

## Assessment of Knowledge and Attitude and Practice towards Breast Cancer Screening among Female in Abha City, 2017

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### ABSTRACT

**Background:** Assessing the knowledge, attitude and practices of Saudi women toward breast cancer preventive practices improve the possibility of reducing the percentage of deaths from breast cancer as well as its prevalence. **Objectives:** Evaluating the knowledge and attitude and practice (KAP) towards breast cancer screening among female in Abha city in Kingdom of Saudi Arabia (KSA).

**Methods:** A cross-sectional study was done and based on a questionnaire sheet conducted in Abha City during the period of September to November 2017 among 421 educated Saudi women aged from 20-60 years old. **Results:** The female's knowledge about the symptoms was restricted to pain in the breast and presence of lump either in the breast or under the armpit, but most of them underestimated the other signs of breast cancer including changing the position and pulling of the nipple, bleeding or discharge from the nipple, nipple rash and redness of the breast. Also, the most significant identified risk factors for breast cancer were family history (59.1%) followed by using hormonal replacement therapy (30.2%). Most of the subjects has negative attitude toward using mammography for screening while a positive attitude was shown toward seeking for medication. The KAP score was adequate among only 32.5% of the subjects toward breast cancer.

**Conclusion:** The level of knowledge about breast cancer was insufficient among the included subjects and resulted in inappropriate attitude and practice pattern. The majority have never checked for breast cancer or either admitted to clinical examination of breast using mammography screening technique.

**Keywords:** Knowledge, Attitude, Practice, Breast Cancer, Saudi Female, Abha, KSA.

### INTRODUCTION

Breast cancer is a major health condition that varies in rates with the highest incidence in developed countries while in developing countries the prevalence rate is still low<sup>(1)</sup>.

According to the International Agency for Research on Cancer in 2008, breast cancer resulted in about 7.6 million deaths and more than 12 million new cases<sup>(2)</sup>. The prevalence of breast cancer in KSA was estimated to be about 8 thousand in 2006<sup>(3)</sup>.

This number increased by the year 2010 to reach about 27% of the diagnosed cancers were breast cancers among females aged more than 40 years<sup>(4)</sup>.

There was an inverse association between using early mammography screening and the reduced death rates from breast cancer<sup>(5)</sup> thus, annual mammograms are recommended for women who are older than 40 years especially those with a family history of breast cancer<sup>(6)</sup> according to the National Comprehensive Cancer Network<sup>(7)</sup>.

The severity of the disease would be higher among older women with a family history of breast cancer and the prognosis will be poor thus the early identification of breast cancer will

decrease the severity of the disease through proper management during early period<sup>(8)</sup>.

Assessing the knowledge, attitude and practices of Saudi women toward breast cancer preventive practices will improve the probability of reducing the level of deaths from breast cancer as well as its prevalence. There are few studies conducted in KSA among women thus, other studies are needed for assessing the preventive practices and the usage of mammography among Saudi females<sup>(9, 10)</sup>. The present study aimed at assessing the knowledge and attitude and practice towards breast cancer screening among female in Abha city.

### METHODS

#### *Study design*

It is a cross-sectional study based on a questionnaire sheet conducted in Abha City during the period of September to November 2017.

#### *Study population and sample size*

A convenience sample of women was randomly chosen from different parts of Abha City. The respondents were interviewed in shopping malls during the study period. The included subjects

were 421 educated Saudi women aged from 20-60 years old.

**Study tools**

The questionnaire was structured after reviewing the available studies on medical research engines. The questionnaire was reviewed by 3 experts to be validated and translated into Arabic. The questionnaire included 4 parts. The first part of the questionnaire included questions about the demographics of included women as age, education, family history of breast cancer and disease history of breast cancer. The other parts consisted of questions related to knowledge, attitude and practice of women toward breast cancer.

**Ethical approval**

The study protocol and the questionnaire were approved by the supervisors. A written informed consent was provided by the participants.

**The study was done after approval of ethical board of King Khalid university.**

**Statistical analysis**

The data were analyzed using the SPSS (22) for windows. The variables were presented as percentages and frequencies.

**RESULTS**

**Demographics of the studied subjects:**

The demographics of the included females are presented in Table. 1. Most of the women (72.2%) aged from 41-60 years old while only 27.8% aged from 20-40 years old. Also, the majority (77.4%) had college degree while 22.6% were at secondary school stage. None of the respondents suffered from breast cancer but 14.5% had a family history of breast cancer.

