Journal of Research in Medical and Dental Sciences
2018, Volume 6, Issue 2, Page No: 568-573

Available Online at: www.jrmds.in
eISSN No. 2347-2367: pISSN No. 2347-2545

The Knowledge and Practice of Kurdish Women Referred to Mammography Clinics on Breast Cancer Screening: A Cross –Sectional Study

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DOI: 10.5455/jrmds.20186287

ABSTRACT

Breast is a common site for developing potentially fatal malignancies in women. Breast cancer is one of the few malignancies that, if diagnosed at early stages its prognosis is good. Training plays an important role in the primary prevention of cancer. Training should be directed towards high-risk groups and its aim is to make people interested in the early diagnosis and treatment of their disease. This study aimed to evaluate the knowledge and practice of Kurdish women on breast cancer screening in Sanandaj, Iran in 2015. This cross-sectional study was conducted on 335 women who referred to mammography clinics of Tohid hospital in Sanandaj, Iran in 2015. Data were gathered using questionnaire. Demographic data, knowledge and practice of participants were evaluated. Data were analyzed using SPSS. Ver.18. Descriptive statistics and also analytical statistics including chi-square test and Pearson correlation were used. The results showed that there was a significant correlation between age, level of education, place of living, marital status and family history of breast cancer with women`s knowledge and practice on breast cancer screening (p≤.05). Pearson correlation showed that there was a positive correlation between knowledge and practice of studied women. Although the level of Kurdish women`s knowledge on breast cancer was moderate, but their practice was poor. Therefore, development of breast cancer screening centers in Sanandaj, Iran to improve women`s knowledge and practice on breast cancer screening is suggested.

Key words: Breast Self-examination, Breast neoplasm, Health knowledge

HOW TO CITE THIS ARTICLE: Karim Sharifi, Morteza Jalilvand, Farideh Elahimanesh, Fardin Gharibi, The Knowledge and Practice of Kurdish Women Referred to Mammography Clinics on Breast Cancer Screening: A Cross –Sectional Study, J Res Med Dent Sci, 2018, 6 (2):568-573, DOI: 10.5455/jrmds.20186287

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Received: 27/01/2018
Accepted: 08/02/2018

INTRODUCTION

Breast is a common site for developing potentially fatal malignancies in women. Breast cancer is one of the few malignancies that, if diagnosed at early stages its prognosis is good [1]. Primary prevention, risk factors reduction and also early diagnosis of this common cancer decline the mortality rates [2]. Based on the annual report of World Health Organization in 2012, breast cancer was responsible for 521000 deaths in the world [3]. The disease has been reported as the most common malignancy among Iranian women in the recent years [4]. Previous studies have shown that the mean age of patients with breast cancer is approximately 10 years younger than in western countries and also the incidence rate of breast cancer in Iran is estimated to be 22.09% in 100,000 women [5-9].Approximately 70% of Iranian women are in advanced stages of the disease in the time of referral that in these stages,

the possibility of treatment is reduced [10]. The American College of Physicians suggested screening mammography for women under 50 years old [11]. It has been shown that screening with mammography reduces breast cancer mortality by detecting small, non-palpable regions of breast cancer at an early stage [12]. Also mammography is an effective tool in differentiating benign from malignant suspicious breast masses [13]. Breast cancer screening in women is the best strategy to reduce breast cancer mortality, but there is not a widespread and public program of breast cancer screening by mammography in Iran [14]. Mammography screening utilized in developed countries cannot be equally applied to less developed countries [15], in less developed countries, due to misunderstanding of the disease and the fear of physician referral, the time of diagnosis is longer, therefore most of patients are in the advanced stages of disease and treatment is difficult and the mortality rate raises [14].

The fight against cancer is based on primary and secondary prevention and training [16]. At least one third of cancers are preventable by training and increasing knowledge and awareness of people [17]. Training should be directed towards high-risk groups. The first step in training is to recognize the knowledge and practice of targeted people [18]. The aim of this study was to evaluate the knowledge and practice of Kurdish women about breast cancer screening in Sanandaj, Iran in 2015..

MATERIALS AND METHODS

This cross-sectional descriptive-analytical study was conducted on 335 women who referred to mammography clinics of Tohid hospital in Sanandaj, Iran in 2015. Data were collected using questionnaire .The questionnaire had three parts; the first part covered demographic data (age, level of education, the place of living, marital status, previous history of benign breast problems and family history of breast cancer). The second part included questions related to knowledge of women on breast cancer screening (breast cancer risk factors and signs for early detection, proper time for Breast Self-examination, proper performance of BSE and suitable time interval for BSE). The third part included 8 questions and covered the practice of women (their practice on mammography, clinical breast examination by a physician and breast self-examination). Correct answers scored 1 and false answers scored zero. The maximum score was 18.The questions were read by the researcher to subjects and answers were recorded. Data were analyzed using statistical package for the social sciences (IBM-SPSS version 18, Chicago, II, USA). Descriptive statistics and also analytical statistics including chi-square test and Pearson correlation were used to examine the association between variables. A p value< 0.05 was considered significant.

