



REVIEW ARTICLE

A QUASI STUDY TO ASSESS THE COPING MECHANISM IN PREOPERATIVE PATIENTS UNDERGOING SURGERY IN SELECTED HOSPITALS, LUDHIANA

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ABSTRACT

This experiment A Quasi study to assess the Coping Mechanism in Preoperative Patients Undergoing Surgery in Selected Hospitals, Ludhiana, Punjab. It is totally normal to feel anxious before surgery. Even if an operations can restore your health or even save your life, most people feel uncomfortable about "going under the knife." It is important to make sure that fears and anxiety do not become too overwhelming. Hospitalization for surgical procedure can be experienced as a threat or stressor and may produce anxiety in patients. The present study is aimed to assess the coping mechanisms in Preoperative patients Undergoing Surgery in selected hospitals, Ludhiana, Punjab. The main objectives were to assess the coping mechanisms in preoperative patients undergoing surgery, to identify the relationship of coping mechanisms with selected variables i.e, age, sex, education, occupation and type of surgery, to prepare guidelines for preoperative patient for relieving anxiety. A Quasi experimental research approach, A single group pre-test and post -test design was used for the present study by taking three hundred (300) patients who are admitted in the selected hospitals in Ludhiana, Punjab. Purposive sampling technique was used in this study .The data were analysed by using the descriptive and inferential statistics i.e. mean, mean percentage, standard deviation, t-test, ANOVA, degree of freedom, etc. According to The pre-testpercentage score coping mechanism 87.67% of the patient's had maladaptive coping and 12.33% of the patient's had adaptive coping before the structured teaching programmed. According to post-testpercentage score coping mechanism 78.33% of the patient's had adaptive coping and 21.67% had maladaptive coping. There is a difference between the pre-test and post-test coping mechanism score. The mean post-test highest coping mechanism score was 9.191 and the mean pre-test coping mechanism score was 5.746. Thus the result showed that there is a significant effect of STP at $p < 0.05$ level.

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INTRODUCTION

It is totally normal to feel anxious before surgery. Even if an operation can restore your health or even save your life, most people feel uncomfortable about "going under the knife." It is important to make sure that fears and anxiety do not become too overwhelming. There is no cure-all for anxiety. But there are many things that can help people better cope with anxiety before surgery: Many hospitals offer special support, and family and friends can help too. Preoperative teaching is a vital aspect during before surgery. Preoperative teaching facilitates coping by enhancing the sense of self-respect and psychological well-being of patients. 78% of surgical patients had reported the effectiveness of preoperative teaching in reducing anxiety. Studies showed that psychological preparation could not accomplish everything.

However psychological relaxation techniques such as distraction and imagery have significantly reduced the anxiety level. Fitzpatrick E, Hyde A. (2006) Preoperative Patient Education pertains to various types of educational interventions that occur before surgery to prepare patients for the increasing physical and psychological demands during and after the operation. These provisions include health information, skill training for patients on the use of pain pumps, and provision of psychosocial support to address patients' anxieties, needs, and concerns.

Statement of Problem: A Quasi experimental Study to assess the coping mechanisms in Preoperative Patients Undergoing Surgery in selected hospitals, Ludhiana, Punjab.

Objectives

- To assess the coping mechanisms in preoperative patients undergoing surgery.

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- To identify the relationship of coping mechanisms with selected variables i.e. age, sex, education, occupation and type of surgery.
- To prepare guidelines for preoperative patient for relieving anxiety.

Purpose

The purpose of this study is to assess the pre-operative anxiety with best coping mechanisms of patients undergoing surgery.

Delimitation of the study: The study is limited to

- Surgery in selected hospitals in Ludhiana.
- Specific age group from 18 years and above.
- Patients who are admitted in the hospitals.

