ORIGINAL ARTICLE

Knowledge, attitude and practices amongst the Pakistani females towards breast cancer screening programme

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Abstract

Objective: To assess the knowledge, attitude and practices amongst Pakistani females towards breast screening programmes.

Methods: The descriptive cross-sectional study was conducted from June 2013 to July2014 at Mayo Hospital, Lahore, and comprised attendants and patients who visited out-patients department and/or were treated as in-patients. The questionnaire contained 25 open and close-ended questions regarding knowledge and attitude, along with 7 questions regarding practices. Data was analysed using SPSS 17.

Results: There were 1184 women with a mean age of 32.7±8.6 years. The mean score was 12.7±4.9. Positive family history of breast cancer was reported by 156(13.2%) women; 420(35.5%) believed advancing age was a risk factor; 1041(87.9%) never had breast self-examination; 1106(93.4%) never had a clinical breast examination; and 1171(98.9%) never had screening mammogram.

Conclusion: The knowledge and practices regarding breast cancer screening, breast self-examination and mammogram among women were not good. The knowledge about breast cancer risk factors was very poor and showed an alarming attitude towards practices.

Keywords: Breast self-examination, Nuliparous, Breast clinical examination, Mammography. (JPMA 65: 1075; 2015)

Introduction

Breast cancer is the second leading killer amongst cancers and major public health problems in the developing countries.[1] According to the World Health Organisation (WHO), 7.6 million people worldwide died from cancer and approximately 70% deaths occurred in economically disadvantages countries, while 30% of cancers could be prevented. By 2008, annually they reported 1.3 million new cases and 458000 deaths occurred from breast cancer in females.[2] Breast examination has become more frequent in developed societies in past few decades.[3,4] In 2002, an estimated 203500 new cases of breast cancer were diagnosed amongst United States women and subsequently 40000 deaths can be claimed due to this life-threatening problem.[5]

It is the most commonly presenting cancer among females and mortality rates are highest in low and middle economic countries due to lack of knowledge, and late-stage diagnosis.[6,7] A significant 60% of all cases are age-related that occurred above the age of 60 years.[8] Early detection of breast cancer imparts a good role in reducing mortality rate and create good prognosis.[9] Pakistan is a developing country and spends 2.4% to 3.7%ofgross domestic product (GDP) on health.[10,11] Health facilities, including breast screening, is limited. It accounts for 9.5% of urban and 4.8% of rural population. Radiological advantages are available 2.5% for urban and only 0.7% for rural population.[12]

In our socioeconomic, cultural and religious setup, only inexpensive, simple and effective tools are needed to administer. Awareness towards early detection of the disease and treatment can predict better outcomes. Therefore, WHO recommended regular breast screening for women using mammography. Effective and simple tools, including breast self-examination (BSE) and clinical breast examination (CBE), have been advocated. One-third of breast cancer can be reduced by early detection with treatment.[13] Breast examination has become more frequent in developed societies in the past few decades.[3,4] About 60% of breast cancer can be detected with simple breast examination.[14]

A study described low survival rate for three months or older presenting symptomatic breast cancers, and majority of Pakistani women reported late.[15,16] Few studies investigating people's beliefs have been carried out in Pakistan and those done in western settings have

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emphasised the importance of these screening tools and indicated poor awareness about breast cancers and screening methods, limited resources, lack of education, cultural, religious and poor perception towards screening.[8,17-19]

The current study was planned to test the knowledge about risk factors, practices of BSE and attitude regarding 'breast lump' treatment seeking behaviour and developing awareness of breast cancer amongst general population.

Subjects and Methods

The descriptive cross-sectional study using convenient sampling was carried out from June 2013 to July 2014 in Surgical Unit III, West Surgery Ward, Mayo Hospital, Lahore, Pakistan. Young women aged over 18 years were selected from among the attendants and patients in out-patient department (OPD) or those being treated as in-patients. Only those subjects were included who volunteered to participate after the study purpose was explained to them and confidentiality was assured. Those who had already responded to the questionnaire during their earlier visit were excluded on their subsequent visits. Hospital paramedical staff was also excluded.

Data was collected through a questionnaire which had 32 questions.

