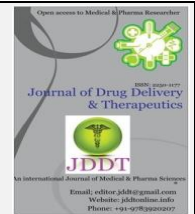


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Review Article

Effect of psycho educational intervention on level of anxiety among Hospitalized children: A systemic Literature review

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ABSTRACT

Background: Hospitalization and Disease can be the first crisis situation that a child encounters. Hospitalization may leads to increase the stress and level of anxiety among children and parents. An excessive or persistent state of anxiety can have a devastating effect on child's physical and mental health. Psych education is an evidence-based therapeutic intervention for clients and their family members who help them 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: To evaluate the impact of psycho educational intervention on level of anxiety among hospitalized children.

Methods: A systematic literature review is conducted.

Electronic database search to Collect Literature: The following electronic databases are searched: ProQuest, Research gate, Pubmed, EBSCO, science direct, the British Nursing Index and the Cumulative Index to Nursing & Allied Health Literature (CINHAL) and journal available in library.

Result: collected review of literature result shows that psycho educational intervention considers a positive effect on reduce the level of anxiety among hospitalized children.

Conclusion: psych educational intervention is cluster of the strategies like play therapy, storytelling, guided imagery etc. It is a non- invasive and safe intervention which helps to reduce the anxiety level.

Keywords: psych educational intervention, anxiety level, hospitalized children, search engine, counselling

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What is known to study?-

This study is belongs to literature review which shows that many of the researcher worked on anxiety. The types of anxiety vary according to age and causes of anxiety. Researchers used various tools to measure the level of anxiety. This study search specific to anxiety among children regarding hospital stay and invasive procedure during hospital stay.

What new things add in study?-

This paper helps to identify various tools used by researcher to assess the level of anxiety in hospitalized children. The primary objective is to describe anxiety measurement instruments used in children.

The most commonly used instrument was the State-Trait Anxiety Inventory, The Screen for Child Anxiety Related Disorders (SCARED) Children's Manifest Anxiety Scale—

Mandarin version, PROMIS, Pediatric Anxiety Short Form, State-Trait Anxiety Inventory, Faces Pain Scale-Revised and 10-cm Visual Analogue Scale, both adapted for anxiety) were used.

Back ground of study-

Hospitalization is a threatening and stressful experience for many children if they are immature. As children's are unfamiliar with the environment and medical procedures and unaware of the reasons for hospitalization, it can result in children's anger, uncertainty, anxiety and feelings of helplessness. Play is an important part of nursing care for children. Play offers, the child, an opportunity or creative expression, diversion and effective coping.

According to several studies, preschool children have more hospital related fears than older children because of their developmental stage (Gazall & Mactie 2007). The preschool

children are not always able to separate reality from the imaginary and the child's ability to express and cope with his or her fears is limited. According to parents, 83% of preschool children suffer from different kinds of anxiety symptoms related to hospital fears (Hus 2004).

Hospitalization and Disease can be the first crisis situation that a child encounters. Hospitalization may lead to increase the stress and level of anxiety among children and parents. An excessive or persistent state of anxiety can have a devastating effect on child's physical and mental health. Psych education is an evidence-based therapeutic intervention for clients and their family members who help them to cope with illness and give the information as well as support to understand in better way. Psych education helps to children and their family to minimize the emotional trauma during the hospital stay.

Anxiety is common nature of human being. Only human can express the anxiety. Anxiety is considered as sign of depression or psychological problem. Many researches had been carried out research on anxiety and its causes, anxiety and its treatment strategies, school admission and anxiety among children, hospitalization and anxiety etc. It is considered as early sign of depression. Early support can reduce the level of anxiety. The anxiety is commonly present in following conditions like-

- Social anxiety
- Anxiety during Hospital admission
- Specific phobias
- Panic disorder
- Generalised anxiety disorder (GAD)
- Post-traumatic stress disorder (PTSD)
- Obsessive compulsive disorder (OCD)

Hospitalization is seen as an extremely disturbing situation in the life of a person, since it includes decline of health

condition and removal from family and social contexts. This fact gains proportion when it happens to a child, for besides changing the family routine, it may cause changes in the child's development and lasting consequences, including anxiety.

By definition, anxiety consists of an emotional state with psychological, social, and physiological components that may affect individuals at any stage of their development.

