

# A study to evaluate the effectiveness of pre- operative teaching on self care after mastectomy in terms of knowledge and coping ability of the patients who have undergone mastectomy in a selected hospital at Madurai

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**Abstract:** *The women's Breast is one of the most beautiful aspects of the human body. The number of cancer patients in the world is increasing of the estimated a million new cancer cases every year, more than half are in developing counties. To collect valid and reliable data. Two tools were used in this study. They are- 1.Structured interview schedule to assess knowledge, 2.Standardized coping scale to assess the coping. The nature of the study was quasi-experimental. The study was conducted in selected hospital at Madurai. The research design used for this study was two group experimental group and control group design. Data collected using both knowledge questionnaire and coping scale to assess the effectiveness of preoperative teaching on self care after Mastectomy among breast cancer patient. Sample size was total 30 ( Group I-15 and Group II-15). The data were analyzed and interpreted by using descriptive and inferential statistics. Major finding of the study revealed that - Comparison of Level of Knowledge in the Pretest and Posttest of the Experimental Group-The pretest shows that 13 (86.7%) subjects had inadequate Knowledge 2 (13.3%) had moderately adequate knowledge where as in posttest 9(60%) had adequate knowledge 6(40%) had moderately adequate knowledge. Comparisons of Mean Pretest and Posttest knowledge Score of Experimental Group-The mean posttest knowledge score of the subject (11.46) is higher than the mean pretest knowledge score 6.26 of the experimental group. The control group pretest shows that 11(73.3%) subjects had inadequate knowledge, 4(26.7%) subject had moderately adequate knowledge. In the posttest 8 (53.3%) subjects had inadequate knowledge, 7(46.7%) subjects had moderately adequate knowledge. It can be conclude that, The preoperative teaching program was found to be very effective in increasing knowledge and coping of patients who have undergone mastectomy regarding self care after mastectomy.*

**Key Word:** Evaluate, Effectiveness, Mastectomy, Knowledge, Coping ability.

## 1. INTRODUCTION:

The women's Breast is one of the most beautiful aspects of the human body and this aesthetic beauty has been captured in paintings and sculptures since time immemorial in all cultures and societies. According to WHO (1996) Cancer is a dreadful disease and cancer mortality is continuing to rise in most regions of the world. The number of cancer patients in the world is increasing of the estimated a million new cancer cases every year, more than half are in developing counties. Carol Noll Hoskins, and Judith Haber (2000), nothing is quite as threatening as the discovery of a lump in the breast, a women imagines scalpels, hears words like radiation, chemotherapy, and when the diagnosis of the breast cancer is confirmed, the threat can become a while wine of confusion and fear, testing even most stable relationships. Nurses are unique position to identify the problems, the amount of coping behaviors and knowledge of women underwent mastectomy, and to help the women to develop positive coping methods in overcoming those problems.

## 2. OBJECTIVES:

- To assess the knowledge of the patients who is undergoing mastectomy before and after giving pre-operative teaching on self care after mastectomy.
- To identify the coping ability of the patients who have undergone mastectomy before and after giving pre-operative teaching on self care after mastectomy.
- To find out the effectiveness of pre-operative teaching on self care after mastectomy for patients who have undergone mastectomy in terms of gain in knowledge and increase in coping ability.
- To seek the relationship between the knowledge and coping of patients who have undergone mastectomy regarding self care after mastectomy.
- To determine the association between the followings.
  - a. Post test knowledge score and age.
  - b. Post test knowledge score and education.
- To determine the association between the following
  - a. Post test coping score and age.
  - b. Post test coping score and education

**3. ASSUMPTIONS:**

- Preoperative teaching on self care after Mastectomy will improve the knowledge and coping ability.
- This study will create the awareness of patients who have breast related problems.
- Health education about Breast self examination will improve the Knowledge of women .

