



ORIGINAL RESEARCH PAPER

Paediatric Nursing

ASSESS THE EFFECTIVENESS OF PLAY ACTIVITIES TO REDUCE THE ANXIETY LEVEL OF HOSPITALIZED CHILDREN AT THE AGE GROUP OF 4-10 YEARS IN PEDIATRIC WARDS OF SELECTED HOSPITALS AT BANGALORE, INDIA: A PILOT STUDY.

KEY WORDS: Assess, Effectiveness, Play activities, Anxiety, Hospitalization, Children.

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ABSTRACT

Introduction: Play is the most important activity of a child's life. It is the way he/she communicates with the environment where he lives, expressing not only his feelings of love, but also his anxieties and frustrations, as well as criticism of the family environment and relationships, and leading to the harmonious development of his personality. **Aim:** The main aim of this study is to assess the effectiveness of play activities to reduce the anxiety level of hospitalized children at the age group of 4-10 years. **Methodology:** A Quasi-experimental research design in which Non-randomized control group pre-test and post-test design was adopted on 20 hospitalized children (10 experimental and 10 control group) at the age group of 4-10 years in paediatric wards of selected hospitals at Bangalore, India. The samples were selected by using purposive sampling technique. The Anxiety Level Assessment of Hospitalized Children was used to assess the anxiety level of hospitalized children. **Result:** In this study, the Mean Pre-test level of anxiety among hospitalized children in Experimental Group was 96.00 with a Standard Deviation of 23.357. Where as in the Control Group, the Mean Pre-test level of anxiety among hospitalized children was 90.900 with a S.D of 19.997. The Mean Post-test level of anxiety among hospitalized children in Experimental Group was 56.20 with a Standard Deviation of 19.031. Where as in the Control Group the Mean Post-test level of anxiety among hospitalized children was 91.50 with a S.D of 19.426. A paired t test was compiled to determine whether the observed difference in mean Pre Test and Mean Post -test level of anxiety among hospitalized children Score of experimental group was statistically significant. The observed t value of 9.951 was higher than the table value at 0.05 indicating that the observed difference in mean was statistically significant. Similarly in the control group, the observed value 0.441 was less than the Table value at 0.05 indicating that the observed difference in mean was not statistically significant. **Conclusion:** The study concluded that proposed play activities is an effective method for reducing the anxiety level of hospitalized children.

INTRODUCTION :

The Wealth of a nation is not so much in it's of economics and natural resources but it lies more decidedly in the kind and quality of the wealth of its children. It is they who will be the creators and shapers of a nation's tomorrow. Their quality and personality will determine the kind of destiny that beckons the nation.

Child's health determine the quality of the child in future, because the success of the child in future, because the success of the child in the future, will depend on how the child goes through the early stages of life, namely the age of the baby, toddler, preschool and school. Children are individuals who are still dependent on adults and their environment, meaning that they need an environment that can facilitate the fulfilment of children's need for their growth and development.

An important index used to estimate the Nation's health is the health status of children in the country. Children are more vulnerable due to their lack of knowledge of procedures, a lack of control, a lack of explanation in child-appropriate terms, and a lack of pain management. Hospitalized children may experience high level of anxiety due to many different factors both physical and psychological factors.

Play therapy is a creative process of art making to improve and enhance the physical, mental and emotional well-being of individual of all ages. Through play therapy, children receive treatment that is based on their existing strengths, weaknesses, interests, and concerns. It can help children of all ages and races. The purpose of play therapy is essentially one of healing. Play therapy can be successfully applied to clients with physical, mental or emotional problems, diseases and disorders.

Children express themselves through drawings, using them as a stage to dramatize their needs, wishes anxieties, and joys.

OBJECTIVES :

1. To assess the level of anxiety among hospitalized children in experimental and control group before administering play activities.
2. To assess the level of anxiety among hospitalized children in experimental and control group after administering play activities.
3. To compare the level of anxiety among hospitalized children between experimental and control group.