The common symptoms of anxiety are-nervousness, restlessness, being tense, feelings of danger, rapid heart rate, rapid breathing, or hyperventilation, increased or heavy sweating, trembling or muscle twitching of muscles, weakness and lethargy, poor concentration, insomnia and physiological symptoms related to GI tract.

METHODS

Literature searching through internet requires a planned strategy for appropriate finding. It was searched by key words like Anxiety among children, Hospital Anxiety, Play therapy, therapeutic intervention etc. A systematic search for anxiety related psycho educational intervention is conducted. The literature review is designed as a narrative study, because a broader perception of children is different in various conditions. The article include from various country. It will help us to know that what research has been carried out in this field.

Search strategy

A systematic electronic search is used to identify number of studies carried out on psycho educational intervention on level of anxiety among Hospitalized children in terms of play, diversion, storytelling etc. The original research papers are only included in study. The following electronic databases were searched: , online journal sites, ProQuest, Embase, Pubmed, PsycARTICLES, EBSCO, Scopus, Educational Resources Information Center(ERIC) , the British Nursing Index and Cumulative Index to Nursing & Allied Health Literature (CINHAL) and journal available in library.

The screenshot shows the PubMed search interface. At the top, there are navigation links for 'NCBI Resources' and 'How To', and a 'Sign in to NCBI' link. The search bar contains the query 'anxiety in hospitalized children' and a 'Search' button. Below the search bar, the 'Search Details' section is visible, including a 'Query Translation' box with a complex MeSH-based search string, a 'Result' section showing '905' results, and a 'Translations' section listing the search terms used.

Search Details

Query Translation:

