

# Effect of Structured Teaching Programme on Knowledge, Attitude and Practice Regarding Breast Self-Examination and Prevention of Breast Cancer Among Nun Sisters Residing in Thrissur District

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#### **ABSTRACT**

The aim of the study was to assess the effect of structured teaching programme on knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer among nun sisters residing in Thrissur district. The objectives of the study were to assess the knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer among nun sisters, evaluate the effect of structured teaching programme on knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer among nun sisters, find out the association between knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer with their demographic variables among nun sisters. The study was based on the frame work of 'Health belief model'. A preexperimental one group pretest and posttest design was used, and a purposive sampling was used to select 100 nun sisters. Pretest was conducted by using structured knowledge questionnaire, structured attitude scale, structured practice check list and a structured teaching programme was given on the same day. Posttest was done after two weeks. The mean pretest score of knowledge, attitude and practice were 13.730 (SD-2.8064), 59.170 (SD-5.7403) and 4.390 (SD-2.6088), respectively. In the posttest the mean score was 18.610 (SD-2.3948) for knowledge, 61.540 (SD-6.1306) for attitude and 7.010 (SD-3.4975) for practice. The calculated 't' value of pretest and posttest mean score of knowledge, attitude and practice were 16.748(p<0.001), 3.67(p<0.001) and 7.716(p<0.001), respectively. Therefore, it is evident that the structured teaching programme was highly effective in improving the knowledge, attitude and practice of nun sisters regarding BSE and prevention of breast cancer. A statistically significant (p<0.05) associations found between pretest level of knowledge with years of religious life, level of attitude with education, occupation and age of menopause.

**Keywords:** breast self-examination, nun sisters, prevention of breast cancer

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#### INTRODUCTION

"Attitude is a little thing that makes a big difference."

Winston Churchill Around 49.6 percent of the world's population is female, given a total female population of around 3.71 billion in the world as of 2016 [1]. Breast cancer is the one of the most common malignancies affecting women. Worldwide, over 1.55 million cases of breast cancer are diagnosed every year, and 502,000 women die from the disease each year [2]. Current statistics indicate that over an entire life time (birth to death), a women's risk of developing breast cancer is one in eight.

When broken down by age, the risk for 39 years of age is 1 in 210, and it increases to 1 in 26 by 59 years of age. Approximately 80% of breast cancers are identified in women older than 50 years of age [3]. Breast cancer is the most common malignancy in Indian women second only to cervical cancer. In India the incidence of breast cancer is 30 per 100,000 women [4].

## **Need and Significance of the Study**

Breast cancer is a major public health concern throughout the world [5]. Every woman's breast is different, so it is important for individual women to be familiar with her breast in order recognize any peculiarities. The cancer produces a variety of symptoms including lump or thickening of the breast and under arm, nipple discharge or nipple turning inward, redness or scaling of the skin or ridges of the breast skin [6].

Despite extensive investigations in to the cause of breast cancer there is still no known cause and most likely involves many factors. Recommended preventive techniques to reduce breast cancer mortality and morbidity include breast self-examination (BSE), clinical breast examination (CBE), and mammography. BSE benefits for women are in two ways. Women become familiar with both the appearance and the feel of their breast and detect changes in the breast as early as possible. In the literature, it is stated that 90% of the times breast cancer is first noticed by the person herself [6].

The investigator felt that lack of knowledge, unpleasantness of procedure, and unfavorable attitude are the barriers to perform breast self-examination among nun sisters. Therefore, the investigator felt that women by allowing women to talk about breast cancer, correcting their misconceptions and providing accurate facts can reduce associated fear, anxiety and misconceptions and create positive

attitude and awareness to nun sisters. So, the investigator selected the study to assess the effect of structured teaching programme on knowledge, attitude, and practice regarding breast self-examination and prevention of breast cancer.

#### Statement of the Problem

Effect of structured teaching programme on knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer among nun sisters residing in Thrissur district

## **Objectives**

- (1) To assess the knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer among nun sisters.
- (2) To evaluate the effect of structured teaching programme on knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer among nun sisters.
- (3) To find out the association between knowledge, attitude and practice regarding breast self-examination and prevention of breast cancer with demographic variables among nun sisters.

