ORIGINAL ARTICLE

KNOWLEDGE, ATTITUDE AND PRACTICE FOR BREAST CANCER RISK FACTORS AND SCREENING MODALITIES IN STAFF NURSES OF AYUB TEACHING HOSPITAL ABBOTTABAD

Sheraz Ahmad, Ahmad Nadim Qureshi*, Sania Atta*, Mahwish Gul, Muhammad Rizwan, Sohail Ahmad*, Ayesha Riaz, Muniba Gul, Shafaq Zaman, Nita Johnny***

Student, Ayub Medical College, *Department of Oncology, Ayub Medical College, **Student, Women Medical College, Abbottabad, Pakistan

Background: Breast cancer is the commonest cancer modality in female worldwide. Avoiding the risk factors can reduce its incidence and adhering to screening and early detection can reduce its mortality. A sufficient knowledge regarding the risk factors and screening modalities is therefore essential. We assessed the knowledge level about these parameters in our staff nurses. **Methods:** A self-administered questionnaire survey was performed. Knowledge regarding the risk factors and screening modalities were categorised into good, fair, poor and very poor categories. **Results:** Knowledge regarding most of the factors was found to be fair. A few things were termed as good knowledge like role of breast-feeding in protecting against breast cancer. Practice regarding the screening modalities was not satisfactory. Only a few nurses had good knowledge of the risk factors and screening modalities. Practice of the Screening modalities was also poor. **Conclusion:** There is a need to improve the nursing curriculum, training at the workplace and motivate them for screening practices. They should be encouraged to talk to their patients and their female attendants about prevention and early detection of breast cancer.

Keywords: Breast cancer, BSE, knowledge

INTRODUCTION

Breast cancer is the commonest cancer among women worldwide.[1] In Pakistani women breast cancer is the most common cancer modality. The African and Asian countries showed an increasing annual incidence rate than the European and North American countries.[2] Furthermore, Pakistan has a higher incidence of the disease than the neighbouring countries.[3,4] In Pakistan, breast cancer is noted to metastasize earlier and is more aggressive.[4]

Early detection and prompt treatment is a major prognostic factor in breast cancer.[5] In Pakistan, late presentation, more often in the 3rd and 4th stage is very common.[6–7] Screening practices like breast self-examination (BSE), clinical breast examination (CBE) and Mammography can downgrade the cancer presentation.[3–8] The best approach to lessen the burden of breast cancer morbidity is in prevention. A Nurse is best suited for discussing a private issue like breast cancer in our society provided she is knowledgeable herself. For this purpose, we assessed the level of knowledge of staff nurses in Ayub Teaching Hospital, regarding breast cancer risk factors.

METHODS AND MATERIAL

A self-administered questionnaire survey was conducted in July, 2010 at Ayub Teaching Hospital, Abbottabad. The study was approved by the research ethical review committee of the hospital.

The target population included all staff nurses working in all wards of the hospital in the morning, evening and night shifts on our study dates. Out of 240 nurses 133 were requested to participate after a short briefing regarding the survey. An informed verbal consent was taken. Only one nurse denied participating in the study because she had recently participated in such a survey. The questionnaires were distributed and explained by the female team members and some interested volunteer female doctors from the Gynaecology Department. The questionnaires were collected the same day after completion, and 3 respondents couldn't return their questionnaires because of the workload.

The questionnaire had four parts: First part contains questions about the age, marital status and job duration of the staff nurse. Second part comprised of questions related to risk factors and had 9 questions with dichotomous answers. Responses for individual questions were analysed and the one having 80% and above correct answers were termed as 'good' and the one having score of 60–80% was termed as a 'fair' knowledge. A question getting a 50–60% corrects answers was termed as a 'poor' knowledge and for <50% correct answers, it was termed as a 'very poor' knowledge. Third part had questions regarding Breast Self Examination (BSE). It included asking about the significance, age for starting, schedule, proper time and procedure for performing BSE. It also included whether she had ever performed BSE, did she perform it monthly, and

if not, what was the reason? Fourth part contained questions regarding mammography. It included questions about mammography if it is an X-ray, the significance, age for starting and also if it is a painful procedure. The data was collected on a specially designed questionnaire and analysed using SPSS-16.

RESULTS

Out of 133 participants 130 (97.7%) responded the questioner. Majority of them were in age range of 20–30 years (98, 75.3%), and 66 (50.8%) were unmarried.

Table-1 shows knowledge regarding risk factors, and Table-2 shows knowledge for Brest Self Examination.

Out of the total, 86 (66.16%) respondents had performed BSE. Out of these 86, 30 (34.9%) did it once in life while 56 (65.1%) on monthly basis. Forty-four (33.84%) never performed BSE (Table-3). Of those who never performed BSE, 52% didn't perform it of fear of finding something bad, 25% said that they don't have time for it.

Table-4 shows knowledge of study participants about mammography.

Table-1: Knowledge of risk factors (n=130)

Questions	Correct answers	%	Category
Family history of breast cancer is a risk factor	80	61.5	Fair
Personal history of Ca. Breast of one side is a risk for cancer on the other side	90	69.2	Fair
Increasing age increases the risk	79	60.8	Fair
Menarche before 12 and menopause after 50 years of age increases the risk	62	49.5	Very Poor
Nulliparity/First live birth after age of 30 years increases the risk	78	64.6	Fair
Postmenopausal obesity increases the risk	65	53.1	Poor
Continuous use of oral contraceptive pills for a period greater than 5 years increases the risk	87	67.75	Fair
Smoking increases the risk	73	57.7	Poor
High fat diet increases the risk	73	57.5	Poor
Breast feeding decreases the risk of Ca. Breast	120	93.8	Good

Table-2: Knowledge for Brest Self Examination (n=130)

