

Effectiveness of Organized Play Session On Anxiety Level: A Quasi-Experimental Research Study

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Abstract: Objectives: 1. To assesses the anxiety level in both the experimental and control group before and after play session. 2. To compare the level of anxiety among hospitalized preschool children between the experimental and control group. 3. To find out the association of anxiety children with selected demographic variables. **Methods:** Quasi-experimental non-randomized control group research design was adopted for this study. A total of 50 pre-school children were selected by using purposive sampling technique in IMS & Sum hospital Bhubaneswar. The level of anxiety was assessed using a self-structured questionnaire. **Results:** This study showed in the experimental group, before play session about 20%, 64%, 16% pre-school children had mild, moderate anxiety, severe anxiety respectively & after a play session, on post-test results showed 76% preschool children had mild anxiety, 16% preschool children had moderate anxiety & no one had severe anxiety whereas in control group pre-test results showed 60%, 28%, 12% preschool children had mild, moderate, severe anxiety respectively & on post-test results showed 48%, 36% & 12% preschool children had mild anxiety, moderate & severe anxiety respectively. Before the play session, in the experimental & control group, the mean \pm SD value of anxiety score was 29.6 ± 6.55 and 24.52 ± 8.06 respectively. The obtained "t" = 2.44 with p-value is 0.0091 which was statistically significant, whereas in post-intervention the mean \pm SD value of anxiety score in experimental was 19.8 ± 4.64 and in control group mean \pm SD value was 25.04 ± 8.12 . The obtained "t" = 2.80 with p-value was 0.0073 which was statistically significant. **Conclusion:** Organized Play session is an effectual session in reducing anxiety among hospitalized preschool children.

Keywords: Effect, Play session, Hospitalization, Preschool children, Anxiety

Introduction

Hospitalization brings an unhappiness experience for children because they have to leave their sweet home and their parent and another important person. Illness and hospitalization are important cause which creates circumstances of negative effects in children's lives. About 2.4% of children were scared of getting illness & 39.5% of 86 children were experienced fear due to hospitalization. ⁽¹⁾ Children become angry, irritable as they can't perform their favorite activities like play. ⁽²⁾ Strain & tension are seen in children as they are separated from their home and entry to a stranger surrounding in the hospital. The children seem fear due to medical procedures, pain, panic due to separation from friends & parents, loss of safety & security in the hospital. ⁽³⁾ Parent also develops anxiety and depression when their children are hospitalized. ⁽⁴⁾ Furthermore there are so many factors that induce stress among the parent whose children are being hospitalized. ⁽⁵⁾ Mothers may experience irreconcilable emotional reactions, such as grief,

sorrow, fault, panic, resentment, loss of self-esteem, and a sense of failure as they distancing themselves from their children during hospitalization. ⁽⁶⁾ Moreover, anxiety due to hospitalizations can affect children's mental growth, physical growth as well as personality development. ⁽⁷⁾

About more than 90% of children expressed that they were fearful by the name of the hospital. Mainly fears were due to nursing procedures. Children also expressed fears caused by the unfamiliar environment, child-staff relations ⁽⁸⁾ But when a child gets admission in the hospital, concentration is given to cure the disease and to decrease the psychological saddle. ⁽⁹⁾ And considering play is an unimportant. However, the importance of play is increased when the child is frequently hospitalized. Play therapy meets the mental health needs of children. It helps them to meet the mental health needs, reduce their psychological burden. ⁽⁹⁾ Play helps hospitalized children cope with the traumatic situation. ⁽¹⁰⁾ Play helps the Children to win the panic situation are helped to express their feelings. It helps them to express their feeling through natural, through an innate, self-guided, self-healing process. ⁽¹¹⁾ Therefore the present study conducted to find out the effect of organized play sessions on anxiety levels among the hospitalized preschool children.

Methods

Research approach: Quantitative research approach was used for the present study. Research design: A quasi-experimental research design was used in the present study. Setting: the present study was carried out at IMS and Sum Hospital, Bhubaneswar. A total of 50 hospitalized preschool children were adopted by using purposive sampling technique for the present study.

