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Evaluate the Effectiveness of Structured Teaching Programme on Knowledge regarding Prevention and Management of Breast Cancer among Women in Selected Rural Areas at Meerut

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Abstract: ***Background of the Study: Breast cancer remains a worldwide public health dilemma and is currently the most common tumour in the globe. Breast cancer is life threatening diseases in females and the leading cause of mortality among women population. Aim to evaluate the effectiveness of structured teaching program on knowledge regarding prevention and management of breast cancer among women in selected rural areas a Meerut'' Methodology: Evaluative Research study was conducted using quasi experimental research design pre-test post-test design in selected rural areas at Meerut. The total sample size was 30 and data collection was done by using questionnaire method. Result: The result of study shows that the intervention of structured teaching programme on knowledge regarding prevention and management of breast cancer among women was effective. The assessment of knowledge level of knowledge level out of 30 sample in pretest is 23% had average knowledge and 67% had poor knowledge and 10% had good knowledge about breast cancer. The total mean knowledge of the women in pre-test was 9. The result of assessment of the knowledge level out of 30 sample in post-test is 77% had average knowledge 7% had poor knowledge 16% had good knowledge about the breast cancer among women. The total mean knowledge of the student in post knowledge was 14.50. Conclusion: Thus, we can conclude that the finding reveals that the pre score mean of women regarding breast cancer is 9 and post test score mean is 14.50. This findings reveals that there is significant difference between in pre-test and post test score. It concludes that structured teaching programme is an effective tool in enhancing knowledge regarding prevention and management of Breast cancer among women.***

Keywords: Evaluate, Effectiveness, Structured Teaching Programme, Knowledge, Prevention, Management, Breast Cancer

1. Introduction

Breast cancer is the second most common cancer in women. Healthy women do not think about breast cancer this is probably due to the fact that in the most cases cancer was an incurable disease and its detection actually meant a notice of the impending death of a person. As statics show, the rate of breast cancer incidents among women younger than 49 is 34, 5% of all cancer cases in country. And in India, it is 37.0% of all cancer cases so the rate is quite high also among young women and chances of getting

Breast Cancer grow up with the age. Breast Cancer is a disease in which cells in the breast grow out of control. There are different kinds of breast cancer. Breast cancer can begin in different parts of the breast. The breast is made up of three main parts: -Lobules, ducts and connective tissue. The lobules are the glands that produce milk. The ducts are tubes that carry milk to the nipples. The connective tissue (which consist of fibrous and fatty tissue) surrounds and holds everything together most breast cancer begin in the ducts on lobules. In 2020, there were 2.3 million women diagnosed with breast cancer and 685,000 deaths globally as the end of 2020, there were 78 million women alive who were diagnosed with breast cancer in the past 5 year, making it the world's most prevalent cancer.

There are more lost disability adjust life year (DALYs) by women to breast cancer globally than any other type of cancer. Breast cancer occurs in every country in the world in women at any age after puberty but with increasing rates in later life. Breast cancer mortality changed little from the 1930s through to the 1970s. Improvements in survival began is the 1980s in countries with early detection 2 programme combined with different modes of treatment to eradicate invasive diseases.

According to a study by Lubicon (2020) In India, every four minutes a woman is diagnosed with breast cancer. With some 1,78,000 new cases being diagnosed every year, the incidence of breast cancer has overtaken cervical cancer to become the most common cancer in Indian women. What is more alarming is that it is being increasingly diagnosed at a younger age (a decade earlier) in India compared to the west. With 90,000 deaths per annum, tragically, a woman loses her life to breast cancer every minute in the country. For every two women diagnosed with breast cancer, one dies of it. This study was conducted in the department of pathology Uttar Pradesh University of medical science " SAIFAI ETAWAH " U.P .1051 cases of quay lesions of the breast were included. 85% (56.29%) and in 66 (43.7%). 2016- 21376 cases ,2017-22737 cases ,2018-24181 cases.

Problem Statement

"A study to evaluate the effectiveness of structured teaching programme on knowledge regarding prevention and management of breast cancer among women in selected rural areas at meerut."

