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RESEARCH ARTICLE

Barriers To Early Detection of Breast Cancer Among Women Living In Poverty

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ABSTRACT
Objective: Early detection and screening are the most effective means to reduce breast cancer mortality in all populations. In this study, the inhibiting factors in the applications of qualitative research methods used for early diagnosis of breast cancer among poor women were identified.
Material and methods: Through focus group interviews, 40 women ranging between 20-60 years of age, meeting the absolute poverty criteria, without regular breast self-examination, clinical breast examination and mammography were recruited for the study. A conventional content analysis method was used in the data analysis. Interviews were recorded using a voice recorder, and the average duration of the interviews was 53 minutes.
Results: Factors inhibiting women's behaviors regarding early detection of breast cancer were identified as, respectively; individual attitudes and beliefs, provision of healthcare services and, cultural factors.
Conclusion: According to the data achieved, we concluded that, initiatives should be planned in order to reduce the inhibiting factors in the breast cancer screening behaviors of women living in poverty. In addition, health policies concerning provision of health care services should be revised.

KEYWORDS: Early detection, Breast cancer, Barrier, Poor Women.

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INTRODUCTION

Poverty is the most decisive risk factor regarding health care. According to WHO, poverty is currently the leading cause of diseases and deaths. Therefore, poor women constitute a group that can easily be affected by the health care problems caused by poverty. Poverty of the women is an adverse factor in the behaviors of protection and development of health and thus, poor women need to be the specific group to be addressed in the diagnostic studies [1].

Early diagnosis is the most effective way to decrease morbidity and mortality rates in breast cancer, and is of paramount importance in terms of protection and development of health among poor women. Breast cancer accounts for 24.2% of all female cancer cases in the world [2]. According to 2017 data of the Ministry of Health, breast cancer is the leading cancer type among women with the incidence rate of 43 per 100.000 population in Turkey [3].

Studies conducted so far reveal that early diagnosis behaviors of women regarding breast cancer are not sufficient and these rates are even lower for the women living in poverty [4-5-6-7].

Factors inhibiting the behaviors of individuals for early diagnosis of breast cancer also influence the success of efforts exerted for early diagnosis. In the studies that were conducted, factors such as perception of health, health insurance, fear of cancer, and transportation problems were listed as the factors inhibiting the applications used in early diagnosis of breast cancer in women [8-9].

Poverty of women is an important factor regarding her general health status and health protective behaviors. In some studies carried out with poor women, it was noted

that these groups should be addressed as priority groups in the studies on early diagnosis [8-10-11]. Therefore, the aim of this phenomenological study was to identify the factors inhibiting the applications used for early diagnosis of breast cancer among poor women.

Main question of the study: What are the causes of inadequate behaviors of poor women regarding early diagnosis of breast cancer?

Sub-questions: What are the knowledge levels of poor women regarding early diagnosis of breast cancer?

What are the perceived barriers of women concerning the early breast cancer diagnosis behaviors?

METHODOLOGY

Study Design **:** A qualitative design was used to research this study. The study was conducted using the focus group interview method.

Research Place : This study was conducted in Eğitim and Çetin Emeç districts of Balçova Region, in İzmir. Balçova Region consists of eight districts and women of low socio-economic status generally live in Eğitim and Çetin Emeç districts. Balçova Municipality has established "district homes" in these districts in order to enhance social solidarity, support women to have a profession, and strengthen the education system. This study was carried out in these neighbourhood homes.

Sample : The study group consisted of 7645 women who were aged 20-60 and were living in Eğitim and Çetin Emeç districts of Balçova Region. Criterion sampling method was used in selecting the samples. Two criteria determined for sampling were being in the age group of 20-60 and living in poverty. Poverty criterion of the study was determined by 'absolute measurement of poverty' calculated by food-calorie approach. Accordingly, 40 women who had monthly incomes of 600 □ or less for a family of 4 persons and reported no breast mass, no breast cancer, no regular breast self examination, no clinical breast examination and mammography history were included in the study in total. Mean age of the participants was 41.25 ± 8.66. Mean income of the participants was 454.25 ± 273.72 TL and mean number of the individuals living in the same house was 4.6 ± 1.12. 60% of participants were primary school graduates, 82.5% were married and 87.5% had social insurance.

Data Collection : Research data were collected via focus group interview method. Addresses of the women aged between 20-60 living in the two districts were taken from the alderman's office and they were visited at home. Aim of the study was explained to the women, their verbal consent was taken, then they were invited to focus group interviews at the district homes.5 focus group interviews, each consisted of 6-9 participants, were performed in total. Data were collected through semi-structured questionnaire consisting of eight questions and were evaluated by two experts. Focus group interviews were completed at a single session and lasted for at least 45 or at most 65 minutes. Interviews were tape-recorded by the consent of participants. Furthermore, an observer took notes. The focus group interviews continued until no new concept or different expression concerning the study subject emerged and the data collection process was finalized when it was concluded that data saturation was achieved.