This study has been approved by Ethics Committee of Kurdistan University of Medical Sciences. Written informed consent was obtained from all subjects.

RESULTS

The mean age and SD of participants was 47.1±8.8 years. Majority of participants were in 40-49 years age group (46.9%). Total of 309 (92.2%) were married, 117 (34.9%) were illiterate, 294 (87.8%) were living in city and 46 (13.7%) had family history of benign or malignant breast diseases. [Table1]

Table 1: Frequency distribution of demographic characteristics of the studied women

Variables		No. (%)
Place of Living	Urban	294(87.8)
	Rural	41(12.2)
Marital Status	Single	26(7.8)
	Married	309(92.2)
Age Groups	≤39	54(16.1)
	40-49	157(46.9)
	50-59	98(29.3)
	≥60	26(7.8)
Level of Education	Illiterate	117(34.9)
	Primary	81(24.2)
	Secondary	29(8.7)
	High School	65(19.4)
	Academic	43(12.8)
Family history of benign or malignant breast diseases	Yes	46(13.7)
	No	289(86.3)

The reasons for referring to mammography clinics are presented in table 2. Painful breast was the most and nipple inversion was the least cause for referring to mammography clinics. [Table 2]

The results showed that there was a significant correlation between age group (p=0.03), level of education (p=0.0001), the place of living (p=0.002), marital status (p=0.16) and family history of breast cancer (p=0.02) with women`s knowledge on breast self-examination (BSE). [Table 3]

The results also showed that there was a significant correlation between age group (p=0.01), level of education (p=0.0001), previous history of benign breast problems (p=0.02) and family history of breast cancer (p=0.0001) with women`s practice of breast self-examination (BSE). [Table 4]

Pearson correlation showed that there was a positive correlation between knowledge and practice of women on BSE (r=.54, p =.0001). There was an inverse correlation between knowledge and age (r= -.23, p=.0001) and also there was no correlation between age and practice (r= -.05, p=.31).

Table 3: The relationship between knowledge of BSE in studied women with demographic variables

Variables		Knowledge			P Value
		Poor No. (%)	Intermediate No. (%)	Good No. (%)	
Age Group	≤39	4(7.4)	33(61.1)	17(31.5)	0.03
	40-49	25(15.9)	98(62.4)	34(21.7)	
	50-59	26(26.5)	58(59.2)	14(14.3)	
	≥60	4).4(15	2).18(69	4).4(15	
Marital status	Single	)5.3(11	9).14 (53	)6.9(34	0.16
	Married	1).56(18	5).193(62	4).60(19	
Level of Education	Illiterate	9).42(35	8).70(59	3).5(4	0.0001
	Primary	8).12(14	1).60(74	1).9(11	
	Secondary	4).1(3	3).23(79	2).5(17	
	High School	1).2(3	8).46(70	2).17(26	
	Academic	7).2(4	6).8(18	33(77.6)	
Place of Living	Urban	44(15)	9).185(62	1).65(22	0.002
	Rural	6).15(36	7).22(53	)9.84(	
Family history of benign breast diseases	Yes	4).2(15	5).8(61	(23/1)3	0.96
	No	7).57(17	8).199(61	5).66(20	
Family history of breast cancer	Yes	7).4(8	5).26(56	8).16(34	0.02
	No	55(19)	6).181(62	53(18.4)	

Table 2: Frequency distribution of the reasons for referring to mammography clinics of the studied women

The reasons for referring to mammography clinics	No. (%)
Painful Breast	129(38.5)
Annual examinations(patient`s recommendation)	56(16.7)
Felt a lump in the breast	53(15.8)
Evaluation of previous breast disease	41(12.2)
Annual examinations(physician`s recommendation)	20(6)
Nipple discharge	15(4.5)
Flaking breast skin	12(3.6)
To Complete breast examinations	5(1.5)
Inflammation, swelling and itching	3(.9)
Inverted nipple	1(.3)

Table 4: The relationship between women`s practice of breast self-examination in studied women with demographic variables

