

A Quasi Experimental Study to Assess the Effectiveness of Counselling on Anxiety among Pre-Operative and Post-Operative Patients Undergoing Abdominal Surgery in Christian Medical College and Hospital Ludhiana Punjab

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Abstract: The aim of the study was to assess the effectiveness of counselling on anxiety among pre-operative and post-operative patients undergoing abdominal surgery. The sample comprised of 40 patients divided into two groups experimental group 20 & control group 20. Spielbergers state anxiety inventory was used to collect data. 't' value & Anova was calculated for the comparison of pretest and post-test. State anxiety score of experimental and control group of patients. Results showed that there was marked difference in pre-test and post-test state anxiety scores of patients in experimental group where as in control group there was a statistically significant difference between pre-test and post-test scores. However no significant effect was found in control group. However no significant effect was found according to age, educational qualification, religion, technique of surgery & income support system on pre-test anxiety scores of patients in both experimental and control group

Keywords: counselling, pre-operative, post-operative, abdominal surgery ,patients.

1. INTRODUCTION

Anxiety is considered as a normal feeling that always accompanies people throughout life. It is a compound phenomenon that has psychological, motor, somatic vegetative and metabolic components. Anxiety reaches its peak when there is impending threat to an individual's physical or mental integrity. One such threat is surgery. Even the thought of operation and anaesthesia increase the feeling of anxiety. The dimension of anxiety has inconvenient influence on the time of recovery, quantity of complications and the discomfort felt by patients. The incidence of preoperative anxiety was reported as high as 60% of surgical patients. Patients preparing to undergo surgery should not suffer needless anxiety. The practice of giving pre-operative information can reduce patient anxiety. However, some controversy still remains, since for cardiac surgery, information delivered either personally or by pamphlets produced no benefit. It is also interesting to note that any complete or minimal written information regarding anaesthesia, while not significantly changing the state-anxiety levels, could increase the knowledge regarding anaesthesia

Admission to hospital causes stress and anxiety which not only causes an imbalance in homeostasis, but it also impedes recovery. In addition, it has been established that providing pre-operative information and encouraging discussion helps to alleviate this anxiety. This preparation, which should lead to understanding and reduce uncertainty, enables patients to play a role in their own information builds accurate expectations of surgery which will in fact reduce emotional arousal during surgery. Surgical patients who are given emotional support and information about the procedure generally have a smoother operative course and recovery, and show greater compliance with treatment

Although it has been known for many years that pre-operative information reduces anxiety this recommendation is not widely implemented by hospital staff. Giving of pre-operative information remains inadequate and still contributes to increased patient's anxiety. Care must be taken when giving information. Several studies have highlighted that information given to hospital patients is often insufficient, contradictory and confusing.

Objectives:

- To assess and compare the pre-test anxiety among experimental group and control group of patients , undergoing abdominal surgery.
- To compare pre-test and post-test anxiety among experimental and control group of patients
- To assess and compare post-test anxiety among experimental and control group.
- To find out the relationship of pre-test anxiety score among patients who are undergoing abdominal surgeries with selected variables such as age ,sex income etc.

Hypothesis:

- H1-there is a reduction in pre-operative post-test score of patients receiving counselling in the experimental group.

2. SAMPLE & SAMPLING TECHNIQUE

The investigator selected a sample of 40 patients posted for abdominal surgery , 20 for experimental group and 20 for control group from Christian Medical College and Hospital, Ludhiana, Punjab. The purposive sampling technique was used. **The tool used in the study has 2 parts:**

Part 1: Sample characteristics

This part consist of items for obtaining personal information i.e. age, gender, education, religion, income, technique of surgery and support system.

Part 2: Standardized tool STAI (state anxiety scale)

This part consists of 20 items. Helps distinguish between two types of anxiety i.e. state anxiety & trait anxiety. The first subscale measures state anxiety, the second measures trait anxiety. The range of scores is 20-80, the higher the score indicating greater anxiety .some of the questions relate to the absence of anxiety, and are reverse scored (1,6,7,10,13,16,&19). Approximately 10 minutes are required to complete STAI.

