A Descriptive Study to Assess the Level of Knowledge, Attitude and Practice Towards Breast Cancer Screening Among Women Living in Selected Rural Areas of Varanasi District, U.P.

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Abstract- Introduction: Incorporating breast cancer screening leads to early diagnosis and decrease mortality. Women participation in screening depends on their knowledge and attitude, other barriers Objective: To assess knowledge, attitude and practice regarding breast cancer screening among the samples and to associate the knowledge and demographic variables and to find the correlation between the knowledge and practice Method: A descriptive study was conducted wherein women of age group20-60 years were selected for the study using convenient sampling method. A total 200 women were included in the study. Data were collected using a 58 item modified structured tool measuring women's knowledge, attitude and practice level regarding Breast Cancer Screening. Result: The majority 58% of the respondents were have moderately adequate, 24% adequate and 18% inadequate knowledge regarding breast cancer screening. It also revealed that 48.5% were have average positive attitude, 29.5% good attitude and remaining 22% possess poor attitude towards screening. In terms of practice, majority 68.5% had good practice, 19.5% average and remaining 13.5% poor practice of undergoing breast screening methods. A significant association was found between demographic variables and knowledge. There was a moderate negative correlation between knowledge and practice (R = -0.5486). Conclusion: In this study the level of knowledge and attitude of the women regarding Breast Cancer Screening was moderate but the level of practice of Breast Self -Examination and undergoing other breast Screening Methods was poor. Thus, the study concludes that more training regarding self-breast examination and health education on breast cancer screening is needed among the women.

Keywords: Women, Knowledge, Attitude, Practice, Breast Cancer Screening, Breast Self –Examination

INTRODUCTION

BACKGROUND OF THE STUDY

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 continue to rise over 13.1 million in 2030. As per the recent report of ICMR (Indian Council ofMedical 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, 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.

During the clinical posting the researcher came across a number of the women patients who had been diagnosed with advanced stage of Breast Cancer and many of whom undergone mastectomy (removal of the breast). After asking them that why they did not came earlier for screening some said that they did not know much about screening, some replied that why to increase their worry unusually and even the screening

cost is very high .On the basis of that our curiosity led us to conduct a study among women living in rural area ,to find out what knowledge and attitude do they possess regarding breast cancer and Breast Cancer Screening, if they practice/undergo breast cancer screening or not.

RESEARCH APPROACH-
The quantitative research approach was adopted for this study.

RESEARCH DESIGN–
A descriptive research design was used in this study.

POPULATION –
The target population selected for this study is all the women of age group 20-60 years from a selected rural area of Varanasi.

SAMPLE SIZE
The sample size was 200

SETTING OF THE STUDY
Women living in selected village panchayat (Balipur, Madhopur) of Vidyapith Block in Varanasi District.

SAMPLING TECHNIQUE
The data was collected using convenient sampling technique

DESCRIPTION OF TOOL–
Screening Procedure Self-constructed tools for assessment of knowledge, attitude of practice for breast cancer screening. The tool consists of 4 sections.

Section 1 –It contains questions related to demographic data of the study participants that is age, sex, education, age at marriage, personal history, family history of breast cancer. This section did not carry any score/ marks but used for self-descriptive analysis.

Section 2 - It contains 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.

Adequate	>75%
Moderately Adequate.	50-74%
Inadequate.	<50%

Section 3-It contains 10 statements to assess the attitude (what they think) regarding Breast Cancer Screening. For assessing attitude,the questions carry 5,4,3,2,1 marks for the options Strongly agree, agree, neutral, disagree, strongly disagree, respectively on the basis of which the practice will be graded in to good, average and poor

Good	38-50
Average	24-37
Poor	10-23

Section 4 –It contains 6 statements to assess practice whether or not the individual undergoes any breast screening like Breast Self-examination or Mammography.

For assessment of practice the questions carry 2 and 1 mark for the options YES and NO respectively on the basis of which the practice will be graded in to good, average and poor.

Good	9-1
Average	5-8
Poor	1-4

VALIDITY
The validity of the tool was obtained by submitting to the experts, in the field of OBG, Community, Medical surgical nursing and oncology, the tool will be received according to their suggestions.

RELIABILITY – The re-test method is used to find out the reliability of the tools.

DATA COLLECTION PROCEDURE –Before the collection of data, permission was obtained from the principal of 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 samplesandgave instructions regarding tool. Each samplewas given 20- 30 minutes to complete the questionnaire.

