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The Women's Awareness of Breast Cancer Screening Methods Such As Mammography in Lorestan Province, Iran



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ABSTRACT

Background: The prevalence of breast cancer is increasing. As a leading cause of mortality in Iran, breast cancer is a problem that requires investigation in terms of the knowledge and attitude of its diagnostic tests among Iranian women. Materials and methods: This study is a cross-sectional survey. The sample consisted of 196 married women were chosen by using simple random method and assessed with a questionnaire including two parts: the first part was contained of demographic data, family, social and economic factors, risk and women-midwifery factors; the second part was included participant's level of knowledge and the attitude of them toward screening methods with content validity and Test-retest reliability. Results and conclusion: Mean age was 36.39 years. Results showed that respondents had intermediate knowledge and positive attitude around breast cancer screening tests. There was no significant statistic relationship between the frequency of screening tests rate and knowledge and attitude of breast cancer screening methods, relative history of breast cancer (p=0.542). It is recommended that in order to increase rates of breast cancer screening tests, plans that are easy for women to access should be in the government program.

INTRODUCTION

Cancer is a non-communicable disease that affects all human societies worldwide. Cancer examinations lead to about 10 million diagnoses all over the world resulting in more than 6 million deaths every year (1). Cancer can affect breasts as well as any part of the body (2). Breast cancer is the second common cancer in American women, to the skin cancer (3) and makes 14% of female cancer deaths.(4)

Its incidence is increasing significantly over recent decades (4) and the highest rates occur in the United States of America and Canada (5). There has been a rise in breast cancer in Iran (6) too, and according to the latest statistics reported by the Iranian Ministry of Health, 27 people per hundred thousand women are diagnosed to have breast cancer. In addition, most of the Iranian women are diagnosed to have advanced breast cancer (i.e., Stage III and IV) and these women are somehow younger than their western counterparts (7). The development of breast cancer increases with age. Breast cancer tends to occur in women after age 20 (2) (8)and about 50% of it occur in the age range 50–65 years(9, 10).

High morbidity and mortality originated from this disease can be decreased by early detection and quick treatment (11). The most important screening methods include breast self-examination (BSE), physical examination of the breasts by physicians or qualified health workers, clinical breast examination (CBE) and mammography (12). Since none of these screening tests is 100% sensitive in detecting, it is often suggested that a mixture of these techniques be applied in the screening process (13).

Awareness of the symptoms of the breast cancer (such as change in the look or feel of the breast, change in the look or feel of the nipple and nipple discharge) and doing the exam regularly helps to detect any signs or symptoms right after a change occurs (examples of these changes are: development of a lump or swelling, skin irritation or dimpling, nipple pain or turning inward, redness or scaliness of the nipple or breast skin, or a discharge other than breast milk) (14). Accordingly, the insignificant knowledge and wrong beliefs about breast cancer prevention among women are responsible for a negative uptake of the curability of an early detected cancer and of the efficacy of the tests (15). Early detection of breast cancer plays an important role in

reducing its morbidity and mortality. Theoretically, a 95% survival rate could be achieved if this cancer was diagnosed at an early stage (16).

Based on these facts, this study was designed to evaluate the knowledge and attitudes of mammography and other breast cancer screening methods among women in Lorestan province, Iran in order to plan breast cancer prevention programs and encourage Iranian women to adhere to breast cancer screening guidelines.

MATERIALS AND METHODS

This cross-sectional descriptive study was conducted on 196 married women in Khoramabad-Iran. Samples were chosen by using the simple random method. The information was collected through a valid and reliable questionnaire including two parts: the first part was contained of demographic data, family, social (i.e. level of education, education of husband), and economic (i.e. profession, profession of husband, income status, number of family members) factors, risk (i.e. history of breast disease, history of cancer in the family (first and second degree relatives), history of oral contraceptive use, infertility, breastfeeding, and menopause age) and womenmidwifery factors (number of pregnancies and childbirths); the second part was included participant's level of knowledge (10 questions), the attitude of them toward mammography and other breast cancer screening methods (15 questions). Components were scored from 0 (for an incorrect answer or the lack of response) to 1 (for correct answer). All items were formatted with Likert -scale (possible replies range from strongly disagree to strongly agree). Participants provided informed consent before completing the survey questionnaire. Validity and the reliability of the questionnaire were confirmed in a former research (18). Statistical analysis was performed using statistical package for social sciences (version 17).

RESULTS

The mean age of all respondents was 36.39 years, ranging from 17 to 65 years. 70.2% (n=137) of women had a diploma or university educations but only 35.1% (n=68) were employed and 64.9% (n=127) did not have a job or were housewives. 75.7% (n=147) of husbands had a diploma or university educations and 63.9% (n=124) had a governmental work. Fig. 1 showed knowledge of

breast cancer risk factors in women-midwifery. The result showed women-midwifery think breastfeeding experience is most effect in the prevention of breast cancer.



breast cancer risk factors

Fig. 1 .knowledge of breast cancer risk factors in women-midwifery

The percentage of women who performed BSE was 25.2% (n=49) and only 21.3% (n=41) reported that they had a CBE (done by physician or midwife) and 19.8% (n=38) had received a mammogram. 33.7% (n=65) of the respondents claimed that they carried out none of the screening tests as yet.