Data collection tool:

Self-structured hospitalization anxiety scale: It consisted of 16 items. All items answered using a Likert scale format ranging from never to always. Give 0 point for "never", 1 point for "some time" 2 point for "often" and 3 point for "always". Scoring: no anxiety 0-12, mild anxiety 13-24, & severe anxiety 37-48

Data collection procedure

A formal prior written permission was obtained from Medical superintendent IMS & Sum Hospital, Bhubaneswar for conducting the study. Informed consent from the samples was obtained after an explanation of the objectives of the study. The data gathering process was done in 2 sessions. In the first session, 50 samples (25 in the control group and 25 in the experimental group) were taken from the pediatric ward by non-probability purposive sampling. On average the investigator got 10-12 hospitalized preschool children together for data collection. Time for data collection was 20 minutes on the first day, the pre-test was done in both the group to find out the level of anxiety by using a self-structured anxiety tool. Thereafter play therapy: building block, color paper, and drawing instrument were administered only to the experimental group for 4 days group. In the second session, the group was observed on the 4th day of induced (play session) the anxiety of preschool children. In a day maximum, 5 patients were observed, so that the investigator could easily observed in the ward. Then after on 4th day, post-evaluation was done in both groups. The researcher continued this pattern of data gathering process till the completion of the data collection.

Results

Analysis of data

Data analysis has been done by using descriptive and inferential statistics. Demographic data among both the groups were expressed as frequency and percentage. Quantitative data expressed as mean \pm SD. Both paired & unpaired "t" test was performed to find out the effectiveness of organized play session. Chi-square test was done to determine the association of anxiety level with demographic variables.

Socio-demographic characteristics of study participants

Out of 50 hospitalized preschool children, the maximum (34%) were within 4-6 years of age. There is equal (50%) of female and male children according to sex distribution. The majority of the study samples (44%) were having Rs 10000-Rs 20000 monthly family income. According to parental education, the majority (24%) were having higher secondary education, as well as graduation, and above graduation.

According to the history of previous hospitalization, maximum (66%) samples were having no history of previous hospitalization. Maximum samples (48%) were hospitalized for 1-2 days.

Section –A

Findings the pre-test anxiety score & post-test anxiety score in both experimental and control group

Fig-1 revealed that on pre-test in the experimental group, 20% preschool children had mild anxiety, 64% preschool children had moderate anxiety, 16% preschool children had severe anxiety & on post-test results revealed that 8% preschool children had no anxiety, 76% preschool children had mild anxiety, 16% preschool children had moderate anxiety & no one had severe anxiety and pre-test results in the control group showed that 60%, 28%, 12% preschool children had mild-moderate anxiety & severe anxiety respectively. And on post-test results showed that 4% of preschool children had no anxiety & about 48%, 36% & 12% preschool children had mild, moderate & severe anxiety respectively.

Section -B

Findings the comparison of pre-test anxiety score and post-test anxiety score between experimental and control groups.

Table .1 showed that in the experimental group, in pre-intervention the mean \pm SD of anxiety was 29.6 ± 6.55 and the mean \pm SD value in the control group was 24.52 ± 8.06 . The obtained “t” = 2.44 at df=48 with p-value is 0.0091 which was statistically significant, so it accepts the research hypothesis whereas in post-intervention the mean \pm SD value of anxiety score in the experimental group was 19.8 ± 4.64 and the mean \pm SD value of anxiety score in the control group was 25.04 ± 8.12 . The obtained “t” = 2.80 at df=48 with p-value was 0.0073 which was statistically significant.

Section -C

Findings related to Chi-square analysis of anxiety level with selected socio-demographic variables

Table 3 revealed that the chi-square association of anxiety level with age was statistically significant as the calculated chi-square value is 8.72033; the calculated p-value (0.01277) was < 0.05 level of significance. The chi-square association of anxiety level with family income was statistically significant as the calculated chi-square value is 6.111; the calculated p-value (0.0471) was < 0.05 level of significance. And also the chi-square association of anxiety level with parental education was statistically significant as the calculated chi-square value is 15.2891, calculated p-value (0.001) was < 0.05 level of significance. But there was no association of anxiety with sex of preschool children.

Discussion

In the experimental group, on pre-test about 20%, 64% & 16% of preschool children had mild, moderate, and severe anxiety respectively. And on post-test results showed about 8% of preschool children had no anxiety & about 76% & 16% of preschool children had mild & moderate anxiety respectively.