**4. HYPOTHESES:**

- **H1** Mean posttest knowledge score regarding self care after mastectomy will be significantly higher than the mean pre-test knowledge score of patient undergone mastectomy who received pre-operative teaching as measured by the structured interview schedule.
- **H2** Mean pretest knowledge score of patient undergone mastectomy in experimental group will be significantly higher than the mean posttest knowledge score of patient undergone mastectomy in the control group as measured by the structured interview schedule.
- **H3** Mean posttest coping score regarding self care after mastectomy will be significantly higher than the mean Pretest coping score of patients undergone mastectomy preoperative teaching as measured by the coping scale.
- **H4** Mean posttest coping score of patients undergone mastectomy in experimental group will be significantly higher than the mean posttest coping score of patient undergone mastectomy in the control group as measured by coping scale.
- **H5** There will be a significant relationship between posttest knowledge score and posttest coping score regarding self care after mastectomy in the experimental group.
- **H6** There will be a significant association between posttest knowledge score of experimental group and selected demographic variables (age and education) among patients with mastectomy who had pre-operative teaching.
- **H7** There will be a significant association between posttest coping score of experimental and selected demographic variables (age and education) among patients with mastectomy who had pre-operative teaching.

**5. RESEARCH APPROACH:**

Quantitative research approach is used for this study.

- **Research design**  
quasi-experimental research design (two group pre test – post test and control group design was adopted for the study)

This study had control group and manipulation without randomization.

Group	Pre test	Intervention	Post test
E	K1C1	X	K2C2
C	K3C3	-	K4C4

- E = Experimental group
- C = Control Group
- K1 = Pretest assessment of experimental group knowledge score
- C1 = Pretest assessment of experimental group coping score
- X = Administration of pre-operative teaching to experimental group
- K2 = Post test assessment of experimental group knowledge score
- C2 = Post test assessment of experimental group coping score
- K3 = Pretest assessment of control group knowledge score
- C3 = Pretest assessment of control group coping score
- K4 = Post test assessment of control group knowledge score
- C4 = Post test assessment of control group coping score

- **Setting**  
The study was conducted in Rajaji Gov. Hospital, which is 1890 bedded super speciality hospital at Madurai.
- **Population**  
Patients who have undergone mastectomy from the Government Rajaji Hospital, Madurai.

- **Sample**  
In this study the sample is patients who have undergone mastectomy between the age group of 30 – 60 years.
- **Sample size**  
30 patients who have undergone mastectomy surgery. Out of which, 15 patients were in experimental group and 15 were in control group.
- **Sampling technique**  
The sample for the study was selected by Purposive sampling technique.
- **Data collection instrument**  
Demographic variables.  
Structured interview schedule to assess knowledge.  
Standardized coping scale to assess the coping.

## SECTION 1 –

### Demographic characteristics of the participants

- 1.1 With regard to distribution of age, 13.3% from control group and 26.7% from experimental group were in the age group of 36-40 years and 20% from the control group and 13.3% from the experimental group were between the age group 51 – 55 years.
- 1.2 Regarding educational status 46.7% in the control group and 40% in experimental group had primary education and 20% in control group and 46.7% in experimental group had high school education.
- 1.3 With regard to the marital status 12 (80%) patients with mastectomy were married and 3(20%) were widow in the control group. In experimental group 14 (93.3%) subjects were married and 1(6.7%) were widow.
- 1.4 The socio economic status of the participants shows that majority of the participants in both the experimental group (66.7%) and control group (86.7%) had family monthly income of below Rs. 1000.

