



## A SURVEY TO KNOW THE KNOWLEDGE, ATTITUDE AND PRACTICE RELATED TO BREAST CANCER AMONG FEMALES IN LUCKNOW, INDIA.

**K. B. Jain<sup>\*1</sup>, S. K. Gupta<sup>2</sup>, Pratap Shankar<sup>3</sup>, Dheeraj Singh<sup>3</sup>, Sachin tutu<sup>3</sup>, Preet  
Lakhani<sup>3</sup>, Amod Kumar<sup>3</sup>, R. K. Dixit<sup>3</sup>**

<sup>1</sup>Department of General Surgery Hind Institute of Medical Sciences Safedabad, Barabanki

<sup>2</sup>Department of Orthopaedic Surgery Hind Institute of Medical Sciences Safedabad,  
Barabanki

<sup>3</sup>Department of Pharmacology K. G. M. U. Lucknow

Article Received on 13/08/2015

Article Revised on 04/09/2015

Article Accepted on 25/09/2015

**\*Correspondence for  
Author**

**Dr. K. B. Jain**

Department of General  
Surgery Hind Institute of  
Medical Sciences,  
Safedabad Banrabanki

### ABSTRACT

**Background:** Breast cancer is the most common cancer causing the largest burden of cancer deaths in women worldwide. More than one million women are estimated to be diagnosed with breast cancer every year. Different studies conducted have shown that knowledge of females regarding breast cancer is poor. The low survival rates in less developed countries can be explained mainly by the lack of early

detection programmes, resulting in a high proportion of women presenting with late-stage disease, as well as by the lack of adequate diagnosis and treatment facilities. **Aims and objectives:** Aim of the study was to determine knowledge, attitude and practice among community dwelling females of Lucknow towards Breast Self Examination (BSE) and also to explore their knowledge about breast cancer. **Material and methods:** An observational cross-sectional study was conducted. 500 subjects were selected randomly and included in the study. Data collection was done by using questionnaires. **Results:** Knowledge of study participants about risk factors for breast cancer was low. . Around 50.2 % participants agreed that breast cancer is a major problem in women and identified breast cancer as the most common cancer in women. Only 24.4 % were aware that breast cancer could be inherited in some families. Only 27.4 % participants knew that breast cancer presents commonly as a painless breast lump. Only 39.6 % were able to correctly identify breast self-examination (BSE) as a method for detection of breast cancer. **Conclusion:** The result of our study has

demonstrated the extremely low level of breast awareness among women in Lucknow. Women should be encouraged about BSE and CBE. Health education programmes, various NGOs and other organisation should focussed at creating awareness about methods of early diagnosis and treatments of breast cancer.

**KEYWORDS:** breast cancer, self breast examination, knowledge, screening, prevention.

## INTRODUCTION

Breast cancer is the top cancer in women both in the developed and the developing world.<sup>[1,2]</sup> The incidence of breast cancer is increasing in the developing world due to increase life expectancy, increase urbanization and adoption of western lifestyles.<sup>[3]</sup> It is estimated that worldwide over 508 000 women died in 2011 due to breast cancer.<sup>[4]</sup> Although breast cancer is thought to be a disease of the developed world, almost 50% of breast cancer cases and 58% of deaths occur in less developed countries. In most of the developing regions like India the incidence rates are below 40 per 100,000.

Breast cancer survival rates vary greatly worldwide, ranging from 80% or over in North America, Sweden and Japan to around 60% in middle-income countries and below 40% in low-income countries.<sup>[5,6]</sup>

Limited resource settings with weak health systems where breast cancer incidence is relatively low and the majority of women are diagnosed in late stages have the option to implement early diagnosis programmes based on awareness of early signs and symptoms and prompt referral to diagnosis and treatment.<sup>[7]</sup>

Population-based cancer screening is a much more complex public health undertaking than early diagnosis and is usually cost-effective when done in the context of high-standard programmes that target all the population at risk in a given geographical area with high specific cancer burden, with everyone who takes part being offered the same level of screening, diagnosis and treatment services.<sup>[8]</sup>

Several risk factors for breast cancer have been well documented. However, for the majority of women presenting with breast cancer it is not possible to identify specific risk factors. A familial history of breast cancer increases the risk by a factor of two or three. Some mutations, particularly in BRCA1, BRCA2 and p53 result in a very high risk for breast

cancer.<sup>[9]</sup> However, these mutations are rare and account for a small portion of the total breast cancer burden.

Reproductive factors associated with prolonged exposure to endogenous estrogens, such as early menarche, late menopause, late age at first childbirth are among the most important risk factors for breast cancer. Exogenous hormones also exert a higher risk for breast cancer. Oral contraceptive and hormone replacement therapy users are at higher risk than non-users.<sup>[11]</sup> Breastfeeding has a protective effect.

There also occurs contribution of various modifiable risk factors, excluding reproductive factors, to the overall breast cancer burden. They conclude that 21% of all breast cancer deaths worldwide are attributable to alcohol use, overweight and obesity, and physical inactivity. This proportion was higher in high-income countries (27%), and the most important contributor was overweight and obesity. In low- and middle-income countries, the proportion of breast cancers attributable to these risk factors was 18%, and physical inactivity was the most important determinant (10%).

