Original Article

Awareness of Breast Cancer, Attitude and Practice towards its Screening among Female Support Staff

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ABSTRACT

Background: Breast cancer is the most common cancer among women worldwide. In developing countries, mortality from breast cancer is higher than in developed countries due to low levels of knowledge and poor practice of breast cancer screening. This study aims to assess the awareness of breast cancer, attitude, and practice of its screening among female support staff.

Method: A cross-sectional study was conducted at Patan Academy of Health Sciences using a structured questionnaire. One hundred and twenty-seven female support staff was interviewed. Descriptive statistics such as frequency and percentage were used to analyze the level of awareness, attitude, and practice. The relationship between awareness and practice, attitude and practice were analyzed using Spearman's correlation co-efficient.

Results: The majority of respondents had a poor level of awareness regarding breast cancer and screening (64.57%: poor level, 28.35%: average level, and 7.14%: good level). Over half of the respondents (52.76%) reported a favorable attitude towards breast cancer screening practice and 37% of respondents had performed breast cancer screening methods. There was a significant mild correlation (r =.313, p = .032) between awareness and practice, whereas there was no significant correlation (r = -.045, p= .726) between attitude and practice.

Conclusion: Overall, the majority of female support workers interviewed had poor awareness of breast cancer and screening. The potential impact is that fewer women are encouraged to take up these services and may therefore be at risk of developing breast cancer.

Keywords: Attitude**,** Awareness, Breast Cancer, Female Support Staff, Screening Practice.

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INTRODUCTION

Breast cancer is the most common cancer among women worldwide; in 2018, about 627,000 women died from it.[1] The Incidence of breast cancer among Asian women is 34066 (36.8%), 162468(27.7%), 3091(2.4%), and 2068(13%) in Pakistan, India, Srilanka, and Nepal respectively.[1]

In Australia, 28.9% of women performed breast self-examination (BSE) monthly, and 27.3% had done Clinical Breast Examination (CBE) annually.[2] In the Philippines, out of 944 women 8% had done mammograms.[3] In UAE, out of 112 women, 76 (74.5%) had a good level of awareness regarding BSE and 43.1% of respondents had done BSE.[4] In China 38.4% women had performed BSE, 47.0% women had done CBE and 103 (24.7%) women had done mammography as recommended.[5]

In India, among 360 women found that 81% (292/360) women did not have knowledge about Breast cancer.[6] In Nepal, 5.6% (18/320) female health personnel had good knowledge and 304 (95%) had good attitude on breast self-examination.[7] The study conducted at Pokhara Nepal, 24.2% were aware on BSE.[8] In early stage, BSE is one of the most important techniques of screening and diagnosis of breast cancer. There was gap between knowledge and practice of BSE.[9] In Kathmandu Nepal, (304, 95%) had good attitude and 16 (5.0%) had poor attitude toward BSE among female health personnel. There was low level of practice on BSE but good positive attitude on BSE.[10]

The primary prevention of breast cancer among the women that is early detected by BSE.[11] There were various studies recognized that lower level of awareness, positive attitude but poor practice on breast cancer screening among women thus to increase the level of awareness and practice are essential to improve the health status of women. The researcher is interested to identify the awareness on breast cancer, attitude, and practice of screening among female support staff in a Patan Academy of Health Sciences.

MATERIALS AND METHODS

A quantitative cross-sectional study was conducted among 127 female support staff [non-medical female worker (attendants)] of at Patan Hospital and Lalitpur Nursing Campus of Patan Academy of Health Sciences from January 2019 to February 2020. This study was conducted after Institutional Review Committee of Patan Academy of Health Sciences. A self-developed structured questionnaire was developed by researcher through literature review and consult with subject expert. Total enumerative sampling technique was used for collecting data and it was collected by interview method. The questionnaire was translated from English to Nepali language by bilingual translator. The content validity of questionnaire was done by subject experts and necessary modifications were done. There were 35 items of structured close ended and multiple response questionnaire. Reliability was checked by chronbach alpha, the reliability coefficient was 0.78.

The questionnaire had four parts according to variables; Part I: the questionnaire related to socio-demographic variables.

Part II: the questionnaire related to awareness of breast cancer which had 25 items. The

total scored was 25 and it was categorized into good level [above 19 (>75%)], average level [13-19 (50-75%)], and poor level [13 (<50%)] of awareness.[12]

Part III: the questionnaires were related to attitude of breast cancer screening practices (10 items) which was measured by using 5-point Likert scale. The total scored was 50; cut off point of scoring was done based on mean value of total obtained score. Favorable attitude score: score more than mean (>36), and unfavorable attitude score less than or equal to mean (≤36).

Part IV; the questionnaire related to practices (4 items). Scoring was based on mean value of total score.[13]

The data were entered on Microsoft Excel and analyzed using the statistical package for social sciences (SPSS vs. 16). The data was analyzed by using descriptive statistics (frequency, percentage and mean). Spearman's correlation coefficient was used to determine relationship between awareness, attitude and practice of screening.

