



Knowledge & practice regarding breast cancer and breast self examination (BSE) in women of rural areas, north India A cross sectional questionnaire based study

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Abstract

Breast cancer has become most common type of cancer among women. It is a fast developing into public health crisis and society's uncomfortable to talk about women body has made situation even worse, particularly in rural areas due to lack of knowledge, awareness and late diagnosis. A study was conducted by National Cancer Registry Programme in 2020 showing breast cancer was among the five common sites of cancer. About 1 in 28 women are expected to develop breast cancer during their lifetime. By 2030, breast cancer will cause most deaths among women in India than any other malady. In 2020, there were 2.3 million women diagnosed with breast cancer and 685000 death globally. As of the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in past 5 years making it world's most prevalent cancer. Increase in weight, lack of exercise, hormone replacement therapy, combined oral contraceptive pills, stress, late night shifts, etc are some of the factors that increase the risk of breast cancer. Survival rate is low because detection takes place late. According to World Cancer Report 2020, most efficient intervention for breast cancer is early detection and rapid diagnosis.

Objective: We aimed to assess the knowledge regarding breast cancer and to evaluate the practice of breast self examination among women of rural community in northern India.

Method: This is a descriptive non-experimental research design. A total of 120 Samples were selected using non probability Purposive Sampling technique. After obtaining the permission of higher authority, Institutional ethical committee, data collection procedure was carried out. with a structured validated questionnaire. Data were analysed and interpreted by SPSS version.

Result: The overall knowledge level of women regarding breast cancer, it showed (n=120) 10 (8.3%) women had good knowledge, 83 (69.16%) had average knowledge and 27 (22.5%) had poor knowledge. The mean value of knowledge score is 9.008 (SD = + 1.95.) The overall Practice score of women in rural areas regarding breast self-examination, it showed 16 (13.33%) women had good practice, 43 (35.83%) had average practice score and 61 (50.83%) had poor practice. The mean value and standard deviation of practice score is 4.366 and 1.36. Results proved that the Chi square value was less than the tabulated value at 0.05 level of significance, hence there is no significant association between demographic variables and knowledge scores of women among rural areas regarding breast cancer.

Conclusion: A research study was conducted to find out the association on knowledge and practice with the selected demographic variables. After analysis of the data it was found that there is no definite relationship between knowledge and practice. The researcher recommends further research and observational studies to enhance the knowledge and practice level of any kind among women in rural areas.

Keywords: Breast cancer, demographic characteristics, self-examination

Introduction

Breast cancer remains a worldwide public health dilemma and is currently the most common tumour in the globe. Awareness of breast cancer, public attentiveness, and advancement in breast imaging has made a positive impact on recognition and screening of breast cancer. Breast cancer is life-threatening disease in females and the leading cause of mortality among women population. For the previous two decades, studies related to the breast cancer has guided to astonishing advancement in our understanding of the breast cancer, resulting in further proficient treatments. Amongst all the malignant diseases, breast cancer is considered as one of the leading cause of death in Post menopausal women accounting for 23% of all cancer deaths.

Breast cancer is the one of the most common cancer and also it became the leading cause of mortality due to cancer among female around the World. In 2008, about 1.38 million new cases of breast cancer were diagnosed with almost 50%

of all breast cancer patients and approximately 60% of deaths occurring in developing countries. 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. In 2020, there were 2.3 million women diagnosed with breast cancer and 685 000 deaths globally. As of the end of 2020, there were 7.8 million women alive who were diagnosed with breast cancer in the past 5 years, making it the world's most prevalent cancer.

The objective of the WHO Global Breast Cancer Initiative (GBCI) is to reduce global breast cancer mortality by 2.5% per year, thereby averting 2.5 million breast cancer deaths globally between 2020 and 2040. Reducing global breast cancer mortality by 2.5% per year would avert 25% of breast cancer deaths by 2030 and 40% by 2040 among women under 70 years of age. The three pillars toward achieving these objectives are: health promotion for early

detection; timely diagnosis; and comprehensive breast cancer management.