Each participant was scored on the basis of knowledge and attitude regarding breast cancer on the number of correct answers. Out of a total score of 100, percentage score for each participant was calculated. A score of more than 80% was considered 'excellent knowledge'; between 60% and 79% 'very good knowledge'; between 40% and 59% 'good knowledge'; and less than 40% 'poor knowledge'. Respondent's practices regarding breast cancer screening were also recorded.[20]

The questions were phrased in such a manner that subjects could easily answer. All relevant information was gathered from them. The main questionnaire was initially developed in English language. It was translated in simple understandable Urdu language and was administered to the participants. The questionnaire was back-translated at the time of data entry.

Data was analysed using SPSS 20. Frequencies and percentages were calculated for demographic variables. The association between variables were tested for statistical significance using Student's Chi-square with differences regarded to be significant at 5% level.

Results

Initially, 1347 women were approached and 1203(89.3%) submitted/answered the questionnaire. Then 19(1.6%) questionnaires were excluded as they were incomplete. The final study sample comprised 1184(87.9%) participants. The mean age of the participants was 32.7±8.7 years with 489(41.3%) in the 20-30 years age group. The mean score was 12.7±5.0 which showed poor knowledge amongst participants. Majority 623 (52.6%) were married with Muslim predominance 1011(85%). Most of the females 993 (83.9%) were housewives and 191(16.1%) were self-employed. All subjects had some level of education, Primary being the most common in 898(76%) (Table-1).

Table-1: Demographic data.

Variables	N=1184	%
Marital status		
◆ Married	623	52.6
◆ Unmarried	522	44.1
◆ Widow/Divorced	39	3.3
Religion		
◆ Islam	1011	85.3
◆ Christianity	136	11.4
◆ Hindu	37	3.1
Occupation		
◆ House wife	993	83.9
◆ Self Employed	191	16.1
Age(in years)		
◆ 10-20	93	7.9
◆ 21-30	460	38.9
◆ 31-40	375	31.7
◆ 41-50	256	21.6
Mean Age	32.5±8.71 years	
Education		
◆ Primary School	898	75.8
◆ Secondary School	245	20.7
◆ College	29	2.4
◆ Postgraduate	12	1.01

Table-2: Response regarding risk factors.

Knowledge	N=1184	Percent (%)
Does breast cancer risk increase with advancing age?	421	35.5
Does positive family history decrease risk of breast cancer?	307	25.9
Does breast feeding increase risk of breast cancer?	132	11.1
Is first child birth at age more than 30 years a risk factor?	558	47.1
Is nulliparity a risk factor for breast cancer?	337	28.4
Obesity is not a risk factor for breast cancer?	387	32.7
Is menarche below 12 years a risk factor for breast cancer?	435	36.7
Do oral contraceptive pills increase risk of breast cancer?	867	73.2
Is trauma to breast a risk factor of breast cancer?	639	53.9
Is poor personal hygiene a risk factor for breast cancer?	531	44.8

*Those who answered yes to the statement.

Table-3: Crosstab of knowledge regarding breast cancer with advanced age and beast lump evaluation by marital status.

	Marital Status				Total (%)	P-value
	Single (n=522) (%)	Married (n=623) (%)	Widowed (n=35) (%)	Divorced (n=04) (%)		
Risk of breast cancer with advance age						
◆ Yes	201	211	9	0	421	
◆ No	301	332	26	3	662	0.01
◆ Not sure	20	80	0	1	101	
Breast lump be evaluated by a doctor?						
◆ Yes	367	447	35	4	853	
◆ No	91	111	0	0	202	0.01
◆ No sure	64	65	0	0	129	

Positive family history of breast cancer was reported by 157 (13.2%) women. When the respondents were asked about various risk factors, 421(35.5%) said they believed risk of breast cancer increases with advancing age (p<0.01). Besides, 487(41.1%) had the opinion that it is a contagious disease; 347(29.3%) said they had heard about mammogram; 564(47.6%) believed that mammography is painful; 223(18.8%) answered correctly that it is safe; 425(35.9%) thought it can detect 'breast lump' before it is palpable; 328(27.7%) said women with breast cancer on one side can never develop it in the other breast; 748(63.2%) believed that early diagnosis and treatment is life-saving; 228 (23.8%) considered surgery as the most effective method of treatment; and 957(80.8%) said that getting breast cancer is God's will and nothing can be done (Table-2).