RESULTS

Among the 127 respondents, 37.79% of respondents belonged to 40-49 years of age. Majorities (91.3%) of respondents were married; 92.68% had children. Nearly half (48.03%) of respondents had completed secondary education, and 7.87% of respondents were illiterate.

This study found that 82 (64.57%) of respondents had poor level of awareness, 36 (28.35%) had average and 9 (7.14%) had good awareness regarding breast cancer and screening. Among 127 respondents, 67 (52.76%) had favorable attitude and 60 (47.26%) had unfavorable attitude regarding breast cancer and its screening practice. (Table 1)

In this study, most of respondents79 (72.48%) answered that smoking or use of tobacco was the risk factor of breast cancer and 25 (22.94%) of respondents answered that late menopause after 55 years was also a risk factors of breast cancer. Around two third (83.89%) respondents answered that while palpating the breast, painless breast lump was the warning signs of breast cancer and 50 (42.37%) respondents answered discoloration /dimpling of the breast was also the warning signs of breast cancer. (Table 2)

In this study, more than half of the respondents (58.27%) answered that breast cancer was a preventable disease. Among them, 73.61% of respondents' answered that breast cancer can be prevented by performing regular BSE and avoiding smoking, and only 36.11% of respondents answered i.e. bearing 1st child before age of 30 years can be prevented by breast cancer.

In this study, majority of respondents (95.20%) answered clinical breast examination was the method of screening for breast cancer and only (22.40%) of respondents answered mammogram was the screening methods of breast cancer. (Table 3)

About one third (32.28%) of the respondents had done breast self-examination (BSE). Among them, only 2 (11.11%) of respondents had performed breast self-examination at right time between the 7-10 days of menstruation period and 11 (61.11%) of respondents performed any time during menstruation period. Among 127 respondents, 17 (13.38%) respondents had done clinical breast examination (CBE) by

doctor. Among 17 respondents, 8 (47.06%) had done mammogram. (Table 4)

Majority of respondents, 43 (91.49%) had poor practice and 4 (8.51%) of respondents had good practice on breast cancer screening. (Table1). There was significant correlation (r =.313, p = .032) between awareness and practice whereas no correlation (r = -.045, p= .726) between attitude and practice. (Table 5)

Table 1: Overall level of Awareness of Breast Cancer, Attitude and Practice of Breast cancer screening

Variable	Frequency	Percentage
Overall level of Awareness		
Good	9	7.14
Average	36	28.35
Poor	82	64.57
Overall Level of Attitude		
Favorable	67	52.76
Unfavorable	60	47.26
Overall level of Practice		
Good	4	8.51
Poor	43	91.49

Table 2: Awareness of breast Cancer regarding Risk Factors and Warning Signs

Variables	Frequency	Percentage
[a] Risk Factors of Breast Cancer		
Smoking or tobacco Use	79	72.48
[a]Overweight / Obesity	50	45.87
First child at late age after 30 years	45	41.28
Early menarche before age of 12.	28	25.69
Late menopause after 55 years	25	22.94
Unmarried women or infertile women	54	49.54
[a] Warning Signs of Breast Cancer		
Painless breast Lump while palpating	99	83.89
Changes in the shape and size of the breast and nipple	69	58.47
Discoloration /dimpling of the breast	50	42.37
Ulceration in the Breast	82	69.49
Lump under armpit	82	69.49
Enlarged lymph nodes	95	80.51

[a=] Multiple response

Table 3: Awareness regarding Preventive Measure and Screening Methods of Breast Cancer

Variables	Frequency	Percent
Breast Cancer as preventable Disease		
Yes	53	41.73
No	74	58.27
[a]Preventive measure of breast cancer		
Performing Regular Breast self-examination	53	73.61
Avoiding smoking	53	73.61
Doing regular Exercise	52	72.22
Bearing first child before age of 30 years.	26	36.11
Consult doctors, If early menarche or late menopause	37	51.38
[a] Screening method of Breast Cancer		
Breast self-Examination	90	72.00
Clinical Breast Examination	119	95.20
Mammogram	28	22.40
Breast ultrasound	46	36.80

[a]Multiple response

Table 4. Practice of Breast-self-examination, Clinical Breast Examination and Mammogram

Variables	Frequency	Percentage
Ever done Breast Self-examination		
Yes	41	32.28
No	86	67.72
Performed BSE every month (n=41)		
Yes	18	43.90
No	23	56.10
If yes, time of performing BSE (n = 18)		
During menstruation	3	16.67
Between the 7-10 days after menstruation	2	11.11
After 14 days of menstruation	2	11.11
Any time during menstruation	11	61.11

Have had clinical breast examined by a doctor		
Yes	17	13.38
No	110	86.61
Mammogram according to the doctor's advice (n = 17)		
Yes	8	47.06
No	9	52.94

[a=] Multiple response

Table 5: Co-relation between Awareness, Attitude and Practice of Breast Cancer Screening

Variable	Correlation	P value
Awareness Vs Practice	.313*	.032
Attitude Vs Practice	-.045	.726

*Correlation is significant at the 0.05 level (2-tailed)

DISCUSSION

In this study, we found that 64.57% of respondents had poor, 28.35% had average and 7.14% had good level of awareness on breast cancer and screening methods. Similar findings were revealed in a study conducted among female health care professionals in Saudi Arabia where 281 (71.1%) had poor, 104 (26.3%) had fair and 10 (2.6%) had good level of knowledge on breast cancer.[14] But our finding was inconsistent with another study conducted in Thailand among female personnel,[15] 7.4% had poor, 57.6% had fair (average) and 76 (35%) had good level of knowledge; and in Nigeria[16] among undergraduate female students where 15% had poor, 35.7% had fair and 49.3% had good level of knowledge on breast cancer.