MATERIALS AND METHODS :

Study design:

It is a Non-randomized or non-equivalent control group pre-test post-test design, which belongs to quasi-experimental design, is selected to assess the anxiety level of hospitalized children.

Study area:

This pilot study was conducted in paediatric wards of selected hospitals at Bangalore India. The Bangalore Hospital has been selected for experimental group and Gleaneagles Global hospital has been selected for control group.

Study population:

In the present study population were hospitalized children at the age group of 4-10 years in Paediatric wards of selected hospitals at Bangalore, India.

Sample & Sample Size:

In this pilot study, sample was 20 hospitalized children at the age group of 4-10 years.

Sampling technique:

In this study, Non probability, convenient sampling technique is employed in order to collect the data.

Inclusion criteria:

1. Children in the age group of 4-10 years

- Children who were able to cooperate in the play activities.
- Children who were admitted in pediatric wards.
- Children or Parent who can understand and are able to speak Hindi and English language.

Exclusion Criteria:

- Children who were blind, mentally and physically challenged.
- Children who were admitted for only observation.
- Children who does not co-operate to participate in the study.
- Critically ill and unconscious children.

Study Tool: The tool consists of 2-sections:

Section A: Demographic Profile:

Which includes Age of the child, Sex of the child, Birth order of the child, Place of residence, Type of family, Monthly Income of the family, Religion, Temperament of the child, Previous exposure to the hospital, Number of hospitalizations within last one year, Diagnosis, Number of unpleasant experiences in the hospital.

Section B: Anxiety Level Assessment of Hospitalized Children:

In this checklist, the researcher has concern with the mother's/ guardian of hospitalized children (only as a source for acquiring information) and then the researcher has converse with the mother's/guardian regarding the behavior of their child as included in the checklist and then assign a score of 0, 1, 2, 3 and 4 (i.e. Strongly disagree, Disagree, Both, Agree and Strongly agree) for each behavior. The scores thus obtained from each interviewee, should be summed up in the score column. It consists of 50 items and these items include the different behavioral attributes of a child. The final score is the total of all the scores obtained, assigned from all four columns and can manage from 0 -200.

Scoring Procedure:

To interpret the level of anxiety, the score were interpreted as follows:

LEVEL OF ANXIETY	SCORE
No anxiety	0
Mild anxiety	1 – 50
Moderate anxiety	51 - 100
Severe anxiety	101 – 150
Very severe anxiety	151 – 200

Proposed Play Activities:

The following types of play were included in play activities i.e. Play with blocks, Painting, Dolls, Balls, Stickers, Puzzles, Video games and Snake & ladder.

Ethical Consideration:

Prior to the data collection, written permission was obtained from concerned administrative authority of selected hospitals at Bangalore, India. Following which the Head of paediatric department, concern doctors and staff permission was taken prior to proceed with the conduction of the study. The purpose and other details of the study were explained to the study subjects and written consent was obtained from the care giver. Assurance was given to all the caregivers about the confidentiality of their response.

Data Collection:

The data for pilot study was collected w.e.f. 8th March 2021 to 26th March 2021. A pre-test was conducted from 8th March 2021 to 12th March 2021. After completion of pre-test, Play activities were given from 15th March to 22nd March 2021 to the experimental group for 1-2 hours per day. After the intervention completes, post- test was conducted from 23rd March 2021 to 26th March 2021 Where as for the control group, the pre-test was conducted and no intervention was given to the subjects. It was conducted among 20 hospitalized

children, 10 in experimental group and 10 in control group.

Data Analysis:

Obtained data was organized in a master sheet in excel format on computer. Descriptive statistics was used to analyse the frequency, percentage, mean and standard deviation of the various variables, The significance of the difference between pre-test and post-test was determined by 't' test.