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("anxiety"[MeSH Terms] OR "anxiety"[All Fields]) AND ("hospitalised children"[All Fields] OR "child, hospitalized"[MeSH Terms] OR ("child"[All Fields] AND "hospitalized"[All Fields]) OR "hospitalized child"[All Fields] OR ("hospitalized"[All Fields] AND "children"[All Fields]) OR "hospitalized children"[All Fields])
```

Result: 905

Stopword(s) Ignored: in

Translations:

anxiety	"anxiety"[MeSH Terms] OR "anxiety"[All Fields]
hospitalized	"hospitalised children"[All Fields] OR "child, hospitalized"[MeSH Terms] OR ("child"[All Fields] AND "hospitalized"[All Fields]) OR children
children	"hospitalized child"[All Fields] OR ("hospitalized"[All Fields] AND "children"[All Fields]) OR "hospitalized children"[All Fields]

Database:

Ref. no	Study title	Country	Sample	Research type	Methods	Findings
1.	Effect of a Supportive Training Program on Anxiety in Children with Chronic Kidney Problems and their Mothers' Caregiver Burden	Iran	116 children with chronic kidney problems who hospitalized	randomized controlled clinical trial	Data was collected through convenient sampling technique where Participants were randomly assigned to experimental (n = 56) and control (n = 56) groups by using Face Anxiety Scale and the Zarit Caregiver Burden Scale.	The results revealed that the supportive training program reduce children's anxiety and caregiver burden and also effective to reduce the negative effects of hospitalisation.
2.	Social Robots for Hospitalized Children	Boston, Massachusetts	Fifty-four children with age group 3 to 10 years were randomly exposed	Experimental study	Samples were randomly exposed to 1 of 3 interventions: (1) interactive SR teddy bear; (2) tablet-based avatar version of the bear; or (3) plush teddy bear with human presence. We monitored intervention enrollment and completion patterns, obtained qualitative feedback, and assessed children's positive and negative affect, anxiety, and pain intensity pre- and postintervention.	The SR may provide new ways to address the emotional needs of hospitalized children, potentially increasing access to emotionally targeted interventions. Rigorous development and validation of SR technology in pediatrics could ultimately lead to scalable and cost-effective tools to improve the patient care experience.
3.	Hospitalization anxiety in children: conceptual analysis	Brazil	Available literature search	methodological study, with a qualitative approach	Searching for possible available literature (books, dictionaries, and scientific papers. Keywords anxiety ,hospitalization and children used	Facing hospitalization, the child may demonstrate different behaviors, among them behaviors prior to identification of hospitalization anxiety as a nursing diagnosis and that have not been observed in the family context before.
4.	Effectiveness of origami on hospitalized anxiety among children	India tamilnadu	40 children age 6-12 year	Quantitative research approach. two Group Pre-test Post-test Quasi-experimental research design.	Purposive sampling technique was used to employed children into experimental and control group. The sample size was 40 (20 children in each experimental and Control group). The tools used for data collection were demographic variables and Hospitalized Anxiety Assessment Checklist.	Origami helps children to adapt unpleasant situations in better way, especially during hospitalization. This healthy adaptation promotes quick recovery from their illness.
5.	Assess the Effectiveness of Art Therapy on Level of Anxiety among Hospitalized Children.	INDIA	60 school age children	Quantitative research approach	Non probability convenience sampling technique selected at hospitals of Wardha District. Data were collected by using Modified Spence children anxiety scale .	The study findings reveals that 17 (56.66 %) of the children from experimental group had severe anxiety in pre-test and none of child from experimental group had severe anxiety in post test.
6.	A New Mobile Application to Reduce Anxiety in	Thailand	60 patients age 5 to 12 years	single-blinded,	Sixty participants were randomly assigned to	The child anxiety visual analog scale

	Pediatric Patients Before Bone Marrow Aspiration Procedures		old who were undergoing bone marrow aspiratio-n	randomized controlled trial	the intervention group (mobile application added to usual care) or the control group (usual care only). Preprocedural anxiety levels were evaluated by visual analog scales (child anxiety visual analog scale).	score of patients in the intervention group decreased significantly after they used the mobile application (P < .0012).
7.	Play interventions to reduce anxiety and negative emotions in hospitalized children	304 Chinese children (ages 3-12)	Hong Kong China	Quasi experimental study with non-equivalent control group pre-test and post-test,	In the control group, children received standard medical and nursing care, such as vital signs observation, pharmacological treatment and wound and pain management. In the experimental group, participants received hospital play interventions, conducted by hospital play specialists.	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.	The effect of storytelling in a play therapy on anxiety level in pre-school children during hospitalization in the general hospital of buton	Indonesia	30 pre schooler children	quasi-experimental study with pretest-posttest control group design.	Pre School - Spence Children's Anxiety Scale (SCAS) was used to measure anxiety in 30 pre-school children.	There is a significant influence of storytelling in a play therapy on anxiety levels in preschool children during hospitalization.
9.	Dental anxiety among children of age between 5 to 10 years visiting a teaching dental hospital in islamabad, Pakistan	Pakistan	252 children aged between 5-10 years	Cross sectional study	Dental anxiety was assessed by using the Faces Version of the Modified Child Dental Anxiety Scale.	This study has highlighted dental anxiety as a potential public health concern regarding children in Pakistan.
10.	Effectiveness of therapeutic play in terms of anxiety and behavioral response among hospitalized preschool children in masonic hospital at coimbatore	Coimbatore, india.	60 samples	one group pre-test post-test pre experimental design	Purposive sampling technique was used to employ the sample. By using anxiety rating scale and behavioural response rating scale to assess the level of anxiety and behavioural response level.	The result showed that therapeutic play to reduced anxiety and improved behavioural response among hospitalized preschool children
