KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS BREAST CANCER SCREENING AMONG RURAL WOMEN IN INDIA

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Abstract: There are about 100 types of cancers including oral cancer, breast cancer, skin cancer, prostate cancer, and lymphoma. But in all of these, breast cancer is most common among women impacting 2.1 million women each year, and also causes the greatest number of cancer related deaths among women. **Methodology:** The Researchers conducted a cross sectional study to assess the knowledge, attitude and practice towards breast cancer screening among 200 conveniently selected women living in rural areas of Varanasi. After validation and reliability of the tool was done using Cronbach's alpha the self-administered tool was administered to the study participants. **Results:** On assessing the knowledge of on breast cancer screening 24% were having adequate knowledge level, 58% moderately adequate and remaining 18% inadequate. So, the study reveals that most of the participants were having moderately adequate level of knowledge. On assessing the attitude on the breast cancer screening, 48.5% of the study participants were having average attitude, 29.5% good and remaining 22% having poor attitude regarding breast cancer screening. On assessing the practice of the breast cancer screening method, the results depict that 13.5% of the participants were having good practice of breast cancer,19.5% average and 68.5% poor practice. On associating the demographic variable with the knowledge of breast cancer screening it was found that there was a significant association with demographic variables like Age, education, occupation, marital status, age at marriage, duration of marriage, no of children and source of information. On calculating the co-relation between the knowledge and practice of breast cancer screening among women (20-60yrs of age) using "Pearson's correlation formula" the R value is -0.5486 which means moderate negative correlation. **Conclusion:** Thus, the study concludes that more training regarding self-breast examination and health education on breast cancer screening is needed among the women.

Key words: breast cancer, cancer screening, knowledge, attitude, practice

INTRODUCTION

According to WHO, Cancer is second leading cause of death globally, and is responsible for an estimated 9.6 million deaths in 2018.Globally, about 1 in every 6 deaths occurs due to cancer. It accounted for 7.6 million deaths (around 13 % of all deaths worldwide) in 2008, which was projected to be continuing to rise over 13.1 million in 2030(World Health Organization). As per the recent report of ICMR (Indian Council of Medical Research) India had 14 lakhs cancer patients in 2016 and this number was expected to increase. Cancer burden in India has doubled over the last 26 years. There are about 100 types of cancers including oral cancer, breast cancer, skin cancer, prostate cancer, and lymphoma. But in all of these, breast cancer is most common among women impacting 2.1 million women each year, and also causes the greatest number of cancer related deaths among women. As per WHO, in 2018 it was estimated that 627,000 women died from breast cancer – that is approximately 15% of all cancer deaths among women. While breast cancer rates are higher among women in more developed regions, rates are increasing in nearly every region globally

Breast cancer refers to cancer originating from uncontrolled growth of the breast tissue or cells, most commonly from the inner lining of milk ducts or the lobules that supply the ducts with milk. As high rate of sufferers with breast cancer and death are women, the need for early diagnosis and screening has become crucially very important. Early diagnosis strategies focus on providing timely access to cancer treatment by reducing barriers to care and /or improving access to effective diagnostic services. The goal is to increase the proportion of breast cancers identified at an early stage, allowing for more effective treatment to be used and reducing the risk of deaths from breast cancer. Screening consists of testing women to identify cancers before any symptoms appear. Various methods have been evaluated as breast cancer screening tools, including mammography, clinical breast exam and the self-breast exam.

METHODOLOGY

The Researchers conducted a cross sectional study to assess the knowledge, attitude and practice towards breast cancer screening among women living in rural areas of Uttar Pradesh. The study was conducted among selected women of 20-60 years of age living in the selected rural villages of Uttar Pradesh India. On calculating the sample size with one sample study method (dichotomous) with confidence level 95%, Margin of error 6%, Population Proportion 49%, and a population size 750, the sample size was calculated to 197 samples with 10% attrition rate the sample size was finalized to 197±20 samples. Around 200 samples were conveniently selected for the study after obtaining informed consent from the study participants. After the study got approved from the institutional ethical committee (Ethical Approval letter no. API/ACN/Misc/2022-2023/302). After an extensive literature review survey questions were formulated and organized in sections of knowledge, attitude and practice. Before administering the questionnaire to the study population, the face validity of the questionnaire was ensured by a committee of experts in research methodology, obstetrics and gynecology, Community and oncology. A pilot study was conducted on 30 pilot participants for ensuring the

clarity and reliability of the questionnaire. Cronbach's alpha was used to evaluate the reliability which was found to be > 0.72 the researchers randomly approached the subjects in each department and distributed the questionnaires. Complete anonymity was maintained to protect participants' identity and to ensure confidentiality of data.