## **Hypothesis**

H1: There will be a significant difference between pretest and posttest level of knowledge regarding breast selfexamination and prevention of breast cancer among nun sisters.

H2: There will be a significant difference between the pretest and posttest level of attitude regarding breast self-examination and prevention of breast cancer among nun sisters.

H3: There will be a significant difference between pretest and posttest level of practice regarding breast self-examination and prevention of breast cancer among nun sisters.





H4: There will be a significant association selected socio-demographic between variables and knowledge, attitude, and practice of nun sisters regarding breast self-examination and prevention of breast cancer.

### **Conceptual Framework**

The study is based on Rosen Stocks and Becker's "Health belief model."

## RESEARCH METHODOLOGY **Research Approach**

The research approach for the present study was quantitative research approach.

## Research Design

The research design adopted in this study was pre-experimental, one group pretestposttest design.

## **Setting of the Study**

Setting of the study was different Christian religious convents in Thrissur district.

## Sample and Sampling Technique

The sample for this study consisted of 100 nun sisters from Thrissur district. The sampling technique in this study was purposive sampling and samples were selected from 10 convents from Thrissur district.

### **Inclusion Criteria**

- Nun sisters belonging to Christian religious congregation in Thrissur district.
- The nun sisters who are >21 years and willing to participate.

#### **Exclusion Criteria**

- Nun sisters who are not able to perform BSE because of old age and sickness.
- Nun sisters who had previous knowledge about BSE.
- Nun sisters who are suffering from breast cancer.

#### Tool/Instrument

Research tools used for the present study

Tool 1: Structured questionnaire

- Section I: Demographic proforma
- Section II: Structured knowledge questionnaire

Tool 2: Structured attitude scale

Tool 3: Structured practice checklist

### Validity and Reliability of the Tools

Content validity was done with 5 experts comprising of one doctor and 4 specialists in medical

surgical nursing. By split-half method the reliability of the knowledge questionnaire(r=0.7), attitude scale (r=.7) and practice check list(r=0.76) were established.

## Findings and Interpretation of Data

Among the subjects 38% of subjects were in the age group of 36–50 years and 24% in the age group of >65 years. Considering their educational qualification, 67% of the subjects were having professional education. Regarding their occupation, 55% of the subjects were belonging to professional job. Thirty eight percent of the subjects were between 16 and 30 years of religious life.

Out of 100 subjects, (56%) attained menarche at the age between 14 and 16 years. Regarding to their menopause, majority of subjects (44%) were not in menopause and 35% attained menopause between 41 and 50 years. While considering the family history of cancer, 74% had no family history of cancer.

#### Classification of Subjects Based on the Knowledge, Pretest and **Posttest Attitude and Practice Regarding Breast** Self-Examination and Prevention of **Breast Cancer**

Table 1 depicts that in the pretest majority (66%) of the subjects had average knowledge and 6% had good knowledge and in the posttest majority (70%) of the subjects had good knowledge and 3% had

poor knowledge regarding BSE and prevention of breast cancer.

**Table 1.** Classification of subjects according to the pretest and posttest level of knowledge regarding BSE and prevention of breast cancer. (n=100).

I and of humaniadas	Pretest	Posttest	
Level of knowledge	Frequency	Frequency	
Good	6	70	
Average	66	27	
Poor	28	3	

Table 2 shows that in the pretest majority of the subjects (71%) had favorable attitude, 29% had positive attitude and nobody had negative attitude and in the posttest most of the subjects (87%) had

positive attitude, 13% had favorable attitude and nobody had negative attitude regarding BSE and prevention of breast cancer.

**Table 2.** Classification of subjects according to the pretest and posttest level of attitude regarding BSE and prevention of breast cancer. (n=100).

I amal of additionals	Pretest	Posttest	
Level of attitude	Frequency	Frequency	
Positive attitude	71	87	
Favorable attitude	29	13	
Negative attitude	0	0	

Table 3 depicts that in the pretest most of the subjects (84%) had poor practice and 15% had fair practice and in the posttest most of the subjects (54%) had poor practice and 15% had good practice regarding BSE and prevention of breast cancer.

**Table 3.** Classification of subjects according to the pretest and posttest level of practice regarding BSE and prevention of breast cancer. (n=100).

