

Conference Paper

Play Therapy to Reduce Anxiety in Children During Hospitalization: A Literature Review

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ORCIDIka Rizki Anggraini: <https://orcid.org/0000-0003-1032-2567>**Abstract.**

Hospitalization is a form of individual stressor for children, forcing them to adapt to the hospital environment. Adjusting to a new foreign environment such as a hospital can cause anxiety in children. One of the actions taken to overcome hospitalization anxiety is play therapy. The purpose of this study was to identify the types of play therapy used to reduce anxiety levels in children during hospitalization. This was a literature review and a total of 15 articles were found by searching through the Google Scholar, PubMed, and ProQuest databases. Skill play and dramatic role play, which are based on content, were the play therapies that were most widely used, found in 12 of 15 articles. Play therapies based on social characteristics included solitary play and associative play, which were found in 9 of 15 articles.

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1. Introduction

According to the 2009 Nationwide Inpatient Sample, the incidence of children undergoing hospitalization in the world from the total number of patients treated in hospitals, there are 6.4 million children in America under the age of 17 years or about 17%[1]. It is estimated that 35 per 1000 children in Indonesia are hospitalized [2]. Based on data from Riskesdas 2013, the average number of children undergoing hospitalization throughout Indonesia is 2.8% of the total number of 82,666 children.

Hospitalization is a child's condition that requires treatment in a hospital (inpatient) due to certain circumstances. The child will undergo treatment or therapy from hospitalization until the child is healthy and returns home [3]. Children's reactions to hospitalization anxiety vary according to the child's developmental level. The reaction of toddler age children shows temper tantrum behavior, refuses to eat, has difficulty sleeping, toileting and returns to the developmental phase of younger children. The reaction shown by the child when experiencing hospitalization anxiety can result in obstacles

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in the implementation of the treatment that will be given so that it hampers the healing process and causes the treatment to take a long time, even complications can occur during treatment. Several studies related to anxiety in children during hospitalization already exist, but are not specific to the toddler age category. So that the researchers conducted "Identification of Types of Play Therapy to Reduce Anxiety Levels in Children During Hospitalization" based on a literature study which is expected to be used as information in carrying out treatment interventions for children undergoing hospitalization and can be used for the benefit of the health world.

2. Method

The design of this research is a literature study. The sample selection consists of anxiety children in hospitalization. The researchers collected by identifying, find keyword in database, screening, selecting eligible articles, and determining the articles based on the inclusion criteria. The applied databases were Google scholar, PubMed and ProQuest. The research question in this review section, "play therapy OR therapeutic play AND anxiety AND children AND hospitalization". The process of literature search and selection are depicted in (Figure 1). The searches were on three databases by keyword from 2015-2019. Several research stages were done so the literature study results credibility is legit and credible. The applied stages were

3. Results

The obtained articles were from three databased. The searches were done based on the inclusion criteria. The applied keywords were *play therapy and anxiety and hospitalization*. Sample in this study is toddler. Based on 15 journals reviewed, the types of play therapy that can reduce anxiety levels in children during hospitalization are based on content, namely skill play and dramatic role play. While the type of play therapy is based on social characteristics, namely solitary play and associative play.

4. Discussion

Types of play therapy based on the content, there are skill play and dramatic play role and the most is skill play, there are 2 articles using puzzle games in 5 articles, coloring 4 articles, drawing 3 articles, folding 2 articles of origami paper, forming clay 1 article, caring for dolls using a medical kit play 1 article and coloring body part 1 article. Skill