Along with the basic demographic questions, the self-administered tool consisted of 3 important sections i.e. section –I consisted of 30 questions related to risk factors, causes, sign and symptoms, screening methods and complications along with the treatment options of breast cancer to assess the knowledge. If the score is more than 75% then it was considered adequate knowledge, if the score is between 50-74% then it is considered moderately adequate knowledge and if it is less than 50% then it is considered inadequate knowledge.

Section-II consists of 10 statements to assess the attitude with 5-point Likert scale. If the score is between 38-50 then it is considered good attitude, if the score is between 24-37 then it is considered moderate attitude and if the score is between 10-23 then it is considered poor attitude.

Section-III consists of 6 practice statements with yes or no type questions with a scoring of "1" if yes and "0" if no. If the score is above 5 then it is considered good practice, if the score is between 3 and 4 then it is considered average practice and if it is less than 2 then it is considered poor practice.

Before the collection of data, permission was obtained from the principal of Apex College of Nursing and Gram Pradhan (Sarpanch) of selected village of Varanasi District. The researchers then introduced themselves, took required oral and written consent from the study samples and gave instructions regarding tool. Each sample was given 20- 30 minutes to complete the questionnaire. Data analysis – The data was summarized, organized, tabulated &analyses according to the objectives of the study by using descriptive (frequency and percentage) and an inferential statistic (chi-square).

RESULTS AND DISCUSSION

After careful data collection, scrutinizing and analyzing, the result showed that out of the 200 samples 40%were to 20-30years of age group, 72.5% were having Intermediate level schooling, 45% of the women were house wives, 58% were having family income of Rs.5000-20000, 75 % of the study participants were Hindus, 55% of the participants were married, 47% of the population got married after 18 years, 23.5% were married from past 2-5 years, 66% of the women were not having any history of taking oral contraceptives, 55% having no child, 96.5% of the study participants were not having any family history of breast cancer and 66.5% of study participants gets information from TV/ Internet.

Table:1

Distribution of Demographic Variables

S. No	Demographic variable	Option	Frequency	Percentage %
1	Age	20yrs – 30yrs	80	40
		30yrs – 40yrs	45	22.5
		40yrs – 50yrs	40	20
		50yrs - 60yrs	35	18.5
2	Education	No formal education	25	12.5
		Primary education	20	10
		High school	30	15
		Intermediate, Graduation and above	125	72.5
3	Occupation	House wife	90	45
		Government employee	10	5
		School/ College going (student)	63	31.5
		Private job	20	10
		Daily wage worker	17	8.5
4	Monthly income	Rs5000-20000	116	58
		Rs20000-30000	44	22
		Rs30000-50000	23	11.5
		Rs More than 50000	17	8.5
5	Religion	Hindu	150	75
		Muslim	45	22.5
		Christian	4	2
		Others	1	0.5
6	Marital status	Married	110	55
		Unmarried	79	39.5
		Divorced	4	2
		Widow	7	3.5
7	Age at marriage	Below 18 years	27	13.5
		Above 18 years	94	47
		None(unmarried)	79	39.5
8	Duration of marriage	Less than 1 year	24	12
		2-5 years	47	23.5
		5-10 years	32	16
		Above 10 years	18	9
		None	79	39.5
9	History of oral contraceptive pills	Yes	68	34
		No	132	66
10	No. of children	1	20	10
		2	49	24.5
		More than 2	21	10.5
		None	110	55
11	Family history of breast cancer	Yes	7	3.5
		No	193	96.5
12	Source of information	TV/Internet	133	66.5
		Family/Friends	23	11.5