Objectives

1) To assess the level of pre-test knowledge regarding prevention and management among women.
2) To evaluate the effectiveness of STP on knowledge regarding prevention and management of breast cancer among women.
3) To find the association between the post-test level of knowledge regarding breast cancer with their in selected demographic variables.

Research Hypothesis

H1:- There will be significant increase in knowledge after structured teaching programme.
H2:- There will be significant association between pre-test level of knowledge with their in selected demographic variables.

Null Hypothesis

HO1:- There will not be significant change in knowledge after structured teaching programme.
HO2:- There will not be significant association between post-test level of knowledge with their selected demographic variables.

Operational Definition

1) **Evaluate:** In this study, evaluate refers to an activity to decide the level of knowledge regarding on prevention and management of breast cancer among women in rural area.
2) **Effectiveness:** In this study, effectiveness refers to the improvement in level of knowledge regarding breast cancer among women in rural area.
3) **Structured Teaching Programme:** In this study, structured teaching programme refers to systematically organized teaching programme on breast cancer prevention and management among women in rural area. It refers to use AV Aids as a medium of giving information regarding breast cancer.
4) **Knowledge:** In this study, knowledge refers to an ability to answer correctly the structured knowledge questionnaire on breast cancer.
5) **Prevention and Management:** In this study, prevention and management refer to identifying and assessing risks, as well as developing and testing intervention to prevent or reduce harmful exposures, disease onset, or disease progression.
6) **Breast Cancer:** In this study, breast cancer is a malignant (cancerous) growth that begins in the tissue of the breast.
7) **Women:** In this study, a woman is an adult female in the age group of 20- 50 years. 8. RURAL AREA: - Rural areas are the complete opposite of urban areas, having a low population and density whilst maintaining a lack of large infrastructure.

Assumptions

1) The study assumed that the women in rural area may have inadequate knowledge regarding breast self-examination.
2) Structured teaching programme is an effective way to improve the knowledge of women in rural area.
3) The study assumed that the women in rural area may have inadequate knowledge regarding prevention and management.

Limitation

1) In this study the age limit of women is from 20-50 years.
2) Sample size limited to 30 females only.
3) This data collection period limited for 15 days.

2. Conceptual Framework

The conceptual framework of the present study is based on General systems Theory with input, process, output and feedback. This model was first introduced by Ludwig Von Baran off and later modified by. (J. W. Kenny 1999) According to this theory, a system is a group of elements that interact with one another in order to achieve the goal. An individual is a system because she receives input from the environment. This input when processed provides an output. All living systems are opened. There is a continual exchange of matter, energy and information. The system is cyclical in nature and continues to be so, as along as the four parts ─ input, process, output and feedback – keep interacting with each other. If there are changes in any of the parts, there will be alteration in all other parts. Feedback from within the system or from the environment provides the information, which helps the system to determine its effectiveness.

3. Review of Literature

Review of literature will be based on the following key points: -

1) Studies related to assess the knowledge regarding Prevention and Management of breast cancer.
2) Studies related to evaluate the effectiveness of structured teaching programme on knowledge regarding Prevention and Management of breast cancer.

Studies related to assess the knowledge regarding Prevention and Management of breast cancer.

ASM Ishtiak et al (2022), examined knowledge, practice, and associated factors of breast self- examination among female university student of Bangladesh. This study aimed to explore knowledge, practice, and associated factors of breast self examination among female university students of Bangladesh. A cross-sectional study was conducted among 400 conveniently selected female students aged ≥ 18 years from four universities. A pre-test semi-structured self-administered questionnaire was used for data collection. A total of 400 students participated from two private and two public universities. The average age of the participants was 20.89 ± 1.72 years of all 60.5% had presence of knowledge about BSE. The average knowledge score was 7.41 ± 3.27 (in a scale of 0.15). Among those who had knowledge about BSE only 10.7% participants practiced it monthly.

Kibret Asmare et al (2022), examined knowledge, attitude, practice towards breast self-examination and associated factors among women in Gondar town, Northwest Ethiopia, 2021: a community-based study. This study aimed to assess knowledge, attitude and practices towards breast self-

examination and associated factors among women in Gondar town, Northwest. A community- Based cross - sectional study was conducted on women. A simple random sampling method was used to select 571 participants. Interviewer administered questionnaires were used for data collection, 541 participants were involved in the study with a response rate of 94.7% of these, 56%, 46% and 45.8% of women had adequate 13 knowledge, favorable attitudes, and performed breast self-examination respectively.

