

Effectiveness of Art Therapy on Level of Anxiety among Hospitalized Children

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Abstract: *Background:* Hospitalization most of the time become emotional and developmental set back to the children. It causes anxiety due to imbalance between environmental and societal demands and children's coping abilities. *Objective:* To determine the effectiveness of art therapy on anxiety among hospitalized children at Government Doon Medical College and Hospital, Dehradun, Uttarakhand, India. *Material and methods:* Quasi experimental design with pre test post test control group design was used in the study. The study was conducted at Pediatric ward of Government Doon Medical College and Hospital Dehradun. Purposive sampling technique was used to collect data from 50 hospitalized children both males and females with age group of 8 - 18years and were distributed in two groups (25each in control and experimental group). Data collection was accomplished by using Spence Children Anxiety Scale. *Results:* The findings shows that in both groups the test p - value was <0.001 (significant). *Conclusion:* This study concludes that Art therapy is an effective method in reducing anxiety among Hospitalized children. Nurses have to play important role to participate in art therapy in reducing the anxiety among hospitalized children.

Keywords: Effectiveness, Art therapy, Anxiety level, Hospitalized children

1. Introduction

The prosperity of a nation is greatly influenced by the health of its children. The world that children grow up in today is complex and constantly evolving. As kids get older, they pick up life lessons every day by observing the goodness and badness around them. The less your child stumbles and the better he gets as a result of your efforts to instill confidence in him.

As per the Centres for Disease Control and Prevention (CDC) data, around 66% to 378 children per day are admitted to hospitals per week. Illness and hospitalization are forms of crisis for children. Children who are hospitalized may feel anxious because of the strange hospital setting and associated procedures. [1]

One of the most frequent emotions experienced by children in hospitals is anxiety, which has a negative impact on both the length of the hospital stay and the standard of nursing care. Numerous non - pharmacological techniques, including play therapy, music therapy, art therapy, and bibliotherapy, can reduce anxiety, but art therapy is one of the most effective and affordable options. For children with anxiety, art therapy is offered as a stand - alone therapy as well as being incorporated into a number of mental health care programmes. Therefore, nurses can use art therapy to help hospitalized children feel less anxious.

Art Therapy provides away to gain insight and understanding through self - expression. [2] This interactive Art helps to hospitalized children to forget about their illness and normalize their experience. [3]

2. Material and methods

Study design

The study was conducted at Government Doon Medical College and Hospital, Dehradun, Uttarakhand, India from 31

august to 18th September 2022. Quantitative Research Approach with quasi experimental design (pre - test post - test control group design) was used. Non - probability purposive sampling technique was used for collecting the sample which comprised of 50 children in between 8 to 18 years of age.

Inclusion criteria:

- 1) Children's availability at the time of data collection.
- 2) Both male and female children between the age group of 8 - 18 years were included.

Exclusion criteria:

- 1) Children who were mentally retarded.
- 2) Children who were under strict isolation.
- 3) Children who were not willing to participate in the study

Tool description

It includes Socio demographic variables and Spence's Children's Anxiety Scale to assess the hospitalized anxiety among children aged 8 - 18years.

Tool 1: Socio - demographic variables

It includes child age, education, gender, mother's education, father's education, previous history of hospitalization, duration of hospitalization, play activity during hospitalization, presence of caregiver.

Tool 2: Spence Children's Anxiety Scale

Spence Children's Anxiety Scale was used to assess anxiety among hospitalized children aged 8 - 18years in selected hospital of Dehradun. This tool was developed by Dr. Susan H Spence, Ph. D. and Professor Emeritus in Griffith University, Australia. Her research in the area of clinical psychology focuses on the causes, assessment and prevention of anxiety. This scale is widely used across the world and has been translated into over 20 languages. [4]

Scoring of tool

In the scale maximum scoring was 3, and minimum score was 0. The total score of tool is 114. A score between 0 - 15 will indicate Normal Anxiety, 16 - 30 is Mild anxiety, 31 - 45 will be Moderate anxiety and 46 - 60 and <60 will indicate severe anxiety.

Statistical Analysis

The data were presented as mean and standard deviation. Paired 't' test and unpaired 't' test were performed to find the

significant mean difference between the pre and post - test level of assessment.

3. Results of the Study

The study was included a total of 50 hospitalized children with age ranging between 8 - 18years. The Mean±SD age of children was 12.16±2.44 years in experimental group and 12.92±2.691 in control group. Frequency and percentage distribution of demographic variables among hospitalized children is shown in Table 1.

Table 1: Frequency and Percentage distribution of demographic variables among hospitalized children, N= 50

S. no.	Demographic Variable	Categories	Experimental (n=25) (%)		Control (n=25) (%)	
			Frequency	%	Frequency	%
1	Age	08 - 12 years	15	60	12	48
		13 - 18 years	10	40	13	52
2	Gender	Female	14	56	13	52
		Male	11	44	12	48
3	Education level	4 - 5 class	5	20	2	8
		6 - 8 class	15	60	12	48
		9 - 10 class	2	8	7	28
		11 - 12 class	3	12	4	16
4	Type of Family	Joint	10	40	10	40
		Nuclear	15	60	15	60
5	Mother's Education	No formal	10	40	9	36
		Primary	4	16	8	32
		Secondary	5	20	3	12
		Graduate	3	12	2	8
		PG & above	3	12	3	12
6	Father's Education	No formal education	9	36	5	20
		Primary	4	16	8	32
		Secondary	5	20	6	24
		Graduate	3	12	5	20
		PG & above	4	16	1	4
7	Duration of Hospitalization	1 day	7	28	7	28
		2 days	10	40	10	40
		≥3 days	8	32	5	20
		<3days	0	0	3	12
8	Play activity during hospitalization	Mobile	25	100	25	100
9	Previous history of Hospitalization	No	22	88	22	88
		Yes	3	12	3	12
10	Caregiver	Father	2	8	3	12
		Mother	18	72	15	60
		Father & Mother	3	12	3	12
		other	2	8	4	16