		Conference / seminars	16	8
		Doctor/ Nurses	28	14

On assessing the knowledge of on breast cancer screening 24% were having adequate knowledge level, 58% moderately adequate and remaining 18% inadequate. So, the study reveals that most of the participants were having moderately adequate level of knowledge**. Humaria Heena** conducted a study in 2019 on knowledge, attitude and practice related to cancer screening among the female health care professionals: a cross sectional study, A total of 395 health care workers participated in this study. Only 6 (1.5%) participants had a good level of knowledge of breast cancer and 104 (26.8%) participants demonstrated a fair level of knowledge.
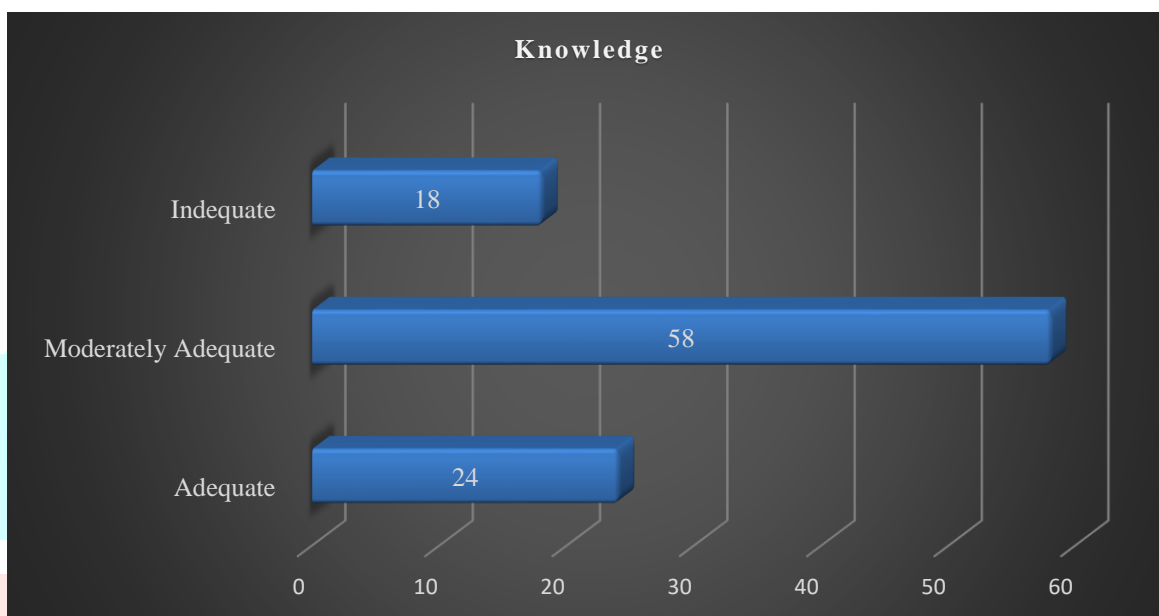

Figure:1- Level of Knowledge on level of Breast Cancer Screening

On assessing the attitude on the breast cancer screening, 48.5% of the study participants were having average attitude, 29.5% good and remaining 22% having poor attitude regarding breast cancer screening. Thus, the study reveals that most of the participants were having average attitude. **Samarth Kalligudi** conducted a study in 2019 on knowledge attitude and practice of breast self-examination among female IT professionals in Silicon Valley of India. The results showed that the mean scores in knowledge, attitude, and practice fields were 18.17 ± 2.90, 27.07 ± 8.14, and 19.11 ± 5.08, respectively
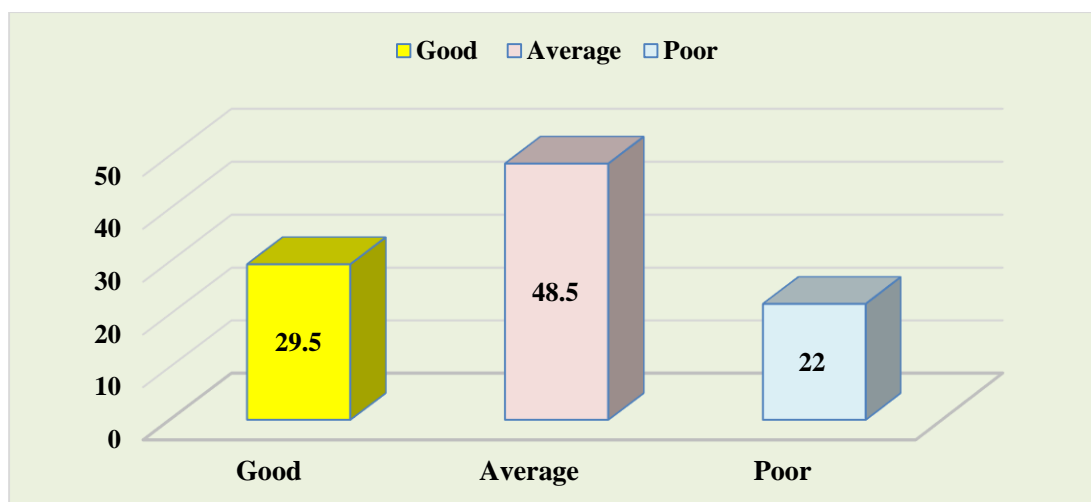
Figure:2 – Level of Attitude on breast cancer screening