When asked to determine the adequacy of participants' knowledge about mammography and other breast cancer screening methods, 78.6% of women who had high school educations, 45.8% of respondents who had a diploma and 50% of them who had university educations reported with intermediate knowledge (34-66%) but 59.1% of women who had grammar school educations reported with adequate knowledge (67-100%) (p=0.603). Most of respondents whose husbands had less than high school educations reported with adequate knowledge (67-100%) (p=0.603). Most of respondents whose husbands had a diploma or university education reported having intermediate knowledge that shows no significant association between husband's education level and participant's level of knowledge (p=0.802). When asked if they had a positive attitude (67-100%) toward mammography and other breast cancer screening methods, all of respondents who had university education reported with positive attitude (p=0.169). Comparison of respondents' attitude toward breast cancer screening methods according to education levels is presented in Table 1.

Educational level	Level of attitude	n (%)
	0-33%	1 (2 3)
		1 (2.3)
Grammar school	34-66%	3 (6.8)
graduate	67-100%	40 (90.9)
Total		44 (100)
	0-33%	1 (7.1)
High school	34-66%	0 (0)
graduate	67-100%	13 (92.9)
Total		14 (100)
÷		2
	0-33%	5 (3.8)
Diploma	34-66%	12 (9.2)
graduate	67-100%	114 (87)
Total	1.1.2.1.1	131 (100)
	0-33%	0 (0)
College level	34-66%	0 (0)
	67-100%	6 (100)
Total	IM/	6 (100)

Table 1: Respondents' attitude according to woman's level of education (N=196).

When asked to determine participants' knowledge and attitude according to husband work (economic factor), most of them reported having positive attitude (p=0.112). 75% of respondents whose husbands had no job and 66.7% of women whose husbands were farmer, reported with inadequate knowledge (0-33%), whereas 64.8% of participants whose husbands were employed, 47.9% of women whose husbands were not employed and 42.9% of them whose husbands were retired reported with intermediate knowledge (p=0.523).

When asked to determine participant's knowledge and attitude according to history of breast cancer (risk factor), most of them reported having positive attitude. 23.8% had family or relative history of breast cancer, approximately half of whom (52.2%) reported with intermediate

knowledge and 31.8% of them had adequate knowledge. Additionally, more than half of respondents had no family or relative history of breast cancer reported with intermediate knowledge. So there was no meaningful relationship between the history of breast cancer and participant's level of knowledge (p=0.992).

Table 2 presents a comparison of respondent's attitude toward breast cancer screening methods according to income level. Most of them reported having positive attitude (67-100%).

Income	n (%)
Level of	
attitude	
	1 (5.6)
0-33%	1 (5.6)
<\$100,21	6 (88.9)
34-66%	11
and the state of t	
67-100%	
1	8 (100)
Total	
0-33%	3 (5) 2 (3.3)
\$100,21-200,42 5.	5 (91.7)
34-66%	
6	60 (100)
67-100%	

Table 2: Respondents' attitude according to income level

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Total
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4 (3.4)

0-33%	6 (5.1)
>\$200,42	107 (91.5)
34-66%	
	117 (100)
67-100%	
Total	

As shown in Table 3, most of respondents reported having intermediate knowledge according to income level.

Table 3: comparison of respondent's knowledge according to income level

Income	n (%)
Level	of
knowledge	
	4 (22.2)
0-33%	
	9 (50)
<\$100,21	MAN
34-66%	5 (27.8)
JT 0070	

67-100%

	18
Total	(100)
	16

0-33%	(26.7)
\$100,21-200,42	37
34-66%	(61.7)
	7 (11.7)
67-100%	60
	(100)
Total	
	12
0-33%	(10.3)
>\$200,42	57
34-66%	(49.6)
	48
67-100%	(40.2)
	117
Total	(100)

DISCUSSION

In this study, knowledge, and attitude of mammography and other breast cancer screening methods was analyzed in a sample of females in Lorestan-Iran. We found that the percentage of those that had a CBE (done by physician or midwife) (21.3%, n=41) or had received a mammogram (19.8%, n=38) was rather low and about a quarter of women (25.2%, n=49) reported that they performed BSE but 33.7% (n=65) of the respondents claimed that they carried out none of the screening tests. The percentage of those that perform breast cancer screening tests was 66.3%. In contrast to our study result (17) found that only 12.3% of female in Ardabil (Iran) carried out screening tests.

Respondents who had a relative history of breast cancer reported to have intermediate knowledge and positive attitude toward breast cancer screening methods. When asked if they had sufficient knowledge and positive attitude around breast cancer screening methods, the majority of the participants with high-income level (>\$200.42) were reported with an intermediate knowledge and positive attitude. In our study knowledge and attitude of mammography and other breast cancer screening methods were not affected by the frequency of screening tests rate. Also, there was no meaningful relationship between relative histories of breast cancer with frequency of screening tests rate. This result also supports results of another similar study (17) showing no significant relationship between knowledge, attitude and relative history of breast cancer with mammography rate.

It is vital for women to obtain more information to keep their families healthy; besides it causes them willing to share the knowledge they obtained with their family and friends. In other study, Tolga Özmen et al. (2016) results showed to increase Mammography-screening rates in low socioeconomic populations, BC awareness and susceptibility should be increased via audiovisual media. Clear messages should be given on that BC is the most common cancer in women, MS after the age 40 years does not cause unnecessary radiation but saves lives by enabling early detection of BC, and that MS is free-of-charge should be given frequently. Uninsured women and women aged between 40-49 years should be especially targeted. Lastly, physicians from all specialties should inform their patients on BC and refer them for MS. after such interventions and improvements in MS should be tested in the same region (18). Results of this study demonstrate that females have intermediate knowledge and positive attitude around breast cancer screening methods. It is therefore recommended that in order to increase rates of breast cancer screening tests, plans that are easy for women to access and also recognize the role of them in breast cancer preventing, should be in the government program.

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