

Quasi Experimental Study to Evaluate the Impact of Psychoeducational Intervention on Level of Anxiety among Hospitalized Children

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Abstract

Background of the study: There are various way to provide Psycho-education(PI) to the patient admitted in the hospital. It is broadly steered by four main goals: transfer of information, medication and treatment support, training and support in self-help and self-care, and the provision of a safe place to vent emotional frustrations.

An excessive or persistent state of anxiety leads devastating effect on children's physical as well as mental health. Psych education is scientifically proved therapeutic intervention which helps to the client along with family members to cope with illness and give the information as well as support to understand in better way .Psych education is helps to children and their family to minimize the emotional trauma during the hospital stay.

Objective:

- 1) To determine the impact of psycho educational intervention on anxiety level among children with hospitalization.
- 2) To find out the association between socio demographic variable with the pre intervention anxiety level among hospitalized children.

Methodology: The study was executed by using quantitative research approach with quasi experimental design. The study was conducted at selected three hospitals of Anand district, two hospital of Vadodara district and one Hospital of Ahmedabad District, Gujarat. 33 Hospitalized 6 – 12 year old children were selected for each experimental group and control group using convenient sampling technique. For both groups, Pre-intervention anxiety level assessment was done using Performa of demographic variables, Modified Hamilton Rating Scale. Psycho educational intervention included play book and guided imagery administered to the 6-12 year old hospitalized children of experimental group for duration of 30 minutes for 3 consecutive days. On third day anxiety level have been level done on third day after 5 hours from last intervention.

Result: Two sample t tests were used to determine the impact of psycho educational intervention on anxiety level among hospitalized participants. As psycho educational intervention has administered to

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interventional group there was statistically significant difference (p value <0.00010) found in post assessment of anxiety level between experimental as well as control group. Comparison between interventional and control group calculated value of two sample test was 11.85.

Conclusion: Findings of the study came to the conclusion that psycho educational interventions consider a positive effect to reduce the anxiety level among children during hospitalization.

Key words: *Psycho educational intervention, anxiety level, hospitalized children*

Introduction

Hospitalization is a stressful and emotional event for parents and caretaker. It can be emotionally devastating to children. Hospital play interventions have been widely used to prepare children for invasive medical procedures and hospitalization. Hospitalization is a critical phase in the life of child. Hospitalization may leads to increase the stress and level of anxiety among children and their caretakers. An excessive or persistent state of anxiety leads devastating effect on children's physical as well as mental health.^[1]

Anxiety can be characterized by the feelings of tension and worry thoughts. It is a normal process in life. However, if the anxiety becomes severe or start to impair one's life functioning, it can be categorized as a disorder or illness.

All parents would like to avoid their parents from hospital based anxiety and stress. Child also try to become less panic with health care industry environment. In all over child population numbers of children are admitted in hospital at least once in their early younger age which is about 30 per cent and all of them 5 per cent are frequently hospitalized.^[2] Children's psychological and physical needs should be vital, for the reason that continuation of the growth and evolution during the sickness will forestall the steady and irreversible physical and mental impacts of kids.^[3]

Despite the specific illness, hospitalization of children in a new situation faces them with scary intervention, body pain and uneasiness. Causes creating stress and anxiety during hospitalization of children are: separation of children from their parents those who have loved, fear of the unknown, lack of control and autonomy, bodily injury leading to discomfort, pain and fear of the death. Kids' reaction in crises situation is affected by different factors, included formative age, past experience, adaptable innate and adaptable abilities, severity and seriousness of the disease and the accessible emotionally supportive system.^[3]

Kids having different kind of fear with regards to hospitalization, for example, fear of separation from the

family, having blood tests and invasive procedure, long duration hospital stay, and being told "bad news" about their health. Among different kind of psychological treatments, there are sufficient research proof based on impact of behavioural intervention along with cognitive behavioural intervention for minimizing the fearfulness and anxiety.^[3] Children commonly report feeling afraid or anxious as they anticipate and engage in healthcare settings with medical professionals.^[4]

The American Academy of Paediatrics (Child Life Services for hospitalized children) recommended providing information, education, and formation of a trusting relationship between health care professionals and children and their parents by using various tools such as pictures, diagrams, orientation tours of surgical or treatment areas, therapeutic play, and puppet etc.^[5]

Psychoeducation is an evidence-based therapeutic *intervention* for patients and their loved ones that provides information.

A research study found that about 10 to 15 per cent of children who are admitted to hospital after sustaining an injury develop post-traumatic stress disorder (PTSD), while for those admitted to areas such as the intensive care unit (ICU), the rate of psychological disorder in children is much higher – in the order of 20-25 per cent.

At the time of hospital admission, particular attention is paid to the improvement of the clinical symptoms of the disease and to a reduction in the psychological burden. As a result, play is often disregarded, or considered of minor importance. However, the role and value of play increases when the child is repeatedly hospitalized, mostly due to a chronic disease or disability, since it decisively contributes to emotional, mental well-being, self-confidence and self-esteem.