Data analysis : Tape-recorded interviews were first analysed into a written text and then transferred to a computer. Subsequently, content analysis method, which is one of the basic qualitative research analysis methods, was used. Primarily, all the collected data were encoded and an encoding list was created to help classification of the content of the interviews. The responses obtained from interviews were analyzed according to the encoding list. Following the encoding, themes were created. In addition to the findings obtained by qualitative content analysis, remarkable and important answers were used exactly as they were expressed. In order to increase the reliability of theme creation and encoding procedures, themes and encodings were evaluated together with two other people. Conflicts were mutually discussed and resolved. In this manner, a high consensus was achieved regarding encoding and themes.

Ethical Considerations : Permission was obtained for the study from University Non-Interventional Clinical Studies Ethics Committee and from Municipality of Balçova. In addition, the participants were provided with information about the study, and their written consent was obtained.

RESULTS

The data obtained from focus group interviews were evaluated as themes of individual attitudes and beliefs, access to health services and cultural factors.

Individual attitudes and beliefs

Theme of individual attitudes and beliefs was analysed as lack of knowledge, low perception of sensitivity and self-efficacy, differences in the priorities, fear, ignoring health status, forgetfulness, time limitation, embarrassment and having responsibilities concerning the health care of other individuals.

All women participating in the study did not have sufficient information as regards to symptoms and risk groups of breast cancer, early detection methods and implementation ways of these methods. Some of them stated that they did not display any early diagnosis behaviors due to wrong information.

I know that large breasts are more likely to have cancer. I mean breast cancer is seen more common in women having big breasts. I don't think I am under the risk of breast cancer, because I have small breasts.

-It is said that it is more risky after the age of 60. In other words, you may have breast cancer after the age of 60. Therefore, it is not an important threat for us at the moment.

As regards to the early diagnostic methods, almost all women stated that they had never heard about clinical breast examination. Women didn't have sufficient information regarding how or when to perform BSE and also when to be screened through clinical breast examination and mammography. Some participants reported that they did not even consider mammography as an early diagnostic method.

- Referring to a doctor when there is a change or a mass in the breast is an early diagnostic method.
- BSE shoud be performed after menopause.

In majority of the participants, *perception of sensitivity and perception of self-efficacy* regarding the breast cancer were found to be low. Among these perceptions, the most commonly seen is the perception of sensitivity. Generally, women expressed that they did not implement early detection protocols because they believed their risk of devoloping breast cancer was low.

- We don`t need, because we don´t believe there is any risk.

As the factors preventing them from practicing BSE, majority of the women participating in the interviews expressed that they didn't know what to find and they didn't understand if the mass they detected was normal or not. Such expressions revealed the fact that self-confidence and determination of women to achieve the expected results from BSE applications were considerably low.

- I did breast self-examination but I couldn´t find anything, I mean I couldn´t figure it out. Then, I asked myself why I am breaking me down and I gave up practicing these self-examinations.

Differences in priorities were referred to as factors inhibiting the behaviors of women for early detection of breast cancer. The majority of the participants stated that they generally neglected their own health due to financial difficulties, family problems, child care, status of women in the society and the related tasks that must be carried out accordingly.

- My livelihobod problems constitute the top priority. There is a heavy responsibility on my shoulders, I would say.

Feeling of *fear* was included in the prominent barriers in focus group interviews. Women indicated that they had a fear of detecting a mass during self-examination or having a negative report in the clinical examination or mammography. Instead of living with the fear of cancer, they prefer to postpone early detection practices and continue living without knowing.

- I don´t want to think about it, I even don´t want to bring it to my mind.

In two of the five focus group interviews, *ignoring health status* is among the factors inhibiting the early detection of breast cancer. Women noted that they felt healthy unless they had bothering complaints. In addition, they underlined that when the acquaintances around were diagnosed with breast cancer, then they considered their own health more but it lasted for a very short time.

- We ignore our complaints, unless they are serious. We don´t visit a doctor unless we fall ill.

With respect to obstacles in the behaviors of women related to the early diagnosis, most of the women reported about different priorities, stress of life, and *forgetfulness* due to heavy responsibilities. Some of the participants noted that reminding activities were unavailable to prevent forgetfulness and they also stated that nothing was recommended by the health personnel about this issue.

- If I remember despite my heavy responsibilities and daily stress, I practice self-examination, maybe, once a month or even once a year.

