

# ASSESS THE EFFECTIVENESS OF PICTURE BASED DIVERSIONAL ACTIVITIES ON ANXIETY DURING IV CANNULATION PROCEDURE AMONG HOSPITALIZED CHILDREN

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## Abstract

Hospitalization disrupts children's lives and can produce feelings such as anxiety, fear, or pain. When hospitalization is necessary, the child may perceive this situation as traumatic and it can alter their emotional development, as they are separated from their daily and family environment to face an unknown process with painful interventions and restrictions. During the hospitalization, the child may experience negative behaviors and emotions, such as stress, fear, anxiety, pain, insecurity, and uncertainty. Hospitalization is stressful for children of all ages. Objective: Determine the effectiveness of picture based divisional activities among the children in the pediatric ward. Method: The research design used for this study was quasi experimental, one experimental group and one control group. The convenient sampling technique was used to select the sample for the study. The total number of samples was 100 out of which 50 samples were experimental and 50 samples were control group. Data were collected by using a structured and second part consists of a structured anxiety rating score. Results: The median Anxiety score of control pre-test, control post-test, experimental pre-test and experimental post-test were 4, 3, 3 and 2, respectively. It was found to be statistically significant ( $P < 0.001$ ). Compared to the control pre-test, the experimental pre-test showed significance (between group comparison) ( $P = 0.005$ ). Compare to the control post-test, the experimental post-test showed significance ( $P < 0.001$ ). Comparing the control pre-test and post-test (within group comparison), showed significance ( $P = 0.018$ ). Comparing the experimental pre-test and post-test, showed significance ( $P < 0.001$ ). This shows that the intervention was beneficial in reducing the anxious mood of the Children. Conclusion: According to the finding of the study, majority of the children who were hospitalized experienced considerably reduced level of anxiety after intervention with picture based divisional Activities.

**Keywords:** Hospitalized Children, Painful Procedure, Picture Based Diversional Activities.

## INTRODUCTION

Children are the blessings from the lord. They are like clay in the potter's hand. Blend them with godly love and care, they become a vessel that stays strong and perfect, purge them with toil and dust they may break and crumble. They build the nation sound and strong, because today's children are responsible citizens of tomorrow. Wolfer and Visintainer conducted an influential study to examine the stress responses and adjustment to hospitalization of paediatric surgical patients. A sick child needs hospital care and it is a stressful experience for him, well the hospital environment and the related procedure make the child feel scared of even more. Hospital care thus puts such emotional drawbacks on the child's regular life. The child is displaced from the daily routine of home and brought into an unfamiliar setting causing loss of contact with siblings, peers and relatives. Hospital care may be an emotional and developmental setback to the child. It causes anxiety due to imbalance between environmental and societal damage and child's coping abilities.

The child in hospital may have to undergo various diagnostic and therapeutic procedures. Hospital care leads to altered nutritional and sleep pattern of the child. Moreover, the stranger environment of hospital leads to reduced appetite and causes anxiety in the child. Play therapy can be defined as the set of interventions to promote children's wellbeing during the hospitalization or the play activities structured depending on the child's health condition, age, and development. Diversional activities performed by health professionals can also improve the nurse-child relationship, increasing confidence during the hospitalization period. Playing is an important part of children's lives. The WHO's standards of children's rights in hospital include the right to play. Recently, the WHO recommended that all doctors and nurses utilize play within treatment and care and that hospitals promote research on using play. Play promotes healing and helps the child to cope with stressful experiences. The attitudes and feelings that children reveal in their play are full of meaning. Play in hospitals is an emerging interdisciplinary research area with a significant potential benefit for child and family health (Dr Line Klingen Gjørde.2021)

## **METHODS AND MATERIALS**

A quantitative research approach was adopted for this study to accomplish the objectives of the study. The research design used for this study was quasi experimental, one experimental group and one control group. The dependent variable of the study is anxiety among hospitalized children. The independent variable of the study was picture based diversional activities. The target population of the study included all the hospitalized children in the age group of 1-3 years. The total number of samples were 100 out of which 50 samples were experimental and 50 samples were control group. Data collection was done in pediatric ward at Saveetha Medical College and Hospital, Chennai for a period of 1 week.