The differences in breast cancer incidence between developed and developing countries can partly be explained by dietary effects combined with later first childbirth, lower parity, and shorter breastfeeding. The increasing adoption of western life-style in low- and middle-income countries is an important determinant in the increase of breast cancer incidence in these countries.<sup>[12]</sup>

Control of specific modifiable breast cancer risk factors as well as effective integrated prevention of non-communicable diseases which promotes healthy diet, physical activity and control of alcohol intake, overweight and obesity, could eventually have an impact in reducing the incidence of breast cancer in the long term. Although some risk reduction might be achieved with prevention, these strategies cannot eliminate the majority of breast cancers that develop in low- and middle-income countries. Therefore, early detection in order to improve breast cancer outcome and survival remains the cornerstone of breast cancer control.

Breast cancer survival rates vary greatly worldwide, ranging from 80% or over in North America, Sweden and Japan to around 60% in middle-income countries and below 40% in low-income countries. The low survival rates in less developed countries can be explained mainly by the lack of early detection programmes, resulting in a high proportion of women

presenting with late-stage disease, as well as by the lack of adequate diagnosis and treatment facilities.<sup>[13]</sup>

Research suggests that women medical help seeking behaviour depends on factors related to their knowledge, beliefs and breast cancer management. This study is planned to explore knowledge, attitude and practice regarding breast cancer among females as it would help to develop future intervention program on breast cancer.<sup>[14]</sup> Last but not least it may be helpful for health program planners to prioritize breast cancer in their priority health issues.

## MATERIAL AND METHODS

The study design will be observational Cross Sectional Study. Participants were recruited randomly. A total of 500 subjects were included in the study. Data collection was done by using interviewer administered questionnaires designed properly to obtain relevant socio-demographic characteristics, knowledge, attitude and practice towards breast cancer. The questionnaire was reviewed by a senior oncologist in our institution, who is not among the authors.

### Socio-demographic characteristics of study participants

Variables	Numbers	Percentage
<b>Age distribution</b>		
Under 30	306	61.2
30–39	108	21.6
40–49	55	11
50 or older	31	6.2
<b>Marital status</b>		
Married 484 49.4	380	76
Single 451 46.1	108	21.6
Divorced/separated /Widowed	12	2.4
<b>Religion</b>		
Hindu	358	71.6
Muslim	124	24.8
Christian	7	1.4
Sikh	11	2.2
<b>Education</b>		
None	32	6.4
Upto 5 <sup>th</sup>	108	21.6
Upto 10 <sup>th</sup>	216	43.2
Upto 12 <sup>th</sup>	94	18.8
Graduation	38	7.6
Post graduation	12	2.4

## Response of participants to selected questions on breast cancer

Variables	Number	Percentage
<b>Breast cancer is the most common cancer in women</b>		
Yes	251	50.2
No	108	21.6
Don't know	141	28.2
<b>Breast cancer occur more commonly in old people</b>		
Yes	103	20.6
No	277	55.4
Don't know	120	24.0
<b>Breast cancer can be inherited</b>		
Yes	122	24.4
No	204	40.8
Don't know	174	34.8
<b>Breast cancer is caused by evil spirits</b>		
Yes	78	15.6
No	303	60.6
Don't know	119	23.8
<b>Breast cancer usually present as a painless breast lump</b>		
Yes	137	27.4
No	227	45.4
Don't know	136	27.2
<b>Early diagnosis improves outcome of treatment</b>		
Yes	306	61.2
No	119	23.8
Don't know	75	15.0
<b>Breast self examination is useful in early diagnosis</b>		
Yes	198	39.6
No	178	35.6
Don't know	124	24.8
<b>Breast cancer is curable when detected early</b>		
Yes	211	42.2
No	176	35.2
Don't know	113	22.6

**Sociodemographic characteristics of study participants**

Out of 500 females who were enrolled in the study 76 % were married. Majority of them (71.6 %) were hindus while 24.8 % were muslims. Out of them 6.4 % were illiterate, 21.6 % had education upto 5<sup>th</sup> class and 43.2 % had education upto 10<sup>th</sup> class.

**Knowledge about breast cancer**

Questions with "yes", "no", or "don't know" responses were designed to elicit participant's knowledge. Around 50.2 % participants agreed that breast cancer is a major problem in women and identified breast cancer as the most common cancer in women. Knowledge of study participants about risk factors for breast cancer was low. In response to the question on the inheritability of breast cancer, only 24.4 % were aware that breast cancer could be inherited in some families. 15.6 % believed that breast cancer can occur due to evil spirits while 23.8 had no idea about it. Participant's knowledge about symptoms of breast cancer was rather poor. Only 27.4 % participants knew that breast cancer presents commonly as a painless breast lump. In terms of methods of diagnosis, only 39.6 % were able to correctly identify breast self-examination (BSE) as a method for detection of breast cancer. 41.2 % correctly noted that breast cancer is curable when detected early.

