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## REDUCING ANXIETY IN CHILDREN DURING HOSPITALIZATION BY PROVIDING THERAPETICAL PUPPET PLAY INTERVENTION

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## ABSTRACT

This study aims to analyze various types of puppet play to reduce children's anxiety levels while hospitalized. The method used is a systematic review through the ProQuest database, Scopus, Science Direct, and Google Scholar. The selected articles were assessed for quality with the guidance of the Joanna Briggs Institutes (JBI). The results showed that from 11 review articles, it was revealed that playing puppet play effectively reduced children's anxiety during hospitalization, and the range of children given pain reduction strategies was 3-19 years. In conclusion, therapeutic puppet play can effectively reduce stress in children who experience hospitalization.

Keywords: Children, Hospitalization, Playing with Puppet

### **INTRODUCTION**

Hospitalization is a process where for certain reasons or an emergency requires the child to stay in hospital, undergo treatment therapy until he is returned home (Ramadan, 2022). According to Afriani et al., (2023) hospitalization anxiety usually occurs in preschoolage children, usually children experience separation anxiety because the child has to be separated from an environment that is felt to be safe, comfortable, loving and fun, such as the home environment and playmates.

Several factors that influence children's anxiety during hospitalization include the child's age, gender and experience of being hospitalized. The child's reaction to hospitalization is in the form of rejection and separation from parents as a form of loss of love and difficulty for the child to adjust during treatment in hospital (Atminingsih & Sari, 2022). Atikah & Rofiqoh (2023) believes that fear that lasts a long time and is not resolved gives rise to a reaction of disappointment towards parents which gives rise to an attitude of detachment in children so that children begin to ignore the presence of their parents and children prefer to remain silent (apathy), refuse to be given action and can cause trauma to child after being discharged from hospital. Handling anxiety in children in hospitals is usually provided with atraumatic care, which is a therapeutic nursing care action by providing a comfortable environment by health workers.

Anxiety during hospital treatment can be overcome by providing therapy to children, namely puppet play therapy or playing with dolls. This has been proven by Jupyantari et al., (2023) doll play therapy is effective in reducing anxiety in children undergoing inhalation therapy. By playing with character dolls, children feel comfortable and enjoyable, thereby reducing their anxiety levels before therapy. Future research can examine more specifically games that can be used as play therapy for children with different disease diagnoses.

Play therapy can help reduce the tension felt by children. Gradually, the psychological and physiological responses to anxiety and fear will develop optimally. Through play therapy, children will learn and build relationships with other people. Hand puppet play therapy has an impact on improving children's communication and helping children express the feelings they experience while in hospital. Children are too afraid to express their feelings when undergoing treatment in hospital. Hand puppet play therapy has many benefits compared to other therapies, including being able to develop children's imagination, increase activity, and create feelings of joy and a happy atmosphere (Ginanjar et al., 2022).

In order to show updates in the world of research, there are several relevant previous studies. *First*, by Anitasari et al., (2024) which is case study research. Second, Ginanjar et al., (2022) is experimental research. *Third*, by Hanum (2023) is a quantitative research method *quasi experiment*. The difference between the three previous studies and the research conducted is that the two journals are experimental research types, and 1 is a case study research journal, whereas this research is a systematic review research. The similarity between the three previous studies and the research conducted is that they both use variables Playing with dolls reduces children's anxiety during hospitalization. Based on the differences and similarities between the research conducted and previous research, the results obtained are still different because they are influenced by different places and times of research.

Based on this background, this researchaims to analyze the use of various types of puppet play in reducing the level of anxiety that children experience when undergoing hospitalization. The benefits can be applied as a coping strategy in facing hospitalization in children.

### **RESEARCH METHODS**

### Design and search strategy

This researchusing design *systematic review*. The databases used as literature sources consist of Google Scholar, Science Direct, Pubmed, Semantic Scholar. The keywords used in English for the period January 2012-December 2023 are Ebsco-host, Embasse, Google scholar, Proquest, Science Direct, Scopus, Springerlink, Clinical key nursing, and Wiley Online. The terms or keywords used are (child OR children) AND therapeutic play AND finger puppet AND Hospitalized anxiety, child OR children) AND play therapies AND puppet play AND hospital anxiety, (child OR children) AND therapeutic play AND Puppetry AND hospitalized anxiety. The formulation of the clinical question is: "Can playing therapeutic doll games reduce children's anxiety during hospitalization?". Immediately after a journal search was carried out on the database, a total of 16,406 journals were obtained, then the researchers carried out article selection after the duplicates became 16,838, the second stage of filtering obtained 21 journals. The third stage was assessed for feasibility so that 11 journals were obtained. After that, the final selection based on title and abstract resulted in 11 journals being included in the review.

