

Breast Cancer Knowledge and Screening Practice among Women Visited to KIST Medical College

K Shrestha

Nursing Director, Nepal Medical College, Jorpati, Kathmandu, Nepal

Corresponding author: Kalpana Shrestha, Prof. Nursing Director, Nepal Medical College, Jorpati, Kathmandu, Nepal; e-mail: shrestha.kalpana@gmail.com

ABSTRACT

Breast cancer is one of the most common cancers among female worldwide. Global statistics show the annual incidence of breast cancer is increasing and this is occurring more rapidly in countries with a low incidence rate of breast cancer.^{1,2} In Nepal it is second most common cancer after cervical cancer. Studies shows the mortality rate of breast cancer can be reduced by early detection and Screening program.³ According to the latest WHO data published in April 2011 breast cancer death in Nepal has reached 1,248 (0.84%) of total death. The age adjusted death rate is 12.92 per 1000, 000 of population and the rank has been reached in number 142 in the world. This study was aims to assess the knowledge and screening practice for breast cancer among women. A cross-sectional descriptive study was conducted among 110 women age range from 20 to 60 years at KIST Medical College, Imadol, Lalitpur. Purposive sampling technique was adopted. Structured questionnaire were used for data collection. Verbal informed consent was taken from each respondents. Descriptive analysis and simple statistical methods were used. Findings revealed that respondents who had heard about breast cancer were 33 (30%) and not even heard were 77 (70%), out of them 26 respondents were doing regular screening which was breast self-examination by 19(73%) mammography 3 (11-5) and USG- 4 (15.4%). Their common source of information were Radio/TV. 90 (81%) married women were 90 in numbers. Knowledge on risk factors of breast cancer was very low. Result of this study shows low knowledge on breast cancer, risk factors and screening practice among women groups of this study. Thus it is important to educate women about importance of early detection through screening methods for breast cancer to reduce mortality.

Keywords: breast cancer, knowledge, risk factors, screening, practice

INTRODUCTION

Breast Cancer is the most common cancer of women and a major public health problem in developed and developing countries.¹ It is a leading cause of death in women. The incidence of breast cancer varies markedly from country to country being highest in United States and Northern Europe and lowest in Asia. In developed countries the incidence of breast cancer is more than 1000 per million where as in developing countries it is less than 200 per million women. However, cancer mortality is higher in developing countries than in the developed countries.² World wide more than 20million people are living with cancer and its number is expected to be more than 30 million by 2020 AD.³ In the United States breast cancer is the most common cause of cancer death among women age range from 40 – 59 years. According to the National Cancer Institute (NCI 2011) every two minutes one women is diagnosed with breast cancer and every 13 minutes a women dies of breast cancer in US.⁴

The growing incidence of breast cancer worldwide stresses the greater need for a study of its rise and the need for awareness about it in developing nations.

Breast cancer is the second leading in women of Nepal. They reach to the specialist doctor very late because of awareness and low knowledge of breast cancer.⁵

Breast screening aims to detect breast cancer at an early stage sign develop such as lump. Breast screening saves lives. Research studies have shown that breast screening has significantly reduced the number of deaths from breast cancer. The International Agency for Research on cancer has shown that there is a 35% reduction in the chance of death due to breast in women who are screened regularly with mammography.⁶

The screening methods of breast cancer are the best and most effective methods for decreasing cancer mortality. These methods increase recovery rates and promote positive treatment consequences.⁶ There are different methods for early diagnosis of breast cancer which are; Breast self-Examination (BSE), Clinical Based Examination (CBE), exam by Physician or Nurses, Mammography, an X-ray of breast and magnetic resonance imaging (MRI) for high risk women group.⁴

There are various risk factors for breast cancer have been reported and this include family history increasing

age, high dietary fat, excessive alcohol intake hormone replacement therapy (HRT), Smoking, exposure to radiation, nulliparity, early menarche, late menopause and obesity.⁷

Literature demonstrates the evidence that in case of early diagnosis and early treatment the chances of cure and survival rate are high. Early detection program are established in order to reduce the breast cancer mortality, breast cancer awareness and clinical breast examination are the key steps for early detection of breast cancer in resource limited countries like Nepal.² Mammography is not feasible due to unavailability of this facility at many centers and expensive. If a women practices BSE regularly, it makes women conscious about breast cancer "Breast awareness" as well as about her general health.⁸ A population based study from eastern region of Nepal conducted that BSE could be based as an important tool for primary prevention of breast cancer in Nepal.⁷ There is need for standard guidelines for the proper management Oncologist follows the recommendation guidelines of National Cancer Association for screening for early detection.