Studies related to Evaluate the effectiveness of Structured teaching programme on knowledge regarding management and prevention of breast cancer.

Hiwot Abera et al (2017), examine effectiveness of planned teaching intervention on knowledge and practice of BSE among first year midwifery students. This study aimed is to assess the effectiveness of planned teaching program on knowledge and practice of BSE among first year female midwifery students in Hawassa health Sciences college. A pre-experimental one group pre posttest design was used among 61 students who were selected by systematic random sampling technique. Data was collected using structured questionnaire and adopted and approved checklist. The mean age of the study participants was 20.13 and 77% of the study participants were single. Before the intervention 14 (23%) of respondents had information and practiced BSE I only 8 (13.1%) performed BSE on a regular monthly basis. The number and percentage of the knowledgeable respondents pre post intervention is 23 (37.7%) and 35 (57.4%), respectively. The mean knowledge t differences for the pre post intervention is 0.18±0.695 the respondents pre-post interventions score of satisfactory practical competency were 10 and 43 respectively as well the mean net gain for the prepost BSE intervention is 0.51±0.62. 12.

Rumpa Sarker et al (2022) examine effectiveness of educational intervention on breast cancer knowledge and breast self-examination among female university students in Bangladesh: a pre -post quasi-experimental study the aim of the present study was to assess the effect of an educational intervention program on breast cancer knowledge and the practice of breast self-examination among young female students of a university in Bangladesh. A quasi-experimental (prepost) study design was conducted at Jahangirnagar university in Bangladesh. Educational information of BSE procedure and leaflets were distributed among 400 female students after obtaining written informed consent. The stepwise procedures of BSE performance were demonstrated with images. pre intervention and 15 days post intervention assessments were conducted to assess the changes in knowledge on breast cancer and practices of BSE. Mc - Nemar's tests and paired sampled t tests were performed to investigate the differences between pre and post-test stages. A total of 400 female university students aged 18-26 years were included in the sample. Significant changes were found in knowledge and 17 awareness about breast cancer and BSE practices after the educational intervention the significant differences were measured in the mean scores of pretest vs post-test : breast cancer symptoms (2.99±1.05 vs 6.35±1.15< 0.001),screening of breast cancer(1.82±0.53 vs 3.98±0.71;p< 0.001). likewise, a significant percentage of changes in BSE practices was obtained between pre-test and post-test (21.3% vs 33.8% ; p <0.001)

4. Methodology

Research Approach: In this study a quantitative approach has been used to assess the knowledge and effectiveness on prevention and management of breast cancer among women in selected rural area at Meerut.

Research Design: The research design used in the study is quasi experimental research design. Pre-test (O1) treatment(X) post-test (O2)

Research setting: The study is conducted in selected rural area Meerut. The study population for present study consisted of women between the age 20 to 50 years old

Sample: In this study the sample is women age between 20 to 50 years old at selected rural area.

Sample Size Sample size consists of 30 women.

Sampling Criteria

Inclusion Criteria

Women available at the time of data collection.

- Women are in the age group of 20 to 50 years.
- Women are able to speak read and write Hindi.

Exclusion Criteria

- Women who are not willing to participate in the study.
- Women who are not able to speak and listen.
- Women who are not present at the time of data collection.

Sampling Technique

In this study purposive sampling technique was used to select the sample. The investigator selected the women from the selected through rural area Meerut.

Tools

Tool 1: Socio-demographic Variable Socio demographic variable consist of demographic data of the subject like age, marital status, religion, type of family, educational status, source of information, employment, nutrition, and age of menarche.

Tool 2: Questionnaire It consists of knowledge questionnaires on breast cancer which include 24 items of multiple-choice question.

5. Result

Plan for data analysis

The data was entered into the master sheet. Keeping the objectives of the main study in view, the descriptive and inferential statistics was done.

