

A STUDY TO ASSESS THE EFFECT OF PLANNED TEACHING REGARDING THE POST MASTECTOMY EXERCISES ON PRACTICES AMONG THE WOMEN UNDERGOING MASTECTOMY IN SELECTED ONCOLOGY CENTERS OF SANGLI, MIRAJ, KUPWAD CORPORATION AREA

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ABSTRACT

Background: Breast is the mental personality of a woman's sexual conceit. The surgical procedure for breast cancer is a mastectomy. Mastectomy is the surgical removal of one or both breasts, either partly or completely. Following mastectomy probable complications are likely to occur and lymphedema is one of the dreadful complications. Post mastectomy exercises play an important role in prevention of complications by releasing muscular tension, preventing contractures and restoring strength. **Objectives:** To assess the existing practices regarding the post mastectomy exercises. To assess the practices after planned teaching regarding the post mastectomy exercises. To compare pre-test practices score with post-test practices score. To find out the association of pre-test practices score with selected demographic variables. **Hypothesis of the study:** H_0 – There is no significant difference between pre-test and post-test practices score regarding the post mastectomy exercises among the women undergoing mastectomy. H_1 – There is significant difference between pre-test and post-test practices score regarding the post mastectomy exercises among the women undergoing mastectomy. **Materials and methods:** A pre-experimental one group pre-test post-test research design without control group approach was undertaken among the women who undergone mastectomy at selected oncology centers of Sangli, Miraj, Kupwad corporation area. A total of 25 pre-operative women who undergoing mastectomy were selected using non probability purposive sampling technique. Observation checklist tool was used to evaluate the effect of planned teaching regarding the post mastectomy exercises. The planned teaching with demonstration of post mastectomy exercises was given after pre-test and on the 7th day post-test was given with redemonstrations of performed exercises. **Results and Conclusion:** The findings of the study showed that, the pre-test practices score was (13.08 ± 2.25) and in the post-test practices score was (17.56 ± 3.59) . The statistics value of the t value was 5.58373 and p value 0.00001. Shows the significant difference in the pre-test and post-test practices score regarding post mastectomy exercises. The findings of the study showed that the post-test practices score was higher than the pre-test practices score. Hence the planned teaching had improved practices of exercises.

KEYWORDS: Practices, planned teaching, post mastectomy exercises, women undergoing mastectomy, demographic variables.

INTRODUCTION

Cancer is the leading cause of morbidity and mortality in the world. According to the **International Agency for Research on Cancer**, this recorded 18.1 million new cases and 9.6 million deaths in 2018. In worldwide increasing the number of new cancer cases an estimated 27.5 million in 2040. Cancer is one of the leading cause

of mortality and morbidity in India an estimated 1.16 million new cancer cases registered each year and 7,84,821 death in each year.

Mastectomy is the surgical removal of one or both breasts, either partly or completely. The common complications after mastectomy include lymphedema, seroma and reduced range of motion, which may lead to

shoulder dysfunction. After mastectomy patients do the regular exercises to help improving the activities. Post-mastectomy exercises are very important for avoiding complications by relaxing muscle tension, restoring strength, avoiding scar tissue formation, and increasing the elasticity of joints and muscles that have been compromised by the surgery. Exercises should be initiated in acute phase which is around 72 hours.

MATERIAL AND METHODS

In the study, quantitative research approach was used. Pre-experimental one group pre-test post-test research design was used. The study consisted variables such as the independent variable i.e. planned teaching and dependent variable i.e. practices. The populations of the

study were women undergoing mastectomy. Women who are willing to participate in study, women who are admitted 2 days before mastectomy and women who understand Marathi language were included in the study while women who have complications between the period of postoperative day 1st and 3rd were excluded from the study. The study consisted of 25 samples were selected by using non-probability purposive sampling technique. The tool consists of two parts namely - Part A: Demographic variables, Part B: observational checklist of post mastectomy exercises. The scoring for practices was based on correct and incorrect response. Each correct response carried a score of "one" and incorrect response scored "zero".

RESULTS

Table no. 1: Frequency and percentage distribution of selected demographic variables.

N=25

Variable	Groups	Frequency	Percentage
Age (in years)	21-30	2	8.00
	31-40	5	20.00
	41-50	9	36.00
	above 50	9	36.00
Educational Qualification	No Formal Education	0	0.00
	Primary	12	48.00
	Higher Secondary	9	36.00
	Graduate	4	16.00
	Post Graduate	0	0.00
Family History of Cancer	Yes	8	32.00
	No	17	68.00
Previous Information received regarding post mastectomy exercises	Yes	7	28.00
	No	18	72.00
Source of Information	Family Members	3	12.00
	Neighbours	0	0.00
	Health care provider	2	8.00
	Electronic Media	2	8.00

Above table shown that maximum participants (36%) are 41-50 age and above 50 years of age. 48% women had primary educational qualification. 68% women had no family history of cancer. 72% women had not received information regarding post mastectomy exercise. 12% women had received information from family members and 8% women had received information from health care provider and electronic media.

