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Challenges Faced by Health Care Providers in Dealing with Iranian Women's Fear of Breast Cancer

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ABSTRACT

Background: Breast cancer is the most common cause of death in Asian countries, especially in Iran. The current solution, to increase survival and reduce complications, is the early diagnosis of breast cancer. However, fear of the disease is a deterrent to adopting preventive modes of behavior. This study aims to explore the fears faced by healthy women in Yazd, Iran. It also looks at ways in which health care providers deal with this challenging issue.

Methods: This study is a directed qualitative content analysis. The researchers conducted 20 semi-structured interviews with 14 women aged between 40 and 65 years. These women were selected through purposeful sampling. The contents of interviews were divided into meaning units after entry into the MAXQDA software. The qualitative analysis was performed according to the protection motivation theory.

Results: The main issue, derived from the qualitative content analysis, is called "infiltrated fear." The participants experienced indescribable horror on hearing the word "cancer." They believed that fear of cancer is more lethal than the cancer itself. Various underlying causes of this fear were expressed. These included gradual death, burning in the fiery furnace of pain, lack of social support, fear of relatives becoming infected, type of cancer, time of diagnosis, and the insidious nature of the disease.

Conclusion: Irrational fear can be replaced by managed fear through some strategies. These include information provided by consultants, helpful relationships with peers, and survivors re-telling their personal experiences. In Islamic doctrine, prophets used promises and warnings as strategy. There was an emphasis on promises. Women can be encouraged to voluntarily adopt preventive modes of behavior by using these strategies.

Keywords: Fear, Qualitative, Content Analysis, Personnel, Breast Neoplasms

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Introduction

In Asian countries, particularly in Iran, the wide incidence of breast cancer has transformed this disease into the most feared and common type of cancer among women. However, there are few reports on this topic.[1] Based on studies conducted by the Ministry of Health and Medical Education (MOHME), breast cancer lies in the average range of prevalence. The age of occurrence is 10 to 15 years earlier than in other countries.[2] The latest official report by Iran's Cancer Institute shows that breast cancer contributes to 25% of all cancers in Iran, and is more common among the age group of 35 to 44 years.[1] The official report released by the Cancer Registry in 2009 showed that the standard age for breast cancer is 28.25 years; in Yazd province, this figure was 38.52 years, third after the provinces of Tehran and Isfahan.[3] Since the primary diagnosis of this disease can reduce morbidity and mortality, Yazdi women should be encouraged to participate in modes of behavior promoting breast health. However, in recent years, their participation in preventive modes of behavior has become a challenge due to cultural barriers.[4, 5] For example, fear is a negative cognitive reaction toward the prevention of breast cancer.[6] To our knowledge, this reaction has not yet been investigated comprehensively in the domestic realm.

In existing studies, "fear of cancer diagnosis" is pointed out as an important and inhibiting screening factor.[7, 8] Also, there have been studies on the relationship between fear of relapse and use of health services among breast-cancer survivors.[9] However, there is evidence that the fear of breast cancer has not been studied in healthy women. The main question outlined in this study is: What are the factors blocking early diagnosis and timely treatment of breast cancer in healthy women? The response can help health care providers gain a deeper understanding of the meaning of fear and procedures of adjustment.

Methods

In order to explore fear, researchers performed a qualitative study through directed content analysis based on the protection motivation theory (PMT). PMT consists of two independent appraisal pathways resulting from fear appeals—threat appraisal and coping appraisal.[10] When people receive health information (like knowledge on breast cancer), they might respond to it either adaptively or maladaptively.[11] The methodology was based on guidelines regarding consolidated criteria for reporting qualitative research (COREQ). The current study was conducted on 14 married women from Yazd who had no history of breast cancer. The participants were selected by purposeful sampling using the following criteria of inclusion:

1) Aged 40 years or above

2) Not suffering from mental disorders based on their records

3) Ability to communicate

The criteria for exclusion consisted of the participant's death or relocation to a different city.