The investigator obtained written permission from the medical director of Saveetha Medical College and Hospital, Chennai. Consent form was obtained from the parents of Hospitalized children prior to the study. The purpose of the study was explained to the parents. The samples who fulfill the inclusion criteria were selected. The non probability sampling technique was used to select 100 samples for the study. Demographic variable was collected. On the first day assessed the children's anxiety level by Hamilton Anxiety scale before IV cannulation procedure and the intervention of picture based diversional activities was given during the procedure to the experimental group. On the 8th day posttest was done to assess the anxiety level among the children. The data was collected and analyzed by using descriptive and inferential statistics.

### **Data Analysis and Interpretation**

This deals with analysis and interpretation of the data collected from 100 (50-experimental group and 50- control group) hospitalized children. The data collected was organized, tabulated and analyzed according to the objectives.

## **RESULTS**

Description of Demographic Variables of Hospitalized Children in the Experimental and Control Group. In the experimental group, majority 13(43.4%) were in the age group of 3 years, 16(53.3%) were male, 12(40.0%) were living in city, 13(43.3%) were Hindus and Christians respectively, 15(50.0%) parents were children, 13(43.3%) were

non vegetarian, and 14(46.7%) had family monthly income of Rs. 5,000 to Rs. 10,000/month. Whereas in control group, majority 11(36.7%) were in the age group of 1 years, 18(60.0%) were male, 15(50.0%) were living in village, 17(56.7%) were Hindus, 18(60.0%) parents were under graduate, 13(43.3%) parents were doing own business, 16(53.3%) were first order birth children, 16(53.3%) were non vegetarian, and 12(40.0%) had family monthly income of Rs. 5,000 to Rs. 10,000/month and above 10,000/month respectively.

### Assessment of Pretest and Post Test Level of Anxiety among Hospitalized Children in the Experimental and Control Group

It shows that in the pretest, majority 16(53.3%) of children had very severe level of anxiety and 14(46.7%) had severe level of anxiety in the experimental group and whereas in the post test after the picture diversional activities majority 22(73.3%) often had mild anxiety and 8(26.7%) of them showed no evidence anxiety in the experimental group.