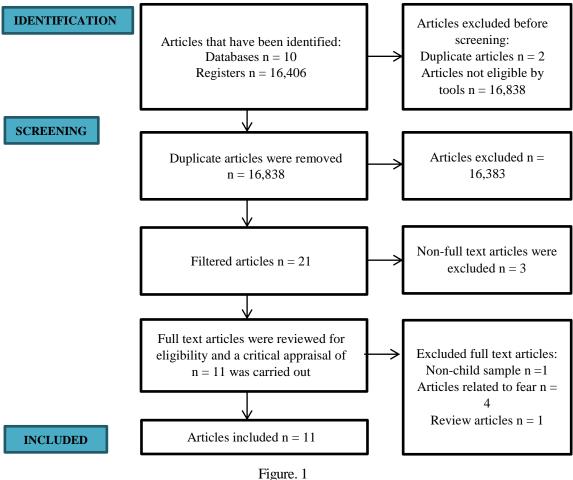
### Participant

The participants found in the literature search were children aged 3-12 years, this age was chosen because it corresponds to the use of puppet play which is suitable for children who are over 3 years old. Furthermore, the participants were children who were hospitalized at hospital who experience anxiety when being treated in hospital. inclusion criteria used in this literature search strategy are journal articles with samples of children and teenagers, in English, publication year range until 2023. Meanwhile for those in Exclusions were review

articles, and articles that could not be accessed in full text. Besides strategy mentioned above, the author also did hand searching of the article has been obtained.

## **Data Extraction**

Data extraction was carried out independently by the author through critical assessment articles using the JBI format for research (Placeholder 1) RCTs and experiments. The data extraction process is described in a PRISMA diagram to illustrate the procedure systematic review (figure 1). The extracted data includes all study characteristics, details puppet play used, outcome measures and results.



PRISMA Flowchart

# **RESEARCH RESULT**

Table. 1
Literature Review

Journal identity	Research methods	Research result
Behera, K., Tripathi, A., Basu,	Quasiexperimental non-	There is a positive relationship (p
A., Sethy, P.R., Manju, M., &	randomized controlled	< 0.001) between age, gender of
Pani, K. (2020) Effect of	group	the child, days hospitalized,
Puppet Therapy on Reduction	•	family income, treatment
of Anxiety among Childrens		measures and history of previous

(6-12 Years) Suffering from Leukemia in Selected		hospitalization with pre-test anxiety scores.
Hospitals of Odisha Zengin, M., Yayan, EH, & Duken, ME (2020) The Effects of a Therapeutic Play/Play Therapy Program on the Fear and Anxiety Levels of Hospitalized Children After Liver	Quasi experiment	The mean and pre test and post test STAIC-level scores were 49.1 $\pm$ 8.5 and 31.5 $\pm$ 4.9, there was a significant decrease in the mean anxiety score. And there is a significant difference (P <sup>1</sup> /4.001).
Kostak, M.A., Kutman, G., & Semerci, R. (2020) The Effectiveness of Finger Puppet Play in Reducing Fear of Surgery in Children Undergoing Elective Surgery: A Randomized Controlled Trial	A Prospective, Randomized Controlled Study	Children who underwent finger puppetry experienced a decrease in anxiety than the control group (p<0.001).
Sulpat, E., Mardhika, A., Fadliyah, L., Tyas, APM, Harianto, S., & Ilhami, YI (2022). The Effect of Puppet Show on Hospitalization in Preschool Children (3-6 Years)	Quasi experiment with one group pre test and post test design	The results of the T test before and after play therapy show that the calculated value of $t = 3,133$ is greater than t table = 2,086 and p value = 0 is smaller than the significance level (0.05), which means that there is a positive effect on the puppet show therapeutic play action on children who experience the effects of hospitalization.
Daro, YA, Safitri, A., & Sulahyuningsih, E. (2021). The Effect of Hand Puppet Game and Cold Compress on the Reduction of Pain and Anxiety Levels in Preschool Age Children Undergoing Infusion in the Pediatric Care Room at Sumbawa Hospital.	Quasiexperimental type nonequivalent control group posttest-only design	Based on the results of the Mann Whitney test, there was a change in pain levels (p<0.001) after playing hand puppets and cold compresses.
Suzan, OK, Sahin, O.O., & Baran, O. (2020). Effect of Puppet Show on Children's Anxiety and Pain Levels During the Circumcision Surgery: A Randomized Controlled Trial	Randomized Controlled Experiment	From the Mann Whitney test, it was found that there was a significant difference in the average anxiety score. Based on the Friedman test, there are significant differences in the experimental group and the control group. ( $p < 0.05$ ).
Santoso, SDRP, & Nurjanah, S. (2021). The Effect of Storytelling Using Finger Puppets on Anxiety in Hospitalized Preschool Children	Quasi-experimental design in one group, post test and pre test with a control group design	Using the Mann-Whitney test, it shows that Z count $\leq$ Z table, which means there is an influence or probability value of p=0.000 (p< $\alpha$ = 0.05) where H1 is accepted.
John, M. J., & Rajesh, B. (2022). A Study to Evaluate the Effectiveness of Puppet Play on Reduction of Anxiety Among Hospitalized Children in Selected Hospitals of	Quantitative with a True Experimental Approach, Pre Test and Post Test Design	This research shows that doll play is effective in reducing anxiety in hospitalized children.

