer in women is generally low and several cultural barriers may be attributed towards the delay in diagnosis.<sup>6</sup>

Diagnosis of breast cancer can be devastating and can trigger several adverse reactions for the majority of women. Many women, including Omanis, can develop symptoms of psychological distress such as anxiety, depression, fatigue, pain, difficulty concentrating, social isolation, sexuality concerns, and self-blame.<sup>7-11</sup> Thus, women with breast cancer tend to adopt several strategies to cope with the diagnosis and redefine themselves and their lives accordingly. They usually turn towards positive cognitive restructuring, wishful thinking, yoga, physical exercise, and religious practice.<sup>11,12</sup> Women in Oman tend to follow their religious beliefs and practices to cope with the diagnosis including listing and reciting of the Holy Book, the Qur'an, praying, and reciting

religious words, they believed that the stronger their faith in *Allah* (God), the greater the chance of a cure.<sup>11</sup>

In women, the loss of the symbols of femininity can result in low self-esteem, negative body image, false self-perception, social isolation and the development of communication or relationship problems with family members or friends.<sup>13,14</sup> As a result of the side effects of cancer treatments, some women may develop “cancer stigma” from losing their feminine physical characteristics through hair loss (secondary to chemotherapy) or the loss of one or both breasts (following mastectomy).<sup>15</sup>

The psychosocial stress and the physical burden of the disease may further reduce the patients’ opportunities in life and increase social rejection and isolation. Thus, their level of emotional well-being is decreased along with poor health outcomes.<sup>16,17</sup>

In Arabic countries including Oman, very little research has been conducted to determine the effect and scale of psychosocial impact on women diagnosed with breast cancer. The psychosocial impact of cancer diagnosis in Omani women might also be relevant to other Muslim women in Arabic countries taking into consideration the similarity between cultural and religious beliefs, and practices. Acknowledging the psychosocial impact of breast cancer diagnosis could help to pave the way in providing psychosocial support.

## METHODS

This study is a continuation of a previously published study conducted to determine and identify the impact of breast cancer diagnosis on Omani women.<sup>11</sup> Qualitative rather than quantitative methods in the form of individual semi-structured interviews were chosen to collect data because it allowed the women to describe their accounts and experiences relating to the impact of the disease on their personal and social life.<sup>18</sup> It also enabled flexible maintenance and overall control over the direction of the interview by keeping the conversation open. In this manner, questions could arise from the patient’s responses and bring forth new issues, expanding on a particular area or response when relevant. The interviews were based on a topic guide that was developed in accordance with the literature and used in previous studies.<sup>11,12</sup> The topic guide was translated from English to Arabic.

Maximum variation purposive sampling was chosen in order to cover the impact of breast cancer diagnosis on women at various stages of breast cancer.<sup>19</sup> Hence, women diagnosed with breast cancer at different stages of treatment including chemotherapy, surgery and radiotherapy, alone or in combination, were selected.

The study population comprised of adult women ( $\geq 18$  years old) who had been diagnosed with breast cancer and were attending the oncology Out-Patient Department (OPD) at Sultan Qaboos University Hospital (SQUH) or that were admitted to SQUH oncology wards for follow-up or treatment who were identified using the Hospital Information System (HIS). Their next scheduled visits to the OPD oncology or the oncology wards were also identified in advance using the HIS. Two of the co-authors (female nurses), who are trained in qualitative research methodology, invited the patients to participate in the study during their visits at the OPD or while they were admitted in the oncology ward. Patients were instructed to read the study protocol, and were assured confidentiality. Signed informed consent forms were obtained from all patients that agreed to participate in the focus group interviews.

The interviews were conducted in a room at the OPD or in the oncology ward at SQUH and lasted from 45 to 60 minutes. The interviews were tape-recorded and transcribed verbatim. This study was approved by the Local Research Ethics Committee of the College of Medicine and Health Sciences of Sultan Qaboos University, Medical Research Ethics Committee (MREC) number 332.