Table 1 (a) represents that the experimental group, 60% of children were from the 8 to 12 age range. In the control group, 52% of children were from the 13–17 age range. In the experimental group, 56% of children were females and 44% were males. In the control group, 52% of children were females and 48% were males.60% of the children in the experimental group were primarily in the 6–8th grade.48% of the children in the control group attended classes for grades 6 to 8. In the experimental group, 60% of the children were from nuclear families.60% of the children were mostly raised by their nuclear family. More than half of the 40% of children in the experimental group had mothers who had no formal education.36% of the children in the control group had mothers who had no formal education. In the

experimental group, 36% of children's fathers lacked a formal education.32% of the children in the control group had fathers who were primarily educated. In the experimental group, more than half of the 40 children spent two days in the hospital. In the control group, the bulk of the 40% of children spent 2 days in the hospital. The vast majority (more than half) of children in the experimental and control groups were mobile while they were in the hospital. More than half (88%) of the children in the experimental group and control group had previously been hospitalized.72% of the children in the experimental group were cared for by their mothers.60% of the children in the control group had mothers as their primary care giver.

Table 2: Comparison between pretest and posttest anxiety levels among hospitalized children between the experimental and control groups, N=50

S. no.	Anxiety Level	Experiment group (mean \pm SD)	Control group (mean \pm SD)	Independent t test	DF	P - value
1	Pre test	38.44 \pm 4.482	36.76 \pm 4.521	1.319	48	0.193
2	Post test	32.88 \pm 5.548	33.76 \pm 3.822	0.653	48	0.517

The hypothesis is tested at $p \leq 0.05$

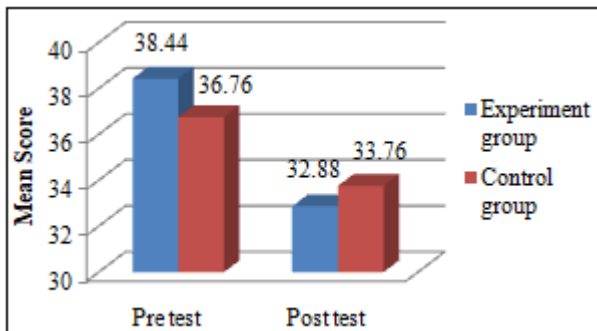


Table 2 (b) indicates that there was no statistically significant comparison between the experimental and control groups in the pre - test and post - test with $P > 0.05$. There was no such difference between the experimental and control groups in pre - and post - test anxiety levels.

4. Discussion

The main aim of this study was to determine the effectiveness of art therapy in reducing the level of anxiety among hospitalized children. Result showed the pre test and post test anxiety level shows the mean difference of 5.56 in experimental and 3 in control group. The calculated independent 't' value ($t=0.653$), $p>0.05$ following 3days of art therapy as measured by Spence's children anxiety scale. In the pre - test, majority of children, 14 (65%) had moderate anxiety, 9 (36%) low anxiety, and 2 (8%) high anxiety levels in the experimental group. In the control group, 13 (52%) have low anxiety, 11 (44%) have moderate anxiety, and 1 (4%) have severe anxiety. Followed by three days of art therapy, majority of children, 19 (76%) children had low anxiety, 6 (24%) children had moderate anxiety levels in the experimental group. In the control group, 23 (92%) of the children had low anxiety levels, and 2 (8%) children had moderate anxiety level in the post - test. It was concluded that art therapy was effective in reducing the level of anxiety among hospitalized children.

A similar study conducted by P. Sao Kamini and Maurya Archana at Wardha on the effectiveness of art therapy among 60 hospitalised children revealed that the effectiveness of art therapy on anxiety was found statistically with $t = 26.16$ at the level of anxiety, $p < 0.05$. [5]

5. Conclusion

This study concludes that Art therapy is an effective method in reducing anxiety among hospitalized children. Nurses have to play important role to participate in art therapy in reducing the anxiety among hospitalized children.

References

- [1] Anxiety and depression in children: Get the facts [Internet]. India: National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention; 2023 Mar. Available from: <https://www.cdc.gov/childrensmentalhealth/features/anxiety-depressionchildren.html#:~:text=Anxiety%20and%20depression%20affect%20many,diagnosed%20depression%20in%202016%2D2019.> Ens mental health/features/anxiety - depression - children.html#:~: text=Anxiety%20and%20depression%20affect%20many, diagnosed%20depression%20in%202016%2D2019.
- [2] Kheibari. S. Z. Effectiveness of Art Therapy for Orphaned children. Practice in clinical psychology.2014; 02 (03): 45 - 52.
- [3] Elisa, Hospitalized anxiety [internet].2019 (cited 2019Sep.06) Available from: <http://ncbi.nlm.nih.gov.>pubmed>.
- [4] Ben D. Spence Children's Anxiety Scale – Child (SCAS - Child) [Internet]. NovoPsych.2021. Available from: <https://novopsych.com.au/assessments/child/spence-childrens-anxiety-scale-child-scas-child/>
- [5] Sao KP, Maurya A. effectiveness of art therapy on level of anxiety among hospitalized children. International journal of science and research (IJSR) [Internet].2017 Aug 8; 6 (8): 974–7. Available from: <https://www.ijsr.net/archive/v6i8/ART20176093.pdf>