

The effect of arm massage on reduction of lymphedema and perceived discomfort among clients with mastectomy at selected hospital

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Abstract: Breast cancer is the most common cancer among women. The study was conducted to evaluate the effectiveness of arm massage on lymphedema and perceived discomfort among patients with mastectomy in experimental group. The research design Quasi experimental non-equivalent control group design. Data collection done by screening the patients with mastectomy. 30 subjects were in experimental group. 30 subjects were in control group. selected by non-randomized sampling technique. Data collection done by perceived discomfort proforma, circumferential arm measurement. The pretest level of perceived discomfort 28 (98.33%) had severe discomfort. In posttest level of perceived discomfort 20 (66.67%) had mild discomfort in experimental group. In experimental group were having pretest level of lymphedema 19 (63.33%) had severe lymphedema. In posttest level of lymphedema 30(100%) had mild lymphedema. The calculated pretest perceived discomfort mean score was 21.57 with standard deviation of 2.80 and posttest mean score was 8.97 with standard deviation of 2.86 and mean difference was 12.60 calculated 't' value was 20. 673.which showed a significance difference between the pretest and post test score of effectiveness of arm massage among patients with mastectomy in experimental group at $p < 0.05$ level of significance. There was a significance difference between pretest and post test score of effectiveness of arm massage among patients with mastectomy in experimental group at $p < 0.05$ level of significance. The outcome of the study it was evident that the arm massage for mastectomy patients was effective.

Keywords: Effectiveness, arm massage, lymphedema, perceived discomfort.

1. INTRODUCTION:

Breast cancer is the most common malignancy in Indian women. In India the incidence of breast cancer is 30 per 1,00,000 women. Post mastectomy pain syndrome incidence after mastectomy range from 20% to 68%. The pain can start in the immediate post-operative period, or onset can be delayed up to 6 months.

The pain is typically experienced as a shooting or burning pain, with point tenderness. Lymphedema occurs in about 10% - 60% of patients. Lymphedema involves the accumulation of protein-rich fluid that impacts physical, functional, and psychosocial health and well-being. breast cancer treatments damage and potentially weaken the lymph nodes and the vessels carrying lymph fluid, which may then compromise the effectiveness of the valves in the lymph vessels.

The pain is typically experienced as a shooting or burning pain, with point tenderness. Lymphedema occurs in about 10% - 60% of patients who undergo mastectomy and in about 0% -8% of patients who have axillary lymph node dissection. women with mastectomy related lymphedema report a variety of physical symptoms like pain, heaviness, tenderness, numbness, limited range of motion, and stiffness, arm swelling is the most common.

Massage therapy for lymphedema should begin with trained in treating lymphedema. In this type of massage, the soft tissues of the body are lightly rubbed, tapped, and stroked. The investigator's experienced patients were suffering with lymphedema during post operative day. Based on the prevalence of lymphedema among patients with mastectomy the investigator motivated to conduct an evaluative study to observe the effectiveness of arm massage in reducing lymphedema and related discomfort. There is an important role for nurses to help people understand the risk and set realistic goals to improve quality of life of the patients.

2. MATERIALS AND METHODS

To accomplish the task quantitative evaluative research approach was used for this study. Quasi experimental non-equivalent control group design was used for the study. Non probability convenient sampling technique was adopted to select 60 post mastectomy patients 30 samples in experimental and 30 samples in control group. The subjects were selected based on inclusion criteria. Tools were used lymph edema Performa, arm circumferential measurement. Data collection was done after Obtaining from Administrator of DR.BR AMBEDKAR hospital. Informed consent was taken from patients. Pre-test was conducted with intervention for experimental group. Administered massage therapy. Post test was conducted for experimental group. Descriptive and inferential statistics were used for the analysis and interpretation of data. The conceptual framework used in the study was based on Imogene King’s goal attainment theory.

3. OBJECTIVES

- To assess the level of lymphedema and perceived discomfort among patients with mastectomy.
- To assess the effectiveness of arm massage in reduction of perceived discomfort and lymph edema among patient with mastectomy.
- To find out the association between pre and post test score of perceived discomfort and lymphedema among patients with their demographic variables.

4. RESEARCH HYPOTHESES

H1 There will be a significant reduction in perceived discomfort and lymph edema among patients with mastectomy who receives arm massage.