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Badrachalam		
Reid-searl, K., Quinney, L.,	Qualitative research with	The theme of optimizing care in
Dwyer, T. A., & Vieth, L.	focus group discussions	the focus group discussion was
(2016). Puppets in an acute		about "how to educate, play and
pediatric unit: Nurse's		distract, achieve control, solve
experiences		obstacles and reduce fear and
		anxiety".
Anandhukrishnan, T.G.,	Quantitative research	The results of the T-test show that
Anjali, S., Baiju, K D.,	with quasi-experimental	there are significant differences in
Lavanya, R.R., Sangeetha S.,	pretest and posttest in a	the experimental group and the
Sarith a, S., Betcy, J.K. (2018).	control group design	control group. Which shows that
Effectiveness of Play o		therapeutic play with doll games
Anxiety among Hospitalized		is effective in reducing anxiety.
Children		
Fontes, CMB, Mondini,	Exploratory Quantitative	From the research results, it was
CCSD, Moraes, M. CO. A. F),	Design	found that the Mc Neymar test
& Bachega, MI (2010). Using	-	obtained significance (p<0.05),
Therapeutic Toys in Care with		where playing interactive doll
Hospitalized Children		games can help children to
*		interact with the hospital
		environment.

The search yielded 16,406 journal articles including 2 deleted articles and 16,838 excluded journal articles. Titles and abstracts were screened for 21 journal articles subjected to full text review. After full text review 11 journal articles were included in further discussion. The eleven articles that have been read in depth and included in the review are summarized in table 2. Then the articles were reviewed where the 11 articles were then reviewed in depth and assessed fairly for the quality of each journal article.

### DISCUSSION

Reviewing the techniques on how to use puppets, it was found that from the journal it was found that story telling techniques were used with puppets, puppet shows, and using finger puppets.

### The Benefits of Puppet Play to Reduce Anxiety in Children Being Treated

Anxiety in children greatly influences the healing process, namely it can cause a decrease in the immune response. This is in line with the theory put forward by Dewi et al., (2023) that psychological anxiety will affect the hypothalamus, then the hypothalamus will affect the pituitary, so that the pituitary will express ACTH (Adrenal Cortico Tropic Hormone) which in turn can affect the adrenal glands which produce cortisol. This suppression of the immune system will result in obstacles to the healing process, this will result in longer treatment times, and even suppressing the immune system will accelerate the occurrence of complications during treatment.

The anxiety experienced by children during nursing procedures in hospital is influenced by three phases. The first phase of protest is shown by the child crying, screaming, getting angry, looking for parents, refusing to meet unknown people. The second phase is despair, characterized by the child withdrawing from unknown people, the child becoming inactive, the child becoming uninterested in his environment, uncommunicative, and refusing to eat or drink. In the third phase, namely the acceptance phase, it shows that children are starting to be interested in the environment and interacting with other people (Fiteli, 2024). The cause of the most anxiety among respondents is the belief that it will cause a lot of pain, fear of injections, fear of seeing the equipment, fear of imagining a lot of blood coming out. This is also revealed by research which states that what makes fear is the thought that it can cause feelings of anxiety. pain, aching, post-extraction bleeding, fear of seeing tools (Niar & Firna, 2023).