- **Descriptive statistics:** The mean, standard deviation, mean percentage was calculated.
- **Inferential statistics:** T test and Chi square to check the effectiveness and association

Table 1: Frequency and Percentage Distribution of Demographic data of the sample n= 30

Age	Frequency	Percentage
20-30 year	**18**	**60%**
31-40 year	7	23%
41-50 year	5	17%
Education Status	Frequency	Percentage
No Formal Education	**13**	**43%**
Primary Education	5	17%
Secondary Education	11	37%
Graduate and Post graduate	1	3%
Marital Status	Frequency	Percentage
Married	21	70%
Unmarried	6	20%
Widow	**2**	**7%**
Divorce	1	3%
Religion	Frequency	Percentage
Hindu	**17**	**57%**
Muslim	11	37%
Sikh	1	3%
Christian	1	3%
Type of family	Frequency	Percentage
Nuclear	8	27%
Joint	**19**	**63%**
Extended	3	10%
Family Monthly Income	Frequency	Percentage
5000-10000	20	67%
10001-15000	**6**	**20%**
15001 and above	4	13%
Occupational Status	Frequency	Percentage
Unemployment	3	10%
Labour	4	13%
Government employees	1	3%
Housewife	22	74%
Age at Menarche	Frequency	Percentage
<12	10	33%
12-14	16	54%
>14	04	13%
Diet	Frequency	Percentage
Vegetarian	25	83%
Non-Vegetarian	5	17%
Source of information	Frequency	Percentage
Mass media	12	40%
Family friends	13	43%
Teacher	2	7%
None	3	10%
BMI category	Frequency	Percentage
Underweight	5	17%
Normal	7	23%
Overweight	14	47%
Obese	04	13%

- The majority of samples 18(**60%)** were in the age group of **20-30 years**, 7(**23%) of** the sample belongs to the age group of **(31-40years) and** 5(**17%) of** the sample belongs to the age group (**41-50years).**
- As per education status, **13 (43%) of the sample were no formal education, 5(17%) were primary education, 11(37%) were secondary education** & 1(3%) were graduate and post graduate.
- As per marital status, **21(70%)of the sample were married**, 6(**20%)** were unmarried, 2(7%) of the sample were widow and 1(3%) of samples were divorce.
- As per religion **17(57%) of the sample were Hindu, 11(37%) of the sample were Muslim, 1(3%) of the sample were Sikh** and 1(3%) of the sample were Christian.
- As per type of family, **8(60%) participants having nuclear family**, 19(63%) participants having joint family and 3(10%) participants having extended family.
- As per family monthly income,**20(67%) of the sample were 5000-10000 family income, 6(20%) of the sample were 10001-15000 family income,** and 4(13%) of the sample were more than 15001 family income.
- As per occupational status, **3(10%) of the sample were unemployment, 4(13%) of the sample were labour work, 1(3%) of the sample were government employees** and 22(74%) of the sample were housewife.
- As per age at menarche, **10(33%) of the sample were less than 12 years, 16(54%) of the sample were 12-14 years**and 4(13%) of the sample were more than 14 years.
- As per dietary pattern, **25(83%) of the sample were vegetarian** and 5(17%) of the sample were non-vegetarian.
- As per source of information, **12(40%) of the sample were from mass media, 13(43%) of the sample were from family friend, 2(7%) of the sample were from teacher** and 3(10%) of the sample were from none.
- As per BMI category, 5**(17%) of the sample were underweight, 7(23%) of the sample were normal, 14(47%) of the sample were overweight** and 4(13%) of the sample were obese

Table 2: Self-structured knowledge questionnaire, N=30

Score	Level of Knowledge	Pretest		Post Test	
		Frequency	Percentage	Frequency	Percentage
0-8	Poor Knowledge	**20**	**67%**	02	7%
9-17	Average Knowledge	07	23%	**23**	**77%**
18-24	Good Knowledge	03	10%	5	16%

Data represented in table 2 depicted that 20(67%) that is majority of samples had poor knowledge, 7(23%) of sample had average knowledge and 3(10%) had good knowledge in pretest. But in post – test 23 (77%) had average knowledge, 5 (16%) of sample had good knowledge and 02(7%) of sample had poor knowledge after administrating the structured teaching program.

