

Original Research

An Examination on the Knowledge Level of Breast Self-Examination of the Patients Who Apply to a University Hospital

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Abstract

Objective: The main aim of this study is to examine the knowledge level of women on breast cancer and breast self-examination who apply to the University Hospital's Obstetrics and Gynecology and General Surgery polyclinics. This study was made in accordance with the Declaration of Helsinki and this study supports the adoption of these principles by other people involved in medical research on human volunteers.

Materials and Methods: The universe is formed by the patients that have applied to the University Hospital's Obstetrics and Gynecology and General Surgery polyclinics within the dates of June-July 2016. Within this study data was collected by the Champion's Health Belief Model Scales (CHBMS) and a total of 351 participants were reached.

Results: The 43.6% of the sample consists of women of 20-29 ages, 71% of them are married and 27.4% of them have either an undergraduate or a post graduate degree. The perceived benefits concept has the most mean out of the 6 concepts in CHBMS. The study also showed that although 79.2% of the participants didn't have a breast problem; 27.6 % of them said that they would do breast self-examine 3-4 times in a year.

Conclusion: As a result we can say that the participants are aware of the importance of breast self-examination and that they have learned it from health professionals.

Keywords: Breast cancer, breast self-examination, patients.

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Özgün Araştırma

Üniversite Hastanesine Başvuran Hastaların Kendi Kendine Meme Muayenesi Hakkındaki Bilgi Düzeylerinin Araştırılması

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Öz

Amaç: Bu çalışmanın amacı Üniversite Hastanesi Kadın Doğum ve Genel Cerrahi polikliniklerine başvuran kadın hastaların meme kanseri ve kendi kendine meme muayenesi hakkındaki bilgi düzeylerini incelemektir. Bu inceleme Helsinki Bildirgesi'ne uygun olarak yapılmış olup, insan gönüllüler üzerinde yapılan tıbbi araştırmalara katılan diğer kişilerin de bu ilkeleri benimsemesini desteklemektedir.

Gereç ve Yöntem: Araştırmanın evrenini Haziran-Temmuz 2016 tarihleri arasında bir üniversite hastanesinin Kadın Doğum ve Genel Cerrahi polikliniklerine başvuran hastalar oluşturmaktadır. Bu çalışma kapsamında Champion Sağlık İnanç Modeli Ölçeği (CSİMÖ) kullanılarak 351 hastaya ulaşılmış ve elde edilen veriler SPSS15.0 ile değerlendirilmiştir.

Bulgular: Örneklem %43,6'sı 20-29 yaş arası kadınlardan oluşmakta; %71'i evli ve %27,4'ü lisans ve lisansüstü mezundur. 6 boyuttan oluşan CSİMÖ'de en yüksek ortalamaya sahip boyutun yarar algısı boyutu olduğu görülmüştür. Ayrıca katılımcıların % 79,2'si meme ile ilgili herhangi bir problem yaşamadıklarını ancak buna karşın %27,6'sı yılda 3-4 kere kendi kendine meme muayenesi (KKMM) yaptıklarını belirtmişlerdir.

Sonuç: Katılımcıların KKMM'nin önemini farkında olduğunu ve bu konu hakkındaki bilgiyi sağlık personelinin öğrendiğini söylemek mümkündür.

Anahtar sözcükler: Meme kanseri, kendi kendine meme muayenesi, hasta.

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Introduction

Breast cancer provokes serious anxiety, even in healthy women, because it is both a frequent occurrence and a fatal disease. The three most common types of cancer in women are breast, colon and lung cancer worldwide. In Turkey the most common cancers are breast, thyroid and colorectal cancers. As a matter of fact, approximately 715,000 (26.5% of the total) in developed countries and 577,000 breast cancer cases (18.8%) in underdeveloped countries are seen in a year. Breast cancer takes second place in incidence and mortality rates, followed by Kaposi's sarcoma and liver cancer. The average incidence of breast cancer in the world is 38-40 per hundred thousand; 66-67 per hundred thousand in Europe and around 45 per hundred thousand in Turkey (THSK, Kanser Daire Bşk, 2016). The cancer with the highest prevalence in the world is breast cancer and the probability of developing breast cancer during life time in a woman in the United States is 12.5%. The probability of death from breast cancer was calculated as 3.4% (Haydaroğlu, et.al. 2005).

The recognition of breast cancer at an early stage without complaints increases the likelihood that the disease will be completely treated. According to Cancer Facts & Figures 2014, 61% of breast cancer diagnoses can be detected early and 5-year survival expectation of the patients in the early period is 99% (Cancer Facts & Figures, 2014). The first important step towards breast cancer is that women must have knowledge of and be aware of how to protect themselves from this disease. Early recognition of breast cancer is facilitated by the patient's sensitivity to this condition and the continuity of physician-patient communication.