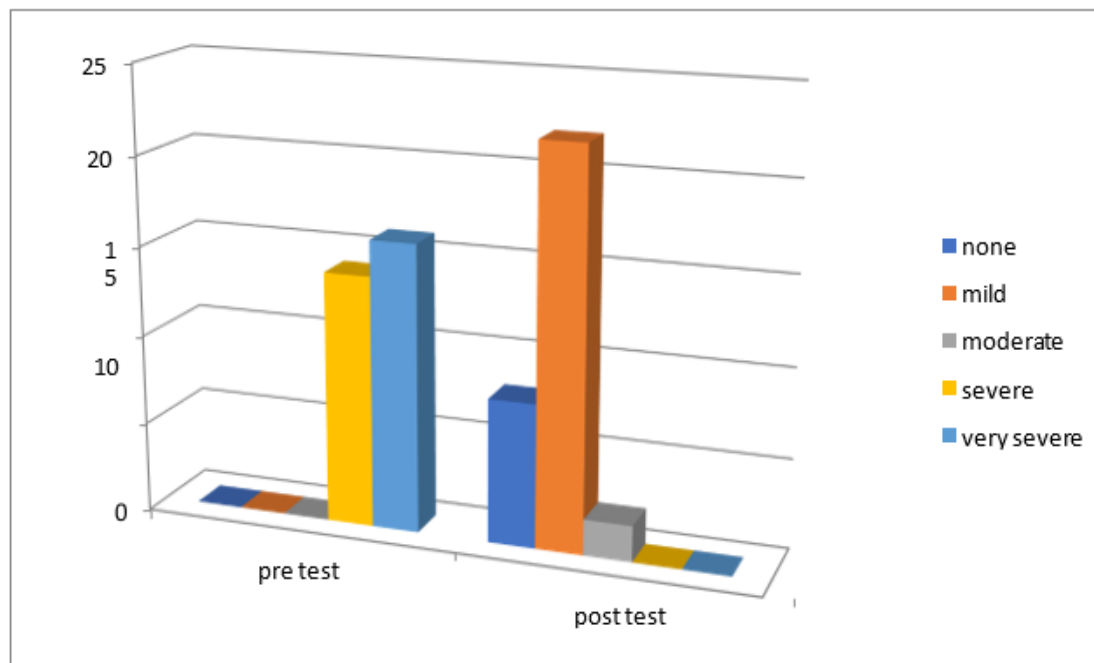
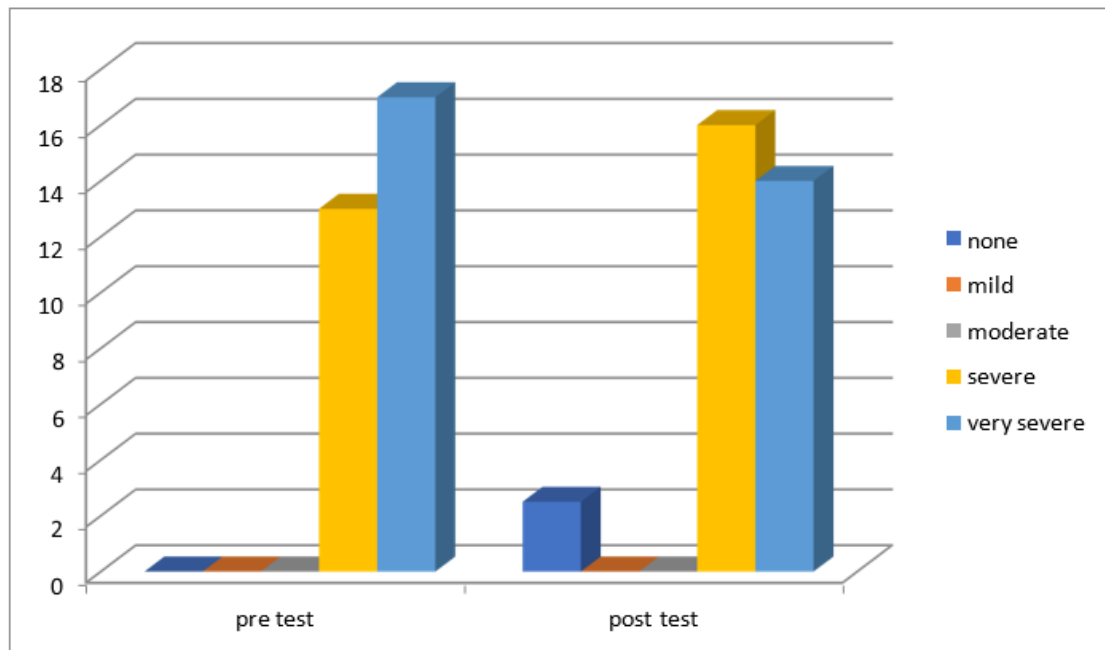


Figure 3: percentage distribution of pretest and posttest level of anxiety among hospitalized children in the experimental group

Table 4.3: Frequency and percentage distribution of pretest and posttest level of anxiety among hospitalized children in the control group

Anxiety	None (0)		Mild (1)		Moderate (2)		Severe (3)		Very severe (4)	
	No	%	no	%	no	%	no	%	no	%
Pre test	0	0	0	0	0	0	13	43.3	17	56.7
Post test	0	0	0	0	0	0	16	53.3	14	46.7

The table 4.3 shows that in the pretest, majority 17(56.7%) of children had very severe level of anxiety and 13(43.3%) had severe level of anxiety in the control group and whereas in the post test, majority 16(53.3%) had severe anxiety and 14(46.7%) had very severe anxiety in the control group.