The framework approach was used to analyse qualitative data, which involved several stages.<sup>20</sup> First, the data, which included the subjects’ conversations and reactions, were checked and the transcripts of the interviews were read to identify the topics that were found to be relevant or of particular interest. Second, a schematic framework was developed in which the raw data was assigned into different categories that represented the patients’ experiences and attitudes. Each category that emerged from the analysis was then allotted a specific code, which was systematically applied to the data to form an index. In addition, the data from the original transcripts were arranged and tabulated. The data was then analyzed.

Data analysis was conducted by the authors and the emergent findings were discussed among

**Table 1:** Socio-demographic characteristics of the respondents.

Respondent number	Age (years)	Marital status	Number of children	Duration since diagnosis (months)	Treatment	Level of education	Family history of breast cancer
1	28	S	0	12	C/S/R	Graduate	No
2	39	M	5	5	C/R	Primary school	Yes
3	40	M	5	24	C/S/R	Graduate	Yes
4	34	M	7	8	C/R	Literate	No
5	37	M	9	2	C/R	Literate	No
6	48	M	9	17	C/R	Literate	No
7	51	M	8	12	C/S/R	Literate	No
8	32	S	0	6	C	Postgraduate	No
9	34	M	5	16	C/R	Secondary school	No
10	42	M	8	14	C	Primary school	No
11	35	M	3	8	C/R	Literate	No
12	52	M	6	9	C/R	Literate	No
13	46	M	4	2	C/R	Literate	No
14	38	M	6	31	C/S/R	Literate	No
15	24	S	0	5	C/R	Graduate	No
16	54	M	8	3	C/R	Literate	No
17	37	M	3	16	C/S/R	Graduate	No
18	49	M	6	36	C/S/R	Literate	No
19	39	M	3	7	C/R	Graduate	No

S= Single, M=Married, C=Chemotherapy, S= Surgery, R= Radiotherapy

all authors and refined as an iterative process, preventing any researcher from dominating the analysis and imposing their views on the results. The responses from all participants were translated verbatim into English. The accuracy of translation was checked by the authors.

## RESULTS

The study group comprised of 19 women. Their age ranged from 24 to 54 years with a mean age of 40 and a median age of 39. Sixteen women were married and three were single. The time since breast cancer diagnosis ranged from a few months to three years and participants were on different methods of cancer treatment (surgery, chemotherapy, or radiation therapy) either alone or in combination [Table 1].

The results from data analysis showed that women diagnosed with breast cancer identified several factors that affected their personal and social lives including factors related to stress and uncertainty, reactions of family members, perception of women with breast cancer by society,

as well as worries and threats of relapse in the future. When the participants were diagnosed with breast cancer, many of them entered a state of shock; for them the word cancer meant "death sentence". They believed that death was inevitable, which created fear and anxiety at all times. The diagnosis not only disturbed their personal, social, and family life, but also interfered with work. Some of the responses expressed by the participants are given below:

"The word death always rings in my ear...the fear of recurrence affects my life...I worry about my future both in terms of my marriage life and my work... the word cancer is, especially, a big word. In other countries it is even called death, and it is not an easy term." Respondent 1, aged 28 years, 12 months post diagnosis, had surgery, on chemotherapy and radiotherapy treatment.

"I could not sit or sleep alone; I was always calling my children to be beside me, scared of dying alone, without seeing them." Respondent 6, aged 48 years, 17 months post-diagnosis, on chemotherapy and radiotherapy treatment.

Some participants were looking for hope to cure the disease. They were searching for information from different resources in order to decrease anxiety and stress. Others decided to travel overseas to get confirmation of the diagnosis, but also possibly in search of more medical attention. Some participants reported the following:

“Thanks to *Allah*, from my reading, I found that the disease might disappear overtime... Yes it might be a chronic disease, but it might disappear after treatment.” Respondent 1, aged 28 years, 12 months post-diagnosis, had surgery, on chemotherapy and radiotherapy treatment.

“I did not agree to repeat the biopsy, I did my booking and everything, then we travelled to Thailand. There, they immediately did ultrasound and biopsy and the results were positive.” Respondent 10, aged 42 years, 14 months post-diagnosis on chemotherapy treatment.