Some of the participants emphasized that they considered breast and female body as private and with the *sense of embarrassment*, they were reluctant to participate in the screenings for breast cancer. Some women suggested that female doctors would eliminate this obstacle and facilitate visiting a doctor for screening. On the other hand, some women declared that the gender of the doctor did not disturb them.

- Embarressment is the nature of women. For example, I cover my breasts during ultrasound imaging but the doctor uncovers.

Having responsibilities concerning the health care of other individuals was noted by some of the participants as an inhibiting factor in early diagnosis behaviors and especially in clinical examination and mammography screening. These women stressed on child care and indicated the difficulty to leave their children during hospital visits, which actually takes a long time. In this context, they proposed that, as in the shopping centers, hospitals should have places for the mothers to leave their children during doctor visits.

- It is not possiple to go to hospital with the kids, they don´t keep quiet; also I cannot leave them to anyone.

Access to health services

Factors such as limited financial facilities to reach the health services, lack of social insurance, failure to obtain an appointment for clinical examination, long waiting time for the doctor, long tests and communication problems with the health care personnel were included in the theme of access to the health services.

Limited financial facilities was among the mostly discussed barriers in all group interviews, especially due to the poverty of the participants. Some of the participants should pay for the clinical examinations and tests because of the lack of social insurance. On the other hand, some of the women with insurance also indicated that they sometimes did not have money even to go to hospital.

- Sometimes I don´t have even 5-10 liras.

Difficulties to obtain an appointment for clinical examination was noted as a barrier in the access to the health service by most of the women. They stated that hospitals were over-crowded, so appointments were given for future dates. They pointed out the conflict between the emphasis on the importance of early diagnosis and the late appointments given for clinical examinations and tests.

- They specify some doubts but give the appointment for the tests at three months later.

Long waiting time at the hospital and long tests were discussed as inhibiting factors by the focus groups. The women noted that they must allocate the whole day for the hospital as the procedures generally last long, sometimes even for several weeks. Thus, women are not willing to go to the hospital. In addition, women having children stated that they could provide external care for their children for one day but it is problematic for

themselves to arrange such a support during long medical procedures.

- *It is tedious to go to the hospitals many times.*

Some of the participants reported that, communication problems with the healh care personnel is an obstacle in the access to the health services. Due to the work overload, health personnel tend to speed up the procedures, may not deal with the patients sufficiently and some may have a bad communication with the patients. As a result, women may not be satisfied with this clinical experience and would not apply to the hospital again for any early diagnosis practice. Furthermore, some women expressed that referring to a doctor as a healthy individual may pose an obstacle for them due to the inappropriate attitudes of the health personnel. Hospitals are already overcrowded and doctors may underestimate the control visit of a healthy person. In this context, the participants proposed the establishment of new special units at the hospitals dealing particularly with early diagnosis practices of breast cancer.

- *When the doctor asks about my complaints, what shall I say? Nothing, I just came for a control.*

Some women indicated that *dissatisfaction with the clinical examination* is also a barrier for themselves. One of the participants expressed her disappointment as; *'Some of the doctors are not interested at all, they even don't take a look. I detected a mass in my breast and went to a doctor for further examination. He asked me if there was a growth in the mass and wanted me to examine. I told him not. Then he told me to visit him again when I detect a growth in the mass"*

Having no recommendation from the health personnel caring for themselves also constitutes a barrier for the women. Women reported this fact as; *"Health personnel should inform us and also give recommendations as therapy", "There should be someone to motivate us and to remind us what to do".*

Cultural factors

Culture is one of the inhibiting factors affecting early diagnosis behaviors in the breast cancer. One of the issues discussed in the interviews was fatalist approach. Women stated that they will die one day either of breast cancer or some other reason. "*I will die one day in any case. If I have that disease it will ultimately cause my death."* One of the participants pointed out that cultural beliefs would be a barrier with the following explanation; *"I felt the mass in my breast. My neighbours said that it appeared when I strongly desired something that I don't have, and it would spontaneously get better".* Another participant answered the question regarding barriers by saying: "Not me, but my husband knows!"

DISCUSSION

Limited and wrong information concerning breast cancer risk groups are inhibiting factors in early detection methods of breast cancer in women. Studies carried out with women living in poverty support this finding [12-13]. Due to the insufficient number of health care personnel and nurses per capita and the crowded population of Turkey, preventive health care services would not be attached the sufficient importance. Failure to perform consistent home visits, which is one of the most important functions of nurses in the provision of primary health care services, may lead to inadequate implementation of health protection and improvement activities and also to experience difficulties in reaching the poor women who have problems to use health services and do not have sufficient knowledge on breast cancer.

