

A study to assess breast cancer awareness among women in India.

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Abstract:

Background:

In India, 1,78,000 new cases of breast cancer diagnosed every year and this is expected to rise to 250,000 new cases per year by 2015. It needs to be noted that the incidence of breast cancer surpasses cervical cancer and become the most common cancer among Indian women. The cause of concern is that breast cancer is being increasingly diagnosed at a younger age. There is need to conduct breast cancer awareness programs including practices of self of breast examination, early detection and management. Hence, a study was carried out to find out the awareness of breast cancer's, signs and symptoms, risk factors and breast cancer examination among Indian women.

Materials and Methods:

The study was carried out in the female opd of a private hospital in lakhimpur kheri district of Uttar pradesh, India. Total 75 female including married and unmarried as well as from rural and urban background has recorded their response to the questionnaire. The data was analyzed using SPSS(IBM).

Results:

The data was collected from 75 female patients. The age of the participants was above 20 years. Majority of the participants has overall poor knowledge regarding breast cancer risk factors, and signs and symptoms and the best time for examination of breast cancer. Only 29.3% women knew about the right age to start breast self examination and only 17.3% women practice it on monthly basis.

Conclusions:

This study concluded that the awareness of the breast cancer's, signs and symptoms, risk factors and breast cancer examination among female of lakhimpur kheri district of Uttar pradesh, India was poor. The study highlights the urgent implementation of breast cancer awareness strategies among the female of lakhimpur kheri district of Uttar pradesh, India.

Keywords: Breast cancer awareness, breast cancer symptoms, risk factors, breast examination

I. Introduction

In India, cancer cases is estimated to rise to 15.7 lakhs by the year 2025. The top most cancer in Indian females are cervix, breast and oral. Breast cancer cases ranked at the top among Indian women, with average age as 25.8 per 100,000 women.[1] According to the National Cancer Registries, the age adjusted incidence rate of breast cancer is 41 per 100,000 women in the capital of india Delhi, followed by Chennai (37.9) and Bangalore (34.4).[1] The breast cancer projects of 2020, suggests that the cases will rise by 1797900[2].

The occurrence of breast cancer estimated 2.3 million new cases, as the leading cause of global cancer incidence in 2020.[3] As per the Globocan data 2020, blood cancer accounted for 13.5% (178361) of all cancer cases in India.[4]

According to the reports, increasing age is associated with the incidence of breast cancer.[5] Also, women with family history of breast cancer are more at risk.[6] The exogenous estrogen, from oral contraceptive pills and hormone replacement therapy, is significantly associated with the risk of breast cancer.

BSE (Breast self-examination) and mammography are the commonest screening technique .[7] Regular BSE practice helps to detect lump at early stage and improves chances of early diagnosis and treatment, yeilding a better survival rate.[8] Hence breast cancer awareness plays an important role. Thus, this paticular study aimed assess the level of knowledge and awareness of female about breast cancer sign and symptoms, risk factors and BSE.

The objectives of the study were:

- To assess the level of knowledge and awareness of breast cancer and seld breast examination in female patients of a private hospital in lakhimpur kheri district of Uttar pradesh, India.

II. Material and methods

A observational approach was carried out in female patients of a private hospital in lakhimpur kheri district of Uttar pradesh, India. The total of 75 female patients whoses age greater than 20 years and who give consent to participate in the study were included. The study Period were from April 2023 to June 2023. A self-administered pretested questionnaire was used to collect the details. Extra-care was taken to establish privacy and confidentiality of participants. The questionnaire was divided into two section. The first part comprised of demographic questions and the second part comprised of questions regarding breast cancer signs and symptoms, risk factors, and breast examination. The data was collected through offline mode and analyzed using SPSS (21 version, IBM).

III. Results:

A total of 75 participants were present in the study. The mean age of the survey participants was 36.44. The majority of the participants are married (85.3%). More than half of the participants are post-graduate (57.3%). Almost three quarter of the participants resides in urban area(74.7%). The detail available in table 1.

Table 1. Demographic characteristics of the participants.

		Mean	
Age		36.44	
		Frequency	Percentage
Marital Status	Unmarried	11	14.7
	Married	64	85.3
Level of Education	Under Graduate	32	42.7
	Post Graduate	43	57.3
Area of Residence	Rural	19	25.3
	Urban	56	74.7

Participants has very poor knowledge regarding breat cancer risk factors regarding history of breast cancer, benign disease like fibroid, use of oral contraceptive pills and use of hormonal replacement theraby in monpause. Very little number of participants know about the risk factors of breast cancer like theHistory of breast cancer in the family, relative or friends (25.3%), use of oral

contraceptives more than 5 years (10.7%), benign breast disease like fibroid (9.3%), and use of hormone replacement therapies after menopause (6.7%). The detail available in table 2.

Table 2. Participant's knowledge of breast cancer's risk factors regarding the history of breast cancer and benign disease, and use of medication.

		Frequency	Percentage
History of breast cancer in the family, relative or friends	Yes	19	25.3
	NO	56	74.7
Use oral contraceptive pills more than 5 years:	YES	8	10.7
	NO	67	89.3
History of any breast disease like fibroid	YES	7	9.3
	NO	68	90.7
Use hormone therapy after menopause	YES	5	6.7
	No	70	93.3
Low physical activity	Yes	43	57.3
	NO	32	42.7

Participants knowledge about breast cancer's risk factors such as physical activity, obesity, alcohol, smoking, eating habits was assessed. was reported by the participants. Less than a quarter number of participants considered overweight and obesity (46.7%), and low consumption of vegetables and fruits (32%) as the risks to breast cancer. The detail available in table 3.