On the other hand, some of the study participants thought that travelling overseas for better care and treatment might be useless as the same medical attention and treatments are available in Oman. The availability of such services in their home country could also help reduce anxiety from being away and they could get support from family members. As for those who decided to travel abroad, they preferred to come back to Oman because they found cancer treatment too costly. Some responses to this issue were as follows:

“People told us to go abroad for treatment... we told them the treatment is available here... I am relaxed in Oman, I am relaxed a lot, everything is available in Oman, thanks to *Allah*... I don't have to go out for treatment... we don't have to worry. Respondent 19, aged 39 years, seven months post-diagnosis, on chemotherapy and radiotherapy treatment.

“They told us the same in India, we said we better go back home to be with family and treatment will not cost a lot.” Respondent 13, aged 46 years, two months post-diagnosis, on chemotherapy and radiotherapy treatment.

Some participants were concerned that their

diagnosis would have emotional ramifications on their family members who would also be shocked and saddened by the diagnosis. The disease imposed much sadness and disappointment upon their families, which, in turn, made the participants feel worse. Brief accounts of the impact of breast cancer diagnosis on the participants' family members are detailed below:

“My whole family became so sad, especially my elder sister, and my brother they could not cope with the news, even more so than me... my husband was the most devastated.” Respondent 10, aged 42 years, 14 months post-diagnosis, on chemotherapy treatment.

“The sadness is connected with me... not sad about myself but for my family... they are concerned about their daughter's future, I am their first child... they are waiting to see my bright future... I mean they were shocked that their daughter is having cancer... I mean they will view this as misfortunate.” Respondent 1, aged 28 years, 12 months post-diagnosis, had surgery, on chemotherapy and radiotherapy treatment.

On the other hand, some of the participants felt that the relationships with their family members, including husbands, became stronger after diagnosis and that family members became more supportive. For example:

“My relationship with my husband is normal. The opposite actually, it became stronger. I mean he is patient with me; he is patient with my anger. He is patient with the children and everything.” Respondent 17, aged 37 years, 16 months post-diagnosis, had surgery, on chemotherapy and radiotherapy treatment.

“My family became much closer to me... before we were distant from each other, I used to visit them sometimes... but now we are closer.” Respondent 8, aged 32 years, six months post-diagnosis, on chemotherapy treatment.

The majority of the participants reported to have been pressurized by family members to travel abroad for treatment, while some were also pressurized to seek traditional treatments such as “*Wasam*” (branding) in hope of curing the disease. Some of their brief accounts are given:

“I was advised by many people, my father also agreed with them despite my father being well educated, they insisted upon me to go abroad for treatment, but when he was advised by his elders to try *Wasam* as the best form of treatment, I refused.” Respondent 15, aged 24 years, five months post-diagnosis, on chemotherapy and radiotherapy treatment.

“I did the *Wasam*... women from the neighborhood suggested it... and said fire helps to get rid of this illness... I was branded 24 times... and I do not encourage such practice.” Respondent 2, aged 39 years, five months post-diagnosis, on chemotherapy and radiotherapy treatment.

Some participants believed that people in their society looked at them in a sympathetic manner, which hurt their feelings, and they found it condescending. This limited their interaction with people and kept them isolated from the rest of society. For example, some participants reported the following:

“People can cause depression... the social view of people towards the sick person is always sympathetic... people have adopted negative attitudes toward cancer patients...” Respondent 12, aged 52 years, nine months post diagnosis on chemotherapy and radiotherapy.

“The community does not help if you have cancer you know... they will deal with you differently and I do not like this feeling, which makes me stay away from others... I do not want to be like this... I mean sick.” Respondent 14, aged 38 years, 31 months post-diagnosis, had surgery, on chemotherapy and radiotherapy treatment.

Some participants were reluctant to tell their friends about the diagnosis, worried that this might affect their relationship and make them appear weak. Thus, they preferred to keep the news of the diagnosis confidential and disclose it to close family members only.

“If I tell my close friends... I might collapse... because of their reaction, it is very difficult... now I have very strong faith... and because of this I do not want to be weakened by my friends’ reactions...or from my surroundings.” Respondent 15, aged 24 years,

five months post-diagnosis, on chemotherapy and radiotherapy treatment.