**Figure 4: percentage distribution of pretest and posttest level of anxiety among hospitalized children in the control group**

**Table 4.4: Comparison of pretest and posttest anxiety scores among hospitalized children in the experimental group**

Anxiety	Mean	Standard Deviation	Paired t value
Pre test	3.56	0.50	t= 20.232 p=0.000,S***
Post test	0.70	0.46	

\*\*\*p<0.001, S – Significant

This table 4.4 shows that the pretest mean score of anxiety among hospitalized children was 3.56 with S.D 0.50 in experimental group and the posttest mean score of anxiety was 0.70 with S.D 0.46. The calculated paired 't' value of t = 20.232 was found to be statistically significant at p<0.001 level. This clearly indicates that after the administration of picture diversional Activities the posttest level of anxiety was considerably reduced among hospitalized children and this clearly indicates that picture diversional activities were found to be effective in reducing the anxiety among hospitalized children in the experimental group.

**Table 4.5: Comparison of pretest and posttest anxiety scores among hospitalized children in the control group**

Anxiety	Mean	Standard Deviation	Paired t value
Pre test	3.60	0.49	t= 1.409 p=0.169, N.S
Post test	3.43	0.50	

The table 4.5 shows that the pretest mean score of anxiety among hospitalized children was 3.60 with S.D 0.49 and the posttest mean score of anxiety was 3.43 with S.D 0.50 in control group. The calculated paired 't' value of t = 1.409 was not found to be statistically significant. This clearly indicates that there was no difference in the level of anxiety among hospitalized children in the control group

**Table 4.6: Comparison of posttest anxiety scores among hospitalized children between the experimental and control group**

Post test anxiety	Mean	S.D	Unpaired 't' value
Experimental group	0.70	0.46	t = 21.808 p = 0.000, S***
Control group	3.43	0.50	

\*\*\*p<0.001, S – Significant

The table 4.6 shows that the posttest mean score of anxiety among hospitalized children in the experimental group was 0.70 with S.D 0.46 and the posttest mean score of anxiety among children in the control group was 3.43 with S.D 0.50. The calculated unpaired 't' value of t = 21.808 was found to be statistically significant at p<0.001 level. This clearly indicated that after the administration of picture diversional activities among hospitalized children in the experimental group there was a significant reduction in the level of anxiety than the control group who underwent normal hospital routine measures.

**Association of posttest level of anxiety among hospitalized children with their selected demographic variables in the experimental group**

It shows that none of the demographic variables had shown statistically significant association with the posttest level of anxiety among hospitalized children in the experimental group.

**DISCUSSION**

The overall findings support the effects of picture based diversional activities in minimizing the anxiety levels among children who have been hospitalized. Indeed, providing play for hospitalized children has special advantages as illness, stress and physical restriction hinder their accustomed play and socialization, which are crucial for the normal growth and development of children. Most importantly, involvement in play activities while in hospital can enhance children's coping skills and relieve their stress, leading to improved psychosocial adjustment both to their illness and to the fact of hospitalization.

In Control group, majority 11(36.7%) were in the age group of 1 years, 18(60.0%) were male, 15(50.0%) were living in village, 17(56.7%) were Hindus, 18(60.0%) parents were under graduate, 13(43.3%) parents were doing own business, 16(53.3%) were first order birth children, 16(53.3%) were non vegetarian, and 12(40.0%) had family monthly income of Rs. 5,000 to Rs. 10,000/month and above 10,000/month respectively.

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The posttest mean score of anxiety among hospitalized children in the experimental group was 0.70 with S.D 0.46 and the posttest mean score of anxiety among children in the control group was 3.43 with S.D 0.50. The calculated unpaired 't' value of  $t = 21.808$  was found to be statistically significant at  $p < 0.001$  level. This clearly indicated that after the administration of picture diversional therapy among hospitalized children in the experimental group there was a significant reduction in the level of anxiety than the control group who underwent normal hospital routine measures

## CONCLUSION

According to the finding of the study, majority of the children who were hospitalized experienced considerably reduced level of anxiety after intervention with picture based diversional Activities. Therefore, nurses have the responsibility in following diversion activities in children to reduce hospitalized anxiety for which picture based diversional activities will be an effective tool. The findings of the study can be incorporated in nursing education, practice and administration for quality pain management care.

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## Conflict of Interest

The authors declare no conflict of Interest

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