Table 3. Participant's knowledge of breast cancer's risk factors related to physical activities, and lifestyle.

		Frequency	Percentage
Overweight and obesity	YES	35	46.7
	NO	40	53.3
Lack of breastfeeding	YES	58	77.3
	NO	17	22.7
Smoking or done alcohol consumption in the past or present	YES	12	16
	NO	63	84
High consumption of red meat	YES	10	13.3
	NO	65	86.7
Low consumption of vegetables and fruits	YES	24	32
	NO	51	68

Only a small portion of participants aware of the knowledge regarding to the breast cancer signs and symptoms like painless and palpable breast lump (16.0%), painless mass under the armpit(10.7%), and bleeding or discharge from the nipple(4.0%), pulling of the nipple inward(1.3%), redness of the breast skin(13.3%), abrupt changes in the size and shape of the breast(8.0%). The detail mentioned in table 4.

Table 4. Participants knowledge of breast cancer signs and symptoms.

		Frequency	Percentage
Painless & Palpable breast lump	YES	12	16
	NO	51	68
	No Comment	12	16
Painless Mass under armpit	YES	8	10.7
	NO	59	78.7
	No Comment	8	10.7
Bleeding or discharge from the nipple	YES	3	4
	NO	72	96
	No Comment	0	0
Pulling of the nipple inward	YES	1	1.3
	NO	69	92
	No Comment	5	6.7
Redness of the breast skin	YES	10	13.3
	NO	62	82.7
	No Comment	3	4
Abrupt changes in the size & shape of the breast	YES	6	8
	NO	62	82.7
	No Comment	7	9.3

Regarding the the best time to start the breast exam by the doctor, only 9.3% of the participants identified the right age for starting breast cancer examination. Almost one-third quarter of the participant support that mammography should be done after 40 years (34.7%). Also participants has poor knowledge regarding the right age to start the breast self-examination (29.3%). Minority of the participant was of the opinion that breast cancer self-examination should be perform on monthly basis (17.3%). The detail can be mentioned in table 5.

Table 5. Participant’s knowledge of best time to do breast examination for breast cancer.

		Frequency	Percentage
When is the best time to start the breast exam by the doctor	After 20 years	7	9.3
	After 25 years	19	25.3
	After 30 years	49	65.3
When is the best time to start mammography	After 20 years	7	9.3
	After 30 years	42	56
	After 40 years	26	34.7
When is the best time to start self-breast exam	After 20 years	22	29.3
	After 30 years	36	48
	After 40 years	17	22.7
How often should a breast cancer self-examination perform	Monthly	13	17.3
	Quarterly	31	41.3
	Yearly	31	41.3

IV. Discussion

This study was conducted to assess the knowledge about breast cancer in Indian women. Majority of the participants has overall poor knowledge regarding breast cancer risk factors, and signs and symptoms and the best time for examination of breast cancer. Only 29.3% women knew about the right age to start breast self examination and only 17.3% women practice it on monthly basis.

The knowledge of risk factors will help in the prevention of breast cancer.[9] As per reports, the history of breast cancer, in first-degree relatives, family or friends, is the major risk factor for breast cancer. In this study, only 25.3% of the participants considered this as a risk factor for breast cancer. On the other hand, a report shows good knowledge of risk factor for breast cancer among university students of Nigeria (46.4%) [9] and Uganda (48.5%) [10]. It has been observed that prolonged use of oral contraceptives increases the risk of developing breast cancer [11]. In India, majority of the population know at least one method of contraception. The current study results predict that only 10.7% participants have use of oral contraceptives for prolonged period and it is a risk factor for breast cancer.

The early detection of breast cancer in females is only possible when women are familiar with breast cancer signs and symptoms. In the current study, participants has poor knowledge about the signs and symptoms of breast cancer like painless and palpable breast lump (16.0%) and painless mass under the armpit(10.7%). It is found in a report from Northwest Ethiopia that participants have higher knowledge about breast cancer signs and symptoms (53.7%, 57% respectively) [12]. In another study among western Nepali higher secondary students, painless breast lump was identified as breast cancer symptom by [13], that was relatively higher as compared to this study findings (16%). Also in the current study, participants has very little knowledge regarding the abrupt changes in size and shaped in breast can be a sign and symptom of breast cancer (8%) while the awareness about the breast cancer sign and symptoms was high among female students in Sharjah (74.7%) [12].

The knowledge of breast self examination and mammography for breast cancer plays important role in the early detection of breast cancer. The United States Preventive Services Task Force has recommended that women between 20–30 years should get clinical breast examination every 3 years while women above 40 years should perform every year. This study result was incomparable with the recommendation as breast examination by a healthcare provider should be started after the age of 20 years (9.3%). The difference in knowledge may be due to the study participants, as they were from rural background.

V. Conclusion

In summary, female patients reported to have a poor knowledge about breast cancer's risk factors, signs and symptoms, and breast examination. It's been observed that good knowledge about breast cancer's risk factors, signs and symptoms, and clinical examination practices play an important role in the early detection and prevention of cancer. The early diagnosis improves the survival rate of breast cancer patients. In contrast, the current study showed that participants have poor knowledge about breast cancer that delays diagnosis and treatment. The late diagnosis of breast cancer negatively impacts the recovery and survival rate and also increases the burden on the healthcare system. Therefore, the government, health administration should play an important role in creating breast cancer awareness. In addition breast examination techniques should be incorporated in study courses.

VI. References

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