Criterion measure

Maximum score= 80

Minimum score= 20

Levels of anxiety

20-40= mild anxiety

41-60= moderate anxiety

61-80= severe anxiety

3. DATA COLLECTION PROCEDURE

The data collection for the study was carried out throughout the month of December. Before starting the task of data collection, formal permission was obtained from the Principal, College of Nursing, Christian Medical College and Hospital, Ludhiana and H.O.D general surgery department Christian Medical College and Hospital, Ludhiana. The data collection was done in the inpatient departments i.e male surgical ward general and private wards .data was collected from pre-operative and post-operative patients undergoing abdominal surgery Christian Medical College and Hospital, Ludhiana. Prior to the interview and applying State Trait Anxiety Inventory, rapport was established with respondents by self-introduction. The purpose of the study was explained to get needed information. They were assured that their responses would be kept confidential and would be used for research purpose. In the private ward pre-test of control

group was taken and after two days post-test was taken. In the general ward pre-test of experimental group was taken in general surgery ward. After one day counselling was given. Next day preoperative post-test was taken. The analysis of pilot study was done in accordance with the objectives & the feasibility of the study. The time taken by each respondent was 10 minutes. It took 1 month to complete the entire procedure. The data collected was then arranged and compiled for analysis

SECTION I DEMOGRAPHIC CHARACTERISTICS OF SAMPLE

Table1 Frequency and percentage distribution of the sample characteristics

N=40

	Control group		Experimental group		df	χ^2
Sample characteristics	n=20		n=20			
	n	%	n	%		
Age						
40-50 yrs.	12	60%	12	60%	1	NA
51-60 yrs.	8	40%	8	40%		
Educational qualification						
10+2	14	70%	14	70%	1	NA
Graduation	6	30%	6	30%		
Income (in Rs.)						
20000-25000	15	75%	15	75%	1	NA
25001-50000	5	25%	5	25%		
Religion						
Sikh	16	80%	16	80%	1	NA
Hindu	4	20%	4	20%		
Technique of surgery						
Open	20	100%	20	100%	-	NA
Close	-	-	-	-		
Support system						
Family	20	100%	20	100%	-	NA
Friends	-	-	-	-		
Religious groups	-	-	-	-		

Section II

Objective1: To assess and compare the pre-test anxiety among experimental group and control group of patients, undergoing abdominal surgery

Table 2 Mean score of Pre-operative pre-test anxiety among experimental group and control group of patients undergoing abdominal surgery

N=40				
		Anxiety score		
Groups	n	Mean	SD	't'
1.Experimental Group	20	65.65	2.27	
				2.94*
2.Control group	20	65.00	2.103	
Maximum score=80 minimum score=20			*=significant at p<0.05 level	

Table 3 Pre-operative post-test anxiety among experimental group and control group of patients undergoing abdominal surgery N=40

Groups	n	Anxiety score		
		Mean	SD	t'
1. Experimental	20	63.90	2.47	2.77*
2. Control	20	65.00	2.10	
Maximum score=80		*significant at p<0.05 level		
Minimum score=20				

Table 4 Post operative post-test anxiety among experimental group and control group of patients undergoing abdominal surgery N=40

Groups	n	Anxiety score		
		Mean	SD	t
Experimental group	20	61.10	3.127	5.902*
Control group	20	65.15	2.033	
Maximum score=80 Minimum score=20		*=-significant at p<0.05 level		

Table 5 Mean score pre-operative pre-test and pre-operative post-test score of anxiety according to age in control and experimental group N=40

Group	n	Anxiety score					
		mean	SD	mean	SD	df	t
Control	20						
40-50years	12	64.75	2.14	64.75	2.14	1	0.53 ^{NS}
51-60years	8	65.38	2.13	65.38	2.13		
Experimental	20						
40-50years	12	65.58	2.19	63.83	2.44	1	0.57 ^{NS}
51-60years	8	65.88	2.70	63.13	2.36		

Maximum Score=80

NS=Non Significant

Minimum Score=20

Table 5(a) Mean score of anxiety of post operative post-test of control group and experimental group according to age .