In control group on pre-test results showed that about 60%, 28% & 12% of preschool children had mild, moderate & severe anxiety respectively. And on post-test results showed that 4% of preschool children had no anxiety, & 48%, 36% & 12% preschool children had mild, moderate & severe anxiety respectively.

This finding is similar to the study conducted by Mr. Anandhkrishnan T G which showed that in the experimental group 38% & 12% of children had mild anxiety and moderate anxiety respectively whereas in the control group about 44% & 6% children had moderate & severe anxiety. ⁽¹²⁾

The present study also reveals that in pre-intervention, the mean \pm SD of anxiety in the experimental group was 29.6 ± 6.55 and the mean \pm SD of anxiety in control group was 24.52 ± 8.06 . The obtained “t” 2.44 at df 48 with p-value is 0.0091 which was statistically significant, whereas in post-intervention the mean \pm SD value of anxiety in the experimental group was 19.8 ± 4.64 and in control group it was 25.04 ± 8.12 . The obtained “t” 2.80 at df 48 with p = 0.0073 which was statistically significant. This finding is similar to the findings of the study conducted by Kinjal Patel et.al (2013) in Gujarat which revealed in pre-intervention, the mean \pm SD value of anxiety in the experimental group was 72.70 ± 23.79 & in control group it was 76.10 ± 19.733 . Whereas in post-intervention, the mean \pm SD value of anxiety in the experimental group was 37.87 ± 14.70 & in control group, the mean \pm SD value was 72.13 ± 19.23 . The obtained “t” value was 14.015 which was statistically significant at 0.000 level. (<0.05). There was a significant reduction in the level of anxiety among the children in the experimental group⁽¹¹⁾.

The present study reveals that there is an association of anxiety with a previous history of hospitalization as the calculated chi-square value is 3.2×10^{-5} ($df=2, p=0.012$). This findings are similar with the finding of the study conducted by Basant Kumar Karn et.al to find out the effect of play therapy on stress reduction by taking 46 school children in Nepal which found that there was a significant association of stress of the children with the previous history of hospitalization ($p = 0.002$)⁽¹³⁾

Similarly, the present study also found that there is a significant association between anxiety level and age of preschool children as chi-square was 8.720, “p” was 0.012 which was statistically significant which is similar with the findings of the study conducted by Sheuli Sen which revealed that the association between anxiety level & age of children was significant as the “F” value = 8.683 & “P” value= 0.006.⁽¹⁴⁾ This finding is also congruent with the findings of the study conducted by Nikita R Suryawanshi et.al in Maharashtra which found that there was a significant association of stress with age of children' ($\chi^2=11.54, P= 0.021$) and no significant association ($P>0.05$) of stress with demographic variables⁽¹⁵⁾

The present study reveals that there was no association between anxiety and sex as the chi-square value is 2.677 (“p” =0.101) which is not statistically significant. These findings are similar to the findings of the study conducted by Basant Kumar Karn in Nepal⁽¹³⁾.

Conclusion

Based on the results of the present study it was concluded that organized play therapy had a significant effect in decreasing anxiety level. Nurses need to be conscious about anxiety among hospitalized children. Nurses can use appropriate play therapy as per the age of the hospitalized children. In the hospital setting, there should be one playroom, which helps to remove fear and anxiety among hospitalized children.

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Ethical consideration: This study was approved by the institutional ethical committee and prior consent of the parents of patients was taken before the collection of samples.

Conflict of interest: The author declares there is no conflict of interest.