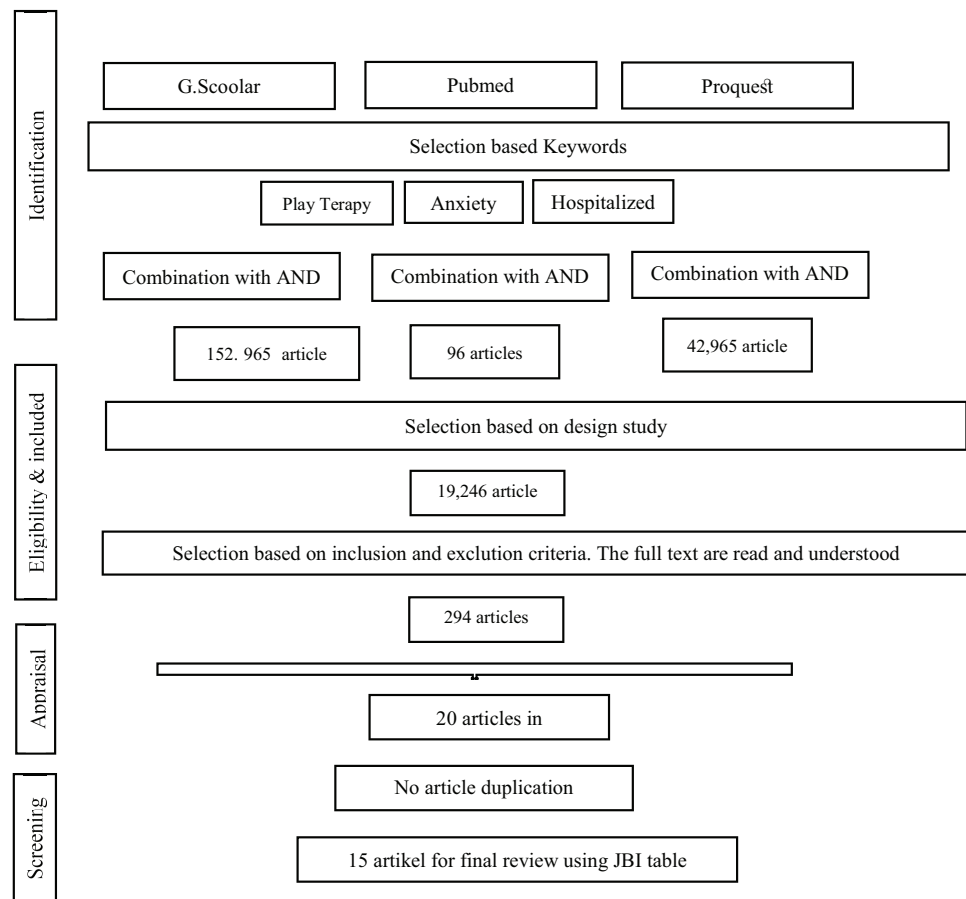


Figure 1: The applied stages were the literature study results.

play is a game that can provide skills to children, especially in gross and fine motoric [18].

This type of skill play therapy can be done by playing coloring pictures. This is evidenced by 4 articles. Actions taken by coloring picture books of animals, numbers, fruit, cartoons, cars and others using colored pencils or crayons. Coloring is an activity of putting colors or dyes such as colored pencils and crayons on an image. Playing coloring in the research of Emi et al (2010) can improve fine motor skills in children [19].

There were 2 articles that used dramatic role play in reducing anxiety levels in children during hospitalization using storybooks and hand puppets. Play storytelling or tell stories using storybooks and dolls of the deer and crocodile as their roles. Role play therapy is a game where players play the role of imaginary characters and collaborate to weave a story together [20].

Based on social characteristics, the most common type of play therapy is solitary play, which is found in 9 articles out of 15 articles. This type of play therapy. From the results of the analysis, this type of solitary play therapy can use games such as forming clay, folding origami paper, drawing and coloring at will, putting together puzzles and

TABLE 1: the Data Analysis.