For the above table shown that the total score of practices are 700, in the pre-test practices 322 (46%) are correct practices and 378 (54%) are incorrect practices. The total 700 score are formed by the total sample of 25 are correctly performing the 28 steps of exercises.

Table no. 2: Frequency & percentage distribution of pre-test practices score regarding post mastectomy exercises.

N=25

Exercises performance	Frequency	Percentage
Correct	322	46.00
Incorrect	378	54.00

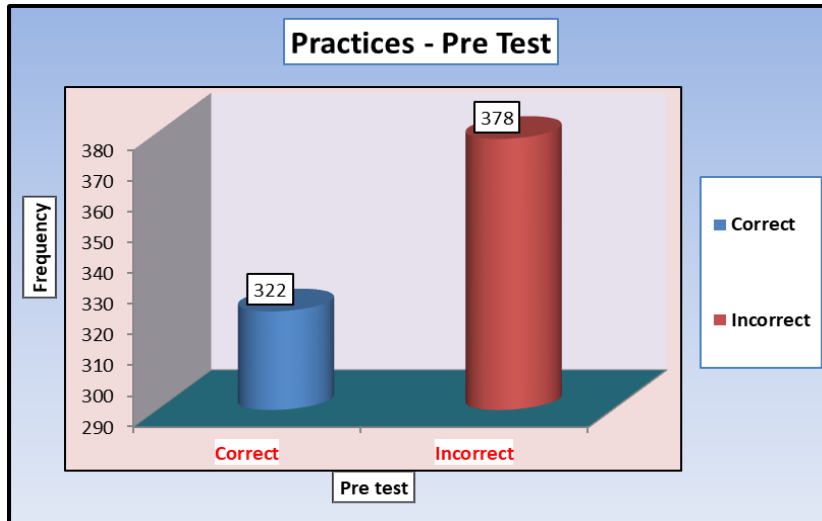


Figure No-1: Frequency & percentage distribution of pre -test practices score regarding post mastectomy exercises.

Table no.3: Frequency & percentage distribution of post -test practices score regarding post mastectomy exercises.

N=25

Exercises performance	Frequency	Percentage
Correct	444	63.43
Incorrect	256	36.57

For the above table shown that the total score of practices are 700, in the post-test practices 444 (63.43%) are correct practices and 256 (36.57%) are incorrect practices. The total 700 score are formed by the total sample of 25 are correctly performing the 28 steps of exercises.

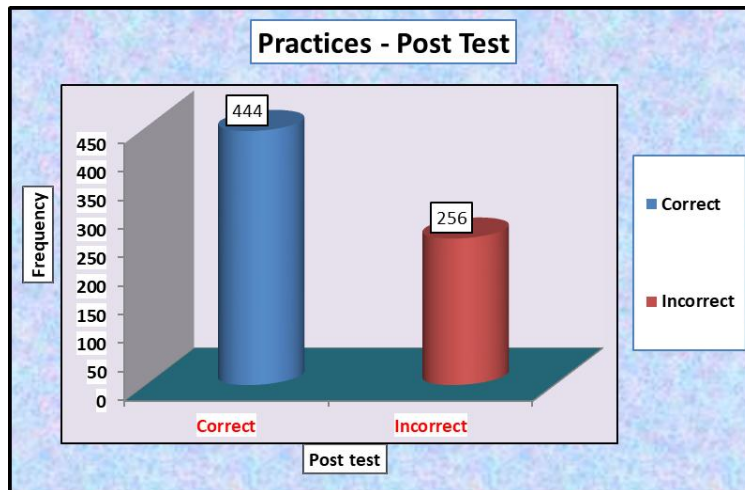


Figure No-2: Frequency & percentage distribution of post -test practices score regarding post mastectomy exercises.

Table no.4: Comparison of pre and post practices score of correct practices regarding post mastectomy exercises.

N=25

SR.NO	EXERCISES	PRE TEST		POST TEST		't' value	'p' value
		MEAN	S.D.	MEAN	S.D.		
1	Deep breathing exercises	3.00	1.04	3.28	0.98	1.070607	0.295
2	Pursed lip breathing exercises	2.60	1.00	4.00	0.00	7	0.00001
3	Shoulder flexion exercises	2.40	0.87	3.28	1.28	3.772969	0.00093
4	Shoulder abduction exercises	1.76	0.72	3.28	1.28	4.87875	0.00006
5	Shoulder shrug circles exercises	1.68	0.90	1.40	0.50	-1.231042	0.23024
6	Wall climbing exercises	1.64	0.81	2.32	0.48	3.440375	0.00213

