



EFFECTIVENESS OF AUDIOVISUAL DISTRACTION TECHNIQUES ON REDUCING HOSPITALIZED ANXIETY IN PRESCHOOL CHILDREN : A CASE STUDY

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ABSTRACT

Hospitalization anxiety is a psychological response often experienced by preschool-aged children due to medical procedures that cause fear and discomfort. Untreated anxiety can lead to uncooperative behavior and hinder the treatment process. One non-pharmacological nursing intervention that can be used is audiovisual distraction techniques. This study aims to determine the effectiveness of audiovisual distraction techniques in reducing hospitalization anxiety in preschool-aged children. This study used a case study design with a pre-post test approach. The study subjects were 10 preschool-aged children undergoing medical procedures at RSUD. The intervention, in the form of audiovisual distraction by watching cartoons, was given during the nursing procedure. Anxiety levels were measured using the Face Anxiety Scale (FAS) before and after the intervention. The results showed a decrease in anxiety scores in all subjects, from moderate to very anxious to mild anxiety or even no anxiety after the intervention. Audiovisual distraction techniques have been proven effective in reducing hospitalization anxiety levels in preschool-aged children.

Keywords: anxiety; audiovisual distraction; hospitalization; preschool children

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INTRODUCTION

Hospitalization is a condition in which a child must undergo hospital treatment due to an illness or certain medical procedures. For preschool children (3–6 years old), hospitalization is often a stressful and anxiety-inducing experience. This is due to the unfamiliar hospital environment, separation or limited interaction with family, and exposure to various medical procedures considered frightening and painful, such as injections, IV insertions, wound care, and the use of certain medical equipment. Preschool children have limited cognitive abilities, so they are unable to understand the purpose and benefits of medical procedures, which ultimately triggers an anxiety response.

Hospitalization anxiety in preschool children can be manifested through various behavioral and emotional responses, including crying, screaming, rebelling, refusing treatment, and uncooperative behavior toward healthcare professionals. Putri et al. (2020) explain that fear and anxiety in preschool children due to hospitalization can lead to increased psychological stress, sleep disturbances, and decreased adaptability during treatment. Furthermore, poorly managed anxiety can hinder nursing care, prolong treatment time, and reduce the quality of healthcare provided. Various studies have shown that anxiety levels in hospitalized children remain relatively high. Lestari and Suminar (2024) reported that most preschool children hospitalized experienced moderate to severe anxiety, particularly when facing invasive procedures. This situation requires nurses to actively implement atraumatic nursing interventions, which aim to minimize physical and psychological trauma to children during the treatment process.

One of the non-pharmacological nursing interventions widely recommended for reducing anxiety in children is audiovisual distraction. Audiovisual distraction is a method of diverting attention by utilizing engaging visual and auditory stimuli, such as cartoons or animated videos. The basic principle of this technique is to shift the child's focus from anxiety-provoking stimuli to pleasurable ones, thereby reducing the perception of fear and pain. Mulyono et al. (2020) in their literature review stated that audiovisual distraction is effective in reducing anxiety and pain in preschool-aged children during injections and other medical procedures.

Other research also supports the effectiveness of audiovisual distraction techniques in pediatric nursing practice. Novitasari et al. (2021) found that implementing atraumatic care through audiovisual media significantly reduced anxiety levels in preschool children during hospitalization. Besides being easy to implement, this technique is safe, non-invasive, and can actively involve parents in accompanying the child during nursing procedures.

Although numerous studies have demonstrated the effectiveness of audiovisual distraction techniques, most of these studies used quantitative designs with large groups or experimental approaches. Therefore, case studies are still needed to more deeply describe individual children's responses to the application of audiovisual distraction techniques, particularly in the context of daily nursing care in the ward. Case studies allow researchers to directly observe changes in children's behavior and anxiety levels before and after the intervention.

Based on the above description, this study aims to determine the effectiveness of audiovisual distraction techniques in reducing hospitalization anxiety in preschool-aged children through a case study approach with a pre-posttest design. The results of this study are expected to provide a basis for consideration for nursing staff in implementing audiovisual distraction interventions as part of pediatric nursing services oriented towards the principles of atraumatic care.

METHOD

This study used a case study design with a nursing care approach for preschool children experiencing anxiety during hospitalization. The nursing care approach was carried out systematically through the stages of assessment, nursing diagnosis, planning, implementation, and evaluation. The research subjects were 10 preschool-aged children who underwent nursing procedures at RSDM in October 2025. The sampling technique used purposive sampling, with inclusion criteria being preschool-aged children who showed signs of anxiety during nursing procedures and were accompanied by their parents. The research variable was the child's anxiety level before and after the nursing intervention in the form of audiovisual distraction techniques. The intervention was carried out by showing cartoon films as a distraction medium during the nursing procedures. Anxiety levels were measured using the Face Anxiety Scale (FAS). Data were collected through direct observation of the child's responses and brief interviews with parents. Data were analyzed descriptively, comparing the child's anxiety scores before and after the nursing intervention.