American Cancer Society recommendations women in their 20s and 30s should have a clinical breast exam (CBE) as part of a periodic (regular) health exam by a health professional preferably every 3 years. Starting at age 40, women should have a CBE by a health professional, every year for early breast cancer detection in women without breast symptoms, women age 40 and older should have a mammogram every year and continue to do so for as long as they are in good health.⁴

There is a lack of population based cancer registry in Nepal. Although individual Institution have been initiated to keep record of hospital based registry.⁵ According World Health Organization (2008) breast cancer accounts for 6% of all cancer in Nepal. The commonest age group of women with breast cancer in Nepal is 40 – 50 years. This is remarkable difference in higher incidence of younger than 50 years age.⁹

Latest data of WHO data published in 2011, breast cancer death in Nepal has reached 1,248 or 0.84% of total deaths. The age adjusted death rate is 12.92 per 100,000 of population Nepal ranks number 142 in the world.¹⁰

Objectives: To assess the knowledge, and practice of breast screening among women visited to out patient department of Kist Medical College, hospital.

MATERIALS AND METHODS:

Study Design: The study was designed as a descriptive cross-sectional study Sample population was women group age from 20 – 60 years and above those who visited

to KIST Medical College and Hospital, Imadol Lalitpur. Non- probability, purposive sampling technique

was carried out to collect the information. Total sampling size was 110 in number and time frame was during four weeks of data collection. Participants were involved in the study only those who were voluntarily willing to take part in the study. A structured set of questionnaire were used to collect data. Face-to face interview were carried out by the researcher. Questions were consists on the demographics information, knowledge on breast cancer, sign of breast cancer and screening practices. The instrument was developed through review of literatures. The developed tool was request to review to the concern gynecologist and expert surgeon for the validity of questionnaires. Before asking any question informed consent were taken by each respondents. Preliminary testing of the instrument was done on ten respondents in similar setting of non study area to test reliability and clarity of the instrument. Data was collected at the out patient department of KIST Medical College hospital. Rrespondents were informed about the objectives privacy and, confidentiality were maintained. Verbal informed consent was taken from each respondent. Data analysis and interpretation were done by tabulation, descriptive methods. Data were tabulator in excel program and was analyzed with simple statistics.

Ethical Consideration: The study was approved by research committee, University Grant Commission, Sanothimi. Verbal inform consent was obtained from the participants, they were informed about the objectives of the study and was asked structured questions. Confidentiality and privacy was maintained during the data collection

Results: A total number 110 respondents female, age range from 20 years to 60 years were involved in the study. The highest respondents were from age 30-39 (36.5%). Respondents were from different ethnic groups, such as *Chhetri, Bhraman, Newar, guring, Magar* and others. Among them the highest number of participants were from Bhran ethnic group which was 33%. Among 110 respondents, 81% were married and others were unmarried, widow and divorced. Their occupations were service, farming, students and housewife were the largest in number, which is 58.2% in number. The respondents level of educations were range from informal, primary level to higher level Mater degree and the primary level were the largest 38 in number. In the knowledge question whether they have heard of breast cancer yes was 30% and have not heard were 70%.