Puppet play therapy can reduce children's anxiety due to hospitalization because hand puppet play therapy has therapeutic value in improving children's communication so that children feel safer with people they have just met. Children are not anxious and do not cry when undergoing treatment because through hand puppet stories children are able to express their pain when undergoing hospital procedures. Children are familiar with nurses and doctors because hand puppet play therapy can help to understand tension and pressure in children, as well as increase interactions and develop positive attitudes towards other people (Mariyam et al., 2022).

In line with the results of research conducted by Hanum (2023)which shows that all respondents experienced a decrease in anxiety levels, and statistically the T test shows a CI value of 95% and  $\alpha < 0.05$ , which means that dolls with sounds can significantly reduce the anxiety level of children who will have their teeth extracted. This is also supported by research Musviro et al., (2023) storytelling therapy using stones can reduce root disease which has an effect on overcoming anemia due to hospitalization in preschool aged children by controlling children's negative thoughts through stories and changing negative views into positive ones through storytelling.

According to Widiyanti (2022) the success of this intervention can be seen from the aspects of the child insisting on leaving the hospital immediately, the child being anxious and crying when the treatment is about to be carried out, the child not being familiar with the nurses and doctors. Children no longer insist on leaving the hospital immediately because during hand puppet play therapy children can be invited to communicate and get to know the environment. Sari et al., (2023) adding that play has the function of stimulating sensory, motoric and intellectual development, playing also increases social development, creativity development, self-awareness development, moral development, and games can also be used as therapy.

## The Effect Of Giving Puppet Play to Reduce Anxiety in Children Being Treated

Furthermore, related to the results of a search for quantitative research results of 10 articles, it shows that there is a positive relationship between therapeutic play intervention efforts with doll games on children's anxiety during hospitalization and the carrying out of painful procedures. From the research results, it was found that there was a significant relationship (P<0.05) towards reducing children's anxiety after playing with dolls (puppet play).

This research is also in line with research Nuliana (2022) during hospitalization, play either in the form of therapeutic games, or in the form of play therapy, has been shown to have high therapeutic value, thereby contributing to physical and emotional well-being, as well as recovery for the child. In addition, providing play therapy can help nurses to investigate problems related to the child's experience in hospital and reduce the intensity of the child's negative feelings when admitted to the hospital and/or hospitalized.

However, opinions differ from the research results Anitasari et al., (2024) hand puppet play therapy is not effective in reducing anxiety in hospitalized children. It is assumed that hand puppet therapy can be used as a reference by paying attention to the situation and anxiety factors in children during hospitalization. This can also be influenced by 3 factors that influence the implementation of play therapy, including predisposing factors, namely knowledge, supporting factors, namely play facilities, and driving factors, namely the child's age, family and agency, in this case the hospital. Having parental knowledge and support in play therapy can reduce stress in children (Prayogi et al., 2022).

Sari et al., (2023) adding that a child's reaction to hospitalization depends on the child's age, development, previous experience with illness, available support systems and existing coping mechanisms. Hospitalization reactions in preschool aged children show unadaptive reactions which can include refusing to eat, frequently asking questions, crying, and not being cooperative with staff.

While children are being treated in hospital, children will usually experience a situational crisis because the child undergoes various procedures and actions while in hospital. Nursing actions make children have a high level of fear and show more negative behavior such as screaming loudly, refusing action, and attacking other people (Sari, 2022).

According to Hasbyallah et al., (2023) when children pretend to calm and care for baby dolls, they also calm and care for themselves, this was also revealed from the results of research on giving dolls made from used goods to children living in disaster-prone areas, where The children there experience a lot of anxiety, and this treatment has been successful in reducing the anxiety of children living in disaster areas. So it can be concluded that playing with dolls can reduce anxiety in children during hospitalization.

# CONCLUSION

From the explanation above, it appears that the effects of hospitalization, especially for long periods of time, on children occur because the child experiences an unpleasant situation when entering the hospital, various procedures and changing medical staff will create an atmosphere of anxiety for the child. Most of the research above shows a positive relationship between the use of doll play and a decrease in anxiety levels during hospitalization. So with this, it is necessary for hospitals, especially inpatient units, to start developing doll play therapy to reduce hospitalization anxiety in children.

# SUGGESTION

Innovations to implement therapeutic play with doll games can be carried out regularly for pediatric patients in inpatient units. This will help children reduce anxiety.

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