No.	Title, Author, Publication Year	Study Design	Sample	Intervention	Outcome
1.	Influence of Therapeutic Play on the anxiety of hospitalized school-age children: Clinical trial. [4]	Randomized clinical trial.	28 children aged 6-11 years	The intervention group performs drama or role play therapy.	The results showed no significant difference to anxiety levels in the intervention group of 73.9 and the control group of 69.4 with a <i>p-value</i> of =0.59.
2.	The effectiveness of playing Clay and Origami therapy to reduce anxiety pediatric patients hospitalized. [5]	Quasi experiment with pre-test and post-test design.	90 pediatric patients aged 3-6 years	Each therapy group played clay, origami, a combination of origami and clay performed for 20 minutes.	There are differences in anxiety levels before and after being given clay play therapy with a <i>p-value</i> of 0.000 < 0.05, origami play therapy with a <i>p-value</i> of 0.000 < 0.05, a combination of clay play therapy and origami with a <i>p-value</i> of 0.000 < 0.05.
3.	The Effect Of Story Telling In A Play Therapy On Anxiety Level In Pre-School Children During Hospitalization In The General Hospital Of Buton. [6]	Quasi experimental study with pre-test and post-test control group design.	30 children of pre-section age h (3-6 years)	Play therapy groups are given storytelling or storytelling about imaginary or imaginary stories. And ask the children to retell.	The results showed a significant strorytelling effect on anxiety levels with a <i>p-value</i> of 0.003 < 0.05 compared to the control group with a <i>p-value</i> of 0.219 > 0.05.
4.	Effectiveness of Multimodal Interventions with Play Therapy: Colouring and Origami Against Anxiety Levels in Toddler Ages. [7]	Quasi experimental study with pretest-posttest one group design.	20 pediatric patients were divided into 2 groups.	The intervention group was given coloring and origami play therapy.	The results showed average levels of anxiety before and after being given coloring and origami play therapy with a <i>p-value</i> of 0.001 < 0.05.
5.	Effect of art therapy and play therapy on anxiety among hospitalized preschool children. [8]	Randomised Control Trial.	60 preschool children aged (3-6 years)	Art groups are given interventions in the form of drawing. While the playing therapy group was given intervention in the form of puzzle games.	Results found significant differences in art therapy and play therapy compared to the control group with a <i>p-value</i> of 0.0001 < 0.001
6.	The Effects of a Therapeutic Play/Play Therapy Program on the Fear and Anxiety Levels of Hospitalized Children After Liver Transplantation. [9]	Quasi experimental study in one group and a pretest-posttest design.	65 children aged 6-12	The intervention group was given a game of caring for dolls or animals made of plastic materials with medical kits such as cannulas without syringes, cotton wool and plaster.	The results showed a significant decrease in anxiety values after being given play therapy with a <i>p-value</i> of =0.001.

playing with dolls or animals with medical kit play. This type of solitary play therapy can

TABLE 1: (Continued).

No.	Title, Author, Publication Year	Study Design	Sample	Intervention	Outcome
7.	Comparison Study of Art Therapy and Play Therapy in Reducing Anxiety on Pre-School Children Who Experience Hospitalization. [10]	Quasi experimental study.	48 preschool-aged children (3-6 years).	Children are given art therapy in the form of drawing and play therapy in the form of puzzles.	The results showed a significant difference with a <i>p-value of</i> 0.00 < 0.05.
8.	Playing Puzzles Against The Anxiety of Preschoolers Who Undergo Hospitalization at Cibabat Regional General Hospital Cimahi City in 2018 [11]	Quasi experiment	The 28 children were divided into coloring play therapy groups and puzzle play therapy groups.	In the coloring play therapy group is taught how to draw and then give a color pencil and images provided such as pictures of animals, numbers, fruit, cartoons, cars. In the group playing puzzles explained how to play the puzzle then demonstrate how to arrange the puzzle.	The results showed that there was a decrease in anxiety levels in children who underwent hospitalization after being given coloring and puzzle play therapy with a <i>p-value of</i> 0.001 < 0.05.
9.	Effectiveness of origami on hospitalized anxiety among children. [12]	Quasi experimental study.	40 children undergoing treatment in the children's ward.	The intervention group was given play therapy using origami paper by folding into the shape of trees, Christmas trees, airplanes, hats, crowns, pistols, fortune tellers, jump frogs, butterflies and hanging snowflakes then imitated by children.	The results of the intervention group were more significant in lowering anxiety levels compared to the control group with a <i>p-value of</i> 0.001 < 0.05.
10.	The Effect of Therapy Containing Puzzle on Decreasing Anxiety of Hospitalized Children Aged 3-6 Years. [13]	Quasi experimental study.	32 children aged 3-6 years	The intervention group gets therapy playing in the form of puzzles.	The results showed that the intervention group with the administration of puzzle play therapy in preschool-aged children who were hospitalized had an effect on decreasing their anxiety with a <i>p-value of</i> =0.000 < 0.05.

