EFFECTIVENESS OF PREOPERATIVE PREPARATION PROGRAMME ON ANXIETY OF MOTHERS OF CHILDREN UNDERGOING SURGERY IN SELECTED HOSPITALS OF MANGALORE

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INTRODUCTION

Illness and hospitalisation often occurs without any warning leaving little time for children and family members to prepare. The children will experience stress because of separation from the parents, invasive procedures, unfamiliar things and people, immobility and loss of control. (Melnyk 1997).

Parents relate their fears and anxieties to their children verbally. They need assurance that their child is receiving adequate medical treatment, they need information to allow them to understand the child's medical status and the treatment he is receiving. It is important to fortify their feelings of adequacy as parents and their importance to their child, and also to give them an opportunity to express their feelings. (Galit Bar-Mor. 1997).The anxiety of the child is triggered by the anxiety of the mother, this may have an impact on the recovery and the length of stay in the hospital. The nurse's role is to help the children and the family in early recovery and discharge. Preoperative preparation influences children and their parents to reduce the anxiety of hospitalisation and surgery.

OBJECTIVES OF THE STUDY:

1. To determine the pre–test level of anxiety of the mothers on the day before the surgery in the experimental and control group as measured by State Anxiety Inventory.
2. To determine the post–test level of anxiety of mothers on the day of the surgery and the first post operative day in the experimental and control group.
3. To evaluate the effectiveness of the Preoperative Preparation Programme among mothers of children undergoing surgery.
4. To find an association of level of anxiety with selected demographic variables.

MATERIAL AND METHODS:

The conceptual framework of the present study was developed by the investigator based on Betty Neuman's System Model. A quasi-experimental design was used for the study. The study was carried out in selected hospitals, in Mangalore. Sample comprised of 40 mothers of children undergoing surgery: 20 mothers in the experimental group and 20 mothers in the control groups. Sample was selected by purposive sampling technique.

Prior to data collection permission was obtained from the concerned authority for conducting the study. Pre–test data was obtained in the evening of the day before surgery by using demographic proforma and Spielberger's State Anxiety Inventory. The Preoperative Preparation Programme consisted of a video on preoperative preparation and a pamphlet. Video film was developed by the investigator, addressing issues in the preoperative, intraoperative and postoperative periods, it could be used in the hospitals to prepare the parents during preoperative period. It was made as a documentary film which gave general information of the preoperative, intraoperative and postoperative preparation. The mothers in the experimental group were shown a video on preoperative preparation and also same information was given in the form of pamphlet. Two post-tests were conducted, first post test a day before the surgery and second four hours after surgery, both for experimental and control group. Data was analysed using descriptive and inferential statistics.

RESULTS:

Description of demographic characteristics.

Highest percentage of the mothers were in the age group of 20-30 years (60%), having education up to 10th standard (57.5) and were non-working mothers (60%). Highest percentage (47.5%) of mothers were having monthly income below Rs. 5000, had only two children (52.5%), highest percentage males (62.5%) admitted to the hospital. Maximum percentage of (62.5%) children hospitalised for surgery were of birth order first and were having residence at a distance of 5-10 kilometres from the hospital (40%). With regard to type of family, majority (67.5%) of the mothers belong to nuclear family. Majority of children were undergoing minor surgery (82.5%), 77.5% and had not undergone surgery previously highest percentages (50%) of children were between the age group of 3-6 years

ASSESSMENT OF ANXIETY LEVEL OF THE MOTHERS:

Majority of the sample in experimental and control group had extreme level of anxiety whereas in the post-test I, in the experimental group 50 % had moderate level of anxiety and in post-test II all (100%) had mild anxiety, but in the control group during post-test 85% (post -test I), 100% (post-test II) of sample had severe anxiety

Effectiveness of video assisted preoperative preparation program on anxiety of mothers

- Mean pre-test anxiety scores of experimental group was 67.70, post-test 1 was 50.95 and post-test 2 was 29.50. There was significant difference in the mean pre to post-test I anxiety level ($t19=27.42$, $p<0.05$) and pre to post - test II ($t19=59.39$, $p<0.05$) & post-test I to post-test II ($t19=37.40$, $p<0.05$) in the experimental group.
- There was significant difference in the mean post-test I ($t38=21.446$, $p<0.05$) and post-test II ($t38=43.129$, $p<0.05$) anxiety level between experimental and control group.

Association of level of anxiety of mothers with selected demographic variables.

