

Awareness of carcinoma breast in women of a selected village population

Pushpa¹, Sushma Kumari²

¹ Senior Resident, Department of Obstetrics and Gynaecology, PMCH, Patna, Bihar, India

² Senior Resident, Department of Obstetrics and Gynaecology, PMCH, Patna, Bihar, India

Received: 18-11-2020 / Revised: 05-02-2021 / Accepted: 18-02-2021

Abstract

Breast cancer is the commonest carcinoma among women and it accounts for 10% of all breast problems presented at clinics. A steady increase in incidence of breast carcinoma in Indian women is posing a great health. This study is done to assess the awareness among women of rural population against breast carcinoma and about importance of self-examination of breast [BSE] for screening and early diagnosis and treatment. This is a cross sectional observational study done at my village Chakiya in Bhojpur district of Bihar in October 2019. Hundred women in age group 18-49 years were included in the study who gave consent for participation. Women were asked about their knowledge and perception about breast carcinoma and BSE. Information about the disease was given to them and importance of BSE for early diagnosis and treatment was talked about in an interactive session. A 6 month follow up was taken to know the impact. Most of them had heard of breast carcinoma but 60% thought it affects the elderly women. Only 16% were aware of BSE but very few practiced it. In 6 months follow up this increased to 25 percent. Women with fibroadenoma (3), 6 women with fibroadenosis and 1 carcinoma breast was diagnosed in follow up period, for which they had not sought consultation before. Breast cancer in women is rising even in rural population and young age is not an exemption anymore. So, increased awareness and screening programmes are the need of time to decrease the incidence-mortality ratio.

Keywords: Breast cancer, BSE, Screening.

This is an Open Access article that uses a fund-ing model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

Introduction

Breast cancer is the top cancer in women both in the developed and the developing world. The incidence of breast cancer is increasing in the developing world due to increase life expectancy, increase urbanization and adoption of western lifestyles. 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 where breast cancer is diagnosed in very late stages. Therefore, early detection in order to improve breast cancer outcome and survival remains the cornerstone of breast cancer control. There is a huge difference in breast cancer survival rates worldwide, with an estimated 5-year survival of 80% in developed countries to below 40% for developing countries [1].

So far great advances have been made in clinical and theoretical studies of breast cancer. The current prevention methods including screening, chemoprevention and biological prevention are more direct and effective than those in the past. The mortality of breast cancer has decreased. However, breast cancer is still the first leading cause of cancer death among females aged 20-59 years.[2] It is the most common form of cancer in India, having overtaken cervical cancer. It's also more common in the younger age group. Almost 50% of all cases are in the age group of 25-50. And more than 70% of the cases present in the advanced stage had poor survival and high mortality. Developing countries face resource and infrastructure constraints that challenge the objective of improving breast cancer outcomes by timely recognition, diagnosis and management. In developed countries like the United States, about 232,340 female will be diagnosed and death of 39,620 female will occur due to breast cancer in 2013[3]. The numbers are staggering and constantly rising. The Indian Council for Medical Research with NCDIR that among

