***Asian Pacific Journal of Cancer Care***
Vol 7 No 1 (2022), 61-64
Original Research

# Knowledge and Practice of Breast Self-examination among Women in Yavataml, India, A Cross- Sectional Study

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**Objectives:** Worldwide breast cancer is the most common cancer among women. By 2030 the global burden of breast cancer is expected to exceed 2 million, with increasing proportions from developing countries. The aim of this study was to assess awareness about breast cancer among women attending in a gynecological clinic in rural area India.
**Materials & Methods:** It was a cross sectional study done for period of 3months among women attending & Gynae OPD of rural medical college. A total of 460 study participants were enrolled during the study period.
**Results:** About 85% were aware about the disease. Among participants who were aware 41% said its due to obesity, 24.74% said because of genetic,16.32% said due to advancing age and 17.60% said due to inadequate breast feeding. It was observed that 52.80% were aware that biopsy is the first modality of diagnosing breast cancer. And 59.43% were aware about Breast Self-Examination.
**Conclusion:** Awareness about breast cancer among the study participants was good in the present study. Intense health education campaign should be conducted at regular intervals regarding BSE importance. Women should be taught how to do BSE as BSE is the main screening modality which will detect early stage of cancer.

## Introduction

Breast cancer is a major health problem and is the second leading cause of cancer deaths in women [1]. More than two-third of the patients are already in an advanced and incurable stage at the time of diagnosis [2]. The World Health Organization described early detection of breast cancer as “the cornerstone of breast cancer control” [3]. Worldwide breast cancer is the most common cancer among women. By 2030 the global burden of breast cancer is expected to exceed 2 million, with increasing proportions from developing countries [4] .Among Indian women after cancer cervix, breast cancer is the second most common cancer and is already the leading cancer in metros. Annually India reports roughly 100,000 new cases and 1 in 26 women are expected to be diagnosed with breast Cancer in their life time [5]. Incidence of breast cancer is rising even in the developing nations due to increasing urbanization and adoption of western lifestyles and increase in life expectancy [6].

Several factors are known to affect the risk for the development of breast cancer. Age, family history, and reproductive factors are the strongest risk factors. Lifestyle and hormonal risk factors have also been mentioned [7]. Knowledge of risk factors of breast cancer for females and perception of their personal risk are the most important factors for motivation of females for the prevention, early detection, and management of the disease [8].

Millions of cancers-related deaths could be averted every year if patients have timely access to

early detection via regular screening and treatment. [9]. In a study conducted in India, it was found that according to oncologists, late presentation of breast cancer was the most important cause of decreased survival among women [10].

Evidence shows that women who seek treatment at an early stage have better chances of survival. For detection at an early stage, women should be aware of the disease, its symptoms and of simple prevention strategies such as breast self-examination. Therefore, it is crucial to understand women's attitude towards breast cancer in order to develop effective strategies for early detection and prevention of breast cancer [11].

The aim of this study was to assess knowledge and practice of breast self-examination among women in rural area.

# Materials and Methods

The study design is a hospital based Cross Sectional Study. The study The study was conducted at OPD of Obstetrics and Gynaecology of Vasant Rao Naik Government medical college, Yavataml, India. The study was conducted for period of 3 months from June 2019 To Sept 2019. The Study participants were all women reporting OPD of Obstetrics and Gynecology in the age group of 18-70 years referred to clinic for complication other than breast cancer. Women with any breast lesion and who were not ready to sign consent form were excluded. A total of 460 study participants were enrolled during the study period.

A pre-structured, pre-designed questionnaire was used. The participants were explained about the purpose of the study. One to one interview was conducted on a pre-structured questionnaire. Information was collected on socio-demographic profile, awareness about breast cancer risk factors, signs and symptoms, treatment options etc. The data was collected after taking informed consent from the participants. The study was conducted after taking permission from institutional ethical committee. Data was entered in Microsoft excel and analysed using descriptive measures.

# Results

## Table Results and Observations

Majority of study subjects (30.43%) were in the age group of 45-53 years followed by (23.26%) in age group 27-37 years. Only 5% of study participants were in the age group of 63-70 years (Table 1).

| Age(Years) | Frequency | Percentage |
|---|---|---|
| 18-26 | 17 | 3.69 |
| 27-35 | 107 | 23.26 |
| 36-44 | 75 | 16.3 |
| 45-53 | 140 | 30.43 |
| 54-62 | 98 | 21.3 |
| 63-70 | 23 | 5 |
| Total | 460 | 100 |
| Education | Frequency | Percentage |
| Illiterate | 48 | 10.43 |
| Primary School | 54 | 11.73 |
| Secondary School | 143 | 31.08 |
| High School | 60 | 13.04 |
| Intermediate | 26 | 5.6 |
| Graduate | 73 | 15.86 |

| | | |
|---|---|---|
| Post Graduate | 38 | 8.26 |
| Professional | 18 | 3.91 |
| Total | 460 | 100 |
| Occupation | Frequency | Percentage |
| Home maker | 209 | 45.43 |
| Semi skilled | 78 | 16.95 |
| Skilled | 110 | 23.91 |
| Clerk/businessman | 29 | 6.3 |
| Semi-professional | 16 | 3.47 |
| Professional | 18 | 3.91 |
| Total | 460 | 100 |
| Social Class | Frequency | Percentage |
| Lower class | 90 | 19.56 |
| Lower middle class | 100 | 21.73 |
| Middle class | 134 | 29.13 |
| Upper middle class | 64 | 13.91 |
| Upper class | 72 | 15.65 |
| Total | 460 | 100 |