11.	The Effects of Preoperative Recreational Activities on Children's Anxiety Level during the Perioperative Period	Jordan	60 sample of 2-7 year age	Quasi experimental design	60 samples which was employed by convenience sampling method are grouped into 2 part. modified Yale Preoperative Anxiety Scale (modified YPAS) three times used for measured anxiety level.	Children in the intervention group exhibited lower level of anxiety level than control group.
12.	Investigation of the Fear of 7-18-Year-Old Hospitalized Children for Illness and Hospital.	Turkey	144 children who were hospitalized	Non experimental Descriptive study	Consent was taken. Data were collected by face-to-face interview technique. Statistical analyses were used to assess data.	It was observed that children in the study experienced fear for illness and hospitalization and the percentage of children with fears was found to be high.
13.	A study to assess the effectiveness of play activities in reducing the level of anxiety among hospitalized	Banglore-india	60 children in the 2 group	A quasi-experimental study	The convenient sampling technique was used to select 60sample[experimental group n=30, control	The findings shows that children were seen anxious during pre-test although and during post-test

	children.				group n=30] Data was collected by using hospital observed behavior check list.	children were not anxious or decreased anxiety so, it shows that play activities were effective method for reduce the anxiety level
14.	The Effectiveness of Storytelling on Separation Anxiety in Hospitalized Children with Chronic Diseases	Iran	40 samples from 4 – 7 year old age group	quasi-experimental study with pretest-posttest control group design.	Data were collected from 40 hospitalized [20 samples in each group] children with chronic diseases by using random sampling technique with use of Spence's Preschool Anxiety Scale tool.	The results revealed a storytelling reduced significantly anxiety in the children in the interventional group compared with children who had not received intervention.
15.	The effectiveness of therapeutic play, using virtual reality computer games, in promoting the psychological well-being of children hospitalised with cancer	Hong Kong	122 children- 70 in control group and 52 in experimental group.	non-equivalent One group pre-test post test	A planned intervention of computer based game introduced among intervention group.	The Investigator concluded that study provides evidence to support the effective use of virtual computer game as a therapeutic play can minimize the anxiety and depressive symptoms among hospitalized children with cancer.
16.	Effect of Toys and Preoperative Visit on Reducing Children's Anxiety and their Parents before Surgery and Satisfaction with the Treatment Process	Iran	60 children with 3 – 8 year old children	quasi-experimental study in posttest design	The level of anxiety in children and parents was evaluated by Observation Scale of Behavioral Distress (OSBD-R) and Spielberger State Anxiety Inventory (STAI). The level of parental satisfaction with the treatment process was evaluated by the process of treatment satisfaction questionnaire (PSQ-18).	Based on the findings, providing toys for children and informing the parents about medical information has a major effect in reducing children's and other's anxiety and increasing maternal satisfaction with the treatment process.

Inclusion and exclusion criteria for article selection

Inclusion criteria

1. The research paper only which directly belongs to hospitalized anxiety among children due to any cause.
2. The paper which is easily accessible online and full text available.
3. The studies which are carried out in English language.
4. Articles which having minimum 60 samples in study.
5. Research conducted between 2010 to 2019 are included.

Exclusion criteria

1. The study concern to adult.
2. The studies which are duplicate and result are ambiguous.
3. The research study which is published in without ISSN No journals.
4. The research studies which are not available on journal database.
5. The research studies in which only abstract is available.

6. Research carried out before 2010.

RESULT

Researcher found 905 research paper from electronic data base. Out of 905, 1012 from PubMed, 212 from ERIC, 24 from PsycINFO, 180 from ProQuest database. 134 articles are excluded as they were duplicates in the databases. 184 articles are excluded as they are not available in full text.

Search strategy in PubMed

MeSH terminology used for PubMed and ERIC ("Anxiety among hospitalized children"[MeSH Terms] OR ["Anxiety"[All Fields]AND "Children"[All Fields]] OR "During hospitalization".

Image

The overall findings of study shown that QOL affected by age, seizure frequency, parent's education, social stigma, cultural practices, type of epilepsy, and type of anti-epileptic in children with epilepsy. Cognition, energy levels and concentration are most commonly affected due to epilepsy. QOL can be assessed by generic or disease specific measures. Generic measures of QOL assess function, disability and distress resulting from general ill health and have the

advantages of allowing comparisons with healthy population. Quality of life (QOL) is concerned with "the degree to which a person enjoys the important possibilities of life. Health-related quality of life (HRQOL) characterizes a person's perception of how health influences an individual's life quality and overall well-being. Quality of life is an important measurable outcome of care for conditions that do not threaten life.

DISCUSSION

The objective of this paper is to provide an insight among health care workers regarding how to reduce the level of anxiety among hospitalized children. Various types of methods had been used by researcher to reduce the anxiety level among children such as play therapy, diversion therapy, storytelling, music therapy, origami technique, guided imaginary, drawing and color, apply quiz etc. A common intervention can be planned to reduce the anxiety among children and their parents too. A common planned intervention will be helpful to reduce anxiety.

CONCLUSION

This review paper is concluded that there are various causes of child anxiety in hospital. A proper strategy can be planned to reduce anxiety. It is expected that this study will play a role in clarifying of the concept of anxiety in hospitalized children in such a way that a planned intervention (Play activity + Story telling+ Puzzle+ thinking Process) can be easily identified in child health care in hospital. This paper helps to promote quality in the process of developing paediatric care.

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