“I do not know what my friends would say, I do not know what is inside them, some will show commiseration in their reaction, others with whom I have had a shaky relationship I do not know, they might be happy about this, I prefer not to tell anyone.” Respondent 8, aged 32 years, six months post-diagnosis, on chemotherapy treatment.

Most of the study participants were worried that the diseases would spread to other parts of the body, believing that breast cancer is an inherited disease and causing them worry that their daughters might develop breast cancer in the future. Some of the participant’s major concerns were noted as follows:

“I wish this illness would disappear... *Inshaallah* (God willing) and will not affect me. But I am scared to be told later that it has spread everywhere.” Respondent 10, aged 42 years, 14 months post-diagnosis, on chemotherapy treatment.

“I am worried about the lives of my daughters, I am afraid this illness might affect them... and they might inherit it from me.” Respondent 7, aged 51 years, 12 months post-diagnosis, had surgery, on chemotherapy and radiotherapy treatment. The participants were also worried about the side effects of chemotherapy. Many of them had bad experiences, and others prepared themselves and accepted the consequences.

“I cried and cried when I was told the chemotherapy will make me lose all of my hair and I will have no hair... I saw it falling but... I prepared myself for the fact that I will lose my hair and I accepted it. I think it is better that the person knows about the side effects so they can be prepared.” Respondent 10, aged 42 years, 14 months post-diagnosis, on chemotherapy treatment.

“Chemotherapy messed me up, extremely affected me... I even felt that my memory was gone and I started to forget things... very difficult, exhausting, the day they gave me chemo I felt like “have I lost my memory to this extent?”... it is really hard, I changed around my kids, around my house, what more can I say.” Respondent 2, aged 39 years, 5



months post-diagnosis, on chemotherapy and radiotherapy treatment.

## DISCUSSION

This qualitative study explored the psychosocial impact on women diagnosed with breast cancer in Oman. The participants in this study identified four main areas that affected patient's personal and social life including stress and uncertainty, reaction of family members, how they were viewed by society, and threats and worries about the future.

The participants were shocked and distressed with the diagnosis; for many it meant a "death sentence" and they were overwhelmed with the idea of their own mortality. Indeed, women in Oman and around the world have also reported experiencing the same feeling and have developed several coping mechanisms to readjust their personal and social lives accordingly.<sup>11,12</sup> Nonetheless, it was observed in one study that participants "who respond to breast cancer diagnosis with passive acceptance and resignation" were likely to be at greater risk of poor long-term psychological adjustment, and poor well-being overall.<sup>21</sup>

Participants in the current study were worried that the cancer could spread to other parts of the body, and about the side effects of chemotherapy. The combination of the effects of mastectomy and the side effects of chemotherapy, such as loss of hair, decreased libido, and early menopause constitute a serious threat to a woman's body image and femininity.<sup>22,23</sup> Indeed, many women in the current study were reluctant to inform their friends about the diagnosis and they preferred to only share the news with close family members. Another major concern observed in this study was "cancer stigma," which led to feelings of unattractiveness, self-consciousness, and solitude.<sup>11,24,25</sup>

Some of the participants believed that society viewed them with pity, which in turn caused limited interaction and isolation from people and the community as a whole. Negative attitudes, stereotypes, and discrimination toward cancer patients are common in some societies where they were referred to as "victims" unable to make any contributions to the community and some people even avoid working with them.<sup>26</sup> Women from ethnic minority groups were shown to have experienced more distressing symptoms and social

isolation if they lived in cultures that do not share their specific values, beliefs, and languages.<sup>27</sup> Thus, many cancer patients reported a series of setbacks, for example, loss of health insurance, unemployment, problems when returning to work after treatment, and struggling to create interpersonal relationships with coworkers.<sup>11,28,29</sup> Social isolation was found to increase the risk of mortality in breast cancer patients due to the lack of access to care, particularly from beneficial caregivers such as friends, relatives, and adult children.<sup>30</sup>