DATA ANALYSIS

Section 1:
This section deals with the demographic variables and the demographic data consisted of baseline information such as Age, Education, Occupation, age at marriage, personal history, family history of breast

cancer. These data were analysed and interpreted using central tendency.

Section 2
With respect to the first objective of the study i.e. to assess the knowledge regarding Breast cancer screening among women, this section is made. This section consists of data collected from the Self constructed knowledge assessment scale consisting of 30 items. These data were analysed and interpreted using central tendency.

Section 3:
With respect to the second objective of the study i.e. to assess the attitude towards Breast cancer screening among women, this section is made. The check list is consistingof 10 questions, each question has its five dimensions like Strongly agree, Agree, Neutral, Disagree, strongly disagree. These data were analysed and interpreted using central tendency.

Section 4:
With respect to the third objective of the study i.e.to assess the practice regarding Breast cancer screening among women, this section is made. The check list consists of six questions, each question as its two dimensions like Yes or No. These data were analysed and interpreted using central tendency.

Section 5:
With respect to the fourth objective of the study i.e. to find out correlation between knowledge and practice of Breast cancer screening among women. The data collected was analysed and interpreted using correlation test (r test).

Section 6:
With respect to the fifth objective of the study i.e. to find out association between knowledge of Breast cancer screening among women. with the selected demographic variables, this section was made. The data collected was analysed and interpreted using chi square test.

SECTION 1 DEMOGRAPHIC VARIABLES
Frequency and knowledge distribution of samples according to demographic variables

Sl 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

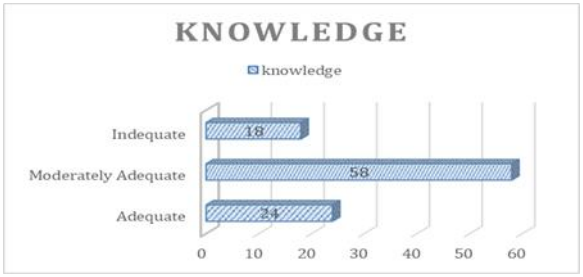
		Widow	7	3.5
7	Age at marriage	Below 18 years	27	13.5
		Above 18 years	94	47
		None(unmarried)	79	39.5
8	Duration of marriage	Less than 1 year	24	12
		2-5 years	47	23.5
		5-10 years	32	16
		Above 10 years	18	9
		None	79	39.5
9	History of oral contraceptive pills	Yes	68	34
		No	132	66
10	No. of children	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

The age distribution depicts that 40%were to 20-30years of age group, 22.5% to30-40years, 20% to 40-50years and 18.5% to50-60years.Thus, the study revealed that most of the participantswere to 20-30 years of age group. Education distribution depicts that only 10% were having primary education, 12.5% were not having any formal education, ,15% high school, and 72.5% were having Intermediate and above. Thus, the study revealed that most of the participants were having education intermediate or above. Occupational distribution depicts that 45% of the women were house wives, 31.5% student ,10% private job, and 8.5% daily wage worker,5% government employee, Thus the study revealed that most of the research participants were housewives. The monthly family income distribution criteria depict that 58% were having family income of Rs.5000-2000Rs, 22% 20000-3000Rs,11.5% 30000-50000Rs and remaining 8.5% having More than 50000Rs.Thus, the study reveals that most of the participants were having family income of Rs5000-20000. Religious distribution depicts that about 75 % of the study participants were Hindus, 22.5% Muslims,2% Christian and remaining 1% were others. Thus, the study reveals that most of the participants were Hindus. Marital Status distribution depicts that 55% of the participants were married,39.5% unmarried, and 3.5% widows and remaining 2% divorced. Thus, the study reveals that most of the participants were married. Distribution of Age at marriage depicts that 37.5% of the participants got married before 18 years, 47% after 18 years, and remaining 39.5% unmarried. So, the study reveals that most of the participants got married after completion of the 18 years. Distribution of marriage distribution depicts that in the married participants, 23.5% were married from past 2-5 years, 16% past 5-10 years 12% with in the same year and 9% for more than 10 years. So, the study reveals that most of the research participants are being married for the past 2-5 years. Oral contraceptive history distribution depicts that 66% of the women were not having any history of taking oral contraceptives while 34% history of taking oral contraceptives. Thus, the study reveals that most of the participants were not having history oral contraceptives. Number of children distribution depicts that 24.5% of the participants were having 2 children, 10.5% more than 2 children, 10% having only child and remaining 55% having no child. Thus, the study reveals that most of the married women were having 2 children. Family history of breast cancer depicts that majority (96.5%) of the study participants were not having any family history of breast cancer and remaining 3.5% had family history of breast cancer. Thus, the study reveals that only 3.5% participants had family history of breast cancer. The information source distribution depicts that 66.5% of

study participants gets information from TV/ Internet,11.5% from friends, 14% from doctors/nurses while remaining 8% through conference/seminars. Thus, the study reveals that majority of study participant's source of information is TV/Internet.