***p<0.05 significant

For the above table shown that the comparison of pre and post practices score of correct practices was done by the paired t test. The deep breathing exercises are not important since the paired t value is 1.070607 and the p value is 0.295, which is greater than 0.05. From 3.00 to 3.28, the pre- and post-test score was increased. As a result, it appears that the planned teaching and demonstration of post-mastectomy exercises were successful. The pursed lip breathing exercises have a paired t value of 7 and a p value of 0.00001, which is greater than 0.05. The shoulder flexion exercises have a t value of 3.772969 and a p value of 0.00093, indicating that they are significant. The shoulder abduction exercises have a t value of 4.87875 and a p value of 0.00006, indicating that they are significant. The shoulder shrug circles exercises are not significant since the t value is -1.231042 and the p value is 0.23024. The

wall climbing exercises are significant since the t value is 3.440375 and the p value is 0.00213 (less than 0.05).

Table no.5: Comparison of pre and post practices score regarding post mastectomy exercises. N=25

Test	Mean	S.D.	t value	P value
Pre Test	13.08	2.25	5.58373	0.00001
Post Test	17.56	3.59		

The comparisons of the pre-test and post-test means of the practices were done by the paired t test. The test statistics value of the paired t test was 5.58373 with p value 0.00001. The p value less than 0.05 hence reject the null hypothesis and accept the alternative hypothesis.

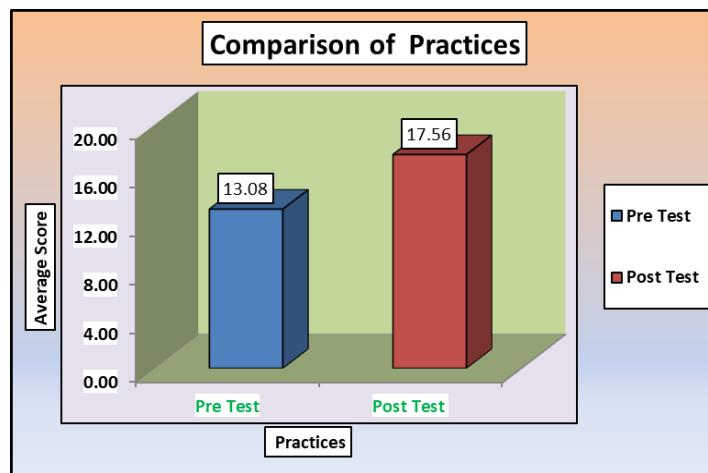


Figure .no.3: Comparison of pre-test and post-test practices score regarding post mastectomy exercises.

Table no.6: Association of the pre-test practices score with selected demographic variables. N=25

Variable	Groups	Pre-test practices score		Chi-square	d.f.	P value	significance
		Correct	Incorrect				
Age (in years)	21-30	31	25	2.34	3	0.5049	Not Significant
	31-40	68	72				
	41-50	115	137				
	above 50	113	139				
Educational Qualification	No Formal Education	0	0	2.28	2	0.319819	Not Significant
	Primary	148	188				
	Higher Secondary	121	131				
	Graduate	58	54				
	Post Graduate	0	0				
Family history of cancer	Yes	105	119	0.003418	1	0.953502	Not Significant
	No	222	254				
Previous Information received regarding post mastectomy exercises	Yes	98	98	1.18	1	0.2774	Not Significant
	No	229	275				

Calculated p value is more than 0.05 hence there are not significant associations of pre-test practices score with demographic variable. The demographic variable of

source of information had cannot conduct the chi square test.

DISCUSSION AND CONCLUSION

In the present study it was found that the post mastectomy exercises practices were less done till 4th post-operative day because of pain related to surgery and presence of drain so the participants was not able to perform exercises up to the full extent. After discharge of the participants the investigator had communication through phone call with the participants about the post mastectomy exercises which were advised by the investigator to be done at home. Received feedback about the participant are doing post mastectomy exercises regularly and there is an improvement felt themselves and they are carrying daily activities

The post-test practices score was higher than the pre-test practices score, according to the study's results. The comparison of the pre-test and post-test practices score was significantly. Hence the planned teaching had improved the practices of exercises. So the planned teaching regarding the post mastectomy exercises was effective.

REFERENCES

1. Global cancer facts and figures. International agency of research on cancer. <http://www.who.int/cancer/PRGloboconFinal>.
2. Ashwini. K.N, satyanarayana.T.E, Ramesh C. A study to assess the effectiveness of video assisted teaching on knowledge regarding post mastectomy exercises among breast cancer patients at Kidwai Memorial Institute of oncology, Bangalore.2018, vol-8. Page no.176-181. https://www.ijhsr.org/IJHSR_Vol.8_Issue.8_Aug2018/26.pdf
3. Sisman H, Sahin B, Duman BB, Tanriverdi G. Nurse-assisted education and exercise decrease the prevalence and morbidity of lymphedema following breast cancer surgery. J BUON. 2012 Jul-Sep; 17(3): 565-9. PMID: 23033300.