

A study to assess the effectiveness of origami therapy on anxiety towards hospitalization among children admitted in pediatric wards of selected hospitals from sangli, Mirajand Kupwad corporation area

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Abstract

Background: Play therapy plays an important role in reducing anxiety towards hospitalization in hospitalized children. This study is aimed to assess the effect of origami therapy on anxiety towards hospitalization among school age children admitted in the pediatric wards of selected hospitals. **Method:** A Quasi experimental pre-test post-test with control group design was used in the study, which includes total 60 children ,30 children in control and 30 in experimental group. Children with moderate and sever anxiety were included in the study and the anxiety was assessed through observation check list by the researcher and anxiety was also reported by the children with self reported rating scale. **Result:** The difference in the anxiety score across two groups was statistically significant. By using observation checklist as well as self reporting rating scale. Then origami therapy was given to the child for 30 min for 5 days for experimental group and the mean post-test anxiety score was observed and in control group it was 19.63 i.e., (mild anxiety) and in experimental group it was 10.4 i.e., (minimal anxiety). Self-reported rating post-test anxiety score in control group was 27.60 i.e. (moderate anxiety) and in experimental group it was 12.70 i.e. (mild anxiety). The difference between the groups was statistically significant as $P= 0.000$. It indicates that the anxiety was reduced with the origami therapy in hospitalized children. **Conclusion:** The study findings showed that administration of origami therapy on anxiety towards hospitalization among children was effective in relieving anxiety.

Key words: Assess, Effect, Origami therapy, Anxiety towards hospitalization

Introduction

A child's overall health is more than physical, mental and emotional health. Children's health focuses on well-being of children from conception through adolescence. It is concerned with all aspects of children's growth and development and with the unique opportunity that each child has to achieve their full potential as a healthy adult. ^[1]

For infants and young children, hospitalization is an entirely new experience. They formed friends with physicians or nurses when they were taken to a private physician's office or a clinic, but they are too young to grasp that hospital workers are also friends. Because parents are prone to anxiety, their fears are passed down to their children. ^[2]

A child's manner of life, or everyday "job," is play. It's also one of the most effective stress- reduction techniques from childhood. The sick child requires play to fill lonely hours and to lessen the damage produced by hospitalization by expressing thoughts and emotions through it. ^[2]

Illness and hospitalization put the child and his or her family under a lot of stress and make it difficult to adjust. Nurses provide comfort, strength, and information to parents and their children. ^[3]

Hence, the current study was done to assess the existing anxiety among children in the experimental and control

group before origami therapy, to assess anxiety in control and experimental group after origami therapy. and to compare the post-test anxiety between experimental and control group.

Material and Methods

Quantitative research approach with Quasi experimental per-test post-test with control group design was used in this study. The study conducted in pediatric hospitals from Sangli, Miraj and Kupwad corporation area. The study enrolled total 60 school age children (10- 12 years) admitted first time in pediatric ward. For conducting the study permission was obtained from Institutional ethical committee and from hospital authority from selected hospitals for the study. Informed written consent was obtained from parents/ caregivers and assent was taken from children. 60 children fulfilling inclusion criteria (School age children (10-12 years) admitted 1st time in hospital, children with moderate and severe level of anxiety and children who are likely to stay in hospital for 6 days were selected for the study. Exclusion criteria included was the children who are critically ill, mentally challenged, the Parent and children who are not willing to participate in the study and Children who are on anti-anxiety medication.

Sample size calculation

Sample size was calculated by using power analysis statistical formula. Sample size was 60 in which 30 were in experimental and 30 in control group. The sampling technique used was the purposive sampling technique.

Procedure

On the day of first admission after 5 hours Observation of anxiety towards hospitalization is checked by using observation checklist by researcher and then self reported anxiety rating scale was given to the child to express the anxiety towards hospitalization. After assessment of anxiety children with moderate and severe anxiety were selected to include in the final study then origami therapy was given every day for 30 minutes twice a day consecutively for 5 days. And after completion of origami therapy everyday post-test was done. In control group, after assessment of anxiety, routine hospital care was continued every day for 30 minutes for 5 days and after 30 minutes post-test was given.

Outcome

The outcome of the study was observed everyday with post test for 5 days after origami therapy.

Statistical analysis

Statistical analysis was done based on the objective of the study, frequency, percentage, mean, SD were calculated to pre and post test score of 6 days. Paired t- test is calculated to get pre-test and post test score.

Results

Table 1. Presents Frequency and percentage distribution of demographic variables, there was no difference in the characteristics of the both the groups, homogeneity was maintained.