SECTION 2 KNOWLEDGE ON BREAST CANCER SCREENING

The graph depicts that 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.



Bar Diagram Showing Distribution of Sample According to their Level of Knowledge

SECTION 3 ATTITUDE ON BREAST CANCER SCREENING

Attitude Distribution

			N=200
S l .no	Level of attitude	Frequency (n)	Percentage (%)
1	Good	59	29.5
2	Average	97	48.5
3	Poor	44	22

Table depicts that 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.

SECTION -4 PRACTICE ON BREAST CANCER SCREENING

Practice Distribution

			N=200
S l .no	Level of Practice	Frequency (n)	Percentage (%)
1	Good	27	13.5
2	Average	39	19.5
3	Poor	137	68.5

The table depicts 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.

SECTION – 5 ASSOCIATION BETWEEN KNOWLEDGE ON BREAST CANCER SCREENING AND DEMOGRAPHIC VARIABLES AMONG WOMEN

Knowledge and demography association table

Sl no	Demographic variable	Option	Adequate knowledge	Moderate knowledge	Inadequate knowledge	χ^2 value	P value	Significance ($p<0.05$)
1	Age	20yrs – 30yrs	23	39	18	13.7	0.33	Not significant
		30yrs – 40yrs	9	32	4			
		40yrs – 50yrs	8	26	6			
		50yrs - 60yrs	2	27	6			
2	Education	No formal education	5	17	3	14.1882	0.27603	Significant
		Primary education	2	16	2			
		High school	11	10	9			
		Intermediate, Graduation and above	24	81	20			

3	Occupation	House wife	24	50	16	24.6252	00179	Significant
		Government employee	2	2	6			
		School/ College going (student)	13	45	5			
		Private job	1	14	5			
		Daily wage worker	2	13	2			
4	Monthly income	Rs5000-20000	18	81	17	10.6274	0.10054	Not significant
		Rs20000-30000	5	22	5			
		Rs30000-50000	6	12	5			
		Rs More than 50000	3	9	5			
5	Religion	Hindu	32	93	25	6.60449	.3584	Not significant
		Muslim	9	30	4			
		Christian	1	1	2			
		Others	1	1	1			
6	Marital status	Married	29	61	19	15.47	0.016	Significant
		Unmarried	11	58	9			
		Divorced	1	2	2			
		Widow	1	3	4			
7	Age at marriage	Below 18 yrs	5	16	6	30.81	<0.00001	Significant
		Above 18 yrs	12	76	6			
		None(unmarried)	25	32	22			
8	Duration of marriage	Less than 1 year	4	16	4	18.9493	0.05133	Significant
		2-5 years	18	22	7			
		5-10 years	9	19	4			
		Above 10 years	4	9	5			
		None	7	58	14			
9	History of oral contraceptive pills	Yes	17	38	14	1.678	0.43199	Not significant
		No	25	86	21			
10	No. of children	1	3	10	7	16.32	0.12102	Significant
		2	17	30	2			
		More than 2	2	14	5			
		None	20	70	20			
11	Family history of breast cancer	Yes	1	4	2	0.7547	0.6856	Not significant
		No	41	120	32			
		No 1	41	122	33			
12	Source of information	TV/Internet	26	93	14	24.7115	.000386	Significant
		Family/Friends	6	7	10			
		Conference / seminars	1	12	3			
		Doctor/ Nurses	9	12	7			

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.

SECTION 6 CORRELATION BETWEEN KNOWLEDGE AND PRACTICE OF BREAST CANCER SCREENING AMONG WOMEN

Knowledge and Practice Correlation Table

S.No.	Level of knowledge	Frequency	Percentage (%)	Correlation
1	Adequate	48	24	R=-0.5486 At P<0.00001
2	Moderately adequate	116	58	
3	Inadequate	36	18	
S.No.	Grade for practice	Frequency	Percentage (%)	
1	Good	27	13.5	
2	Average	39	18.5	
3	Poor	137	68.5	

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.

On the whole, the inferential statistics shows that the knowledge on breast cancer screening has no significant effect on practice.

CONLUSION

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.

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