

Knowledge, Attitude and Practice Regarding Breast Cancer Screening Among Female Nurses of Dubai Health Authority

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Abstract

Breast cancer is one of the most frequent cancers among women in both developed and developing countries. Breast cancer screening can reduce morbidity and mortality and improve the survival rate for this malignancy. Screening awareness and adequate practice can be a crucial factor in control measures. The objective of this study is to assess breast cancer screening knowledge, attitudes and practices among DHA female nurses of screening. A cross sectional study will be implemented among DHA female nurses in 2018. The study was implemented within DHA (PHC and hospitals). Participants are DHA female nurses. With 95% confidence level, the sample required sample size is 357 female nurses. Breast CAM tool will be used for this purpose. Data were collected by face to face interview. Researchers were responsible for data collection, data entry and cleaning. Data was analysed using SPSS 21. Frequencies were generated for univariate analysis, cross tabulation for bivariate analysis were generated, chi squared was used to test the hypothesis, and logistic regression was used for multi variated analysis. Awareness regarding alarming signals ranged from 45% to 86% according to the signal. Regarding "confidence in noticing a change in their breasts" most of the participants (43.5%) were fairly confident, while only 3% were not at all confident. The study explained the most of the participants (70.9%) are not registered with a family doctor. Those who are registered with a family doctor are only 17.1%. Most of the participants also (73.9%) were not invited for breast screening by DHA Breast Screening Program. Those who are invited are only 14.7%. Regarding how often they check their breasts, 39.1% check at least once a month, and 8.6% check at least once a week. Regarding "Ever been to see a doctor about a change they have notices in one of their breasts" 18.4% did this. Level of knowledge regarding alarming signals of breast cancer is relatively low. Ranging from 45% to 86% according to the signal make it important to plan for raising awareness regarding these signals as the knowledge may contribute to the efforts of prevention. The participants were not adequately confident in noticing a change in their breasts. More training and demonstration are needed. Practices are not adequately fulfilled. Health services are need to be empowered to increase adequate practices and appropriate utilization. Further studies are needed to study the associated factors and establish the direction of causality.

Keywords

Awareness, Breast Cancer, Breast CAM, Female Nurses, Dubai

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1. Introduction

Breast cancer is one of the most frequent cancers among

women in both developed and developing countries. It ranks second in frequency of incidence in the world after lung cancer; North American countries have the highest incidence

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rates, while Asia and Africa present the lowest risk of breast cancer. Incidence rates are still growing, for almost all developing countries and low-risk countries. In terms of mortality, it is the fifth cause of death from cancer overall and the most common cause of mortality in female. Breast cancer accounted for 8.3% of total deaths in 2001 and 7.7% of total deaths in 2002 [1]. Cancer incidence in United Arab Emirates (UAE) has been rising in the most recent few decades and cancer patterns are changing quickly. Cancer is the third leading cause of death in the UAE succeeding cardiovascular diseases and road traffic accidents [2].

Breast cancer screening can reduce morbidity and mortality and improve the survival rate for this malignancy. Low participation in screening programs has been attributable to many factors including lack of knowledge. Early detection of breast cancer through mammography screening as well as adjuvant therapy are the best ways not only to reduce mortality from breast cancer but also to improve the life quality of patients.

Even though mammography is the best choice for screening, breast self-examination is also equally important and beneficial for mass awareness, especially in countries with limited recourses or in a country where health care system still needs a lot of reforms and rearrangement, as in the case of many countries in the Arab world. It seems that pursuing a population based mass female screening program in most of developing countries is not a realistic approach. According to stepwise approach of Global Summit Panel 2002, SBE would be the approach for early detection [1, 2].

Knowledge also plays an important role in improvement of health seeking behavior. Knowledge may not only dramatically improve the attitude, disbelieve and misconception, but also consequently enhance screening practice. That is why, to reduce the number of deaths from breast cancer, there was a shift in emphasis from breast self-examination to breast awareness after 1991 [3].

However, lack of awareness, attitude and knowledge about the early detection of breast cancer and the benefits of screening tests is a real problem among women in developing countries and not very well documented. [4]. It has been reported that the public awareness of the importance of screening and early detection of breast cancer in the UAE women remains low [1, 2].

