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A study to evaluate the effectiveness of breast self-examination on prevention of breast cancer and developing skill on breast self-examination among menopausal women at selected rural areas of Shimoga, Karnataka State

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Abstract---Cancer occupies world's major health challenge today. Cancer may occur in human body for any age and sex. Formation of a tumour with the features of abnormal and uncontrollable growth and shows continuous replication of cells leads to cancer. Breast cancer is considered the very common cancer in women. Breast self-examination is easiest and cost-free method for early detection of Breast cancer. WHO estimated that in 2018, 627000 women died with breast cancer in worldwide. Since 1990- 2010 there was a steadfast growth of breast cancer cases in worldwide. Premenopausal and menopausal age is the common age group women diagnosed with breast cancer. Thus, it is considered getting awareness about breast self-examination before attaining menopause helps to reduce the number of deaths due to breast cancer. This study was conducted to evaluate the effectiveness of breast self-examination in the prevention of Breast self-examination. 50 women between the ages 40 to 50 were selected for data collection. To assess the skill level of women the investigator prepared an observation checklist. To assess the knowledge about prevention of breast cancer and breast self-examination the investigator used a structured questionnaire. Data analysis was done by using descriptive and inferential statistics. Analysis proven that there was a significant level of increase in the

post test knowledge. The gain in knowledge score was significant at 0.05 level of significant. Paired t test value is 7.7978 which is more than the paired t value 2.75. Breast self-examination skill score was significant at 0.05 level of significant and calculated paired t test value is 10.6398 which is more than table paired t value 2.75. Findings shown that skill program on breast self-examination are an effective method in gain in knowledge of women. Analysis also reports that there was an association between knowledge level and age, occupation, information received before, and family history. Religion, family income, marital status, previous breast problem has no association with knowledge.

Keywords---breast self-examination, breast cancer, evaluate, effectiveness, skill, premenopause, menopause.

Introduction

Cancer occupies world's major health challenge today. Cancer may occur in any part of the body without consideration of age and sex. Formation of a tumour with the features of abnormal and uncontrollable growth and shows continuous replication of cells leads to cancer. Breast cancer is the very common cancer seen in women. Breast self-examination is easiest and cost-free method for early detection of Breast cancer. WHO estimated that, in 2018, 627000 women died with breast cancer in world-wide. Since 1990- 2010 there was a steadfast growth of breast cancer cases in worldwide. Premenopausal and menopausal age are the common age group women diagnosed with breast cancer. Thus, it is considered getting awareness about breast self-examination before attaining menopause helps to reduce the number of deaths due to breast cancer.

Breast self-examination is the self-inspection of their own breast for the early identification of Breast Cancer. By using the hands and eyes to determine the changes in the breast. Increasing awareness about breast reduces the risk of Breast Cancer. Even though breast – self-examination is not a reliable test for breast cancer, it helps for early detection of any lumps in the breast. During Breast self-examination women may face anxiety if they find a lump. If a woman doesn't attain menopause choose the time of Breast self -examination during the time of menstrual cycle as the breasts are tender.

Breast cancer may occur in any part of the breast. Breast has three parts, lobules, ducts, and connective tissue. The connective tissue is more fibrous and fatty tissue. Breast cancer can spread outside of the breast through blood vessels and lymph vessels. Most common types of breast cancers are invasive ductal Carcinoma, invasive lobar carcinoma, and ductal carcinoma. According to Breast Cancer Statistics in India 2020, 1.38 million new breast cancer cases every year, 4,58,000 deaths occurring due to breast cancer. It also states that every 13 minutes a woman die with breast cancer in India and every 4 minutes an Indian women diagnosed with Breast cancer. Breast cancer is considered the most common cancer in India. 2.3 million Women diagnosed with breast cancer in 2020, 685000 deaths occurred due to breast cancer.

Statement of the problem

A study to evaluate the effectiveness of Breast self-examination on prevention of breast cancer and developing skill on breast self-examination among menopausal women at selected rural areas of Shimoga.

Objectives

- To assess the pre-test knowledge level among women before giving health teaching programme on prevention of breast cancer and developing skill on breast self-examination among menopausal women at selected rural areas of Shimoga.
- To assess the post-test knowledge level among women after giving health teaching programme on prevention of breast cancer and developing skill on breast self-examination among menopausal women at selected rural areas of Shimoga.
- To assess the pre-test breast self-examination skill level among women before giving health teaching programme on prevention of breast cancer and developing skill on breast self-examination among menopausal women at selected rural areas of Shimoga.
- To assess the post-test breast self-examination skill level among women after giving health teaching programme on prevention of breast cancer and developing skill on breast self-examination among menopausal women at selected rural areas of Shimoga.
- To evaluate the effectiveness of health teaching programme on prevention of breast cancer and developing skill on breast self-examination among menopausal women at selected rural areas of Shimoga.
- To find out the association between knowledge level with among menopausal women at selected rural areas their selected demographic variables of Shimoga.

Hypothesis: H1: There will be difference between pre-test and post-test regarding knowledge on health teaching program on prevention of breast cancer and skill on breast self-examination.

H 2- There will be a significant association between the knowledge level of study subjects with selected demographic variables

Research Approach: Quantitative approach is the research approach adopted for this study.

Research Design: Quasi experimental, one group pre-test post- test research design was selected for this study.