Gradual sampling led to a saturation of data. Twenty semi-structured interviews were conducted at a community health center in Yazd, Iran. This is one of the major health centers in Yazd city that primarily provides health services to women. Subsequently, pilot interviews were conducted with three women and the final form of the interview was prepared. The first researcher carried out audio-taped interviews between September and December 2015. The other researchers were observers. Each face-to-face interview was conducted with a prior appointment and lasted between 30 – 90 minutes in a quiet room at a clinic near the participant's home. The interviews started with open and general questions. Gradually, they became more detailed. The questions were designed based on constructs of the PMT. They aimed to discover the meaning of cancer and detect the hidden concept of fear. Burnard's (1991) 14-stage approach was used for the qualitative content analysis of interviews including phases like note taking, immersion in data, open coding, reduction and refinement,

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checking, re-reading and categorization, rearrangement of data, informant checking, preparing to write, report writing, and linking to literature.[12] The interviews were frequently reviewed after entry into MAXQDA software by the team of researchers. This was done to instill an overall sense and categorize them into meaning units. Open coding and constant comparative analyses were employed. The techniques used by the researchers to ensure accuracy of information included bracketing and continuous immersion of data. All participants signed an informed written consent prior to initiation of the study. Consent was also taken to record their voices. Moreover, the concepts of voluntary participation, anonymity, freedom to withdraw from the study without penalty, and explanation of the objectives and methodology of the study were explained to them.

Results

Fourteen women aged 40 years and above participated in the study. All were living in the city of Yazd in Iran (Table 1).

The main issue emerging from the qualitative content analysis was "infiltrated fear." Some of the phrases used by the women to express their perception of cancer included: burning in the fiery furnace of pain, reaching the end of the line, melting like a candle, and the gradual annihilation of the body. All of these indicate their lack of readiness to face cancer. The women also expressed their fear through the following terms: approaching death, fear of the treatment procedure, stress of relatives becoming infected, fear of the type of cancer, the time of diagnosis, and the lack of supportive resources (Table2).

On hearing the word "cancer," participants suddenly felt an indescribable fear. They imagined a monster against which they had no means to fight. They believed that "the fear of cancer is more lethal than the cancer itself." The painless onset of the disease, and its insidious and progressive nature incited dread among participants.

Table 1. Demographics of Participants (n = 14)

Variables	Mean (SD)
Age/Years	51.40(4.61)
Range	40-65
Number of Children	3
	n (%)
Education	
Primary School	1 (7.1)
School Diploma	6(42.9)
Higher Education	7 (50.0)
Occupation	
Housewife	1 (7.1)
Employed	13 (92.9)

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Table 2. Thematic Structure of Qualitative Content Analysis

Main Category	Category	Extracted Codes	Quotes from Participants
Infiltrated fear	Perceptions on the concept of cancer	Burning in the fiery furnace of pain	"A very bad, terrible, and painful feeling. My aunt had breast cancer and she always said: 'My pain is like burning alive in fire.'"
		Reaching the end of the line	"People with cancer will die sooner because they see the end of the line."
		Melting like a candle	"People with cancer seem good for six months or a year but after that they lose weight and their hair starts to fall due to chemotherapy. Just like a candle melting away."
		The gradual annihilation of the body	"I think cancer is a terrible disease which kills its victims bit by bit."
		Approaching death	"Sometimes people have accidents and they die quickly. This shocks others but they don't see them suffer. Cancer is different since you see the sick person is suffering and you know there is no way out. You pretend everything is okay. This is the most awful part."
	Background of the fear of cancer	Fear of the treatment procedure	"Nowadays people are so afraid of cancer because of its treatment procedures like radiation therapy which is not desirable."
		Stress of relatives becoming infected	"They say you won't really understand something until you have tasted it yourself. We might not have taken cancer seriously before but when someone in your family starts grappling with cancer things get different. Your way of thinking changes. I knew it was a horrible disease and families come under a lot of pressure but I didn't know really until it happened to us. Now I think a lot about cancer."
		Type of cancer and time of diagnosis	"Last year my brother's wife got breast cancer. I was a little afraid when my brother told me that a tumor in his wife's breast was detected by Sonography and they should take a sample of the tumor. After they took the sample, I got the results from the hospital and then I was really terrified."
		Lack of supportive resources	"My cousin had cancer and she passed away. I always imagine the same thing happening to me as well. I have no one. She had her children to look after her but I am alone."