N=40

Post operative post	Control group n=20	Anxiety score			SD	df	T
		mean	SD	Experimental Group mean			

test							
40-50years	12	64.83	2.29	61.75	3.47		0.53 ^{NS}
51-60years	8	64.75	2.12	61.25	3.77		

Maximum Score=80

NS= Non Significant

Minimum Score=20

Table 5(b) Mean score of anxiety of pre-operative pre-test and post operative post-test of control group and experimental group according to age. N=40

		Anxiety score					
		Control group		Experimental group			
	n=20	mean	SD	Mean	SD	df	T
Pre-operative pre test							
40-50years	12	64.75	2.14	65.58	2.19	1	0.53 ^{NS}
51-60years	8	65.38	2.13	65.88	2.70		
Post operative post test	n=20						
40-50years	12	64.83	2.29	61.75	3.47	1	0.77 ^{NS}
51-60years	8	64.75	2.12	61.25	3.77		
Maximum Score=80				NS= Non Significant			
Minimum Score=20							

Table 6 Mean anxiety score of Preoperative pre-test , pre-operative post-test and post operative post-test of patients undergoing abdominal surgery according to education. N= 40

		Anxiety score					
Control group (n= 20)		Experimental Group (n=20)					
	n	mean	SD	mean	SD	df	t
Pre operative pre test							
10+2	14	64.71	2.20	65.71	2.40	1	0.34 ^{NS}
Graduation	6	65.67	1.86	62.50	2.07		
Pre-operative post test							
10+2	14	64.71	2.20	64.00	2.42	1	0.34 ^{NS}
Graduation	6	65.67	1.86	62.50	2.07		
Post operative post test							
10+2	14	64.93	2.20	62.43	3.59	1	0.70 ^{NS}
Graduation	6	64.50	2.26	59.5	2.77		

Maximum Score= 80

NS= Non Significant

Maximum Score=20

Table 7 Mean score of anxiety of Pre-operative pre test, pre-operative post-test and post operative post-test of patients undergoing abdominal surgery according to income N=40

		Anxiety score						
		Control group (n= 20)		Experimental Group (n= 20)				
		mean	SD	mean	SD	df	t	
Pre-operative pre test								
Rs.20000-25000	15	65.27	1.94	65.53	2.61	1	1.47 ^{NS}	
25001-50000	5	64.20		66.20	2.59			
Pre-operative post test								
Rs.20000-25000	14	64.71	2.20	64.00	2.42	1	0.34 ^{NS}	
25001-50000	6	65.67	1.86	62.50	2.07			
Post operative post test								
Rs.20000-25000	14	64.93	2.20	62.43	3.59	1	0.70 ^{NS}	
25001-50000	6	64.50	2.26	59.5	2.77			

Maximum Score= 80

NS= Non Significant

Minimum Score= 20

Table 8 Mean score of anxiety of Pre-operative pre test, pre-operative post-test and postoperative post-test of patients undergoing abdominal surgery according to religion N=40

		Anxiety score						
		Control group		Experimental group				
		n =20		n=20				
Group	n	Mean	SD	Mean	SD	df	't'	
Pre-operative pre test								
Sikh	16	64.81	2.17	65.69	2.77			
						1	0.47 ^{NS}	
Hindu	4	65.75	1.89	65.75	2.99			
Pre-operative post test								
Sikh	16	64.81	2.17	63.56	2.45			
						1	0.43 ^{NS}	
Hindu	4	65.75	1.89	63.50	2.38			
Post operative post test								
Sikh	16	64.88	2.28	61.81	3.41			
						1	0.59 ^{NS}	
Hindu	4	64.50	1.91	60.50	4.20			
Minimum score=20								
Maximum score=80								
					NS=Non significant			

4. MAJOR FINDINGS OF THE STUDY

According to income , in both control and experimental group majority of patients undergoing abdominal surgery were in the income group of 20000-35000 (85%,85%) and least were in the income group of 36000-50000 (15%,15%) respectively.

As per educational qualification in both control and experimental group majority of patients undergoing abdominal surgery were in the group of 10+2 (70%,70%) followed by the group of (30%,30%) respectively.

According to religion in both control and experimental group majority of patients undergoing abdominal surgery were in the religion group of sikh (80%,80%) followed by the religion group of hindu (20%,20%) respectively.

The pre-operative pre-test anxiety of experimental group is significantly more as compared to control group.

There is a marked difference in pre-test and post-test state anxiety scores of experimental and control group.

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