Pharmacists, as a member of health care team, may play an important role in the improvement of public awareness about breast cancer. Providing information regarding mammography, education about available screening tests for breast cancer and designing pamphlets for women of the available tests and explaining the risk factors of this disease

were recognized as an important role of pharmacists in breast cancer community care [2].

The objective of this study is to assess breast cancer screening knowledge, attitudes and practices among DHA female nurses. Breast CAM [5] tool will be used for this purpose.

2. Methodology

A cross sectional study is conducted among Dubai Health Authority (DHA) female nurses in 2018. The study was implemented within DHA (Primary Health Care “PHC” and hospitals). Participants are DHA female nurses. With 95% confidence level, the sample required size is 357 female nurses. Breast CAM tool is used for this purpose. Data were collected by face to face interview. Researchers were responsible for data collection, data entry and cleaning. Data was analyzed using SPSS 21. Frequencies were generated for univariate analysis, cross tabulation for bivariate analysis were generated, chi squared was used to test the hypothesis, and logistic regression was used for multi variated analysis.

3. Results

Table 1 shows distribution of the study participants according to the different Socio-demographic variables. The study was undertaken in 2018 on a total of 377 eligible DHA female nurses, 299 with a response rate of 79.3%. Twenty copies of the questionnaire found empty and considered missing. Generally, Most of the participants (79.9%) were from the younger age group (40–49 years). Out of the participants, 1.0% only were Emirati, 6.0% were from different Arab nationalities, and the majority (86.3% were from other nationalities. Regarding level of education, 65.2% hold bachelor degree.

Table 1. Distribution of the study participants according to the different Socio-demographic variables.

Variable	Categories	No.	%
Age group	40-49	239	79.9
	50+	40	13.4
Nationality	Emirati	3	1.0
	Arab	18	6.0
	Other nationalities	258	86.3
Level of Education	MSc	17	5.7
	Bachelor	195	65.2
	Nursing School	64	21.4
	Others	3	1.0
Missing		20	6.7
Total		299	100.0

Table 2 shows the distribution of the study participants according to the level of their knowledge regarding alarming signals.

Table 2. Distribution of the study participants according to the level of knowledge regarding alarming signals.

Variable	Categories	No.	%
Do you think a lump or thickening in your breast could be a sign of breast cancer?	Yes	249	83.3
	No	22	7.4
	Do not know	8	2.6
Do you think a lump or thickening under your armpit could be a sign of breast cancer?	Yes	237	79.3
	No	31	10.4
	Do not know	11	3.6
Do you think bleeding or discharge from your nipple could be a sign of breast cancer?	Yes	242	80.9
	No	26	8.7
	Do not know	11	3.7
Do you think the pulling in of your nipple could be a sign of breast cancer?	Yes	168	56.2
	No	78	26.1
	Do not know	33	11.0
Do you think a change in the position of your nipple could be a sign of breast cancer?	Yes	168	56.2
	No	72	24.1
	Do not know	39	13.0
Do you think a rash on or around your nipple could be a sign of breast cancer?	Yes	135	45.2
	No	104	34.8
	Do not know	40	13.3
Do you think redness of your breast skin could be a sign of breast cancer?	Yes	178	59.5
	No	74	24.7
	Do not know	27	9.0
Do you think a change in the size of your breast or nipple could be a sign of breast cancer?	Yes	202	67.6
	No	56	18.7
	Do not know	21	7.0
Do you think a change in the shape of your breast or nipple could be a sign of breast cancer?	Yes	204	68.2
	No	50	16.7
	Do not know	25	8.4
Do you think pain in one of your breasts or armpit could be a sign of breast cancer?	Yes	204	68.2
	No	61	20.4
	Do not know	14	4.7
Do you think dimpling of the breast skin could be a sign of breast cancer?	Yes	208	69.6
	No	33	11.0
	Do not know	38	12.7
Total		279	
Missing		20	6.7
Grand Total		299	100.0

Table 3 shows the distribution of the study participants according to confidence in noticing a change in their breasts. Most of the participants (43.5%) were fairly confident, while only 3% were not at all confident.

Table 3. Distribution of the study participants according to confidence in noticing a change in their breasts.