**Table 1. Socio-demographic Characteristics of the Participants.**

Majority of subject had schooling at secondary school education with just 8.26 % with graduate and higher education. In terms of occupation, majority of the study participants were home makers (45.43%), 23.91% were skilled workers and 16.95 % were semiskilled workers (Table 1). In terms of socio-economic, 29.13% were categorized as in the middle class, followed by 21.73% in lower middle class and 19.56% in lower class.

Table 2 shows awareness about breast cancer among study participants: about 85% were aware about the disease. Among participants who were aware 41% said its due to obesity, 24.74% said because of genetic,16.32% said due to advancing age and 17.60% said due to inadequate breast feeding. The knowledge about the symptoms showed that 34.43% told pain in the breast is the symptom, lump in breast 30.86% and 21.68% told discharge from the nipple respectively.

| Variable | Frequency | Total |
|---|---|---|
| Awareness about Breast cancer | | |
| Yes | 392 | 85.2 |
| No | 68 | 14.78 |
| Total | 460 | 100 |
| Risk factors | | |
| Advancing age | 64 | 16.32 |
| Genetic | 97 | 24.74 |
| Inadequate breast feeding | 69 | 17.6 |
| Obesity | 162 | 41.32 |
| Total | 392 | 100 |
| Symptoms of breast cancer | | |
| Pain in breast | 135 | 34.43 |
| Lump in brain | 121 | 30.86 |
| Discharge from nipple | 85 | 21.68 |
| Don’t know | 51 | 13.01 |
| Total | 392 | |
| Source of information | | |
| Friends | 119 | 30.35 |
| TV | 69 | 17.6 |

| | | |
|---|---|---|
| Doctor | 81 | 20.66 |
| Health Worker | 98 | 25 |
| News paper | 25 | 6.37 |
| Total | 392 | 100 |
| Awareness about treatment | | |
| Medicine | 115 | 29.33 |
| Surgery | 233 | 59.43 |
| Homeopathy | 19 | 4.84 |
| Ayurveda | 25 | 6.37 |
| Total | 392 | 100 |
| Awareness about diagnosis | | |
| USG | 80 | 20.4 |
| CT | 30 | 7.65 |
| MRI | 14 | 3.57 |
| Biopsy | 207 | 52.8 |
| Mammography | 61 | 15.56 |
| Total | 392 | |
| Awareness about Breast Self-Examination (BSE) | | |
| Yes | 233 | 59.43 |
| No | 159 | 40.56 |
| Total | 392 | 100 |

**Table 2. Awareness about Breast Cancer among Study Participants.**

The source of information for majority (35%) was from friends, 25% from health worker and 20% from doctors.

About 59% were aware that surgery is the main line of treatment and 29.33% stated that disease is curable. It was observed that 52.80% were aware that biopsy is the first modality of diagnosing breast cancer.

Regarding Breast Self-Examination awareness when asked so it was observed that 59.43% were aware (Table 2).

Table 3 shows among the study participants who were aware among them only 38.19% were practicing self breast examination. The frequency of doing BSE monthly was seen in 49.43%, about 29.21% don't know how to do self-breast examination. It was observed that 31.74% were practicing BSE in standing position, 68.25% doing in sitting position.

| Variable | Frequency | Percentage |
|---|---|---|
| Do you practice BSE | | |
| Yes | 89 | 38.19 |
| No | 144 | 61.8 |
| Total | 233 | 100 |
| Frequency of doing BSE | | |
| Weekly | 19 | 21.34 |
| Monthly | 44 | 49.43 |
| Don't do | 26 | 29.21 |
| Total | 89 | 100 |
| What is Correct position of doing BSE | | |
| Sitting | 20 | 31.74 |
| Standing | 43 | 68.25 |
| | | |

| | | |
|---|---|---|
| Total | 63 | 100 |

**Table 3. Practices about Breast Self-Examination among Study Participants.**

# Discussion

It was observed in the present study majority of study subjects were in the age group of 45-53 years (30.43) followed by 23.26% in 27-37 years. In another study by Ranjan Kumar Prusty et al majority (53.2%) of the study participants were in the age group of 25–34 years which is followed by 50% in 45-53years of age group [12]. In another study majority of the study participants belonged to the age group of 31-35 years (32.8%) followed by the age group of 36-40 years (26.5%) respectively [13]. In the present study 31.08 % studied till secondary school and illiteracy was seen in 10.43%. Post graduate education was seen among 8.26% of study participants. In another study majority of study participants were illiterate accounting for 37.5% [13].