Further questions were asked to the participants only who knew about breast cancer and they were 33 in numbers. In the source of information TV/ Radio was the highest which is 33 in number. Their knowledge regarding sign of breast cancer were, painless lump 61%,

bloody secretion from nipple were 21.2%, pitting areola 9%, and all the respondents answered in axillary lump which was 100%. Regarding many risk factors of breast cancer 33 women answered women those who have the breast lump. Among 110 women only 26% women knew about the breast screening, and women who were doing breast self examination were 19, mammogram 3, and ultrasound were 4 in number. Out of 26 respondents only 31 % women had knowledge of mammogram. In the question what is the right age to do mammogram was confusing to all respondents and no one could give correct answer. And the last question were what was to the 77 respondents who did not know about breast cancer, the question were what was the reason for not doing any screening, the answer were not knowing about breast cancer were 70, Two of them answered do not know where to ask, and feel afraid of finding any abnormality were 5 person in number.

DISCUSSION:

This study attempt to look into the awareness, and screening practice of breast cancer among women who visited to KIST Medical College, Gwarko, Lalitpur. One hundred ten participants from different parts of Kathmandu were involved in the study. Breast cancer incidence is increasing in the world and increasing trend in Asia. There are many cancer center in Nepal working on the cancer prevention, control and research in Nepal. In 2008 BP Koirala Memorial Cancer hospital, Bharatpur screened women for cervical and breast cancer they also taught how to perform breast self examination.¹¹

Similar studies have been done in Nepal among staff nurse, school teachers and in general public, which shows low knowledge on screening methods. According to Singh YP, Sayami P in management of cancer in Nepal, cancer education, screening and early detection are the key elements to influence the diagnosis, treatment and prognosis of breast cancer.² Breast awareness and clinical examination are important tool for early detection in our limited context. Breast cancer can be cured in majority of the cases if diagnosed early stages². Hospital record shows that Nepali women reach to get medical help when the disease is already in advanced stage¹¹. The commonest age group are seen in Nepali women's are 30-50 years, where as in developed countries it has been recorded in women at their age after 50 years².

Studies shows about breast cancer screening in Nigeria shows low level of knowledge about symptoms of breast cancer and screening methods,¹² study done in Iran 37.8% of the participants knew about breast self examination and only 7.8% knew about clinical examination^{13,14}. There is another study done in Karachi, Pakistan among

nurses working at hospital shows that low knowledge 30% out of 609 registered nurses regarding risk factors and screening of breast cancer¹⁵. Another study done at Fatima Memorial Hospital, Lahore among 200 inpatient were found lack of awareness regarding breast cancer and its screening practices¹⁶.

The literature supports the argument that regular practice of BSE influences treatment, prognosis and survival rates.¹ Early detection of breast cancer by screening i.e. BSE would significantly reduce the mortality and morbidity in developing countries like Nepal.⁷

This study shows that women are lacked knowledge of accurate information about breast cancer, there is a variation of knowledge and screening practices among the respondents regarding breast cancer it may be due to level of education, their exposure to the environment such as working in the offices, women may get more information about breast cancer. In our society due to the social and religious context, women don't discussed freely about breast problem as it is sensitive issue. 33% of women reported Radio/TV as main source of information about breast cancer in this study, so this media could play a important role to bring awareness, and to educate the public about breast cancer, the early sign and different screening methods especially breast self examination so women are conscious about their breast health.

Participants involved in this study were 110 in numbers, age range from 20 to 60 years. Their demographic data were recorded ethnicity Brahman, Chhetri, Newar, Gurung, Magar and others. Highest numbers were Brahman cast lowest were Magar. Regarding their occupation were different, housewife, service, agriculture and students. The same way their level of education were from informal to master level and highest numbers were in primary level 38 (34.5%) and lowest level master degree 2 (1.8%). Regarding to their knowledge questions 77 were unknown about breast cancer and only 33 had heard breast and out of them 26 of them had done screening, such as BSE 19(73%), Mammography 3 (11.5) and USG- 4 (15.4%). Their source of information were mostly from radio/TV and Friends/ family. Knowledge on risk factors were reported mostly as who had lump in the breast and in early sign of breast were also reported women who had axillary lump by 33 (100%) respondents. About the appropriate time for doing breast self examination, most of the women answered that just before menstruation, only 8 (30.8%) had answered correct answer. Appropriate time to perform mammography was after 30 years were the highest number 38.5% also for a menopause women to do mammography was any time and first day of the month were 46.2% same number for both answers. Out

of 7 respondents who did not do any screening methods were asked and they reported that they were unaware of any methods of screening.