This indicated that the structured teaching program among women was effective and improve the knowledge regarding prevention and management of breast cancer among women

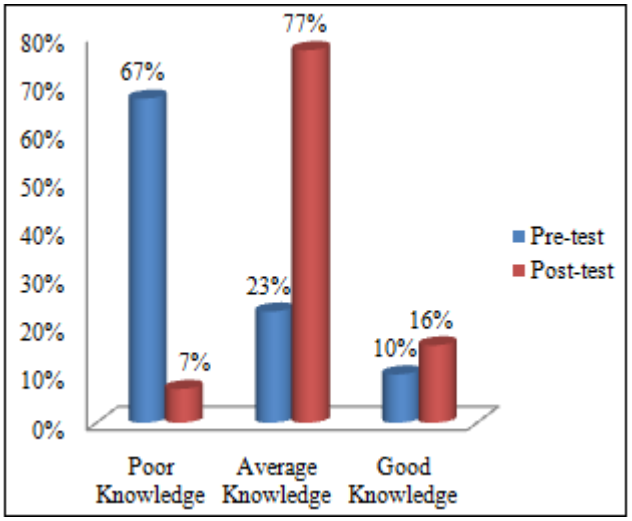

Figure 12: Percentage distribution for Level of Knowledge regarding prevention and management of breast cancer among Women

Table 3: Mean and Standard Deviation of Pre – Test and Post – Test Score among Women. n= 30

	Mean	SD	DF	T Test	Table Value	P Value
Pre Test	9	5.23	29	7.502	2.045	0.0001
Post Test	14.50	3.97				

Data represented in table show that the post –test score of mean (14.50) among women was higher than the pre - test score of mean (5.23) after structured teaching program, and it was found to be statistically significant as evident from the obtained "t" value (7.502) at 0.05 level of significance. The Calculated t value (7.502) is greater than the table value (2.045). So, the hypothesis (H1) is accepted.

Hence the structured teaching program was effective to improve knowledge regarding prevention and management of breast cancer among women.

Table 4: Chi square value showing association between post-test score with selected demographic variables among Women in experimental group, n= 30

Variable		Good knowledge 5		Average knowledge 23		Poor knowledge 2		Df	Table Value	Chi-square value	P value	
		F	%	F	%	F	%					
Age	20-30 years	2		15		1		4	9.49	2.39	0.663 p>0.05	NS
	31-40 years	2		4		1						
	41-50 years	1		4		0						
Education Status	No formal education	2		11		0		6	12.59	**15.49**	**0.016 p>0.05**	**S**
	Primary education	1		4		0						
	Secondary education	2		8		1						
	Graduate and postgraduate	0		0		1						
Marital status	Married	3		17		1		6	12.59	3.17	0.787 p>0.05	NS
	Unmarried	1		4		1						
	Widow	1		1		0						
	Divorce	0		1		0						
Religion	Hindu	1		15		1		6	12.59	7.88	0.246 p>0.05	NS
	Muslim	3		7		1						
	Sikh	1		0		0						
	Christian	0		1		0						
Type of family	Nuclear Family	2		6		0		4	9.49	2.475	0.648 p>0.05	NS
	Joint Family	2		15		2						
	Extended Family	1		2		0						
Family monthly income	5000-10000	3		16		1		4	9.49	1.558	0.816 p>0.05	NS
	10001-15000	1		4		1						
	>15001	1		3		0						
Occupational status	Unemployment	1		2		0		6	12.59	7.272	0.296 p>0.05	NS
	Labour	0		4		0						
	Government employees	1		0		0						
	Housewife	3		17		2						
Age at Menarche	<12 years	3		6		1		4	9.49	3.321	0.505 p>0.05	NS
	12-14 years	1		14		1						
	>14 years	1		3		0						
Diet	Vegetarian	3		20		2		2	5.99	2.577	0.275 p>0.05	NS
	Non-Vegetarian	2		3		0						
Source of information	Mass Media	2		9		1		6	12.59	3.206	0.783 p>0.05	NS
	Family and Friends	1		11		1						
	Teacher	1		1		0						
	None	1		2		0						
BMI category	Underweight	1		4		0		6	12.59	3.27	0.773 p>0.05	NS
	Normal	2		4		1						
	Overweight	1		12		1						
	Obese	1		3		0						

There was significant association between post–test level of knowledge regarding prevention and management of breast cancer with the **Education status** and There are no significant association with selected demographic variables among women.