Majority of the study participants in the present study were home makers (45.43%), 23.91% were skilled workers and 16.95 % were semiskilled workers. In another study by Ranjan Kumar Prusty et al, 47% were home makers which is almost similar to present study [12].

Awareness about breast cancer among study participants was good in the present study. About 85% were aware about the disease. About 49% of women heard about breast cancer in a study done by Ranjan Kumar Prusty et al which is less than present study [12]. In another study 53.04% study participants were aware about breast cancer [13].

Among participants who were aware 41% said its due to obesity, 24.74% said because of genetic, 16.32% said due to advancing age and 17.60% said due to inadequate breast feeding.

About 34.43% told pain in the breast is the symptom, lump in breast 30.86% and 21.68% told discharge from the nipple respectively. In another study 66.67% said it may be because of advancing age, early menopause 33.34% Late menopause 28.57%, Oral contraceptive pills 33.34%, Obesity 57.14% .12 In another study when asked for risk k factors 13.9% said its due to proloned use of OCP’s intake, diet (10.9%), and late pregnancy (6.9%) [13].

It was observed that 50.80% were aware that diagnosis is the first modality of diagnosing breast cancer. In one study biopsy is the modality was told by 71.42% and mammography was told by 80.95% [12].

Regarding Breast Self-Examination awareness when asked so it was observed that 59.43% were aware. About 85.71% of women were aware of BSE in another study [12].

Among the study participants who were aware among them only 38.19% were practicing self breast examination. The frequency of doing BSE monthly was seen in 49.43%, about 29.21% don’t know how to do self breast examination. In another study 47.63% do BSE once in a month [12].

In conclusion, awareness about breast cancer among the study participants was good in the present study. They were also aware about the risk factors and signs and symptoms. Regarding Breast self examination the awareness was not so good. Among women who were aware about BSE they were not pracising very regularly. So, intense health education campaign should be conducted at regular intervals regarding BSE importance. Women should be taught how to do BSE as BSE is the main screening modality which will detect early stage of cancer.

# References

# References

1. Ferlay Jacques, Soerjomataram Isabelle, Dikshit Rajesh, Eser Sultan, Mathers Colin, Rebelo Marise, Parkin Donald Maxwell, Forman David, Bray Freddie. Cancer incidence and mortality worldwide: sources, methods and major patterns in GLOBOCAN 2012. *International Journal of Cancer.* 2014; 136(5)DOI
2. Park K, Park K. Epidemiology of communicable diseases. Textbook of Preventive and Social Medicine. *Banarsidas Bhanot.* 2011; 21:244-250.
3. WHO. Breast Cancer: Prevention and Control. *Available from: http://www.who.int/cancer/detection/breastcancer/en/. [Last accessed on 2017 Aug 06].*
4. Jemal Ahmedin, Bray Freddie, Center Melissa M., Ferlay Jacques, Ward Elizabeth, Forman David. Global cancer statistics. *CA: A Cancer Journal for clinicians.* 2011; 61(2)DOI
5. Raina Vinod, Bhutani Manisha, Bedi Rajeev, Sharma Atul, Deo Suryanarayana, Shukla Nootan , Mohanti Bidhu, Rath Goura. Clinical features and prognostic factors of early breast cancer at a major cancer center in North India. *Indian Journal of Cancer.* 2005; 42(1)DOI
6. Lodge M. The evidence base for cancer control in developing countries: what is to be done? The Newsletter of the International Network for Cancer Treatment and Research. *6.* 2005; 3DOI
7. Sambanje M, Mafuvadze B. Breast cancer knowledge and awareness among university students in Angola. *Pan Afr Med J.* 2012; 11:70.
8. Stuckey Ashley. Breast cancer. *Clinical Obstetrics and Gynecology.* 2011; 54(1)DOI
9. Bodapati Srikanthi Lakshmi, Babu Giridhara Rathnaiah. Oncologist perspectives on breast cancer screening in India- results from a qualitative study in Andhra Pradesh. *Asian Pacific journal of cancer prevention: APJCP.* 2013; 14(10)DOI
10. Godfrey Katende, Agatha Tukamuhebwa, Nankumbi Joyce. Breast Cancer Knowledge and Breast Self-Examination Practices Among Female University Students in Kampala, Uganda: A Descriptive Study. *Oman Medical Journal.* 2016; 31(2)DOI
11. Gangane Nitin, Ng Nawi, Sebastian Miguel San. Women's Knowledge, Attitudes, and Practices about Breast Cancer in a Rural District of Central India. *Asian Pacific journal of cancer prevention: APJCP.* 2015; 16(16)DOI
12. Prusty Ranjan Kumar, Begum Shahina, Patil Anushree, Naik D. D., Pimple Sharmila, Mishra Gauravi. Knowledge of symptoms and risk factors of breast cancer among women: a community based study in a low socio-economic area of Mumbai, India. *BMC Women's Health.* 2020; 20(1)DOI
13. A cross sectional study on Knowledge, Awareness and Practices regarding Breast Cancer among the women of reproductive age group (25-45 years) attending a peripheral health centre in North India. *JMSCR.* 2020; 8(1):137-141.