Variable	Categories	No.	%
Confidence in noticing a change in their breasts	Not at all confident	9	3.0
	Not very confident	67	22.4
	Fairly confident	130	43.5
	Very confident	68	22.7
	Missing	5	1.7
Missing		20	6.7
Total		299	100.0

Table 4 shows the distribution of the study participants according to some practices that are related to breast cancer. It explained the most of the participants (70.9%) are not registered with a family doctor. Those who are registered with a family doctor are only 17.1%. Most of the participants also (73.9%) were not invited for breast screening by DHA

Breast Screening Program. Those who are invited are only 14.7%. Regarding how often they check their breasts, 39.1% check at least once a month, and 8.6% check at least once a week. Regarding “Ever been to see a doctor about a change they have notices in one of their breasts” 18.4% did this.

Table 4. Distribution of the study participants according to some practices.

Variable	Categories	No.	%
Registered with Family Doctor	Yes	51	17.1
	No	212	70.9
	do not know	16	5.4
Ever invited for breast screening by DHA Breast Screening Program	Yes	44	14.7
	No	221	73.9
	Do not know	14	4.7
How often they check their breasts	Rarely or Never	68	22.1
	At least once every 6 months	68	22.8
	At least once a month	117	39.1
	At least once a week	26	8.6
Ever been to see a doctor about a change they have notices in one of their breasts	Missing	2	0.7
	Yes	55	18.4
	No	128	42.8
	Never noticed a change in one of my breasts	94	31.4
Missing	Missing	2	0.7
	Total	299	100.0

4. Discussion

The sample showed that the majority of the participants (79.9%) are from the younger age group (40-49 years). This result is similar to Al Ain study [2] where the younger age group percentage was 81%. The study showed that most of the participants (86.3% were from other nationalities. This is because most of nurses who are working in DHA are from other nationalities.

Awareness regarding alarming signals ranged from 45% to 86% according to the signal. Regarding “confidence in noticing a change in their breasts’ most of the participants (43.5%) were fairly confident, while only 3% were not at all confident. The study explained the most of the participants (70.9%) are not registered with a family doctor. Those who are registered with a family doctor are only 17.1%. Most of the participants also (73.9%) were not invited for breast screening by DHA Breast Screening Program. Those who are invited are only 14.7%. Regarding how often they check their breasts, 39.1% check at least once a month, and 8.6% check at least once a week. Regarding “Ever been to see a doctor about a change they have notices in one of their breasts” 18.4% did this. The awareness issue is similar to what was found in a Saudi Arabian study [6] in which screening services were noted to be underutilized and mainly used for the diagnosis of breast lesions.

In the UK more than 80% of women aged 50–69 are reported to have had mammography in the previous three years [7]. After introducing the national screening program in the UK in 1980s, rates of advanced breast cancer reduced dramatically [8].

In a neighboring country, Qatari women reported low

participation rate in breast cancer screening activities, 23.3% and 22.5% for CBE and mammography respectively, despite having adequate knowledge level [9].

In the UAE, the efforts of Health Authority Abu Dhabi are improving and resources are directed toward better implementation of screening activities [10].

Knowledge, attitude and practices are needed to be empowered. One study conducted in 2018 [11] concluded that training programs could help to increase the nurses' knowledge about the risk factors of breast cancer and practice of breast cancer screening. This could also help to increase the knowledge of the public about breast cancer. Another study conducted from October 2016 to January 2017 [12] concluded that community oriented awareness generation programs to educate women about breast cancer, to promote early detection of breast cancer and to bring about the desirable behavioral change among women are needed.

5. Conclusion

Level of knowledge regarding alarming signals of breast cancer is relatively low. Ranging from 45% to 86% according to the signal make it important to plan for raising awareness regarding these signals as the knowledge may contribute to the efforts of prevention.

The participants were not adequately confident in noticing a change in their breasts. More training and demonstration are needed.

Practices are not adequately fulfilled. Health services are need to be empowered to increase adequate practices and appropriate utilization. Further studies are needed to study the associated factors and establish the direction of causality.

Ethical Consideration

Participation was voluntary. Questionnaire is anonymous, and data were kept confidential. Informed Consent was taken before filling the questionnaire. DHA Ethical committee approval was obtained.

Conflict of Interest

The authors declare that they do not have any conflict of interest.

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