RESULTS:

Table-1: Frequency & Percentage distribution of demographic variables of hospitalized children. N= 20

SECTION-I SOCIO DEMOGRAPHIC PROFORMA	Experimantal (%)	Contro l (%)	Experimantal (n=10) f	Contro l (n=10) f	
Age of the child (in years)	> 4 – 6 years	60.0%	50.0%	6	5
	> 6 – 8 years	30.0%	30.0%	3	3
	> 8 – 10 years	10.0%	20.0%	1	2
Gender of the child	Male	50.0%	60.0%	5	6
	Female	50.0%	40.0%	5	4
Birth order of the child	First	50.0%	60.0%	5	6
	Second	30.0%	30.0%	3	3
	Third	20.0%	10.0%	2	1
	> Third	0.0%	0.0%	0	0
Place of residence	Rural	50.0%	50.0%	5	5
	Semi urban	10.0%	20.0%	1	2
	Urban	40.0%	30.0%	4	3
Type of family	Joint	50.0%	60.0%	5	6
	Nuclear	30.0%	30.0%	3	3
	Single parent	20.0%	10.0%	2	1
	Extended	0.0%	0.0%	0	0
Monthly Income of the family	> 4000/- Rs.	10.0%	10.0%	1	1
	> 4000/- Rs. - 12000/- Rs.	20.0%	20.0%	2	2
	>12000 /- Rs.- 19000/- Rs.	20.0%	30.0%	2	3
	>19000/- Rs.	50.0%	40.0%	5	4
	Religion	Hindu	50.0%	60.0%	5
Muslim	30.0%	20.0%	3	2	
Christian	10.0%	10.0%	1	1	
Sikh	10.0%	10.0%	1	1	
Others	0.0%	0.0%	0	0	
Temperament of the child	Easy to get adjustab le	30.0%	20.0%	3	2
	Interme diately adjusted	30.0%	40.0%	3	4

	Difficult to get adjustable	40.0%	40.0%	4	4
Previous exposure to the hospital	Yes	80.0%	70.0%	8	7
	No	20.0%	30.0%	2	3
Number of hospitalizations within last one year	Nil	30.0%	30.0%	3	3
	One	20.0%	30.0%	2	3
	Two	20.0%	20.0%	2	2
	Three	20.0%	10.0%	2	1
	> Three	10.0%	10.0%	1	1
Diagnosis	Medical please specify	100.0%	80.0%	10	8
	Surgical please specify	0.0%	20.0%	0	2
Number of unpleasant experiences in the hospital	Nil	50.0%	60.0%	5	6
	One	40.0%	30.0%	4	3
	Two	10.0%	10.0%	1	1
	Three	0.0%	0.0%	0	0
	> Three	0.0%	0.0%	0	0

Table 2: Frequency and percentage distribution of pre-test and post-test level of anxiety among hospitalized children in experimental and control group.

CRITERIA MEASURE OF ANXIETY SCORE				
Score Level	Pre Experimental	Pre Control	Post Experimental	Post Control
Very Severe Anxiety (151-200)	0(0%)	0(0%)	0(0%)	0(0%)
Severe Anxiety (101-150)	3(30%)	2(20%)	0(0%)	2(20%)
Moderate Anxiety (51-100)	6(60%)	8(80%)	6(60%)	8(80%)
Mild Anxiety (1-50)	1(10%)	0(0%)	4(40%)	0(0%)
No Anxiety (0)	0(0%)	0(0%)	0(0%)	0(0%)
Maximum=20 Minimum =0				

Table 2 shows the distribution of pre-test and post-test level of anxiety among hospitalized children both in Experimental and Control Group.

It can be seen from the table that 0(0%) hospitalized children in the pre-test experimental group had very severe anxiety (151-200), 3(30%) hospitalized children had severe anxiety (101-150), 6(60%) had moderate anxiety (51-100) and 1(10%) hospitalized children had mild anxiety(1-50).

Similarly, in the pre-test control group 0(0%) hospitalized children had very severe anxiety, 2(20%) hospitalized children had severe anxiety (101-150), 8(80%) hospitalized children had moderate anxiety (51-100) and 0(0%) hospitalized children had mild anxiety (1-50).