women, breast cancers are estimated to contribute 2.0 lakhs (14.8%) and cervix cancers are estimated to contribute 0.75 lakhs (5.4%). Currently, one in twelve females in Britain between age of 1 and 85 years gets breast cancer. With one million new cases of cancers reported in the World, breast cancer is common in females and comprises 18% of all women cancer. Incidence of breast cancer is predicted to increase to 85 per 100,000 women by 2021 [4]. The survival rates of breast cancer in India are low because the detection takes place late. The only way to change these numbers is by increasing awareness. Breast cancer is a treatable disease and chances of survival are higher if it's detected in time. The only way to do so is by being aware of how it can be detected and early diagnosis can be done. Prevention remains the cornerstone of the fight against breast cancer worldwide. Although some prevention methods have been proposed, many remain inaccessible to women in developing countries who, ironically, given the limited diagnostic and curative facilities available to them, need prevention the most. Breast self-examination (BSE), although not having been shown to be effective in reducing mortality[5], is still recommended as a general approach to increasing breast health awareness and thus potentially allow for early detection of any anomalies.[6] This includes leading a healthy lifestyle, being aware of family medical histories so that by knowing the genetic inclination towards it, one can take preventive drugs or undergo preventive surgery. The simplest way to breast cancer prevention is by being able to do a self-breast examination. Women should be doing this on a regular basis after they turn 30 or more. BSE continues to be recommended by health care practitioners because it is free, painless and easy to practice. Despite this potential, there is very little data indicating the uptake and practice of BSE in women[7] Little is known concerning women's knowledge about breast cancer, their knowledge on BSE and their practice of BSE. So the aim of this study was to assess and document the knowledge and perception of women of my village about cause, risk factors and prevention of breast cancer and about

*Correspondence

Dr. Pushpa

Department of Obstetrics and Gynaecology, Patna Medical College and Hospital, Patna, Bihar, India.

E-mail: dr.pushpa1999@gmail.com

Pushpa et al

www.ijhcr.com

International Journal of Health and Clinical Research, 2021; 4(4):278-280

importance of self-breast examination and determining the effectiveness of talk given to them in follow-up period.

Material and Methods

This is a cross sectional study conducted in my village in Bhojpur district, Bihar, where population women above 18 years of age is about 1600. Hundred women in age group 18-49 years were included in the study who gave consent for participation. Agriculture is the basic livelihood of villagers. BSE is an option for the women as the access to CBE (clinical breast examination) and mammography is not readily available. Nearest town with proper gynaecologist, pathologist and radiologist is about 80 kms away. A health check-up camp was organised and an informative talk was given to women attendees. The women above 18 years who consented and came to hear the talk and were willing to participate were included and thus 100 women between 18- 49 years were recruited for study and follow up. A standardized questionnaire was used to collect data. The questionnaire had a section on knowledge about breast cancer and on knowledge and perception about BSE. Questions were also asked about age, parity, and educational qualifications. Responses of the participants were recorded in the questionnaire. A talk was delivered about general information of breast cancer, and about BSE, like correct method of doing it, how often to do it, best time for performing BSE. Information was also given about importance of BSE and to see a doctor if finding any abnormality and follow the advice. A follow up was done for 6 months to see the effectiveness of awareness talk. Data collected was analysed using Microsoft excel spreadsheet. As most of the data are descriptive in nature, frequency

of yes and no responses were calculated. Ethical clearance was taken for the study. Concerned authority were informed.

Results

All the women who consented to take part were put through the task of providing answers to the questionnaire. Information gathered about age, parity, educational and marital status. Mean age of women participating in the study is 35.5 years with standard deviation of 8.59 years. Most of them (90%) were married. All were literate and 61% women had passed their matriculation and 4 were graduates. Eighty-two women had more than 1 child, 11 had 1 and 7 were nulliparous. Most (69%) were homemakers, 26% were farm workers, 3% were in tailoring, and 2 were teachers. Women were asked of their knowledge and perception about carcinoma breast and its risk factors. Most (92%) had heard about it and 65% thought it has familial inheritance. A lump in the breast as a cause of carcinoma was perceived by 96% and 40% thought traditional medicines have advantage over allopathy for treatment. (Table 1). Women's awareness about practice of breast self-examination was noted and it was found that only 16% had heard about self-examination of breast but no one practiced it regularly and none of them knew the correct method of examination. (Table 2). Women were followed up for 6 months after the informative talk, through a contact in the village. On 3 months follow-up regular practice of BSE was increased to 40% which was dropped to 25% after 6 months. About 30% women visited to hospital for various breast problems including lactational related problems. Women with fibroadenoma (3), 6 women with fibroadenosis and 1 with ca breast were diagnosed in follow up period, for which they had not sought consultation before.