There are few techniques which can be utilized including guided imagery, play intervention, music therapy as a non-pharmacological treatment etc. One of intervention is psycho education intervention, which can be one of the viable treatments in decreasing the anxiety emerging from the hospitalization in kids.^[3] Psych education has been defined as "The evidence-

based therapeutic intervention for clients and their family members who help them to cope up with illness and give the information as well as support to understand in better way.” Psych education is helps to children and their family to minimize the emotional trauma during the hospital stay. [6] The central goal of therapeutic play is to facilitate the emotional and physical well-being of hospitalised children. [7]

Psychoeducational intervention seems very effective in various anxiety related disorders, personality disorders, psychotic illnesses, bipolar disorder, schizophrenia and clinical depression.

Methodology

The study was executed by using quantitative research approach with quasi experimental design. Quasi experimental research design: It involves the manipulation of independent variable to observe the effect on dependent variable, but it lacks at least

One of the two characteristics of the true experimental design: randomization or a control group.

The target population for conducting research study were hospitalized children who are 6 – 12 year old. Using non probability convenience sampling technique 66 hospitalized children having anxiety were employed by calculating power analysis and then randomly allocated in two groups (33 each). Only experimental group had taken the intervention. Data collection was done using a researcher self-developed Performa of demographic variables and Modified Hamilton Anxiety Rating Scale. Before data collection, researcher introduced herself to participants with given explanation regarding the study and also obtained informed consent from the participants.

As per the part of psycho-educational intervention, one play book and one story for guided imagery has been prepared by researcher. Consecutively 3 days intervention had given to the experimental group for 30 minutes. Therapeutic play will be given for 20 minute and guided imagery will be given for 10 minutes, in that 7 minute for story and 3 min for take the review from the child about the story. Anxiety level should assessed by using Modified Hamilton anxiety rating (HARS) scale After 5 hours from last intervention.

The study was conducted at selected five hospitals of Anand district, Gujarat. Main study was done at selected three hospitals of Anand district,

two hospital of Vadodara district and one Hospital of Ahmedabad District, Gujarat.

Moreover, the data was analysed and interpreted by using descriptive and inferential statistics.

Operational Definition

Anxiety: It refers to fear and worry among hospitalized children. It affects body and

Mind, leads to emotional stress. In Present study anxiety is assessed by Modified

Hamilton Anxiety Rating scale.

Psycho educational Intervention: It is the cluster of the strategies which help to

Reduce the level of anxiety. In present study, play therapy and guided imagery used as

a psycho educational intervention to reduce the level of anxiety among hospitalized

Children.

Hospitalized children: Refers to the children between the age group of 6-12

Years and who are admitted in the hospital with different diagnosis.

Inclusion criteria:

- Children those are 6 – 12 year old.
- Children those are admitted in selected hospitals for minimum 3 days.
- Children those are willing to participate in the study.
- Children whose parents are available at the period of study.
- Children whose parents are giving permission for intervention.
- Children who’s able to understand Gujarati Language.

Exclusion Criteria:

- Children those are admitted in intensive care unit.

Children those are not co-operative for intervention.

- Children those are physically and mentally challenged.

Result

Result shows that,

Section 1: Findings related to socio-demographic variables in Experimental group and control group.

In Analysis & interpretation of data, Frequency and percentage distribution of samples based on socio demographic variable

In experimental group out of 33 samples,

16 samples (48.5%) are 6-9 years old and 17 samples (51.5%) are 10 - 12 years.

Out of 33 samples, and 22 samples (66.7%) are male and 11 samples (33.3%) are female according to Gender.

In reason for area of hospitalization 21 sample (63.6%) are admitted in general ward, 12 samples (36.4%) are admitted in special ward.

In reason for hospitalization 19 samples (57.6%) having medical illness, 14 sample (42.4%) having surgical illness.

In family type, 18 samples (54.5%) belongs to joint families, 15 sample (45.5%) was living in nuclear families

24 sample (72.7%) children experience of previous hospitalization and 9 sample (27.3%) children have no

Section 2:

TABLE 1 Findings related to psycho educational intervention on anxiety level during hospitalization of experimental group.

Assess pre and post-test level of anxiety in experimental group

	Mild (1-17 Score)		Mild to Moderate (18-24 Score)		Moderate to Severe (25-30 Score)		Very Severe (31-56 Score)		Total
	No.	%	No.	%	No.	%	No.	%	
Pre test	00	00	05	15.15	21	63.63	07	21.21	33
Post Test	26	78.78	06	18.18	01	03.03	00	00	33

experience of previous hospitalization

In regards of duration of hospitalization, 18 sample(54.5%) children are admitted for 1-5 days, 7 sample (21.2%) children are admitted for 6 -10 days and 8 sample (24.2%) children are admitted for ≥ 11 days.

In control group out of 33 samples,

19 samples (57.6%) are in 10-12 years and 14 samples (42.4%) are 6-9 years old.