It can be seen from the table that after play activities the level of anxiety among hospitalized children in the experimental group changed. Like 0(0%) hospitalized children in the experimental group had very severe anxiety (151-200), 0(0%) hospitalized children had severe anxiety (101-150), 6(60%) had moderate anxiety (51-100) and 4(40%) hospitalized children had mild anxiety (1-50).

Where as in the control group 0(0%) hospitalized children had very severe anxiety, 2(20%) hospitalized children had

severe anxiety (101-150), 8(80%) hospitalized children had moderate anxiety (51-100) and 0(0%) hospitalized children had mild anxiety (1-50).

Table 3: Comparison the pre-test and post-test level of anxiety among hospitalized children in experimental and control group.

Group	N	N=10+10 ANXIETY SCORE				Paired T Test		
		Pretest		Posttest		df	T	Result
		Mean	SD	Mean	SD			
Experimental Group	10	96.00	23.357	56.20	19.031	9	9.951	Significant
Control Group	10	90.900	19.997	91.50	19.426	9	0.441	Non Significant

Maximum = 20 Minimum = 0

In experimental group, the $p < 0.000$ means Highly significant In control group, the $p > 0.000$ means Non-significant

Table 3 represents that mean pre-test level of anxiety of hospitalized children in the experimental group was 96.00 with a standard deviation of ± 23.357 .

Where as in the control group the mean pre-test level of anxiety of hospitalized children score was 90.900 with a standard deviation of ± 19.997 .

It can be seen from the table that mean post-test level of anxiety of hospitalized children in the experimental group was 56.20 with a standard deviation of ± 19.031 .

Where as in the control group the mean post-test level of anxiety of hospitalized children score was 91.50 with a standard deviation of ± 19.426 .

A paired t test was compiled to determine whether the observed difference in mean pre-test and mean post-test level of anxiety score of experimental group was statistically significant. The observed t value of 9.951 was higher than the table value (P) indicating that the observed difference in mean was statistically significant.

Similarly "t" test was conducted to determine whether observed difference in mean scores level of anxiety of control group was statistically significant. The observed value 0.441 was less than the table value indicating that the observed difference in mean was not statistically significant.

DISCUSSION:

In this study, the Mean Pre -Test level of anxiety among hospitalized children in Experimental Group was 96.00 with a Standard Deviation of 23.357. Where as in the Control Group, the Mean Pre - Test level of anxiety among hospitalized children was 90.900 with a S.D of 19.997.

The Mean Post -Test level of anxiety among hospitalized children in Experimental Group was 56.20 with a Standard Deviation of 19.031. Where as in the Control Group the Mean Post - Test level of anxiety among hospitalized children was 91.50 with a S.D of 19.426.

A paired t test was compiled to determine whether the observed difference in mean Pre Test and Mean Post -test level of anxiety among hospitalized children Score of experimental group was statistically significant. The observed t value of 9.951 was higher than the table value at 0.05 indicating that the observed difference in mean was statistically significant. Similarly t test was conducted to determine whether observed difference in mean scores of control group respondent's level of anxiety score was

statistically significant. The observed value 0.441 was less than the Table value at 0.05 indicating that the observed difference in mean was not statistically significant.

Wong's (2002) mentioned the various functions of play in hospital. According to him, it provides diversion and brings about relaxation helps the child to feel more secure in a strange environment, helps to lessen the stress of separation and the feelings of home sickness, provides a means for release of tension and expression of feelings, encourages interaction and development of positive attitudes towards other.

CONCLUSION:

The findings of the study revealed that there was significant decrease in the level of anxiety among hospitalised children after provided the various play activities. The present study revealed that the there was prominent change in the behaviour of hospitalised children after they get involved in play activities. These hospitalised children shows more attachment and love along with this anxiety level gets reduced after given them play activities. Nurse administrator also can conduct workshops and in-service education related to importance of play in child development and how it can diminish the hospitalized stress as this will update the knowledge and practice of nurses and it requires collaborative effort and support from the medical experts in paediatrics.

Recommendations:

A similar study can be conducted with large number of sample in different settings. Also Comparative studies can be done on different age groups of children such as toddlers, pre-schoolers and adolescent.

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