Questions	Correct answers	%	Category
BSE detects breast cancer in the early stage	92	70.8	Fair
Correct age for starting BSE is	95	73.1	Fair
BSE is performed Monthly	81	65.3	Fair
Ideal time for performing BSE is?	55	42.3	Very Poor
BSE is performed with hand of the same side?	68	52.3	Poor

Table-3: Performed BSE (n=130)

BSE	No	%
Performed	**86**	**66.16**
Once in Life	30	34.9
Monthly	56	65.1
Never	**44**	**33.84**

Table-4: Knowledge of mammography

Question	Correct answers	%	Category
Is mammography an X-Ray, which detects masses in the breast?	109	89.3	Good
Does mammography detect masses earlier than can be done clinically?	97	78.9	Fair
What is age for starting mammography? (We considered age of 40 years to be correct)	77	63.6	Fair
Is mammography a painful procedure?	38	31.1	Very Poor

DISCUSSION

Primary prevention is the best strategy to decrease the breast cancer related morbidity. Sound knowledge of the risk factors is essential for the primary prevention. At assessment, the knowledge level of staff nurses regarding the breast cancer major risk factors like family and personal history and increasing age was fair. They had a very poor knowledge regarding menarche before 12 years and menopause after 50 years as a risk factor; 53.1% knew that postmenopausal obesity is a risk factor. Faiza *et al*[9] found it to be 25% in their study population.

Knowledge regarding BSE was fair except for a very poor score for knowing the exact time for carrying out a BSE. Practice of BSE was poor with a total of only 66.4% doing it monthly. It is comparable to the 66% of Shiyam *et al*.[10] It is much better than the 59% of practice in a study by Pervez *et al*.[11] Knowledge about BSE was good except the procedure (52.3%) and ideal time (42.3%). The practice of BSE was comparable to the study at Aga Khan Hospital (66%)[10], it is better than the practice in Jordan (59%)[12], but this practice is much poor than a study from Singapore (94%).[13]

Knowledge regarding mammography was good (63.6%) except the correct age for starting and that it is a painful procedure (31.1%).

The shortcoming of the study was the very low response rate, 107 staff nurses were on casual and maternity leave on our study dates. The second point was the dichotomous answers for some of the questions.

Two words, i.e., 'nulliparity' and 'obesity' were found to be difficult for understanding by the nurses.

CONCLUSION

Knowledge of the nurses regarding the major risk factors for breast cancer was fair. Knowledge about the BSE was also fair but a poor practice of BSE was observed. Knowledge regarding mammography was also fair.

The nurses should be educated at their work place and improvement in the nursing curriculum be made for a long-term change. There is a need to motivate the nurses for educating the women from the general population.

ACKNOWLEDGMENTS

We thank Dr. Abdul Wahab Yousafzai from the Psychiatry Department for reading the manuscript and corrections. We also thank Dr. Sadia Shah and Dr. Saima Sardar from the Gynaecology Unit 'B' on their valuable suggestions and help in data collection.

REFERENCES

1. WHO: The World Health Report 1998. Life in the 21st century: A vision for all. Geneva, World Health Organization; 1998. p.88–90. Available at: www.who.int/whr/1998/en/whr98_en.pdf
2. Sasco AJ: Epidemiology of breast cancer: an environmental disease? Apmis 2001;109:321–32.
3. Bhurgri Y, Kayani N, Faridi N, Pervez S, Usman A, Bhurgri H, *et al*. Pathoepidemiology of breast cancer in Karachi '1995–1997'. Asian Pac J Cancer Prev 2007;8:215–20.
4. Sohail S, Alam SN. Breast cancer in Pakistan —awareness and early detection. J Coll Physicians Surg Pak 2007;17:711–2.
5. Sadler GR, Dhanjal SK, Shah NB, Shah RB, Ko C, Anghel M, *et al*. Asian Indian women: knowledge, attitudes and behaviors toward breast cancer early detection. Public Health Nurs 2001;18:357–63.
6. Hussain MM, Ansari AK. Late presentation of carcinoma breast in Pakistani women. Pak Armed Forces Med J 1996;46(2):11–5.
7. Ali AA, Azim KM, Butt HA, Hassan J, Malik A, Qadir A, *et al*. Carcinoma Breast: A dilemma for our society. Ann King Edward Med Coll 2003;9(2):87–9.
8. Anderson BO, Braun S, Lim S, Smith RA, Taplin S, Thomas DB. Early detection of breast cancer in countries with limited resources. Breast J 2003;9(Suppl 2):S51–9.
9. Ahmed F, Mahmud S, Hatcher J, Khan SM. Breast cancer risk factor knowledge among nurses in teaching hospitals of Karachi, Pakistan: a cross-sectional study. BMC Nurs 2006;5:6.
10. Kumar S, Imam AM, Manzoor NF, Masood N. Knowledge, attitude and preventive practices for breast cancer among Health Care Professionals at Aga Khan Hospital Karachi. J Pak Med Assoc 2009;59(7):474–8.
11. Parvez T, Anwar M. Knowledge, attitude and preventive practices for breast Cancer. J Coll Physicians Surg Pak 2001;11:363–6.
12. Jaraden NK. Breast Cancer Risk Factors and breast self examination practice among Jordanian womean. Behrain Med Bull 2010;32(1). Available at: www.bahrainmedicalbulletin.com/march_2010/Breast_cancer.pdf
13. Chong PN, Krishnan M, Hong CY, Swah TS. Knowledge and practice of breast cancer screening amongst public health nurses in Singapore. Singapore Med J 2002;43:509–16.

Address for Correspondence:

Dr. Sheraz Ahmad, Department of Oncology, Ayub Medical College, Abbottabad, Pakistan. **Cell:** +92-333-9233757
Email: sheraz_islamian@hotmail.com