also be done by playing with clay which is a kind of material that resembles a soft wax and is easy to shape. Playing clay can develop motor skills in children.

TABLE 1: (Continued).

No.	Title, Author, Publication Year	Study Design	Sample	Intervention	Outcome
11.	Fairy Tale Therapy of The Kancil Against Decreased Anxiety of Children Hospitalization at Haji Makassar Hospital [14]	Quasi experimental study	16 children were hospitalized in accordance with the criteria for inclusion and exclusion.	Researchers read the children fairy tales of the kancil using puppets and crocodiles.	There were significant results in the reduction of hospitalization anxiety in children after being given storytelling therapy with a p-value of $0.000 < 0.05$.
12.	Effectiveness of Drawing And Coloring Therapy Against Pre-School Age Hospitalization Anxiety (Arifin et al., 2018)	Quasi experimental	30 children aged 3-6 years	Therapy plays drawing using a picture book. To color images using picture books and color pencils.	There were significant results in decreased anxiety hospitalization in children after being given drawing play therapy with a p-value of $0.001 < 0.05$ and coloring play therapy with a p-value of $0.000 < 0.05$.
13.	Effect of Coloring Body Part Therapy On Anxiety In Preschool-Aged Children [15]	Quasi experiment.	24 pediatric patients were found in accordance with the criteria of inclusion and exclusion.	Children are given knowledge of their body parts, then children are given the opportunity to choose which body parts to draw or color.	The results of the appointment had an effect after being given coloring body part play therapy to decrease the anxiety of children undergoing hospitalization with a p-value of $0.006. < 0.05$
14.	The effect of play puzzle therapy on anxiety of children on preschooler in Kota Kendari hospital. [16]	Quasi experimental study	33 children undergoing treatment in the children's ward.	Children were given scrambled puzzle play therapy, asked to compile the puzzle and the child was given praise.	The results showed a significant reduction in anxiety levels after being given play therapy with a p-value of $0.000 < 0.05$.
15.	Effect of Therapeutic Play Interventions On Decreased Value of Preschool Hospitalization Anxiety At Rsup dr. Hasan Sadikin Bandung [17]	Quasi experimental study.	36 preschool-age children	In the intervention group, researchers gave a modified coloring book from the coloring book and then the child was asked to color it.	The results showed that there was an influence after being given therapeutic play therapy with coloring play against a decrease in the anxiety value of hospitalization of preschoolers with a p-value of $0.000 < 0.05$

There are 2 articles that use associative play. One of the types of associative play therapy is playing origami by teaching children to make toys such as animals, flowers, etc. from origami paper and then asking the children to imitate them. Playing origami with a therapist can develop social skills. This is because the game involves social interaction between the child and the therapist with little or no organization [21].

Conclusion

Based on the analysis of 15 journal articles, it was found that the type of play therapy to reduce anxiety levels in children during hospitalization, based on the contents, namely: skill play and dramatic role play and the most widely, namely skill play, found in 12 of the 15 articles using puzzle games contained in 5 articles, coloring 4 articles, drawing 3 articles, folding origami paper 2 articles, forming clay 1 article, caring for dolls using a medical kit play 1 article and coloring body part 1 article. While the type of play therapy based on social characteristics is solitary play and associative play and the most is solitary play, found in 9 out of 15 articles by using puzzle games found in 4 articles, drawing 3 articles, coloring 3 articles, forming clay 1 article, folding 1 article of origami paper, coloring body part 1 article and forming 1 article of clay.

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