There was significant association between pre-test anxiety scores with selected demographic variables like age of the child (χ^2=11.86) (p<0.05), type of surgery (χ^2=9.59) (p < 0.05) and education of the mother (χ^2 = 5.36) (p< 0.05). The calculated chi square value was more than the table value at 0.05 level of significance.

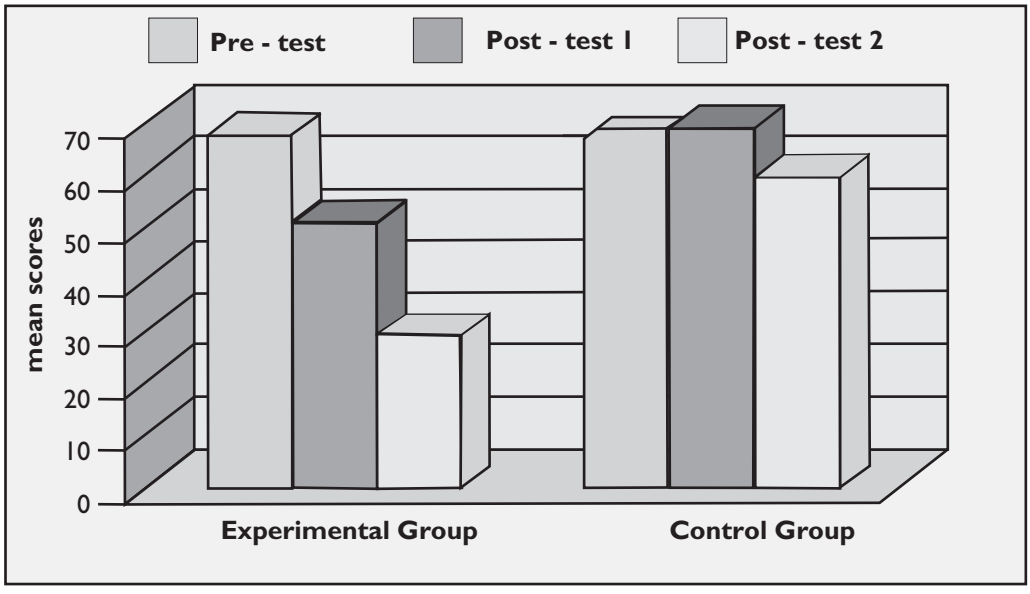

Table 1: Mean difference and't' value of pre-test and post-test anxiety scores in experimental group

Test	Mean difference	t-test
Pre test –Post-test 1	16.85	27.42*
Pre test – Post-test 2	38.20	59.39*
Post test1 – Post-test2	21.45	37.40*

t19=1.729, p < 0.05 * = Significant

Table 2: Mean, mean difference and't' value of post-test anxiety level in experimental and control group N = 20 + 20

Test	Group	Mean score	Mean difference	't' value
Post-test1	Experimental Group	50.95	18.30	21.446*
	Control Group	69.25		
Post-test2	Experimental Group	29.50	30.40	43.129*
	Control Group	59.90		

t38=2.021, p < 0.05 * = Significant

DISCUSSION

The findings are supported by similar studies conducted on the impact of preoperative cognitive behavioural programme on preoperative outcomes in children undergoing elective surgery and their parents. The result demonstrated that the post test anxiety scores in the experimental group was significantly lower than the control group ($p<0.001$) (Kuriakose Preethy. 2003). Effects of viewing an educational videotape about pediatric anesthesia on measures of parental knowledge of anesthesia and preoperative anxiety conducted at Hurley Medical Centre USA. Parents who viewed the videotape showed a significant increase in anesthesia knowledge ($P<0.022$) and a significant reduction in their state of anxiety ($P < 0.031$), anesthesia-specific anxiety. (Zuwala 2001). The findings were also supported by another study on preoperative parental information and parents' presence at induction of anaesthesia. In this study the experimental group received an educational programme about the role and expectation of parents together with an information pamphlet. The comparison group received the routine verbal instructions. The result demonstrated that the parents who received educational programme reported a decrease in anxiety ($p<0.001$). (Astuto 2006). Another study conducted with the purpose of determining whether viewing a video of an actual pediatric inhalation induction would reduce the level of parental anxiety. The results interpreted that the level of anxiety post operatively of children and parents in the experimental group was significantly lower than control group ($p< 0.05$). (Kain, 1998).

CONCLUSION

The need for taking greater responsibility by mothers in the preparation and caring for their children for undergoing surgery in a hospital setup is being increasingly emphasised in the recent years. There is a need to involve mothers in caring for their child before during and after surgery which ultimately will help the child feel secure.

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