Review of Literature

Ellen J. Langer *et al.* (1975), this study assesses the effectiveness of two stress-reducing strategies in a field setting. The first strategy consists of a coping device which entails the cognitive reappraisal of anxiety-provoking events, calming self-talk and cognitive control through selective attention. The second strategy consists of supplying information about the threatening event along with reassurances for the purpose of producing emotional inoculation. Patients about to undergo major surgery were exposed to the coping device, the preparatory information, both strategies, and neither. The prediction that the coping device would effectively reduce both pre- and post-operative stress was confirmed. An analysis of the nurses' ratings of preoperative stress showed a significant main effect for the coping device. There was also a significant main effect for the coping device on postoperative measures (number of pain relievers requested and proportion of patients requesting sedatives). The preparatory information, however, did not produce any significant effects on these postoperative measures. Mary Deyirmenjian, Nadim Karamet *et al.* (2006). The purpose of the study was to assess the impact of preoperative patient education on anxiety and recovery of the Lebanese patients undergoing open-heart surgery. This quasi-experimental study was conducted at a large hospital in Beirut, which is a university hospital. All patients who were admitted to the cardiac surgery unit and who met the inclusion criteria were randomly assigned to as experimental or a control group. The patients in the experimental group ($n = 57$) received a special educational session on their admission day and had a tour of the cardiac surgery unit. The control group ($n = 53$) followed the routine hospital protocol, which encompassed almost no preoperative education or a tour. Anxiety was assessed using the Beck Anxiety Inventory while recovery was measured by physiological outcomes, days of hospital stay, and presence of complications. A Multivariate Analysis of Covariance (MANCOVA) was performed with adjustment for potential confounding variables. Borderline statistical significance was noted for the experimental group in terms of preoperative and postoperative anxiety. The experimental group had a shorter time from awakening to extubation. Unlike most studies published previously, which noted the benefits of preoperative patient education, this study with the Lebanese clients, failed to support earlier findings.

MATERIALS AND METHODS

Research approach: A Quasi experimental research approach was adopted to accomplish the objectives of the study.

Research design

Group 1 o1xo2: A single group pre-test and post –test design was employed to carry out the study.

Independent variables: The independent variables were age, sex, education, occupation and type of surgery.

Dependent variable: The dependent variable was coping mechanisms of the pre-operative patients.

Demographic variables: The demographic variables were age, sex, education, occupation and type of surgery.

Selection and description of the field of the study: The Study was conducted in selected hospitals, Ludhiana, Punjab.

Population: The target population of this study was included all the preoperative patients who are admitted in the hospitals, Ludhiana, Punjab.

Sample and sampling technique: Sample consists of a total three hundred (300) patients who are admitted in the selected hospitals in Ludhiana, Punjab. Purposive sampling technique was used in this study.

Development of tool

Tool consists of two sections A and B.

- **Section A:** Consists of demographic variables i.e. age, sex, education, occupation and type of surgery.
- **Section B:** Self structured coping check list was used to assess the effectiveness of structured teaching programme for pre-operative patients.

Content validity of the tool

Content validity of the tool determined by Expert's of different field the psychologist, psychiatrist, anaesthetics', surgeon and nursing. As per their guidance amendments were made. Content validity of the tool was confirmed by expert's opinion.

Reliability of Tool: Reliability of the tool was calculated by Split- Half method of the reliability. The reliability of the tool was calculated by using Karl Pearson's co-efficient of correlation and Spearman's Brown Prophecy formula and reliability of tool was found to be 0.84 and hence the tool was reliable.

Ethical Consideration

Confidentiality of the information was maintained. As they were assured that (patient's) their responses would be kept confidential and information would be used only for research purpose.

Plan of data analysis

The data analysis will be done by using the descriptive and inferential statistics i.e. mean, mean percentage, standard deviation, t-test, ANOVA, degree of freedom etc.

Sample characteristics

N=300

S.No.	Variables	Frequency	Percentage (%)
1	Age (in years)		
	a)18-30	50	16.67
	b)31-40	78	26
	c)41-50	97	32.33
	d)<50	75	25
2	Sex		
	a)Male	151	50.33
	b)Female	149	49.67
3.	Education		
	a)Illiterate	81	27
	b)Graduate	204	68
	c)Post Graduate	15	5
4.	Occupation		
	a)Unemployed	37	12.33
	b)Laborer	33	11
	c)Service	81	27
	d)Business	36	12
	e)Housewife	113	37.67
5.	Type of Surgery		
	a)General surgery	100	33.33
	b)Gynae/obstetrics	90	30
	c)Chest	0	0
	d)Orthopedics	110	36.67

