

Effectiveness of Progressive Muscle Relaxation Therapy in Reducing Stress among Patients with Abdominal Surgery for Cancer Treatment

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ABSTRACT: A Study to assess the effectiveness of progressive muscle relaxation therapy in reducing stress among patients with abdominal surgery for cancer treatment from selected hospital in Chennai. A quasi experimental design was used and the conceptual frame work of the study was based on Sister Callista Roy Adaptation model. Non equivalent control group pre-test and post design was used for this study. Purposive sampling technique was used to select the samples. All the samples who were admitted in surgical oncology ward were included in the study. The total sample size was 60, 30 in the experimental group and 30 in the control group. The tool used for data collection had two parts. Part one was the demographic profile of the cancer patients and part two was Stress rating scale. The mean level of stress (82.04) after the use of PMRT was lower than the mean level of stress (112.43) before the use of PMRT. The obtained t value df (29) was significant at 0.05 level. The findings imply that the PMRT had a significant effect in reducing the stress of patients with cancer.

The mean post test level of stress in experimental group was lower than the mean post test level of stress in control group (82.04) and (115.32) respectively. The obtained t value of 5.06 at df (58) was significant at .05 level.

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KEYWORDS: stress, effectiveness, progressive muscle relaxation therapy, abdominal surgery

I. INTRODUCTION

Stress is a state produced by a change in the environment that is perceived as a challenging, threatening or damaging to the person's dynamic balance or equilibrium (Brunner 2004). Relaxation is the state of generalized decreased cognitive, physiological or behavioural arousal. Relaxation is also defined as arousal reduction. The process of relaxation elongates the muscle fibres, reduces the neural impulses to the brain and thus decreases the activity of the brain as well as other body system (Barbara Kozier, 2004).

STATEMENT OF THE PROBLEM: A study to assess the effectiveness of progressive muscle relaxation therapy in reducing stress among patients with abdominal surgery for cancer treatment from selected hospital in Chennai.

OBJECTIVES:

1. To find out the level of stress among patients with abdominal surgery before and after progressive muscle relaxation therapy.
2. To find out the effectiveness of progressive muscle relaxation therapy in terms of decrease in the level of stress among patients with abdominal surgery.
3. To compare the post level of stress between the experimental group and the control group.
4. To seek association between post-test stress level of experimental group and selected variables (age, sex, educational status, marital status, duration of illness, classification of cancer and nature of surgery).

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HYPOTHESES:

- The mean post test score of experimental group will be significantly lower than the mean pretest stress score after administration of progressive muscle relaxation therapy among patients with abdominal surgery for cancer treatment.
- The mean post test score of experimental group will be significantly lesser than the post test score of control group among patients with abdominal surgery for cancer treatment.
- There will be significantly association between post test level of stress and selected variables of experimental group (age, sex, educational status, marital status, duration of illness, classification of cancer and nature of surgery).

II. OPERATIONAL DEFINITIONS

EFFECTIVENESS: It is the most outcome of progressive muscle relaxation therapy in producing reduction of stress in post operative cancer surgery patients. It is measured through stress rating scale.

Progressive Muscle Relaxation Therapy: It refers to a programme of relaxation based on relaxing body muscle and muscle groups. In this study "YOGA NITHRA" WAS USED.

STRESS: It is defined as a biochemical response of the body to any threatening situation. In this study, stress refers to the feeling of tension experienced by the patients after surgery which was measured through "stress rating scale."

ABDOMINAL SURGERY: The term abdominal surgery covers generally the operations which involve opening the abdominal cavity, and in modern times this field of work has been greatly extended. In this study abdominal surgery refers to the patients who underwent opening of the abdominal cavity for cancer treatment.

PATIENTS WITH CANCER SURGERY: Patients who are diagnosed to have cancer by physicians and who had undergone for surgery related to cancer in abdominal cavity selected on second postoperative day.

CONCEPTUAL FRAMEWORK: The conceptual framework of this study was based on the sister callistaroys adaptation model.

RESEARCH APPROACH: Experimental approach was used in this study.

RESEARCH DESIGN: Quasi experimental pretest post test control group design was used in this study.

STUDY POPULATION: The population for the study were patients who had undergone abdominal surgery for cancer.

SAMPLE: All the patients who had undergone surgery for abdominal cancer in a selected hospital and who met the inclusion criteria were samples.

Sample size: The sample size was 60 out of which 30 patients were in the experimental group and 30 were in the control group.

SAMPLING TECHNIQUE: Purposive sampling technique was used in this study.

RESEARCH TOOL AND TECHNIQUE;

TOOL I: It consists of a structured interview schedule. It has questions related to the demographic data and disease condition of the patient.