On assessing the practice of the breast cancer screening method, the results depict that 13.5% of the participants were having good practice of breast cancer,19.5% average and 68.5% poor practice. So, the study reveals that most of the study participants were having poor practice. **Manas Ko tepui** conducted a study in 2014 to assess the knowledge, attitude and practice of breast cancer among female personnel of Walailak University Among total of 217 female personnel, the lecturers and laboratory scientists and general officers had a significantly higher mean knowledge score about the practice of breast cancer screening than temporary employees (P < 0.0001).
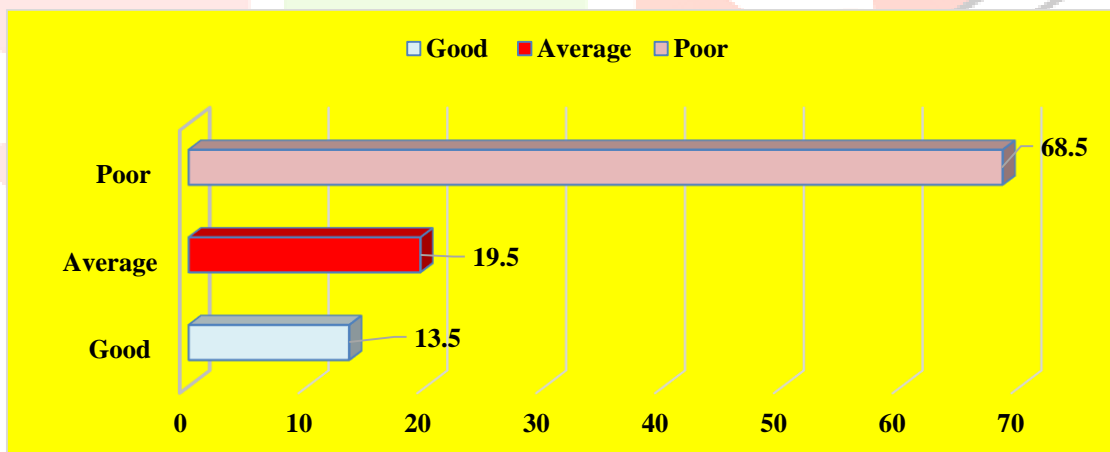

Figure:3 - Bar Diagram Showing Distribution of Sample According to their Level of Practice

On associating the demographic variable with the knowledge of breast cancer screening it was found that there was a significant association with demographic variables like Age, education, occupation, marital status, age at marriage, duration of marriage, no of children and source of information. **Manas Kotepui** conducted a study in 2014 to assess the knowledge, attitude and practice of breast cancer among female personnel of Walailak University the study results showed that the level of education and income of respondents may be involved with this difference in knowledge (P < 0.05).

On calculating the co-relation between the knowledge and practice of breast cancer screening among women (20-60yrs of age) using "Pearson's correlation formula" the R value is -0.5486 which means moderate negative correlation. **Rita Dadzi** conducted a study to assess the knowledge and practice of breast self-examination among reproductive age women in Akatsi South district of Volta region of Ghana. The results suggests that There was a significant association between knowledge on breast cancer and practice of BSE ($\chi2 = 36.218$ p = 0.000).

CONCLUSION:

The researchers have conducted a study on knowledge, attitude and practice regarding breast cancer screening. The result showed that the majority 58% had adequate knowledge, 48.5% had average attitude, and 68.5% had poor practice of breast cancer screening. There is a significant association between the demographic variables and knowledge but a moderate negative correlation between knowledge and practice. Thus, the study concludes that more training regarding self-breast examination and health education on breast cancer screening is needed among the women.

ACKNOWLEDGEMENT

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