This study revealed that most (72.7%) of respondents answered that smoking or tobacco use causes breast cancer. This finding supports previous study conducted among women in Pakistan[17],6.48%, and in Nepal[18],73.3% of respondents answered that smoking or tobacco use causes breast cancer. This finding is contradictory with similar study conducted among female medical students in Libya.[19] In this study, only 22.94% of respondents answered late menopause after 55 years was the risk factor of breast cancer, which was similar with study conducted in Iran,[20] (which mentioned 29.4%), but the finding was different with the study conducted in Nepal[18], where 13.1% of respondents said menopause after age of 55 years was the risk factor for breast cancer development.

Our study showed that 83.89% of respondents answered painless breast lump while palpating was the warning signs of breast cancer. This finding of the study was similar with study conducted among women in Yemen and Libiya.[21,19] This finding was inconsistent with study conducted in Pakistan,[17] where 28.5% answered painless breast lump while palpating was the warning signs of breast cancer. This study found that 42.37% of respondents said discoloration or dimpling of the breast was the warning sign of breast cancer. These findings were similar

with study conducted in India and Yemen.[22,21] This finding was inconsistent with study conducted in Saudi Arabia and Pokhara, Nepal.[14,8]

In this study most of the respondents said breast cancer can be prevented by avoiding smoking which was different with study conducted in India, where 42.85% (N=214) of respondent said avoiding smoking would prevent from breast cancer.[22] This study found that majority of respondents answered that CBE is the method of screening. This finding was similar with study conducted in Nepal,[18] 83.5% conducted distinct with study conducted among female outpatient in Kenya.[23] This study shows that most of the respondents said that BSE is a method of breast cancer screening whose finding was similar to study conducted in Liby,[19] 82.5%, and in China,[24] 60.5% said that BSE is a method of breast cancer screening. This finding was contradictory with study conducted in Yeman.[21] This study finding demonstrate that only 22.40% of respondents said that mammogram was the method of breast cancer screening, which finding was similar with study conducted in Kenya,[23] 19.1% and distinct with in China[24] 42.5%.

In this study, 52.76% of the respondents had favorable attitude, whereas 47.24% respondents had unfavorable attitude regarding breast cancer and its screening. This finding was consistent with study conducted in Nigeria 67.9% respondents had positive attitude 32.1% respondents had negative attitude of breast cancer screening.[25] This finding was inconsistent with the study conducted in Libya[19] majority had good and 10% respondents had negative attitude and in India,[13] among reproductive aged women, most had poor and 32% respondents had good attitude toward BSE. This finding was also inconsistent with study conducted in Nepal,[7] where, majority had positive and 5.0% had negative attitude toward BSE.

In this study, 91.59% respondents had poor and 8.51% respondents had good practice of breast cancer screening. As per researchers' knowledge, there was no study related to overall level of practice of breast cancer screening. In present study, 47 (37.00 %) of respondents performed one or more methods of breast cancer screening. This finding was different with study conducted in Nepal, where 73 (18.8%) of respondents had performed one or more method of breast cancer screening.[18] This finding revealed that 41 (32.28%) of respondents had performed BSE. This finding is similar with study conducted in Pakistan[26], where 23% (N=70) had performed BSE. This finding is in contrast with study conducted in Kathmandu Nepal.[10] This study presents that 17 (13.38%) of respondents had done CBE, which was similar with study conducted in Pakistan[26] where 5.9% and in Philippines[3] where 15% of respondents had done CBE by doctor. But in Thailand[15] where 48.4% (N=105) of respondents had done clinical breast examination by doctor. In this study overall 8 (6.25%, among 127) respondents had done mammograms which were similar to study conducted in Kenya.[23]

There was a statistically significant correlation between awareness and practice on breast cancer and its screening. This finding was similar to a study conducted in India[13].The correlation coefficient between attitude and practice was (r = -.045, p = .726). Thus, there was a negative correlation between attitude and practice. This study was inconsistent with a study conducted in India[13],

which showed that there was a positive correlation between attitude and practice ($r = -.243$, $P < 0.001$).

Limitation: The study was limited to Patan Academy of Health Sciences among female support staff and practice was assessed by questionnaire.

CONCLUSION

Although the support staff with a positive attitude towards breast cancer screening had poor practice. The female support staff who was aware of breast cancer had a good practice. There is needed for training and awareness programs of breast cancer and its screening methods for female support staff in a hospital that increase awareness on breast cancer and improve practice on it.

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