Generally, the first symptom of breast cancer is a palpable mass in the armpit or malformations that occur in the breast. The ability to detect such masses by the patient depends on the habit of periodic self-examining of the women. Unfortunately, the vast majority of women do not have enough knowledge on this issue. This is why they can't BSE (breast self-examination). The easiest way to overcome this problem is to give women the habit of asking themselves some questions during their lifetime (NTV, 2016).

For nearly sixty years, BSE has been introduced as an application that assures the lives of women who need early diagnosis of breast cancer and has been included in breast cancer screening guidelines by breast health authorities. It is a fact that BSE is important in the life of women in the early diagnosis of breast cancer due to its being economic,

easy and able to be performed easily by women themselves (Akyolcu and Uğraş, 2011). The emergence of the first symptoms of breast cancer usually with a palpable mass reveals the importance of BSE for finding a mass in the breast. However the 2013 Research Report on Health Promotion in Turkey shows that only 5.4% of women regularly do BSE every 2-3 months (See Table 1).

Table1. The Research on Women Doing BSE

EXPRESSIONS	%
I have never done BSE so far.	65,1
I occasionally (less than 3 month) do BSE	19,4
I regularly do BSE every month.	10,1
I do BSE every 2-3 month.	5,4

Resource: Research Report on Improving Health in Turkey, 2013.

A woman's application of BSE can be regarded as an initial behavior when applying to professionals and other precise diagnostic methods in the presence of a suspicious mass. On the other hand, a woman who regularly performs BSE every month may be more sensitive to definitive diagnostic methods, such as mammography and clinical breast examination. In this sense, a woman's performing BSE every month has a vital importance. Nevertheless, in studies conducted in Turkey, it has been determined that the vast majority of women do not perform BSE (Gözüm, Karyurt and Aydın, 2004). Breast ultrasonography, mammography and clinical breast examination methods, which are used other than BSE in the early diagnosis of breast cancer, are more definite diagnostic methods, but the implementation and evaluation of these methods requires the presence of a suspicious condition or routine controls over the age of 40 and the evaluation of a specialist physician (Kalichman, Williams and Nachimson, 2000). There are three main factors in breast cancer screening; self-examination of the breast, physical examination and mammography performed by the doctor (Kozan ve Tokgöz, 2016).

Cognitive-behavioral models have been developed in regulating and attaining health behaviors such as BSE and mammography screening for breast cancer screening. The first and the most used of these models is the Health Belief Model (HBM) There are six aspects defined in the HBM regarding beliefs and behaviors. These refer to: (a) *sensory perception*, a healthy person's perception of a probable danger; (b) *the perception of severity/caring*, the pernicious consequences of the threatening state on the

person and the pernicious consequences of the threatening state; (c) *benefit perception*, perceived positive aspects of the occurrence of protective behavior; (d) *obstacle perception*, perceived negative aspects of the occurrence of protective behavior; (e) *health motivation*, general intent and desire for the development of behaviors in the maintenance and improvement of health; (f) *confidence (self-efficacy)*, individual competence in implementing a health behavior (Gözüm et al., 2004).

Early diagnosis is very important in all types of cancer. In the community, awareness should be increased to ensure early diagnosis in breast cancer. The aim of this study is to contribute to this awareness. Another aim of determining the awareness levels of patients who applied to the university hospital.

Methods and Materials

The population is formed by the patients that have applied to the clinics of Obstetrics and Gynecology and General Surgery of the University Hospital within the dates of June-July 2016. The total number of patients applied to these two polyclinics on these dates is 4000. The sample size to be reached at 95% significance level was calculated as 351. Convenience random sampling method was applied and the candidates were informed about the purpose of the research and how to participate in the research.

Since the survey data were wide-ranging and reliable, they were collected using the Champion Health Belief Model Scale (CHBMS). The scale consists of 42 questions and participants were asked to select the most appropriate option from the range of '1-I never agree' and '5-I fully agree'. Participants were also asked for demographic information such as age, education, level of income and marital status.

The CHBMS scale consists of 6 aspects: sensory perception (1-3), the perception of severity/significance (4-10), benefit perception (11-14), obstacle perception (15-25), confidence/self-efficacy (26-35) and health motivation (36-42). Increasing scores on the scale means increasing sensitivity and caring, benefits for benefit perception, obstacles for obstacle perception, health motivation for health motivation, and self-efficacy for self-efficacy. The ones who agreed to participate in the study were first informed about the method of BSE by researchers themselves and tried to create awareness. During the lecture a standard application was carried out. The participants were explained in detail what the BSE is, why it is important and how it should be applied correctly. This is

because correct and regular BSE is a simple and economic method protecting women's privacy in the early diagnosis of breast cancer. This narrative is also thought to have contributed significantly to the study because it would increase the awareness of women about breast cancer.