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Discussion

Intense fear is considered an emotional reaction in patients diagnosed with breast cancer in the early stages of the disease.[13] In this study, we investigated healthy women's fear of breast cancer. The qualitative content analysis showed that their experiences and emotions were similar to those diagnosed with cancer. Although healthy women had not actually experienced cancer, they were able to imagine the continuous pain. They believed that breast cancer is equal to death. Main areas of fear were incurability and definite death. Vrinten et al. (2016) claimed that this belief inhibits participation in screening. It can be overcome by a public health campaign. Rising above such a belief is far easier than succumbing to fate. Fate decrees that if individuals believe they will get cancer, then they definitely will get it. Therefore, prevention is not required.[14] The results of Vrinten's study of English women showed that participants considered breast cancer to be their biggest fear and they were worried thinking
about it.[15]

According to our study, observing someone close with breast cancer was one of underlying causes of fear in healthy women. This can induce fear to the extent that healthy women take into account preventive modes of behavior. Lee, in his Ph.D. thesis, speaks about a community where women get a mammography done if a case of breast cancer is detected in their families. They think that they too may have developed the cancer.[16] However, these feelings are momentarily stimulated and the women gradually forget about it. So the fear cannot be associated with continuous preventive modes of behavior.

Women are mainly responsible for the welfare of their families, including husbands and children. As a result, breast cancer can cause an emotional gap within the family. Women feel concerned about the lack of family and social support.[17]

The insidious and painless nature of breast cancer creates a sense of internal dissatisfaction. Based on the study conducted by Muhbes (2010), 83% of breast cancer patients reported "fear of the unknown" as they felt it is a mysterious disease and they did not know what will become of them in the future.[18]

Fear of the process of breast cancer treatment is more powerful than the nature of the disease. Participants imagined a horrible experience. There is evidence of psychological trauma related to cancer diagnosis and treatment.[19]

Therefore, to alleviate this fear, we reminded healthy women that this cancer monster can be cured by timely management. Our research team discovered that "managed fear" is an appropriate approach toward replacing irrational fears in the absence of scientific evidence (phobias). In this respect, we recommend the following strategies:

1. **Providing information through consultant specialists:** Participants repeatedly expressed the need to have informed consultants by their side. Once the diagnosis of cancer is confirmed, specialists can give hope through education on supportive behavior.

2. **Creating helpful relationships with peers:** Women who practice preventive measures can be invited to encourage other women to adopt similar measures. Women with similar natures teaching recommended healthy modes of behavior can simplify that behavior for the target audience.

3. **Re-telling personal experiences by the cured:** Participants requested that cured women should come forward with their stories and pass on their personal experiences. With their deep and successful experience of diagnosis and treatment, cured women can be good role models for their peers. Moreover, when individuals share their success stories, their statements and experiences become more acceptable to the participants.[20]

Conclusion

Based on our observations, fear contributes to women's lack of referral for timely diagnosis and treatment of this disease. Therefore, we attempted

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to investigate this behavior. We looked at measures that influence overcoming the problem of fear in cancer prevention. We would advise physicians and health providers to avoid frightening individuals at risk as they are already frightened on an average to a severe level. Instead, the consequences of not following recommendations or guidelines of cancer prevention can be explained to them in an appropriate manner. Perhaps interpretations of "promising and warning" as mentioned in Islam can help to propagate correct modes of behavior. This "promising and warning" strategy is a prophetic approach. It warns against a dangerous matter and provides adequate time to abstain from it.[21] "Promising" means giving good news and comes from a place of encouragement. "Warning" means stimulating or motivating. "Promising" pulls and "warning" pushes forward. Both are necessary for mankind. Neither is sufficient on its own. Both principles should be present when preaching. It is wrong to rely solely on either. Indeed, "promising" should be emphasized more than "warning." Perhaps, this is why the Holy Quran gives priority to "promising": "promise and warning; promisor and warner."[22] Therefore, by employing this "promising and warning" strategy, we may drive women toward adopting voluntary preventive behavior for breast cancer. It is important to conclude with the thought: "it is time to face up to the fear of cancer."

Conflicts of Interest

The authors declare that there is no conflict of interest in this work.

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Authors' Contribution

Conceptualization, M.Kh., S.S.M.M., and M.L.; Methodology, M.Kh., S.S.M.M., and M.L.; Writing –Original Draft, M.Kh., S.S.M.M., and M.L.; Writing – Review & Editing, S.S.M.M. and M.L.; Supervision, S.S.M.M. and M.L.

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