The participants in this study also sought more information about breast cancer and were pressurized by family members and friends to travel abroad. Like other countries in the Gulf, some patients travelled to overseas (e.g. Thailand, India, Iran) to reconfirm the diagnosis, while others travelled to seek other treatment methods. Information-seeking behavior is one of the coping strategies used by women diagnosed with cancer to decrease stress and anxiety.<sup>31</sup> The reasons for travelling abroad may be to provide some hope of a cure from cancer or possibly to seek different treatment modalities. Patients may also travel to maintain privacy from "cancer stigma" as this would provide an opportunity for patients to be away from the people they know.<sup>11,25</sup> However, treatment abroad is very expensive for some women who cannot afford it, and could also disturb continuity of treatment that has already begun.<sup>32</sup> Therefore, many women in our study preferred to stay in Oman to obtain free treatment.

Some women in this study were also pressurized by family members, friends and neighbors to seek local traditional treatments such as "*Wasam*" (branding). Branding refers to a traditional practice of creating burns on the skin with a hot iron rod or metallic object that eventually becomes a scar.<sup>33</sup> Several Asian, Arabic, and African societies still use traditional medicine in parallel to modern medicine to treat disease and relieve pain. Hence, some people in Oman and in other Arabic countries still believe in traditional medicine and advise patients to use such treatment methods despite the availability of modern medicine. Nonetheless, branding has been reported to have severe complications and potential risks including third degree burns, infection and the possibility of septic shock.<sup>34</sup>

In this study, women were very concerned about the emotional distress that breast cancer causes on family members. Breast cancer is known to affect

women and their husbands. They both tend to experience several psychological distresses such as depression, anxiety, communication avoidance, sexual problems, separation and/or termination of the relationship.<sup>35,36</sup> Younger women and women with a history of psychiatric illnesses have been found to be at greater risk of emotional distress.<sup>23</sup> On the contrary, the patients in this study felt that the relationships with their family and husbands were strengthened after breast cancer diagnosis.<sup>37,38</sup> It has been shown that the development of breast cancer does not usually disrupt marriages if the relationship was already strong before the onset/diagnosis of the disease. The quality of marital relationship has been identified to be a critical contributor towards the quality of life for women with breast cancer and the diagnosis may result in an even closer relationship with their husbands.<sup>11</sup>

There were limitations to this study. First, all of the recruited participants were Omanis and therefore, the findings may not be generalized to women living in different countries with different cultures. Second, the interviews were conducted in a hospital environment by two nurses. Choosing a different setting, such as the participant's home, which is less formal could create a more relaxed atmosphere, and may widen the participants' responses with the possibility of more enriched data. Third, participants were recruited and interviewed by two nurses that were known to them, which may have created some bias in the selection. Finally, although we translated participants' quotes from Arabic to English language, the exact meanings might not have been achieved.

## CONCLUSION

In conclusion, this study showed that diagnosis of breast cancer was a shock to many women. They suffered from devastating symptoms including worry of death. Other major concerns that the participants expressed were the possibility of the cancer spreading to other parts of the body, the side effects of chemotherapy, and the possibility of their daughters inheriting the disease. Thus, healthcare professionals working with breast cancer patients should take these concerns into consideration and support them by suggesting coping strategies that would help to relieve their stress and anxiety.

Patients in this study believed that the society

pitied them, leading to limited interaction with people in the community and withdrawal from society. The participants also expressed a degree of reluctance towards sharing news of their diagnosis with friends out of fear that they would appear weak. Thus, healthcare professionals and decision makers involved with breast cancer women should formulate more public involvement in support of women with breast cancer. Media and public awareness campaigns using leaflets should be distributed to patients at specialized cancer centers and primary healthcare clinics in hope of changing the public's view towards women with breast cancer.

Some women with breast cancer follow the advice of people in the Omani community to use traditional medicine in the form of "*Wasam*" in hope of a cure. However, this type of treatment is associated with complications including burns and infection. Health care professionals working with breast cancer women should educate and make women aware of the risk of complications if they choose to seek this type of traditional medicine.

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## ETHICAL APPROVAL

*Oman Med J* seeks to ascertain the ethical approval of all research studies. Authors are thus mandated to submit a scanned copy of the ethical approval form, which will form an integral part in the critical assessment of Original Article submissions.