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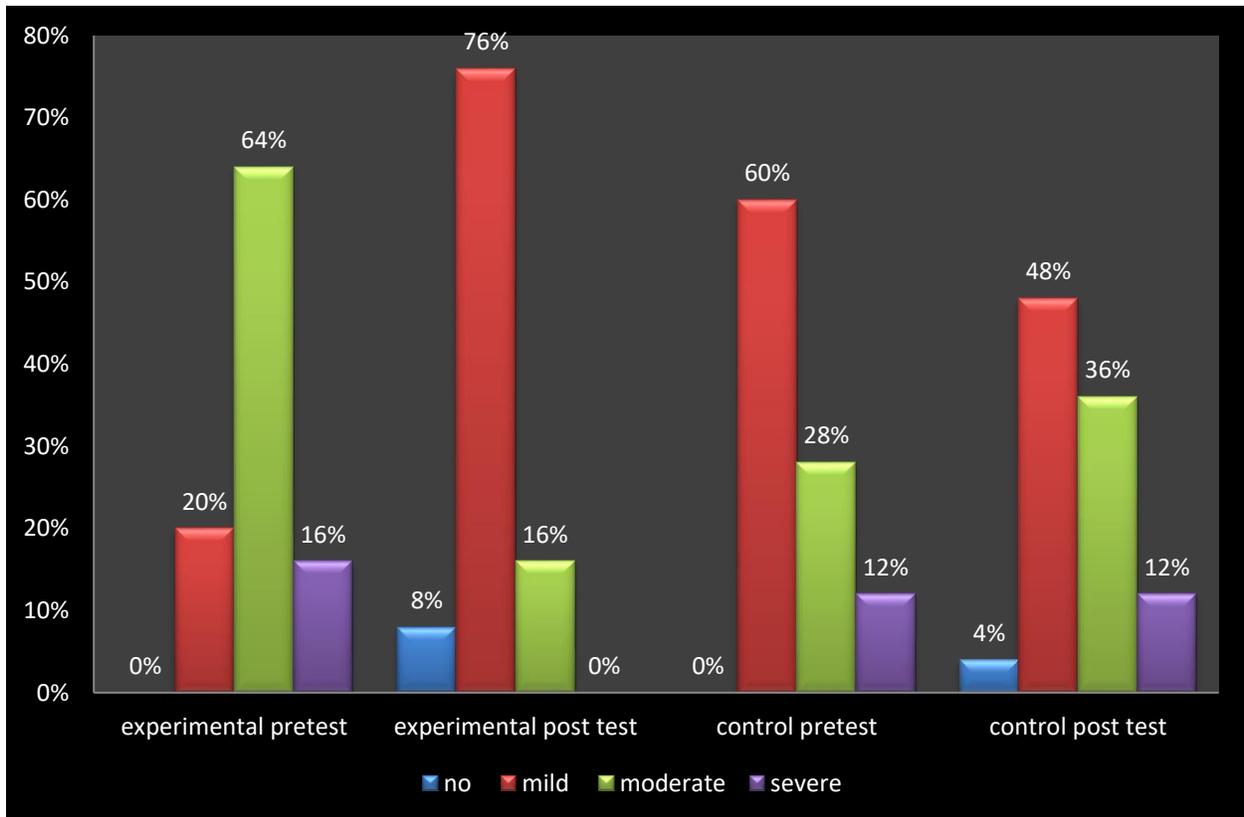


Figure 1. Findings percentage distribution of pre-test and post-test score on anxiety level in both experimental and control group among hospitalized preschool children

Table 1. Findings the comparison of pre-test and post-test score of anxiety level between experimental and control group

Item	Experimental group	Control group	Unpaired "t" test	Df	P-value	Remarks
	MEAN±SD	MEAN±SD				
Pre-intervention	29.6±6.55	24.52±8.06	2.44	48	0.0091	Significant
Post-intervention	19.8±4.64	25.04±8.12	2.80	48	0.0073	Significant

Table 2. Chi-square analysis of age, sex, monthly income, parental education, previous hospitalization, duration of hospitalization

Items	Percentage		Chi-square	Df	Tabulated value t p<0.05	Inference
	Mild (<21)	Moderate(>21)				
Age						
(3-3.9)years	2	15				
(4-4.9)years	2	15	8.72033	2	0.012776	Significant
(5-6)years	8	8				
Sex						
Male	3	21	2.677	1	0.101775	Not significant
Female	9	17				
Monthly income						
<10000	2	7				
10000-20000	2	20	6.111	2	0.0471	Significant
>20000	8	11				
Parental education						
Illiterate	2	4				
Secondary	3	5				
Higher secondary	2	10	-15.2891	5	<0.00001	Significant
Graduation	4	8				
Above graduation	5	7				
Previous hospitalization						
Yes	2	15				
No	10	23	17.3056	1	3.2E-0.5	Significant
Duration of hospitalization						
1-2 days	3	21				
3-4 days	7	13	3.353436	2	0.18699	Not significant
>4 days	2	4				