Variables		Practice			P Value
		Poor No. (%)	Intermediate No. (%)	Good No. (%)	
Age Group	≤39	7).22(40	3).25(46	7(13)	.01
	40-49	9).83(52	6).70(44	5).4(2	
	50-59	49(50)	9).46(46	1).3(3	
	≥60	6).9(34	4).17(65	0	
Marital status	Single	(38/5)10	15(57/7)	3/8)1 (	.52
	Married	5).153(49	3).143(46	2).13(4	
Level of Education	Illiterate	4).73(62	8).43(36	9).1(0	0.0001
	Primary	6).45(55	7).33 (40	7). (33	
	Secondary	8). (4413	7).15 (51	4). (31	
	High School	9). (3624	39(60)	1).2(3	
	Academic	6).8(18	1).28(65	3).7(16	
Place of Living	Urban	6).134(45	3).148(50	1).12(4	.007
	Rural	7).29(70	4).10(24	9).2(4	
Family history of benign breast diseases	Yes	4).2(15	6).11(84	0	.02
	No	(50)161	7).147(45	3).14(4	
Family history of breast cancer	Yes	6).9(19	1).35(76	3).2(4	0.0001
	No	3).154(53	6).123(42	2).12(4	

DISCUSSION

The results of this study showed that the overall women`s knowledge of breast cancer and diagnosis methods was intermediate. The results are consistent with the findings of Rastad *et al.,* in which 55% of the women had poor knowledge on breast cancer [19]. A study by Bener et al reported poor knowledge of breast cancer among women in Al Ain, UAE [20]. Also Dandash and Al-Mohaimeed showed that more than half of the female teachers of Saudi Arabia had a limited knowledge on breast cancer and screening [21]. It seems that the reason is the lack of correct information about breast cancer. Also it seems that a relevant educational program in health system to improve the knowledge level of women about breast cancer is ignored.

The results of the present study showed that the practice of more than half of the participants on breast cancer screening was poor. Rastad *et al.,* also showed that 90% of studied women in Fasa, Iran had poor practice on breast cancer screening [19]. Bener *et al.,* showed that although Qatari women had adequate general knowledge about breast cancer, the screening rates for breast self-examination, clinical breast examination and mammography were low [22]. In a study by Elobaid *et al.,* almost half (44.8%) of participants never had a clinical breast exam and 44.1% of women never had a mammography which showed women`s poor knowledge and practice about breast cancer screening [23]. Alivand *et al.,* l concluded that women's knowledge and practice of breast cancer screening were quite poor [24]. In a study by Montazeri *et al.,* which conducted in 2008, they indicated that Iranian women awareness of breast cancer warning signs and effective screening methods were very inadequate [25]. Majority of previous studies on knowledge and practice of women about breast cancer screening indicated the poor knowledge, attitude and practice of women about breast cancer screening. Almost all of them suggested promoting the level of women`s knowledge in order to prevent breast cancer delayed diagnosis [19-26].

Arshad *et al.,* observed that Arab-American women in Michigan had substantial increase in knowledge about breast cancer and screening following the educational intervention [27]. Although the educational programs to improve women`s knowledge on breast cancer screening are important, but socio-cultural factors associated with breast examination should be considered also [28].There are many women who avoid attending the clinic early only because of their embarrassment of being examined [29]. It seems that cultural and religious barriers, poor knowledge, negative beliefs, fear of pain, embarrassment, and socio-cultural factors and also the cost of treatment are responsible for low practice of women in breast cancer screening programs.

The results of this study showed that there was a significant relationship between age, level of education, place of living , marital status , and family history of breast cancer with women`s knowledge and practice of breast cancer screening. Shiryazdi *et al.,* found a significant relationship between women`s knowledge and educational level and age [30]. Also Seidpour *et al.,* reported a significant correlation between age, occupation and education level with knowledge, attitude and practice of women on breast cancer screening [26]. HajianTilaki *et al.,* indicated that the level of women`s awareness has significantly associated with higher age and higher educational level [31]. Heidari *et al.,* also reported a statistically significant relationship between women`s knowledge of breast cancer screening and level of education, history of breast disease, and family history of breast cancer [32].

In contrast Alivand *et al.,* reported no significantly association between age and educational level with knowledge and practice of breast cancer screening [24]. Also in contrast to our study Seidpour *et al.,* found no significant relationship among the marital status, history of benign breast disease and family history with knowledge, attitudes and practice of breast cancer and screening methods of women [26].

The results showed that painful breast was the most and nipple inversion was the least cause for referring Kurdish women living in Sanandaj, Iran to mammography clinics. This finding is consistent with the results of a study by Yousefi *et al.,* [14].Ohene-Yeboah and Amaning in a study which conducted in Kumasi, Ghana reported that the most common complaint of women referring to breast clinic was breast pain [33]. In a study by Leister The incidence of cyclical mastalgia in well women presenting for breast screening was 69 per cent [34].It seems that breast pain is the main reason for referring women to mammography clinics.

CONCLUSION

Although the level of Kurdish women`s knowledge on breast cancer was moderate, but their practice was poor. Therefore, development of breast cancer screening centers in Sanandaj, Iran to improve women`s knowledge and practice on breast cancer screening is suggested.

Conflict of interest
None.

Acknowledgements
The Authors would like to acknowledge Vice Chancellor for Research of Kurdistan University of Medical Sciences to support this study financially. We also thank Dr. Mehdi Mohammadi for his help during the project.

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