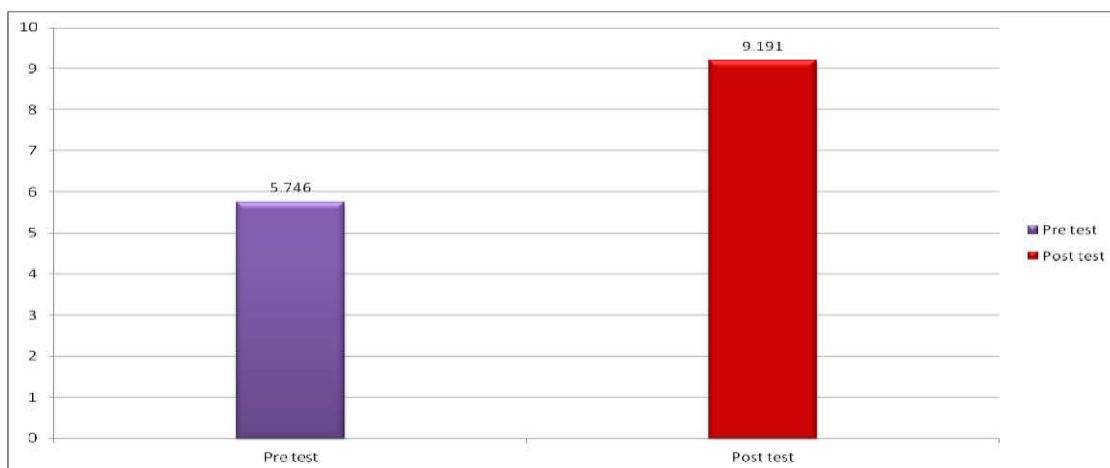


Figure 1. Comparison of pre-test and post-test effectiveness of STP on pre-operative coping mechanism before surgery

Table 1. Percentage distribution of pre-test coping mechanism of the patients undergoing major surgery

N=300		
Level of Coping Mechanism	n	Percentage
Maladaptive coping (0 – 7)	263	87.67
Adaptive coping (8 – 15)	37	12.33

Maximum Score = 15
Minimum Score = 0

Table 1 depict that 87.67% of the patient’s had maladaptive coping and 12.33% of the patient’s had adaptive coping before the structured teaching programme.Hence it is concluded that pre-operative patients had maladaptive coping mechanism before structured teaching programme. There is a difference in coping mechanism in patients before and after structured teaching programme.

Table 2 depicts that 78.33% of the patient’s had adaptive coping and 21.67% had maladaptive coping. Hence it is evident that there was an improvement in coping mechanism after giving STP to the pre-operative patients undergoing major surgery.

Table 2. Percentage distribution post-test effectiveness of a structured teaching programme on the level of coping mechanism

N=300		
Coping Mechanism level	Post-Test Score	
	N	Percentage(%)
Maladaptive coping (0 – 7)	65	21.67
Adaptive coping (8 – 15)	235	78.33

Maximum Score = 15
Minimum Score = 0

Table 2. Comparison of pre-test and post-test effectiveness of STP on pre-operative coping mechanism before surgery

N=300						
	n	Coping Mechanism Score			df	p- value
		Mean	SD	t- value		
		Pre test	300	5.746		
Post test	300	9.191	2.326			

*Significant

Table 2 Reveals, that there is a difference between the pre-test and post-test coping mechanism score. The mean post-test highest coping mechanism score was 9.191 and the mean pre-test coping mechanism score was 5.746. Thus the result showed that there is a significant effect of STP at $p < 0.05$ level. Hence, it is concluded that after the STP patient's used better coping mechanism prior to surgery.

Conclusion

In the present study, the results indicate that many of the pre-operative patients had anxiety and maladaptive coping mechanisms towards pre-operative anxiety. However, they were lacking in appropriate use of coping mechanism for surgery. Therefore some urgent steps are needed to improve the coping ability of patients regarding pre-operative anxiety. There is an urgent need to include anxiety counseling by appropriately trained counselors. Pre-operative teaching is essential for patient management and appropriate explanation, education should be given to patients to enhance post-operative recovery.

Recommendations for future research

The following recommendations are made on the basis of the present study:

- The study can be replicated on a large sample to validate and generalize its findings.
- Similar study can be undertaken with a multi setting approach.
- Descriptive research can be undertaken for such studies to reflect the whole population.
- More and more research should be conducted in order to develop more innovative strategies to improve the knowledge of patient regarding coping mechanisms.

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