Tool III: Stress rating scale was used in this study. Total score is 150. This is categorized in three groups such as mild, moderate and severe. A Score Of 0-50 Indicates Mild Stress, 51-100 Indicates Moderate Stress And 101 -150 Indicates Severe Stress.

DATA ANALYSIS:

The data analysis was done according to the objectives of the study by using inferential and descriptive statistics.

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TABLE I
Distributon of subjects according to the stress level before and after the use of PMRT in the Experimental group.

LEVEL OF STRESS	BEFORE ADMINISTRATION OF PMRT		AFTER ADMINISTRATION OF PMRT	
	f	%	F	%
Mild (0-50)	-	-	-	-
Moderate (51-100)	4	13.33	25	83.33
Severe(101-150)	26	86.67	5	16.67

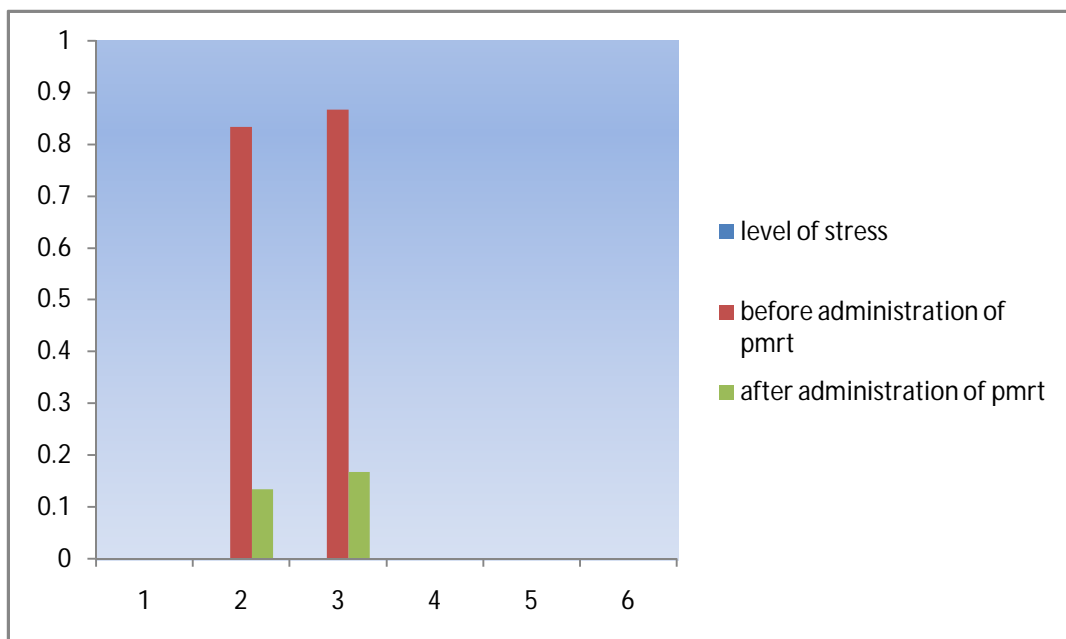


TABLE II
DISTRIBUTION OF SUBJECTS ACCORDING TO THE POST TEST LEVEL OF STRESS IN EXPERIMENTAL GROUP AND CONTROL GROUP

LEVEL OF STRESS	EXPERIMENTAL GROUP n = 30		CONTROL GROUP n=30	
	f	%	f	%
MILD	-	-	-	-
MODERATE	25	83.33	2	6.67
SEVERE	5	16.67	28	93.33

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TABLE III

Comparison of mean level of stress before and after the use of PMRT in experimental group

VARIABLES	N	MEAN	SD	t-value
LEVEL OF STRESS BEFORE THE USE OF PMRT	30	112.4	12.7	31.34
LEVEL OF STRESS AFTER THE USE OF PMRT	30	82.04	13.63	

TABLE IV

Comparison of the mean level of the posttest stress of the experimental group and control group

Group	N	Mean	SD	t- value
Experimental group	30	82.04	13.63	5.06
Control group	30	115.32	33.10	

Major findings of the study

- The mean level of stress (82.04) after the use of PMRT was lower than the mean level of stress (112.43) before the use of PMRT. The obtained t value df (29) was significant at 0.05 level. The findings imply that the PMRT had a significant effect in reducing the stress of patients with cancer.
- The mean post test level of stress in experimental group was lower than the mean post test level of stress in control group (82.04) and (115.32) respectively. The obtained t value of 5.06 at df (58) was significant at .05 level.
- There was no significant association between reduction in the level of stress and selected variables.

III. CONCLUSION

The level of stress of patients with surgery for cancer decreased after PMRT. The study found that there was no association between decrease in the level of stress and selected variables.

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