Low level of sensitivity perception regarding breast cancer is another inhibiting factor for poor women. In the study examining the relationship between the perceived sensitivity and the mammography rates among poor women, it was observed that women with higher perceived sensitivity displayed 0.74 times higher mammography rates compared to women with lower perceived sensitivity and also the correlation between perceived sensitivity and mammography was found as 0.29. Wrong information about the breast cancer risk may lead to barriers in defining the right behavior by reducing the sensitivity perception.

Low levels of self-efficacy perceptions of poor women influence their participation in early diagnosis practices and literature data support this finding [5-14-15]. In this study, self-efficacy perceptions of the participants must have decreased due to unsuccessful experience concerning the behaviors of early breast cancer diagnosis or due to insufficient external motivations.

Another barrier for the poor women is to have different priorities. Studies conducted in this context support this finding [14, 16-18]. Compared to high-income women, poor women have to assume the responsibilities that are loaded to their shoulders by the society. This situation may cause women to ignore their own health status.

Fear of cancer diagnosis or fear of a mass detection in the self-examination are among prohibiting factors concerning the BSE, clinical examination or mammography for women. Studies carried out with women living in poverty exhibited the influence of fear factor on early diagnosis practices [13, 19-20]. In many societies, recognition and perception of cancer as a serious disease can evoke fear in women to perform the breast cancer early diagnosis practices.

Perception of health is another factor causing negative health-related behaviors. Women participating in the interviews defined themselves as healthy women, which may be preventing women from participating in the early diagnosis practices. Su et al (2006) reported that poor Chinese women don't perform early diagnosis practices because they don't detect any sign in their breasts; Ogedegbe et al (2005) reported women don't perform the early diagnosis practices as they feel themselves healthy. Considering themselves healthy unless they have any symptom of the illness and defining early diagnosis as the actions to be taken after the occurrence of the disease may be inhibiting factors, as well.

Most of the women participating in the study identified forgetfulness as an inhibiting factor. In the literature, we couldn't find any study examining forgetfulness as an

obstacle. Husaini et al (2005) stated that women participating in their study did not think about mammography screening. For the women with low socio-economic status, limited knowledge, low level of sensitivity perception and insufficient reminding activities regarding early diagnosis might lead forgetfulness to be considered as an obstacle.

Some of the participants defined embarrassment as a barrier for themselves. For the African-American poor women, the feeling of embarrassment was recognized as an obstacle [17-23]. According to some women, considering breasts as a symbol of sexuality; and according to the Turkish culture, considering that showing breasts to a male foreigner is a sin are two obstacles in visiting a doctor for clinical examination and mammography.

In the study, poor women stated that acesss to the health services is an inhibiting factor in the early diagnosis behaviors, which is supported by literature. In different studies conducted so far, lack of social security, high costs, distrust to doctors, transportation problems were mentioned as inhibiting factors regarding in the early diagnosis practices. [20-23-24]. In addition to the data in the literature, spending long time at the hospitals and long procedures were also reported by the participants of this study. This situation increases the cost of transportation of the poor women by also inhibiting their access to the health services because of the individuals they are responsible for.

Cultural beliefs and fatalism are regarded as barriers in the early diagnosis behaviors of the women. In the context of sharing of the cancer-related information among women, cultural beliefs, religious beliefs and cultural perceptions concerning the breast screening methods were determined to be important by Wu & Bancroft (2006), Husaini et al. (2005) and Bailey et al. (2000), respectively. Lamyian et al. (2007) determined fatalism to be an inhibiting factor in early diagnosis behaviors among Iranian women. It was found in the study that the perception of some women as if events in life are directed by a will oher than her own will and the result would not be changed by her own will despite any efforts will prevent their participation in practices of early diagnosis.

CONCLUSION

In accordance with the obtained data, initiatives should be planned in order to develop early diagnosis behaviors among women living in poverty. In the planning and implementing steps of these initiatives, the activities of the public health nurses, who play an important role in providing primary health care services will be one of the determining factors in the success. By educating poor women, nurses should increase awareness and develop early breast cancer diagnosis behaviors in women. In planning education programs, knowledge of the poor women about early diagnosis, their health perceptions and barrier perceptions should be taken into consideration. Furthermore, educational programs should be planned in order to improve self-efficacy and sensitivity perceptions of women and they must be motivated to participate in the screening programs.

Health services should be arranged to facilitate access to breast cancer screenings. In the access to the health services, both individual knowledges, attitudes and beliefs and the factors facilitating the access to the health services should be integrated.

AUTHORS' CONTRIBUTIONS

The participation of each author corresponds to the criteria of authorship and contributorship emphasized in the Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly work in Medical Journals of the International Committee of Medical Journal Editors. Indeed, all the authors have actively participated in the redaction, the revision of the manuscript and provided approval for this final revised version.

COMPETING INTERESTS

I declare that there is no financial issue or conflict of interest that involves the authors of the manuscript.

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