The data were analyzed with the SPSS 15.0 program with a 95% significance level and 5% acceptable error rate. In order to decide which tests should be used to test hypotheses, the reliability of the data set was first measured and whether the data set exhibited normal distribution was checked.

Findings

Reliability analysis was first performed on the Champion Health Belief Model Scale (CHBMS) to determine which analyzes should be performed on the data. The Cronbach's alpha value of the scale was found to be 0.776. If Cronbach's alpha values are between 0.60-0.80, then the scale is considered to be very reliable (Özdamar, 1999). It is possible to say that the scale applied in this case is quite reliable.

The demographic data is shown in detail in Table 2.

Table 2. Demographic Data

	Demographics	N	%
Age	19 age and below	21	6,0
	20-29	153	43,6
	30-39	76	21,7
	40-49	62	17,7
	50 and older	39	11,0
	Total	351	100,0
Marital Status	Married	250	71,2
	Single	101	28,8
	Total	351	100,0
Educational Level	İlliterate	3	0,9
	Primary School	77	21,9
	Middle School	46	13,1
	High School	83	23,6
	Associate Degree	46	13,1
	Undergraduate and Postgraduate	96	27,4
	Total	351	100,0

As seen in Table 2, the 43.6% of the participants are between the ages of 20-29, 71% of them are married and 27.4% of them are either undergraduate or postgraduates.

The average values of the 6 aspects of CHBMS were calculated and the results are shown in Table 3. These values show how much influence the aspects have on the participants.

Table 3. The Average Values of The Aspects of CHBMS

Aspects	Number of Expressions	N	Mean
Benefit perception	4	333	4,0210
Health motivation	7	330	3,8237
Severity perception	7	329	3,1989
Self-efficacy	10	301	3,1691
Susceptibility perception	3	346	2,7466
Obstacle perception	11	302	2,3546

As can be seen from Table 3, the aspect with the highest mean is the aspect of "benefit perception." This aspect essentially demonstrates the extent to which participants are aware of the benefits that the BCCM has provided to them. In fact, in this aspect, expression like 'Doing breast self-examination each month helps me to find breast masses early,' 'Every month doing breast self-examinations can reduce my chances of dying from breast cancer,' and 'When I perform a breast self-examination, if I detect an early mass, breast cancer treatment may not be bad.' are present. The average of this aspect is 4.02, which clearly shows how well participants understand the importance of BSE.

The aspect with the lowest average is the "obstacle perception" aspect. The number of expressions in this aspect is more than all other aspects. Some of the expressions in the aspect are 'Breast self-examination is embarrassing me,' 'Breast self-examination takes a lot of my time,' 'I forget to perform breast self-examination,' 'I do not have a place that protects my own privacy to perform breast self-examination.' As can be seen from these expressions, the obstacle perception aspect reveals the reasons why participants can't perform the BSE. A low average size in this aspect is mainly a positive result, indicating that there is no obstacle to the participation of the participants in the BSE.

When the responses of the participants to the questions related to the BSE were examined, it was seen that the vast majority (79.2%) of the participants were not experiencing any breast problems and 49.3% of the participants were informed about the BSE by health personnel (Table 4).

Table 4. The Rate of Having a Problem and Knowledge Acquisition About Breast Cancer of the Participants

Questions	N	%
Have you ever had a problem with breast cancer?		
I haven't had.	278	79,2
I have had.	73	20,8
Is there anybody in your family who lived a problem with breast cancer?		
No.	277	79,1
Yes.	73	20,9
How did you get information about BSE?		
Health professionals	171	49,3
Press	100	28,8
No information	76	21,9

32.5% of the participants did not give an answer to the question of how often they applied BSE in the last 1 year; only 27.6% stated that they had done the BSE 3-4 times a year (Table 5).