Result of this study revealed that 70% of women were unaware of breast cancer and those who knew about it 19(73%) of them were doing breast self examination. Various studies shows that by doing regular screening practice helps to reduce mortality and morbidity of women. It helps women to be aware of breast health. It helps women to be aware of breast health. There is a important role of media, such as Radio/TV to provide correct information regarding breast cancer and screening methods.

RECOMMENDATION:

Breast cancer awareness program on screening and early detection program has to be expended throughout the country with proper media. Nurses and paramedical staff to be trained on different screening methods, its benefits, how to perform and to provided adequate message to the general public.

ACKNOWLEDGMENTS

Sincere thanks to women who provided their valuable information regarding their knowledge and practice in screening of breast cancer. Likewise I would like to acknowledge my sincere thanks to University Grants commission, Sanothimi, for providing grant to conduct this mini research. I also want to thanks to my colleague and export group for their contribution on reviewing the questionnaires.

REFERENCES:

1. Ferlay J, Bray F, Pisani P, Parkin DM, GLOBANCAN 2002, Cancer incidence, mortality and prevalence worldwide. IARC Cancer base, Lyon: IARC Press; 2004.5(2.0)
2. Singh YP, Sayami PI, Management of Breast Cancer in Nepal, IOM TUTH, Kathmandu, Nepal. *J Nepal Med Assoc* 2009; 48: 252-7.
3. Parkin DM, Bray F, Ferlay J, Pisani P. Global cancer

- statistics, 2002. CA: A Cancer Journal for Clinicians, 2005; 55: 74-108.
4. Cancer facts and figures, Atlanta; American Cancer Society 2009.
5. Khan S, Kapoor AK, Khan IU. Prospective study of pattern of breast diseases at Nepalgunj Medical College (NGMC), Nepal. *Kathmandu Univ Med J* 2003; 1: 95-100.
6. International Agency for Research on Cancer (IARC). IARC Handbook on cancer prevention No. 7: Breast cancer Screening. Lyon, France: IARC press 2002.
7. Tara S, Agrawal CS, Agrawal A. Validating breast self examination as screening modalities for breast cancer in eastern region of Nepal: a population based study. *Kathmandu Univ Med J* 2008; 6: 89-93.
8. Okobia MN, Bunker CH, Okonofua FE, Osime U. Knowledge, attitude and practice of Nigerian women towards breast cancer: a cross-sectional study. *World J Surg Oncol* 2006; 4: 11.
9. World Health Organization: Cancer. (Online) 2009. Available from URL: <http://www.who.int/cancer/en>. Cited on 20 October 2008.
10. <http://www.worldlifeexpectancy.com/nepal-breast-cancer>
11. Pradhananga KK, Baral M, Shrestha BM. Multi-institution hospital-based cancer incidence data for Nepal: An initial report. *Asian Pac J Cancer Prev* 2009; 10: 259-62.
12. Odusanya OO. Breast cancer: knowledge, attitudes, and practices of female schoolteachers in Lagos, Nigeria. *Breast J* 2001; 7: 171-5.
13. Narges K, Atefeh N, Fereshteh R. The Knowledge and Practice of Breast Cancer Screening Among Women in Kerman, Iran: *Al Ame en J Med S c i* 2012; 5: 17 7-82.
14. Haji-Mahmoodi M, Montazeri A, Jarvandi S, Ebrahimi M, Haghighat S, Harirchi I. Breast self-examination: knowledge, attitudes, and practices among female health care workers in Tehran, Iran. *Breast J* 2002; 8: 222-5.
15. 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; 19: 6.
16. Maqsood B, Zeeshan M, Rehman F, et al. Breast Cancer Screening Practices and Awareness in Women admitted to a Tertiary Care Hospital of Lahore, Pakistan Community Department and Dentistry, Lahore.