Knowledge plays an important role in improvement of health seeking behavior. Several studies show that lack of knowledge is a significant factor for delayed health seeking behaviour.

Methodology

The study is a Cross Sectional Descriptive Design to assess the knowledge on breast cancer and practice of Breast Self-Examination (BSE) in women of rural area Mohanlalganj Lucknow. The setting of present study is rural area of Mohanlalganj, Lucknow, U.P. A total of 120 samples were selected by purposive sampling technique who fulfilled inclusion criteria. Well structured and validated questionnaire was used as a data tool to assess the knowledge regarding breast cancer and to assess the practice level of Brest self examination. The data was collected after obtaining concern from each samples and also permission from IEC, other higher authorities. Based on the study objectives and target population, structured, validated questionnaire was used to assess the knowledge on breast cancer and practice of BSE.

The structured data tool has 3 sections.

Section A: Consists of demographic variables like age, educational status, family type, Religion, occupation, marital status, previous knowledge, source of information.

Section B: Consists of 20 knowledge-based questions regarding breast cancer.

Section C: Includes 10 Practice based questions on breast self examination. Descriptive and Inferential statistics were used to compute the data which collected from respondents. (n=100).

Results and Discussion

The collected data were tabulated and analysed in various types of tables and charts. After analysis of the data, it was calculated by descriptive and inferential statistics. Chi square was used for finding association between knowledge score with demographic variables. The objectives of the study was evaluated as follow,

Demographic characteristics

According to the data collected on 120 samples, it is observed that majority of samples 52.5% (n=63) were comes under 31-40 years of age and belongs to Hindu and married (n =100) 83.33%. it was found that nearly (=60) 50% were primarily educated. According to type of family, 57 or 47.5% women belongs to nuclear family and rest 63 or 52.5% belongs joint family. Out of 120, (n=58) 48.33% were housewife. Out of 120 sample, (n=68) 56.66% women were having previous knowledge and rest 52 or 43.33% were not having pervious knowledge. With regard to source of information (n=30), 30% women got the information through medical profession, 21 or 17.5% women got information from posters, 11 or 14.16% got information from family and internet respectively.

Findings related to association on knowledge and practice with the selected demographic variables.

On referring the Chi square table at different level of degree of freedom, the calculated chi square value is less than tabulated value at the point 0.05 level of significant. Hence, we infer that there is no statistical significant difference between demographic variables with knowledge scores of women regarding breast cancer.

Table 1: Frequency and Percentage Distribution According to Socio Demographic Variables. (n=120)

SL no.	Demographic Data	Category	Subject Group	
			Frequency	Percentage
1.	Age	20-30	24	20%
		31-40	63	52.5%
		41-50	28	23.33%
		51-60	5	4.16%
2.	Educational Status	Illiterate	16	13.33%
		Primary	60	50%
		Graduate	40	33.33%
		Post graduate	4	3.33%
3.	Family	Nuclear	57	47.5%
		Joint	63	52.5%
4.	Religion	Hindu	100	83.33%
		Muslim	15	12.5%
		Christian	4	3.33%
		Other	1	0.83%
5.	Occupation	Government job	19	15.83%
		Self-employment	19	15.83%
		Housewife	58	48.33%
		Private job	24	20%
6.	Marital status	Unmarried	12	10%
		Married	100	83.33%
		Widow	6	5%
		Divorced	2	1.66%
7.	Previous knowledge	Yes	68	56.66%
		No	52	43.33%
8.	Source of knowledge	Family	36	30%
		Medical professional	21	17.5%
		Poster Internet	11	14.16%

Table 2: Association Between Knowledge Score of Women in Rural Areas with their Selected Demographic Variables (n=120)