Table 5. Participants' Status of Implementation BSE in The Recent Year

Status of Implementation BSE in the Recent Year	N	%
Monthly	83	23,6
Every two months	57	16,2
3-4 times a year	97	27,6
No answer	114	32,6
Total	351	100,0

Discussions and Results

In the majority of the studies conducted in our country, it was determined that the rate of women having knowledge and education about BSE is lower than the studies conducted abroad. It can be argued that this situation arises from the level of accessing

and benefiting from educational resources (Duran, 2008). As a matter of fact, in the studies carried out on nurses, it has been observed that while monthly regular application rates of BSEs of nurses vary between 6% and 67% abroad; this ratio varies between 15% and 29% at home (Karayurt, Cokun, Cerit, 2008). In a study by Secgili and Nahcivan (2006), it was found that the level of income of women, the presence of health-care providers and the knowledge of breast cancer affected the implementation of BSE. In the same study it was determined that there was no relationship between having breast cancer in the family and their marital status and BSE practice (Seçgili and Nevcihan, 2006). Similarly, Altuncan and colleagues found in the study of BSE awareness of women between 20-60 years of age that only 35.7% of those who had breast cancer stories in their families and 12.6% of those who did not have breast cancer stories in their families applied BSE once in a while (Altuncan et al., 2008).

As a result of a survey Kılıç and his colleagues conducted on university students, only 19.5% of them were found to have done BSE (Kılıç, Sağlam, Kara, 2009). In a study on nursing undergraduate students, when examined the condition of performing BSE at class level, only 1 student (1.9%) in the first class, 26 students (42.6%) in the second class and 18 students (32.1%) in the third class and 25 students (45.5%) in the fourth grade stated that they regularly applied BSE (Uzun, Karabulut, Karaman, 2004). It was determined in a study conducted in the US that 35.4% of women living in San Diego and 34.6% living in Phoenix perform BSE once a month (Coe et al., 1994). In another survey it was reported that 60.2% of the women in the Leningrand region do BSE (Semiglazov et al., 1992).

In the studies on the effect of education on BSE, it was indicated that 85% of the women had previously been trained in BSE but only 45% of the women had regular breast examination every month (Ersin and Bahar, 2012). According to the breast cancer screening protocol applied in our country in national cancer screening program, it is recommended that women between 20-40 years old should have a BSE per month and a clinical breast examination every two years. Women between 40 and 69 years of age are required to have a BSE per month, a clinical breast examination every year and a mammography every two years (THSK, Kanser Dairesi, 2016).

In the context of this study, it was found that 49% of participants were informed about the BSE by health personnel and 21.9% had no knowledge about it at all. One of

the most important tasks for this issue is the training of breast cancer and early diagnosis methods for a group of healthcare personnel who have problems in health care. In a study conducted by Dündar and his colleagues, it was determined that 23.4% of the knowledge about the BSE was obtained from the health personnel and 39.3% from the radio / tv programs (Dündar et. al. 2006).

It is thought that education is the most appropriate tool that can be used to raise awareness. So much so that, in the study which Karayurt and his colleagues examined the impact of peer and group educations on knowledge and beliefs about breast cancer and BSE, knowledge and practice of BSE increased and perceived health beliefs developed after the education (Karayurt, Dicle and Tuna, 2009). In another study, it was determined that participants' perceptions of BSE and their confidence increased due to the education given to the mothers and their daughters (Gürsoy et al. 2009). Another study emphasizing the importance of education is the study Avcı and Gözüm conducted on preschool teachers. In this study participants were divided into two groups and it was found that their perceived self-esteem and sensitivity to breast cancer increased after training (Avcı and Gözüm, 2009). In addition nurses/midwives who provide services within the scope of family practice can contribute to the women they are responsible for by giving training on BSE and making their examinations accurate and regular. Because BSE is a procedure which is simple, non-invasive, non-hazardous, requires no tools, can be performed in a short time and is at no cost (Kılıç, Sağlam and Kara, 2009). Due to the fact that the nurses who are part of the health team are in constant contact with women, great responsibilities fall on them about education. Nurses play an important role in teaching and disseminating BSE at centers and/or at home providing rehabilitation services such as hospitals, schools, health centers, cancer associations (Koca, 2010).

As in many studies, active training programs aimed at increasing women's awareness of breast cancer were found useful in this study. It can be stated that other important tools in society's awareness of cancer and cancer prevention are the Internet and media. In this context, the awareness of the people can be increased by the effective use of these tools.

The most important steps to be taken in reducing the risk of breast cancer are to manifest the risks of breast cancer in each community, identify risk groups and promote screening programs (Eti and Gürkan, 2007). All in all, early diagnosis of this disease

minimizes the removal of breast completely (mastectomy), which is the biggest nightmare of women. For this reason diagnosis of the disease should be made as early as possible. From this point of view, the importance of BSE is even better understood.

The fact that it was made to patients who applied to university hospital constitutes the limitation of this study. Other constraints are the fact that the research is partially reflective of the area under investigation due to voluntary planning.

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