Level of practice	Pretest	Posttest	
	Frequency	Frequency	
Good	1	15	
Fair	15	31	
Poor	84	54	

## Effect of Structured Teaching Programme on Knowledge, Attitude and Practice Regarding Breast Self-Examination and Prevention of Breast Cancer

Table 4 indicates that the calculated paired 't' value is 16.75 and p value 0.0001. So, the difference between the mean posttest

and pretest knowledge score is statistically significant

Table 5 indicates that the calculated 't' value is 3.671 and p value 0.0001. So, the difference between the mean posttest and pretest attitude score is statistically significant.



**Table 4.** Mean, standard deviation and "t" value of knowledge scores of subjects. (n=100).

	Mean	SD	't' value	p value
Pretest	13.73	2.8064		
			16.75	0.0001**
Posttest	18.61	2.39		

<sup>\*\*</sup>Significant at 0.001 level.

**Table 5.** Mean, standard deviation and "t" value of attitude scores of subjects, (n=100).

	Mean	SD	't' value	p value
Pretest	59.17	5.74		
			3.67	0.0001**
Posttest	61.54	6.13		

<sup>\*\*</sup>Significant at 0.001 level.

Table 6 indicates that the calculated 't' value is 7.716 and p value 0.0001. So, the difference between the mean posttest and

statistically pretest attitude score is significant.

**Table 6.** Mean, standard deviation and "t" value of practice scores of subjects. (n=100).

	Mean	SD	't' value	p value
Pretest	4.39	2.61		
			7.716	0.0001**
Posttest	7.01	3.49		

<sup>\*\*</sup>Significant at 0.001 level.

## Association Between Knowledge, **Attitude and Practice with Their Demographic Variables**

Study findings reveal that there is an association between pretest level of knowledge with years of religious life and there is an association between pretest attitude with education. level of occupation and age of menopause. The calculated Fisher's exact value of years of religious life and knowledge is14.885 and p value is 0.021, which is statistically significant. The study results also show that education, occupation, and age of menopause positively changed the attitude of the nun sisters regarding BSE and prevention of breast cancer.

#### RECOMMENDATIONS

On the light of present study, the investigator suggests following the recommendations:

Similar kind of study can be performed in large scale and in different settings such as Schools, offices, colleges and in communities.

- A similar study can be done with an experimental and control group from different settings.
- A similar study can be done to assess the knowledge, attitude and practice regarding to different methods for the early detection of breast cancer.
- A similar study can be done in married nulliparity women.

#### **CONCLUSION**

The structured teaching programme was a successful endeavor in improving the knowledge, attitude and practice regarding the breast self-examination and prevention of breast cancer. Based on the findings of present study, it is concluded that the risk factors of breast cancer were prevalent among nun sisters and raising awareness about breast self-examination prevention of breast cancer is essential for its early detection and prevention. There significant improvement was knowledge, attitude and practice score among nun sisters after structured teaching programme. The findings of this study suggest the need for educating the women regarding breast self-examination, the most simple, effective and inexpensive method of preventing and detecting breast cancer.

#### REFERENCES

- [1] World population clock. Country meters. Available from: http://www.country meters.info/en/world.
- [2] P.N. Fon, C.N. Jules, E.K. Tebit, et al. Knowledge, attitude and practice of breast self-examination among female undergraduate students in the University of Buea. BMC Res Notes. [serial online]. 2015. 8(43): Available from:http://www.ncbi. nlm.nih.gov/pmc/articles/PMC44144 36/.

- [3] S.C. Smeltzer, B.G. Bare, J.L. Hinkle, K.H. Cheever. *Brunner and Sudharth's Text Book of Medical Surgical Nursing*. 12th Edn., New Delhi: Elsevier Publications; 2014.
- [4] Express News Service. New Delhi/pune May 29, 2015, 9:06; Available from: http://indianexpress.c om/article/india/india-others/breast-cancer-top-killer-among-womenlung-cancer-among-men-in-india/#sthash.LVXpq8R7.dpuf.
- [5] Padmavathy. Breast cancer among women, *Nightingale's Nurs Times*. 2015; 11(9).
- [6] S.C. Smeltzer, B.G. Bare, J.L. Hinkle, K.H. Cheever. *Brunner and Sudharth's Text Book of Medical Surgical Nursing*. 12th Edn., New Delhi: Elsevier; 2014.