**Attitude towards breast cancer**

The source of information about BSE was from the doctors in among 7 %, from leaflets in 1 %, from televisions in 57 % from radio in 38 %. The main reasons for not having clinical breast examination (CBE) include not having a breast problem in majority of the participants and being unaware of the need for CBE . None of the participants has ever had mammography screening.

**DISCUSSION**

The study suggests that community-dwelling women in Lucknow have rather poor knowledge of breast cancer. This partly explains the late presentation seen in over 75% of women with the disease. Our study showed that only 27.4% of community-dwelling women were aware of a painless breast lump as a common presentation of breast cancer and very less proportion of these women were able to identify non-lump presenting symptoms of breast cancer. Only 39.6 % were aware of BSE as a screening tool for breast cancer.

Participants in our study does not have good attitude towards breast cancer as majority indicated visiting the doctor for breast complaints very late. The use of screening methods

was very low among our study subjects. Higher level of education and higher knowledge score were significant determinants of BSE practice in our study. Routine breast cancer screening is currently not being practiced in Lucknow. The actual burden of breast cancer in the population is unknown due to lack of adequate cancer statistics. The age specific incidence of the disease needs to be established to make a case for routine screening of women of specific age groups. Due to non-availability of adequate data to justify mammography screening and the high cost and skilled expertise required for the procedure, current efforts at breast cancer screening in Lucknow must rely on a combination of BSE and CBE. Women should be taught about the techniques of monthly BSE. Nurses, midwives, and other healthcare providers can be trained to augment physicians in the performance of clinical breast examinations (CBE).

## CONCLUSION

The results our study has demonstrated the extremely low level of breast awareness among women in Lucknow. Women should be encouraged about BSE and CBE. Health education programs should be focussed at women through various media including leaflets, television, and radio. NGOs and other organizations can also make significant contribution to "breast awareness" through sponsoring workshops, health talks, symposia. In addition, women friendly agencies/organizations such as hospital antenatal and postnatal clinics, Feminist organizations should participate in generating knowledge. Doctors should educate women on "breast awareness" during regular physician office visits for other health related problems.

## REFERENCES

1. Siegel RL, Miller KD, Jemal A. Cancer statistics, 2015. *CA Cancer J Clin* 2015; 65: 5–29.
2. Forouzanfar MH, Foreman KJ, Delossantos AM, et al. Breast and cervical cancer in 187 countries between 1980 and 2010: a systematic analysis. *Lancet* 2011; 6736: 61351–61352
3. Parkin DM, Bray F, Ferlay J, Pisani P: Global cancer statistics, 2002. *CA Cancer J Clin* 2005; 55(2): 74-108.
4. Adebamowo CA, Ajayi OO: Breast cancer in Nigeria. *West Afr J Med* 2000; 19(3):179-191.
5. Neave LM, Mason BH, Kay RG: Does delay in diagnosis of breast cancer affect survival? *Breast Cancer Res Treat* 1990; 15(2): 103-108.

6. Rossi S, Cinini C, Di Pietro C, Lombardi CP, Crucitti A, Bellantone R, Crucitti F: Diagnostic delay in breast cancer: correlation with disease stage and prognosis. *Tumori* 1990; 76(6): 559-562
7. WHO (2013) Breast cancer: Prevention and control. WHO 2012. <http://www.who.int/cancer/detection/breastcancer/en/>
8. Coughlin, S.S. and Ekwueme, D.U. () Breast cancer as a global health concern. *Cancer Epidemiology*, 2009; 33: 315-318
9. Semiglazov, V.F., Moiseenko, V.M., Manikhas, A.G., et al. () Intrim results of a prospective randomized study of self-examination for early detection of breast cancer. *Voprosy Onkologii*, 1999; 45: 265-271.
10. Linsell, L., Forbes, L.J.L., Burgess, C., Kapari, M., Thurnham, A. and Ramirez, A. Validation of a measurement tool to assess breast cancer. *European Journal of Cancer*, 2010; 46: 1374-1381
11. Gupta SK, Pal DK, Garg R, et al. Impact of a health education intervention program regarding breast self examination by women in a semi-urban area of Madhya pradesh, India. *Asian Pac J Cancer Prev*, 2009; 10: 1113-7.
12. Thomas DB, Gao DL, Ray RM, Wang WW, Allison CJ, Chen FL, Porter P, Hu YW, Zhao GL, Pan LD, Li W, Wu C, Coriaty Z, Evans I, Lin MG, Stalsberg H, Self SG: Randomized trial of breast self-examination in Shanghai: final results. *J Natl Cancer Inst* 2002; 94(19): 1445-1457
13. Zhou P, Gautam S, Recht A. Factors affecting outcome for young women with early stage invasive breast cancer treated with breast-conserving therapy. *Breast Cancer Res Treat* 2007; 101: 51–57.
14. White J, Morrow M, Moughan J, et al. Compliance with breast conservation standards for patients with early-stage breast carcinoma. *Cancer* 2003; 97: 893–904.