S. No.	Variables	Category	Knowledge Score			Chi Square	df	P Value
			Good	Average	Poor			
1	Age	20-30	2	20	2	0.056	6	0.52
		31-40	4	42	17			
		41-50	2	20	6			
		51-60	2	1	2			
2	Education	Illiterate	2	4	10	7.200	6	1.34
		Primacy	1	46	13			
		Graduate	7	29	4			
		Post Grad.	0	04	0			
3	Family	Nuclear	4	47	10	0.5974	2	0.43
		Joint	6	41	16			
4	Religion	Hindu	10	72	18	0.0925	6	0.13
		Muslim	0	8	7			
		Christian	0	3	1			
		Other	0	0	1			
5	Occupation	Govt Job	6	9	4	0.004	6	0.09
		Self Employment.	1	13	5			
		Housewife	1	42	15			
		Private Job	2	19	3			
6	Marital status	Unmarried	1	9	2	9.232	6	0.97
		Married	7	70	23			
		Widow	1	3	2			
		Divorced	0	2	0			

On referring the Chi square table at different level of degree of freedom, the calculated chi square value is less than tabulated value at the point 0.05 level of significant. Hence, we infer that there is no statistical significant difference between demographic variables with knowledge scores of women regarding breast cancer.

Findings related to knowledge regarding breast cancer.

The overall knowledge level of women regarding breast cancer, it shows only 10 (8.33%) patients had good knowledge, 83 (69.16%) had average knowledge and 27 (22.5%) had poor knowledge. The mean value and standard deviation of knowledge score is 9.008 & 1.95.

Table 3: Level of Knowledge on Breast Cancer among Rural Women

S.no.	Knowledge level	Score	Frequency	Percentage	Mean	Standard deviation
1	Good	14-20	10	8.33%		
2	Average	7-13	83	69.16%	9.008	1.95
3	Poor	0-6	27	22.5%		

Findings related to practice of breast self-examination (BSE).

The overall practice level of women regarding breast self examination, it shows 16 (13.33%) had good practice score, 43 (35.83%) had average practice score and 61 (50.83%) had poor practice score. The mean value and standard deviation of knowledge score is 4.366 & 1.36

Table 4: Practice of Breast Self -Examination among Women of Rural Areas.

Characteristics	Frequency	Percentage	Mean	Standard deviation
Good (8-10)	16	13.33%		
Average (5-7)	43	35.83%	4.366	1.36
Poor (0-4)	61	50.83%		

This study was supported by a similar study which was done to assess the knowledge regarding breast self-examination (BSE) among urban and rural women in selected hospitals at Amritsar with the help of questionnaire which consists of 30 questions. The data subjected for statistical unpaired t-test showed a highly significant difference (p<0.05) existing between urban and rural women over all mean knowledge score (t=5.36). It indicates that urban women have more knowledge regarding breast self-examination.

A cross-sectional study was conducted among 300 women

with the help of questionnaire method, who were residents of parklands (urban area) and kawama (rural area) to assess the knowledge, attitude and practice of self breast examination and breast cancer screening between first and second class women of Kitwa district. The findings of the study showed that most of rural than urban women had poor knowledge about BC, CBE and SBE. Educational programs on Breast cancer and SBE should be conducted in print and electronic media using the local languages to reach out to the women in rural areas.

Nursing implications

The implications drawn from the study are of vital concern to the field of Nursing education, Nursing Administration, Nursing Practice and Nursing Research. Present study emphasizes on the assessment of knowledge regarding breast cancer and practice on breast self-examination among women. It can assist in reducing the incidents of complications of breast cancers. Therefore, the nurses must have knowledge about general and specific aspects of breast cancer and its prevention by teaching breast self-examination. The nurses should take active part in Health programmes, hospital education and community health programmes. Therefore, nursing education is important for improving the knowledge regarding breast cancer among women.

Conclusion

Breast cancer is one of the most common cancer and also it became the leading cause of mortality due to cancer among female around the World. Hence this study was very effective to find out the knowledge on breast cancer and practice of Breast self examination. This study concluded that majority of the respondents had average knowledge on breast cancer and few had good practice score on Breast self examination. We would recommend to conduct this study in large scale along with teaching modules.

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