Table 2. Presents the comparison of post-test anxiety score assessed through observation checklist in experimental and control group there was statistically significant difference in anxiety among children in control and experimental group, as the (P value is <0.05).

Table 3. Presents Comparison of self-reported rating scale on post-test level of anxiety in experimental and control group. And it is found that there was statistically significant difference in anxiety among children in experimental and control group with rating scale. as the (P value is <0.05).

Table 1. Frequency and percentage distribution of demographic variables

Sr. No.	Variable	Groups	Control		Experimental	
			Frequency	Percentage	Frequency	Percentage
1	Age (years)	10 years	14	46.67	13	43.33
		11 years	11	36.67	10	33.33
		12 years	5	16.67	7	23.33

2	Gender	Male	16	53.33	14	46.67
		Female	14	46.67	16	53.33
3	Education	4th Std	11	36.67	13	43.33
		5th Std	14	46.67	10	33.33
		6th Std	5	16.67	7	23.33

Table 1. shows that, maximum children were in the age group of 10 years in both the groups that is 46.67% in control group and 43.33% in experimental group. In gender 53.33% were male in control group and 46.67% were in experimental group. 46.67% female were in control group and 53.33 % female in experimental group. In education maximum number of children were from 5th standard that is 46.67% in control group and in experimental group maximum children were from 4th standard that is 43.33%.

Table 2. Comparison of post-test anxiety score assessed through observation checklist in experimental and control group

GROUP	MEAN	S.D.	t	p
Experimental	10.4	4.43	6.99	0.000
Control	19.63	4.32		

Table 2. shows that, the mean post-test score of experimental group was 10.4 with standard deviation 4.43.the post-test score of control group was 19.63 with Standard deviation is 4.32. the test statistics value of the unpaired t test was 6.99 with p value is 0.000. The p value is less than 0.05, which shows that there is difference in anxiety score between experimental and control group. hence, we reject the null hypothesis and accept the alternative hypothesis. which concludes that, there was significant difference in anxiety among children in control and experimental group.

Table 3. Comparison of self-reported post-test level of anxiety in experimental and control group

GROUP	MEAN	SD	t	p
EXPERIMENTAL	12.70	3.85	15.76	0.000
CONTROL	27.60	3.46		

Table 3. shows that, the post-test score of experimental group was 12.70 with standard deviation of 3.85. The post-test score control group was 27.60 with standard deviation of 3.46. The test statistics value of the unpaired t test was 15.76 with p value 0.000. The p value less than 0.05, hence reject the null hypothesis and accept the alternative hypothesis. Which concludes that, there was significant difference

Discussion

Children's hospitalization causes anxiety in their parents, siblings, and other family members. Parents believe their children to be their most significant assets, which contributes to their stress. Because of the distinct characteristics of children of various developmental ages, their care necessitates the development of additional skills on the part of caregivers. ⁵

One of the most crucial aspects of a child's existence is play, which is also one of the most effective techniques for stress management. Because illness and hospitalization are traumatic events in a kid's life and frequently result in excessive stress, acting out fears and anxieties provides a way for the youngster to cope with these difficulties. Children who are able to play are coping well; those who are unable to play are waiting, testing, holding back, or making internal judgements about the situation. ⁶

In a study conducted by Rafia Islam, Keerthana, et, al. in 2017. The main aim of the study was to determine the effectiveness of origami on anxiety among hospitalized children. A pre- experimental research design was used

in this study. the sample were hospitalized children aged between 8- 10 years who were admitted in pediatric ward. Purposive sampling technique was used in this study. The tool used in study was child reaction and hospital anxiety assessment rating scale to assess the anxiety level among hospitalized children. In this study researcher did pre-test assessment of level of anxiety by using hospital anxiety assessment rating scale. Then the child was encouraged by the researcher to make origami as per their choice for the next 4 days for 30- 40 minutes. And post-test was conducted on the fourth day by using hospital anxiety assessment rating scale to detect changes in level of anxiety among hospitalized children. The result of the study concluded that, during pre-test 11.1% children had mild anxiety, 61.1% had moderate anxiety, 27.8% children had severe anxiety. And post test result showed that, 72.2% children had mild anxiety, 27.8% children had moderate anxiety and there were no children with severe anxiety.

Conclusion

It is concluded that, administration of origami therapy for anxiety is safe, cheap and cost- effective method to reduce anxiety towards hospitalization. This study recommend that origami therapy should be incorporated as one of the pain management modalities in daily practices.

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Conflicts of Interest- There are no conflicts of interest

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