Table 1: Knowledge of breast cancer and risk factors perceived among women(n=100)

Ever heard of carcinoma breast.	
yes	92
No	08
Source of information.	
Media	08
Friends and family	59
From hospital visits	25
Perceived causes .	
Family h/o ca breast	65
Life style and exposure to causing agent	10
No idea	25
Perceived risk factors.	
Presence of lump in breast	96
Older age more than 60	62
No breast feeding	04
Use of OCP	00
Wearing breast support after a certain period	05
Early menstruation and late menopause	00
Nulliparity	02
Perception that breast CA can be prevented.	90
Perceived methods of prevention.	
Eating healthy	56
Early detection by BSE	10
No idea	24
Perception that CA breast can be treated.	60
Perceived method of treatment.	
Allopathic medicine	05
Traditional medicine, Ayurveda, Homoeopathy	40
Surgery	15

Table 2: Comprises women's awareness about practice of breast self-examination.

Ever heard of BSE	
Yes	16
No	82
Heard of it but don't practice	14
Heard of it but practice occasionally	02
Practice monthly	00
Know correct method	00

Discussion

In 2012, 1.67 million new cases of breast cancer were diagnosed that is 25% of all cancers among women. Ferlay et al. [8] stated that 883,000 cases are in less developed countries and 794,000 in most developed countries. Breast carcinoma has overtaken cervical carcinoma and is the leading cause of cancer deaths among women of 20-59 years. Advances have been made in prevention and treatment of breast ca but are still not easily accessible to masses. Early detection is of utmost importance for successful treatment and BSE is one such simple and non-invasive method. This study assessed the knowledge perception and awareness of breast carcinoma, causes and risk factors and about BSE as preventive method. Mean age of women participating in the study is 35.5 years with standard deviation of 8.59 years which is comparable to study of Kumarasamy H et al (36.9±8.8 years).[9] All were literates and could read and write their names. Graduates were 2 and 44 women had done their matriculation. Women in my study were aware of the existence of breast cancer, but didn't have sufficient knowledge about risk factors and BSE. They also had misperceptions about certain risk factors. This finding is similar to study of Kumarasamy H et al (89%) and study of Sama CB et al in African women (88.1%).[10] Most of them gathered information from talking to others among family and friends (59%), while 25% gathered information from hospital visits for different reasons. Women had a general idea that all cancers including breast cancer has a familial inheritance. Most women (65%) perceived that a family h/o breast cancer is a cause, while 25% had no idea about causative factors. More than 60% women had a belief that breast cancer is a disease of elderly and doesn't affect young women. 96% women perceived that a lump in breast can change in carcinoma. Some, 5% even thought that wearing breast support after 40-45 years of age increases the risk. Several case-control studies have established that the main risk factors for breast cancer in Asian women include early age at menarche, late menopause, higher age at marriage, late age at first child birth, lower mean duration of breast feeding and a lower parity.[11] The women in my study were unaware of OCP, early menstruation and late menopause as risk factors. Only 2 % women thought nulliparity as posing the risk and only 4% thought no breast feeding and lactation related problems can increase chances of developing carcinoma breast. That the breast carcinoma can be prevented was a common perception in 90% women. But they didn't have a clear idea of method of perception. Eating healthy was perceived by 56% as being important for avoiding carcinoma. Early detection of lump in breast by self-examination as useful method was perceived by 10% women only. 24% had no idea about preventing methods. Breast carcinoma as being treatable was perceived by 60% of women. Most of them 40% thought that traditional medicines like ayurveda and homoeopathy can cure cancer better than allopathy. Only 5% thought that allopathic medicine may have a role in treating carcinoma. Surgery was perceived as good method by 15%. It was found that breast self-examination was largely unheard of. Only 16% women had heard of examining by themselves which is still higher than the study of Santhana Lakshmi L et al.[12] But no one practiced it regularly. A few (2%) examined occasionally while bathing. No one knew the correct method of BSE. After delivering the talk and giving information about breast carcinoma and BSE, improvement was seen in the women's perception of the disease. It was seen that about 40% women continued monthly self-examination up to 3 months. It was disheartening to know that this number dropped to 25% at the end of