In terms of attitude, 910(76.8%) subjects said breast lump should be evaluated by doctor (p<0.01); 315 (26.2%) said routine examination of breast is not necessary until any problem is noticed that is alarming; 823(69.5%) agreed with the statement that BSE should be performed once a month above the age of 20 years; 617(52.1%) said between 20 and39 years of age BCE every three years is necessary; 495(41.8%) said every woman over 40 years should have annual BCE; and 284(23.9%) correctly said that they should have annual mammogram as well.

When it came to practices, 1039 (87.7%) respondents never had BSE, while 138 (11.6%) had more than 12 months since last BSE; 123(10.4%) had BSE during routine check-up; and 22(1.8%) had BSE when they had breast problem other than cancer. Only 7(0.59%) practised BSE once in the preceding 12 months.

Overall, 1106(93.4%) participants had never had BCE; 23(1.9%) had it twice; 55(4.6%) had it more than twice in the preceding 12 months; 54(4.5%%) had BCE during routine check-up; and 12 (1%) had experienced BCE during their visit to the clinic after some breast-related problem.

A total of 1170(98.9%) subjects never had a mammogram in their lifetime, and only 14(1.1%) had it during routine check-up.

When the knowledge of the participants was checked with their marital status, majority, 332 (53.3%) out of 623 married females said that there was no risk of breast cancer with advanced age while most 211 (33.9%) said yes that it is a risk factor while in single females 301 (57.6%) also said it is not a risk factor with advanced age and 201 (38.5%) opined that it is a risk factor (p=0.001). Majority 447 (71.7%) married females also had the opinion that breast lump should be evaluated by a doctor while 111 (21.2%) were against it. A total of 367 (70.3%) single females said that it should be evaluated by a doctor while 64 (12.2%) were sure about breast lump evaluation (p<0.001) (Table-3).

Discussion

The study shows apparent lack of knowledge regarding breast cancer and its screening, and overall practices about BSE are very poor. The study sample was relative representative of population. Although 13.2% of the respondents had positive family history of breast cancer, overall they had poor knowledge regarding breast cancer screening. Conversely, a study conducted in Iran reported 10% women had positive family history of breast cancer and 64% knew about the condition.[21]

The knowledge and practices regarding BSEwas poor in our study, with 87.7% respondents never having had BSE. A study from Saudi Arabia reported that 30.3% of women had heard about BSE and only 18.7% had practised BSE within the preceding 12 months.[22] Similarly, a study from Iran reported that 17% practiced regular monthly BSE.[21]

In our study, 81% believed that getting breast cancer was God's will and nothing can be done. In another study from Pakistan it was reported to be only 35%.[23]

It is worth noticing that the mean score of our study was 12.7 which showed poor knowledge amongst the study population. But they were aware of the relationship of various risk factors with breast cancer, including increasing age (35.5%), breast-feeding (11.1%) and obesity (32.7%). A study from Rawalpindi had similar results of various risk factors with 67.7% having knowledge that increasing age was a risk factor, 74.9% viewed breast-feeding decreases the risk, and obesity is a risk factor was answered by 53%.[24]

When they were asked about treatment, 23.8% considered surgery as the most effective method and more than half of the women (51%) viewed that mastectomy was the only available treatment.[25] Besides, 41.1% had the belief that it was a contagious disease.

Majority of married 332 (53.3%) and more than half of single females 301 (57.6%) believed that advancing age is not a risk factor for breast cancer while they were asked about breast lump evaluation by a doctor. A total of 447 (71.7%) were of the opinion that a breast lump should be evaluated by a doctor among married females. It was observed that knowledge of married women regarding risk factors and lump evaluation was not satisfactory while that of a single female was appropriate as compared to married participants but their overall knowledge was not good (Table-6).

Conclusion

The participants had poor knowledge and awareness regarding different aspects of BSE even though most of them had appropriate knowledge of different risk factors associated with breast cancer. There is need of serious efforts for generating awareness among the general population regarding breast cancer screening, BSE and mammogram.

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