So, the hypothesis (H_2) is accepted.

6. Nursing Implication

The present study emphasizes on determining the effectiveness of structure teaching programme on knowledge regarding prevention and management of breast cancer among women in selected rural area at Meerut. The study has number of implications in prime concern to the nursing education, nursing practice, nursing research and nursing administration.

a) Implication For Nursing Education

1) The study helps the nursing students to learn about assessing and providing knowledge to the women.
2) The student teacher can arrange some more teaching programme on prevention and management of breast cancer.
3) The student teacher can encourage the women to conduct the teaching on prevention and management of breast cancer.

b) Implication For Nursing Research

1) The study will encourage the future investigators to conduct a study on prevention and management of breast cancer.
2) This study will help the future investigator in conducting his research more effectively. 3. The study will help the researcher as a guideline to conduct his study and limit the errors.

c) Implication For Nursing Practices

1) The finding of the study will help the nurses to plan for assessing the knowledge of women on prevention and management of breast cancer.
2) The student teacher can give structured teaching programme on prevention and management of breast cancer.
3) The student teacher can create awareness about the prevention and management of breast cancer.

d) Implication For Nursing Administration

1) The study will help the administrator in arranging education programme on prevention and management of breast cancer.
2) It will motivate the nursing administration to emphasize on breast cancer.

7. Recommendation

1) There should be public awareness about benefit of having knowledge regarding prevention and management of breast cancer.
2) The government should promote the promotion of breast cancer teaching programme in rural areas to reduce the occurrence of breast cancer problems.
3) More study can be done to assess the knowledge of women regarding the prevention and management of breast cancer.
4) The study can be done to assess the health status of women.

References

Books

[1] Brunner, L.S.Suddarth, D.S.Smeltzer, S.C.O.,•& Bare, B.G (2004) Brunner & Suddharth‟ textbook of medical- surgical Nursing (10th Edition), Page no.138-158.
[2] Jaypee books ,Ram Sharan Mehta, oncology nursing(2007)• (1 Edition), Page no.90-109
[3] Javed Ansari Davinder Kaur ,Pee Vee textbook of medical -surgical Nursing• (2020) Volume 2 New Edition, Page no.
[4] Ross and Wilson,(2010) Anatomy and Physiology in Health and illness(11th• Edition)
[5] Lois White, Gena Duncan, Medical Surgical Nursing, Australia, Delmar• Publication, 2002, Page no. 816 – 854.
[6] Pricilla Lemons, Karen Burkae, Medical Surgical Nursing, Chandigarh• Dorling Kindersely Publications, 2008, Page no. 1829 -1830.

Journals

[7] ASM Ishtiak et al (2022) “study to assess the knowledge, practice and• associated factors of breast self–examination” “National Library of Medicine”.
[8] Mikiyas Amare Getu et al(2022) examined breast self examination• knowledge and its determinants among female students at Addis Abada university. “National Library of Medicine “.
[9] Kibret Asmare et al(2022) examined knowledge, attitude, practice towards• breast self examination and associated factor among women in Gondar Town.(https://pubmed.ncbi.nim.nih.gov)
[10] Samira S Abo Al -Shiekh et al (2021) examined breast cancer knowledge and• practice of breast self - examination among female university students, Gazo. .(https://pubmed.ncbi.nim.nih.gov)
[11] Moustafa Youniset et al (2016) examined knowledge and awareness of breast• cancer among young women in the united Arab Emirates.
[12] Basem Ashareef et al (2020) examined breast cancer awareness among• female school teacher in Saudi Arabi : A population based survey .
[13] Mohamed El – Shinawi et al (2013) examined assessing the level of breast• cancer awareness among recently diagnosed patients in Ain Shams university hospital.
[14] Sayed Azizur Rehman et al (2019) examined awareness about breast cancer• and breast self examination among female students at the university of Sharjah.
[15] Huma T Rehman et al (2022) examined breast cancer knowledge among• health professional .