**Table (1): Demographic of included females (421)**

	No.	Percentage (%)
<b>Age</b>		
20-40	117	27.8
41-60	304	72.2
<b>Educational Level</b>		
College	326	77.4%
Secondary School	95	22.6%
<b>Family history of breast cancer</b>		
Yes	61	14.5%
No	360	85.5%
<b>Disease history of breast cancer</b>		
Yes	0	0
No	421	100%

**Assessment of knowledge of included subjects**

The female; awareness about breast cancer is shown in Table 2. The majority of respondents have good knowledge about pain in the breast and presence of lump in the breast or under the armpit as symptoms of breast cancers. On the other hand, most of them underestimated the other signs of breast cancer including changing the position and pulling of the nipple, bleeding or discharge from the nipple, nipple rash and redness of the breast. As for the risk factors, the most significant identified risk factors for breast cancer were family history (59.1%) followed by using hormonal replacement therapy (30.2%) while the least identified risk factors were overweight, not having children or having children in older age, a late menopause and older age above 40 years.

**Table (2): Awareness regarding the breast cancer:**

Symptoms of breast cancer:	Correct answers
The nipple position has changed	57 (13.5%)
The nipple is pulled	64 (15.2%)
Pain in one breast	402 (95.5%)
Bleeding or discharge from the nipple	146 (34.7%)
Lump in breast or under the armpit	413 (98.1%)
Nipple rash and redness of the breast	118 (28%)
<b>Risk factors for breast cancer</b>	
Having a family history of breast cancer	249(59.1%)
Using hormonal replacement therapy	127(30.2%)
Overweight or obesity	46(10.9%)
Not having children or having children in older age	34(14.3%)
Having a late menopause	63(15%)
Aged more than 40 years	48(11.4%)

**Evaluating the subject's attitude**

The majority of subjects will feel sad if they attacked by breast cancer and 28.35 will be afraid. Most of the subjects had positive attitude toward seeking for treatment while only 14.5% would surrender to death. The majority of respondents had negative attitude toward using mammography but 19.7% showed positive attitude toward using mammography for screening the breast cancer (Table. 3).

**Table (3): Attitude of females toward breast cancer (n=421)**

Would you feel if you have breast cancer	No.	Percentage (%)
Fear	119	28.3
Sadness	302	71.7
What would you do if you have breast cancer		
Surrender to death	61	14.5
Seek for treatment	360	85.5
Would you screen for breast cancer using mammography		
Yes	83	19.7
No	338	80.3

**Practice pattern of included subjects**

The respondent's practice is presented in Table. 5. Most of the subjects have never screened for breast cancer using mammography or even self or clinically examined but only 11.6% have screened for breast cancer before, 17.8% practiced self-examination and 11.9% seek for clinical investigations.

**Table (5): females' practice toward breast cancer (n=421)**

	Yes	No
I've screened for breast cancer before using mammography	49 (11.6%)	-88.40%
Did you practice breast self-examination?	75 (17.8%)	-82.20%
Did you seek clinical examination before?	50 (11.9%)	-88.10%

**- KAP score**

The KAP score was low among most of the subjects (67.5%) and only 32.5% showed adequate KAP toward breast cancer (Table. 5).

**Table (5): KAP score of respondents regarding breast cancer:**

	KAP Score
Good KAP	137 (32.5%)
Poor KAP	284 (67.5%)

**DISCUSSION**

The prevalence of breast cancer in developed countries is higher compared to developing countries, but the incidence is increased in Arab world among younger women

in comparison with western countries<sup>(11-13)</sup>. Early diagnosis of breast cancer would significantly increase the survival rate thus public knowledge about breast cancer would result in better prognosis of breast cancer<sup>(14)</sup>.

The knowledge of the breast cancer symptoms was inadequate among most of the subjects while the good knowledge was about the pain in one breast and the presence of lumps in breast or under armpit. Also, the knowledge about the risk factors was also inappropriate which resulted in poor attitude and practice pattern. These results were also shown in another study conducted in KSA as the knowledge of the females in King Khalid Armed Forces about the symptoms and risk factors was inadequate among most of them<sup>(15)</sup>.

The same results were presented in Qassim region where most of the subjects showed improper knowledge about the symptoms, risk factors and examination of breast cancer<sup>(16)</sup>. Also, breast lump, nipple discharge and pain were the most prominent symptoms among the students in Jordan<sup>(11)</sup>. Among women from Oman, most of the subjects suffer poor knowledge about the symptoms and risk factors of breast cancer<sup>(17)</sup>.

This study has some limitations as all the subjects were educated and don't represent the whole population, the variables showed non-significant association with the KAP scores. There is still a need for large prospective studies to enhance the KAP of Saudi women toward breast cancer; its symptoms, diagnosis as well as early examination.

**CONCLUSION**

The level of knowledge about breast cancer was insufficient among the included subjects and resulted in inappropriate attitude and practice pattern. The majority have never checked for breast cancer or admitted for mammography examination.

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