6 months. But women seemed to be seeking consultancy after that, the information spreading outside the study group, and 3 cases of fibroadenoma, 6 cases of fibroadenosis and one case of carcinoma breast was diagnosed in the follow up period. Village women are aware of carcinoma breast but very few are aware of self-examination of breast and the method of examination. Willingness to perform BSE regularly is low. Health education, talks and awareness programs are necessary in village areas. Awareness among girls is also necessary. Local health care providers should be educated about symptoms and signs of the carcinoma and about importance of referral to the consultant at the earliest. There is also, need to clear up and rectify the wrong conceptions about the disease. It was perceived that the awareness programmes in the rural India should include the family as whole as the health needs of women are largely decided by male members of the family.

References :

1. Coleman M, Quaresma M, Berrino F, Lutz JM, Angelis R, Capocaccia R, et al. Cancer survival in five continents: a worldwide population-based study (CONCORD). *Lancet Oncol.* 2008;9: 730–56.
2. Yi-Sheng Sun, Zhao Zhao, Zhang-Nv Yang, Fang Xu, Hang-Jing Lu, Zhi-Yong Zhu, Wen Shi, Jianmin Jiang, Ping-Ping Yao, Han-Ping Zhu. Risk Factors and Preventions of Breast Cancer. *Int J Biol Sci.* 2017; 13(11): 1387–1397.
3. Siegel R, Naishadham D, Jemal A. Cancer statistics, 2013. *CA Cancer J Clin.* 2013;63:11–30
4. Han S, Guo Q, Wang T. Prognostic significance of interactions between ER alpha and ER beta and lymph node status in breast cancer cases. *Asian Pac J Cancer Prev.* 2013;14:6081–4
5. Kösters JP, Göttsche PC: Regular self-examination or clinical examination for early detection of breast cancer. *Cochrane Database Syst Rev.* 2003, CD003373 (2): Review. PubMed PMID: 12804462 Google Scholar
6. Ginsberg GM, Lauer JA, Zelle S, Baeten S, Baltussen R: Cost effectiveness of strategies to combat breast, cervical, and colorectal cancer in sub-Saharan Africa and South East Asia: mathematical modelling study. *BMJ.* 2012, 344: e614-e614.
7. Suh, M.A.B., Atashili, J., Fuh, E.A. et al. Breast Self-Examination and breast cancer awareness in women in developing countries: a survey of women in Buea, Cameroon. *BMC Res Notes* 5, 627 (2012).
8. Ferlay J, Soerjomataram I, Ervik M. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *Int J Cancer.* 2015;136:359–86
9. Kumarasamy H, Veerakumar AM, Subhathra S, Suga Y, Murugaraj R. Determinants of Awareness and Practice of Breast Self Examination Among Rural Women in Trichy, Tamil Nadu. *J Midlife Health.* 2017 Apr-Jun;8(2):84-88.
10. Sama CB, Dzekem B, Kehbila J, Ekabe CJ, Vofo B, Abua NL, Dingana TN, Angwafo F III. Awareness of breast cancer and breast self-examination among female undergraduate students in a higher teachers training college in Cameroon. *Pan Afr Med J.* 2017 Sep 29;28:91.
11. Manoharan N, Nair O, Shukla NK, Rath GK. Descriptive Epidemiology of Female Breast Cancer in Delhi, India. *Asian Pac J Cancer Prev.* 2017 Apr 1;18(4):1015-1018.
12. Santhana Lakshmi M, Sugunadevi G. A cross-sectional study on knowledge about breast cancer among women aged 20-30 years. *Int J Community Med Public Health* 2017;4:4131-6.

Conflict of Interest: Nil
Source of support: Nil