Setting of the study: The study was conducted at selected rural areas of Shimoga, Karnataka state. 50 menopausal women were selected as samples for this study.

Population: 50 menopausal women at selected rural areas of Shimoga, Karnataka State were the target population.

Sample: Sample consisted of 50 menopause aged women at selected rural areas of Shimoga, Karnataka State.

Sampling Technique: 50 menopausal women at selected rural areas of Shimoga, Karnataka State were selected by convenient sampling method.

Criteria for sample selection

1. Inclusion Criteria: The patients who had interest to participate in the study, and age between 40 - 50 years residing in rural areas of Shimoga.
2. Exclusion Criteria: Women who were not ready to perform breast self-examination.

Research tool and technique:

Tool includes a semi-structured questionnaire, and an observation checklist for the researcher.

Description of the tool

The tool used for the study includes two section that is section I and section II.

Section I: Includes 10 items on socio demographic data.

Section II: Questionnaire to assess the knowledge on prevention of breast cancer and breast self-examination (20 Items)

Part A: Knowledge on breast cancer. (10 Items)

Part B: Regarding Breast Self-Examination (10 Items)

Section III: Observation checklist to assess the skill on breast self-examination.

Data Collection Procedure

Before conducting the study, formal permission was obtained. Informed consent was obtained from the participants. The period of data collection was done for 5 weeks

Plan for data analysis: Data analysis was done by using descriptive statistics and inferential statistics.

Protection of human subjects: Obtained both oral and written consent while starting data collection. Permission obtained from concerned medical officer. Assurance given to the participant about their privacy.

Findings

The collected data were tabulated, analysed and interpreted by using descriptive and inferential statistics.

1. Findings on sample characteristics.
2. Findings on pre-test and post-test knowledge of samples.
3. Findings on pre-test and post-test skill level of the samples.
4. Association between knowledge level and demographic variables such as age, attained menopause, education level, occupation, religion, marital status, family income per-month, information about breast cancer and breast self-examination any breast related problems, and family history of breast cancer.

Table .1. Findings on socio demographic characteristics of samples (N=50)

Demographic factor	Category	% Of Sample
Age	40- 42 years	32.15
	43-45years	38.67
	46-49years	12.45
	50-52years	16.73
Attained menopause	Yes	22.56
	No	77.44
Education	Primary school education	33.96
	Secondary school education	25.51
	Pre University education	32.12
	Graduate and above	8.41
Occupation	Unemployed	32.54
	Private job	23.53
	Government job	10.42
	Self-employed	15.36
Religion	Hindu	40.32
	Muslim	23.45
	Christian	28.56
	Others	7.67
Marital status	Married	80.15
	Unmarried	3.42
	Widower	2.41
	Divorced/separated	14.02
Family income per –month	Less than 10000 Rupees	23.65
	10001 -1500 Rupees	33.81
	15001-20000 Rupees	31.32
	20001 INR and above	27.14
Have u heard any information about breast cancer and breast self-examination?	Yes	32.56
	No	66.44
History of breast related problems	Yes	12.34
	No	87.66
Family history of breast cancer	Yes	12.34
	No	87.66

Table .2. Pre-test knowledge level on breast cancer and breast self-examination(N=50)

Knowledge level	Frequency	Percentage
Good	8	16%
Average	13	26%
Poor	29	58%

Table .3. Post-test knowledge level on breast cancer and breast self-examination (N=50)

Knowledge level	Frequency	Percentage
Good	32	64%
Average	10	20%
Poor	08	16%

The pre-test knowledge about breast cancer and breast self-examination shows that 29 (58%) had poor knowledge, 13 (26%) had average knowledge and 8 (16%) had good knowledge. The post-test score maximum was 32 (64%) gained good knowledge, 10 (20%) gained average knowledge, and 8 (16%) scored poor knowledge score.

Table .4. Pre-test on skill regarding breast self-examination (N=50)

Breast Self-Examination Skill level	Frequency	Percentage
Good	10	20%
Average	12	24%
Poor	28	56%

Table .5. Post-test on skill regarding breast self-examination (N=50)

Breast Self-Examination Skill level	Frequency	Percentage
Good	38	76%
Average	10	20%
Poor	02	04%

The pre-test shows that majority of 28(56%) poor skill, 12 (24%) gained average skill and 10 (20%) gained good skill. On the other hand in post-test there was an increase in breast self-examination skill level.. The post-test score was 38 (76%) women scored good skill, 10(20%) scored average skill and only 2 (04%) scored poor skill level.

The gain in knowledge score and skill level was significant at 0.05 level of significant and calculated paired t test value is 7.7978, 10.6398 respectively. Based on the results its proved that health teaching programme on breast cancer, and developing skill on breast self-examination is effective in preventing breast cancer among menopausal age women.

The study also proves that the level of knowledge, age, attaining, menopause, education, occupation, and obtained information earlier have association with demographic variables. Marital status, family income, religion, and history of breast problems are not influenced with the knowledge and skill about breast cancer and breast self-examination.

Conclusion

Health team members must give information to the menopause aged women regarding breast cancer and breast-self-examination as reduces the number of incidence of Breast cancer. Breast self-examination or breast awareness well-intentioned for the early identification of lumps in the breast and for consulting health team and making a early diagnosis of this dreadful disease. Awareness programme given in the community saves several women and further they educate to the other women in the community.

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