By 33 samples, 18 samples (54.5 %) are male and 15 samples (45.5%) are female according to Gender.

In reason for area of hospitalization 16 sample (48.5%) are admitted in general ward, 17 samples (51.5%) are admitted in special ward.

In reason for hospitalization 25 samples (75.8%) having medical illness, 8 sample (24.2%) having surgical illness.

In family type, 22 samples (63.6%) was living in nuclear families, 12 samples (36.4%) belongs to joint families.

24 sample (72.7%) children experience of previous hospitalization and 9 sample (27.3%) children have no experience of previous hospitalization

In regards of duration of hospitalization, 21 sample(63.6%) children are admitted for 1-5 days, 9 sample (27.3%) children are admitted for 6 -10 days and 3 sample (9.1%) children are admitted for ≥ 11 days.

Above mention table 2.1 interpreted that in experimental group, 5 sample have mild to moderate anxiety, 21 sample have moderate to severe anxiety and 7 sample have very severe anxiety in pre- test while in post- test 26 sample have mild anxiety, 6 sample have mild to moderate anxiety, 1 sample has moderate to severe anxiety.

Table 2: Mean pain value and SD of subjects according to psycho educational intervention on level of anxiety during hospitalization of experimental group.

Experimental group	Mean	SD	T value	P Value
Pre test	28.00	4.04	11.99	0.000
Post Test	13.42	5.70		

Above table 2.2 consists description of mean [pre-test 28.00, post-test 13.42] and standard deviation [pre-test 4.04, post-test 5.70] of children according to psycho educational intervention in experimental group.

TABLE 3: Findings related to psycho educational intervention on level of anxiety during hospitalization of control group.

3) Pre and Post- test anxiety level of Control group

	Mild (1-17 Score)		Mild to Moderate (18-24 Score)		Moderate to Severe (25-30 Score)		Very Severe (31-56 Score)		Total
	No.	%	No.	%	No.	%	No.	%	
Pre test	01	03.03	02	06.06	17	51.51	13	39.39	33
Post Test	01	03.03	05	15.15	17	51.51	10	30.30	33

Above mention table interpreted that in control group, 1 sample have mild anxiety, 2 sample have mild to moderate anxiety, 17 sample have moderate to severe anxiety and 13 sample have very severe anxiety in pre- test while in post-test 1 sample have mild anxiety, 5 sample have mild to moderate anxiety, 17 sample has moderate to severe anxiety and 10 sample have very severe anxiety.

Table 4: Mean pain value and SD of subjects according to psycho educational intervention on level of anxiety during hospitalization of control group

	Mean	SD	T value	P value
Pre test	28.97	3.95	1.00	0.320
Post Test	27.97	4.16		

Above table 4 consists description of mean [pre-test 28.97, post-test 27.97] and standard deviation [pre-test 3.95, post-test 4.16] of children according to psycho educational intervention in control group.

Section: 3 Comparison between mean score of anxiety during hospitalization of interventional and non-interventional group.

Table 5: Comparison of post- test anxiety scores among interventional and non-interventional group

Post-test anxiety score	Mean	SD	T value	P value
Exp Group	13.42	5.70	11.85	0.00010
Control Group	27.97	4.16		

Above table 5 consists description of comparison between interventional and non- interventional group post assessment score of mean [interventional group 13.42, non-interventional group 27.97] and standard deviation [interventional group 5.70, non- interventional group 4.16] of children according to impact of psycho educational intervention on level of anxiety.

P Value is 0.00010* $p < 0.05$ is significant at 0.05% level. Hence null hypothesis H_0 was rejected. This indicates that Psycho educational intervention is highly effective in reducing level of anxiety among hospitalized children.

Findings related to association between level of anxiety and selected demographic variables of experimental group.

χ^2 calculated value corresponding to the age in year, gender, Area of Hospitalization, Reason for Hospitalization; Types of family, History of previous Hospitalization, Duration of Hospitalization are found less than tabulated χ^2 value. Hence, it is concluded that there is no significant association between levels of anxiety during Hospitalization with selected demographic variables in experimental group.

The above result can be compare with the result of a study that “Children who received the hospital play interventions exhibited fewer negative emotions and experienced lower levels of anxiety than those children who received usual care”.⁸

Conclusion

The present study has enlightened the non-pharmacological treatment reduce the anxiety level in children which is easy to administered and safe for the children. Hence, parents and nurses of hospitalized

child should be aware about psycho educational interventions in reducing the anxiety level in kids during hospitalization.

The above result is supported with a study result that “Psychoeducation group interventions have been shown to be effective in reducing depressive symptoms, decreasing the risk of relapse and recurrence, and improving treatment compliance in patients with both depression and an organic, physical disease. In comparison with the general public, depressive patients present a worse control of their physical pathology, less adherence to treatment, and poorer fulfillment of healthy lifestyle habits.”⁹

Ethical Clearance- it is obtained from CHARUSAT ethical committee.

Conflict of Interest- Nil

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