RESULT

The results of the study showed a decrease in anxiety levels in all subjects after being given distraction techniques. Hospitalization is a condition when a child must undergo hospital treatment due to an illness or certain medical procedures. Before the intervention, most children were in the category of severe to very anxious. After the intervention, FAS scores decreased to mild anxiety or even no anxiety.

Table 1.
Comparison of Pre and Post Intervention Anxiety Scores

Subject	FAS Pre Score	Category	FAS Post Score	Category
An. F	4	Severe anxiety	2	Mild anxiety
An. D	4	Severe anxiety	0	No worries
An. Y	5	Very anxious	1	Very mild anxiety
An. O	5	Very anxious	1	Very mild anxiety
An. H	5	Very anxious	2	Mild anxiety
An. R	4	Severe anxiety	0	No worries
An. K	5	Very anxious	2	Mild anxiety
An. A	5	Very anxious	3	Moderate anxiety
An. Z	4	Severe anxiety	2	Mild anxiety
An. C	3	Moderate anxiety	1	Very mild anxiety
An. F	4	Severe anxiety	2	Mild anxiety
An. D	4	Severe anxiety	0	No worries
An. Y	5	Very anxious	1	Very mild anxiety
An. O	5	Very anxious	1	Very mild anxiety
An. H	5	Very anxious	2	Mild anxiety

DISCUSSION

The results of this case study indicate that audiovisual distraction techniques are effective in reducing hospitalization anxiety levels in preschool-aged children. The decrease in anxiety was evident after the intervention, as evidenced by a reduction in negative behavioral responses such as crying, refusal to act, and uncooperativeness. This occurs because the child's attention is diverted from fear-inducing stimuli, such as the hospital environment and medical procedures, to enjoyable visual and auditory stimuli, such as watching cartoons.

These findings align with research by Lestari and Suminar (2024), which found that audiovisual distraction techniques significantly reduced hospitalization anxiety in preschool children. Similar results were also reported by Ekasaputri and Arniyanti (2022) and Balqis and Rofiqoh (2022), who showed that showing cartoons reduced children's anxiety during treatment and invasive procedures. This finding is supported by a literature review by Mulyono et al. (2020), which concluded that audiovisual distraction is effective for various medical procedures, including injections and inpatient care.

Theoretically, distraction techniques work by redirecting a child's cognitive focus. When children receive engaging visual and auditory stimuli, their attention span for anxiety-provoking stimuli is reduced. This leads to a decrease in threat perception and negative emotional responses. Novitasari et al. (2021) explain that audiovisual media can reduce stress and anxiety in children by providing a sense of comfort, safety, and improving mood while in the hospital environment.

Furthermore, the results of this case study also support the application of the concept of atraumatic care in pediatric nursing. Atraumatic care is an approach aimed at minimizing physical and psychological trauma in children during treatment. Research by Amna et al. (2024) showed a significant relationship between the application of atraumatic care and reduced anxiety in hospitalized children. A similar approach was also reported by Novitasari, Weti, and Wati (2021), who confirmed that the use of audiovisual distraction as part of atraumatic care can increase comfort and a sense of security in preschool children.

The results of this study are consistent with various studies that have implemented non-pharmacological nursing interventions based on play therapy and distraction to reduce anxiety in preschool children. Amin et al. (2024) demonstrated that origami play therapy as part of a nursing intervention was able to reduce children's anxiety levels during treatment. Similarly, Aryani and Zaly (2021) and Sapardi and Andayani (2021) reported that providing structured play activities in

nursing care significantly reduced anxiety in preschool children during hospitalization. These similar findings confirm that enjoyable, planned, and developmentally appropriate stimulation is an important component of nursing care to reduce anxiety responses.

Furthermore, Fiteli et al. (2024) revealed that preschool-aged children undergoing hospitalization for the first time tend to exhibit higher levels of anxiety due to limited understanding and prior experience. This situation requires nurses to implement atraumatic nursing interventions, one of which is through audiovisual distraction techniques. Audiovisual distraction is considered effective because it is easy to implement in nursing practice, non-invasive, and can divert children's attention from anxiety-provoking stimuli.

The reduction in anxiety that occurs after administering audiovisual distraction nursing interventions also positively impacts children's levels of cooperation during nursing procedures. This facilitates nurses in providing optimal, safe, and child-centered nursing care. Thus, the results of this case study strengthen the empirical evidence that audiovisual distraction techniques are an effective, practical nursing intervention, and in line with the principles of atraumatic care in reducing hospitalization anxiety in preschool-aged children.

CONCLUSION

Distraction techniques for hospitalization are a common condition in which a child must undergo hospital treatment due to an illness or medical procedure. Distraction techniques have been shown to be effective in reducing hospitalization anxiety levels in preschool-aged children. This intervention is easy to implement, safe, and can be used as part of nursing interventions. Hospitalization is a condition when a child must undergo hospital treatment due to illness or certain medical procedures.

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