## SECTION 2 -

### Knowledge Regarding Self-care after Mastectomy

- 2.1 Comparison of Level of Knowledge in the Pretest and Posttest of the Experimental Group, The pretest shows that 13 (86.7%) subjects had inadequate Knowledge 2 (13.3%) had moderately adequate knowledge where as in posttest 9(60%) had adequate knowledge 6(40%) had moderately adequate knowledge. This shows that there is a marked difference between the pretest knowledge scores.
- 2.2 Comparisons of Mean Pretest and Posttest knowledge Score of Experimental Group, The mean posttest knowledge score of the subject (11.46) is higher than the mean pretest knowledge score 6.26 of the experimental group. The obtained 't' value is 18.43 which is significant at 0.05 level. It implies that the preoperative teaching programme has a significant effect in increasing the knowledge of the subjects.

## SECTION 3 –

### Comparison of knowledge Score of Control Group

- 3.1 The control group pretest shows that 11(73.3%) subjects had inadequate knowledge, 4(26.7%) subject had moderately adequate knowledge. In the posttest 8 (53.3%) subjects had inadequate knowledge, 7(46.7%) subjects had moderately adequate knowledge.

## SECTION 4 –

### Comparison of Coping Score of Experimental Group

- 4.1 Comparison between Pretest Coping and Posttest Coping Scores, In the pretest 10 (66.6%) had low coping, 4(26.7%) had moderate coping, 1(6.7%) had high coping, where as in posttest 10 (66.7%) had high coping, 5 (33.3%) had moderate coping and none of them had low coping. It shows that there was coping variations between the pretest coping score and posttest coping score, which reveals that effectiveness of preoperative teaching regarding mastectomy.
- 4.2 Comparison of Mean Pretest Coping Score and Mean Posttest Coping Score, The mean posttest score 92.1 was higher than the mean pretest score 45.1 The obtained 't' value is 8.996 which is significant at 0.05 levels. This implies that the pre-operative teaching regarding self care after mastectomy has a significant effect in increasing the coping regarding mastectomy.

## SECTION 5 –

### Comparison of Coping Score of Control Group

5.1 Comparison of pretest Coping and Posttest Coping Score Control Group, In the pretest 9(60%) had low coping 6(40%) had moderate coping and none of them had adequate coping, where as in post test 8 (53.3%) had low coping, 7 (46.7%) had moderate coping and also none of them had adequate coping.

## SECTION 6 –

### Relationship between Knowledge and Coping

6.1 There was a significant negative relationship between posttest knowledge scores and posttest coping score of experimental group.

6.2 There was a significant negative relationship between pretest knowledge score and pretest coping of experimental group.

## SECTION 7 –

### Association between Knowledge Score and demographic variable (Age and Education)

7.1 There was no significant association of knowledge score between age and education. The age group of patient with mastectomy was df (4) the calculated value  $\chi^2 = 3.47 < 7.82$ . Association between the Coping Score and demographic variable (Age and Education).

7.2 There was a significant association of coping score between age and education. The age of patients with mastectomy df (4) the calculated value  $\chi^2 = (15.47 > 9.49)$  and for education of patients of patients with mastectomy and df (3). The calculated value  $\chi^3 = (9.37 > 7.82)$ .

## 6. RECOMMENDATION:

The study recommends the following for further research:-

- The study can be conducted in large sample for better generalization.
- Study can be done on knowledge regarding self care after mastectomy and breast self examination.
- True experimental study can be done in the same study.
- A comparative study of coping skill and body image disturbances among mastectomy patients.

## 7. CONCLUSION:

The knowledge of the patient who have undergone mastectomy had pre-operative teaching programme regarding self care after mastectomy was increased significantly increased than the patients who did not have pre-operative teaching programme in surgical wards of Government Rajaji Hospital.

- The coping regarding mastectomy in the experimental group (who had pre-operative teaching programme) was significantly higher than the patient who have undergone mastectomy who did not have pre-operative teaching programme.
- The preoperative teaching programme was found to be very effective in increasing knowledge and coping of patients who have undergone mastectomy regarding self care after mastectomy.
- The study was shown that, there is a negative relationship between knowledge and coping regarding self care after mastectomy among the patients who have undergone mastectomy in surgical wards of Government Rajaji hospital.

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