H2 There will be a significant association between the posttest level of perceived discomfort and lymph edema with selected demographic variables of patients with mastectomy who receives arm massage.

5. RESULTS and DISCUSSION:

The findings of the study were discussed based on objectives:

Pre-test and post-test level of perceived discomfort among patients with mastectomy in control group

n=30

Perceived discomfort	CONTROL GROUP			
	PRE-TEST		POST TEST	
	F	%	F	%
NO	0	0	0	0
MINIMAL	0	0	1	3.33
MILD	0	0	8	26.67
MODERATE	3	10	18	60
SEVERE	27	90	3	10

Table 1 In pretest, majority 27(90%) severe perceived discomfort and the next majority 3(10%) moderate perceived discomfort and no subjects were found in mild, minimal and no perceived discomfort. In posttest, majority 18(60%) moderate perceived discomfort and the next majority 8(26.67%) mild perceived discomfort, 3 (10%) severe perceived discomfort, 1(3.33%) minimal perceived discomfort.

Pre-test and post-test level of Lymphedema among patients with mastectomy in experimental group

n=30

Lymphedema	EXPERIMENTAL GROUP			
	PRE-TEST		POST TEST	
	F	%	F	%
MILD	11	36.67	30	100
MODERATE	19	63.33	0	0

SEVERE	0	0	0	0
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Table 2 In pretest, majority 19(63.33%) moderate lymphedema and the next majority 11(36.67%) mild lymphedema and no subjects were found in severe lymphedema. In posttest, majority 30 (100%) mild lymphedema.

Comparison of mean perceived discomfort score in posttest among patients with mastectomy in experimental and control group.

n=30

GROUPS	Total score	Perceived discomfort			
		mean	S. D	Mean difference	't' value
Experimental group	24	8.97	2.86	5.13	t=6.322*** S
Control group	24	14.10	3.41		

P<0.05*** S-Significant

Table 3 shows, in experimental group perceived discomfort mean score was 8.97 with the standard deviation of 2.86. In control group perceived discomfort mean score was 14.10 with standard deviation of 3.41. The calculated 't' value 6.322 was significant at p<0.05 level.

Comparison of mean lymphedema score in posttest among patients with mastectomy in experimental and control group.

n=30

GROUPS	Maximum score	Lymphedema			
		mean	S.D	Mean difference	't' value
Experimental group	5	0.35	0.3847	2.05	t=9.794*** S
Control group	5	2.4	1.1017		

P<0.05*** S-Significant

Table 4 shows, in experimental group lymphedema mean score was 0.35 with the standard deviation of 0.3847. In control group lymphedema mean score was 2.4 with standard deviation of 1.1017. The calculated 't' value 9.794 was significant at p<0.05 level.

Nursing practice

This can be facilitated by motivating the nurse to,

- 1) In-depth knowledge on physiological changes during mastectomy and management for lymphedema, perceived discomfort among mastectomy patients.
- 2) Develop skill in providing efficient nursing care for effective reduction of perceived discomfort, lymphedema management and promote comfort.

Nursing Education

- 1) Ensure that the students learn the normal physiological changes during mastectomy and its management.
- 2) Provide adequate clinical exposure for the students to give effective and safe nursing care for menopausal women with reduction of lymphedema, perceived discomfort.

Nursing Research

- 1) As a nurse researcher, promote more research on effective management for perceived discomfort, lymphedema during mastectomy.
- 2) Disseminate the findings of the research through conferences, seminars and publishing in nursing journal.

6. RECOMMENDATION FOR FUTURE RESEARCH

The study recommends the following future research,

The similar study can be conducted with large samples for better generalization as a longitudinal study. It can be conducted to assess the effectiveness of other nursing measures such as exercise, use of constructive clothes for reduction of perceived discomfort, lymphedema among mastectomy patients.

7. CONCLUSION

The purpose of the study was to assess the effectiveness of arm massage on reduction of perceived discomfort, lymphedema among patients with mastectomy. The intentional study proved reduction of perceived discomfort and lymphedema for post mastectomy. The pretest and posttest mean and standard deviation were calculated. The reduction of perceived discomfort and lymphedema was significant at 0.05 level. From the above findings, it is evident that arm massage was to be effective in reducing perceived discomfort and lymphedema among patients with mastectomy.

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