NURSING CARE FOR CHILDREN WITH ANXIETY DUE TO INVASIVE PROCEDURES THROUGH PLASTISIN THERAPY IN THE ANGGREK WARD OF ARIFIN ACHMAD REGIONAL HOSPITAL, RIAU PROVINCE

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Abstract (Georgia 12 Bold)
Anxiety is one of the most common effects experienced by preschool children undergoing invasive procedures in hospitals, with a prevalence of 95%. Anxiety can reduce the effectiveness of therapy, so appropriate intervention is needed, one of which is play therapy using plasticine. The purpose of this case study is to describe nursing care for children with anxiety before invasive procedures through the application of play therapy using plasticine. Research method: The study design used a case study. Data were collected through interviews and observations using the FIS (Facial Image Scale) questionnaire. The intervention was conducted from July 24 to 25, 2025, in the orchid room of Arifin Achmad Provincial General Hospital, Riau, with a total of 2 respondents. Results: The anxiety levels of preschool-aged children during injection procedures before the implementation of play therapy with modeling clay were moderate to severe. The anxiety levels of preschool-aged children before invasive procedures after the implementation of play therapy with modeling clay were mild to moderate. There was a significant decrease in anxiety levels in preschool-aged children before and after the play therapy intervention. Conclusion: There was a significant difference in anxiety levels in preschool-aged children before and after the play therapy intervention prior to invasive procedures
Keywords **:** Anxiety, FIS, Invasive Procedures, Preschool,

INTRODUCTION

Anxiety is an excessive feeling of fear, anxiety, and worry that a person feels (Maulana et al, 2024). In children who are hospitalized, increasing anxiety can have a negative impact on the healing process. Anxious children tend to be uncooperative and refuse care and treatment, thus prolonging the length of hospitalization and even worsening their health condition (Kartika et al., 2024).

One of the main triggers of anxiety in children in hospitals is invasive procedures, which involve needles, the insertion of instruments into natural body openings, or procedures that have the potential to damage tissue. Examples include lumbar punctures, catheter insertions, IV lines, injections, blood draws, and surgery (Neto et al., 2025) (Nurmayunita &

Hastuti, 2023). These procedures often cause pain, triggering high levels of anxiety in all age groups.

Feelings of anxiety, stress, and tension that arise from invasive procedures can affect the function of the hypothalamus, a brain gland that regulates the release of stress hormones throughout the body (Damanik et al., 2024). Anxiety reactions in children can be seen in symptoms such as fear, crying during invasive procedures, a gloomy face, fussiness, and frowning (Yanti et al., 2024). Some children even cry when approached by nurses, throw objects around them, or hit people. This condition affects the child's physical and psychological aspects and, if continued, can cause trauma, prolonged stress, and even impaired gross motor development. If anxiety is not addressed, children can experience decreased motivation to accept treatment, refuse treatment, and even become indifferent to the presence of their parents, which ultimately leads to post-hospitalization trauma (Kartika et al., 2024).

According to Hasanah (2023), nurses have an important role in helping parents overcome their children's anxiety while being treated in the hospital. One of them is the focus of nursing intervention is to minimize stressors through play therapy. Play therapy aims to divert the child's attention from pain or anxiety to other pleasurable stimuli (Hasanah & Dewi, 2023).

Based on an initial survey in the Orchid Infection Ward of Anfin Achmad Regional Hospital, of the 13 pediatric patients undergoing invasive procedures, only 5% appeared calm, while 95% showed signs of anxiety such as being anxious, fussy, and crying. Furthermore, an interview with one of the parents of a preschool child in the Orchid Infection Ward stated that the child would be anxious, crying, and hiding when the nurse came to administer medication by injection. He also stated that one way that had been done to overcome his child's anxiety was by giving him the opportunity to watch animations on Hanaphons. This phenomenon encouraged the author to apply plasticine play therapy as an effort to reduce children's anxiety when undergoing invasive procedures. Therefore, the author was interested in conducting a case study of providing plasticine play therapy to pediatric patients experiencing anxiety in the Orchid Ward of Arifin Achmad Regional Hospital, Rian Province

RESEARCH METHOD

A. Design and Approach

This research uses a case study approach with a descriptive design. Case studies were chosen because they allow researchers to explore in-depth clinical phenomena that occur in a single individual or small group in a real-life context. In this case, the focus of the research is on the application of plasticine play therapy as an Evidence-Based Nursing Practice (EBP) intervention to reduce anxiety levels in preschool-aged children who will undergo invasive procedures.

B. Setting and Duration

This study was conducted in the Orchid Infection Ward of Arifin Achmad Regional Hospital, Riau Province, which treats children with infectious conditions. The intervention lasted one day in 2025, with therapy administered once before invasive procedures for approximately 15 minutes

C. Subjects and Selection Criteria

Respondents in this case study were 2 preschool-aged children (3-6 years old) who were undergoing treatment on day 1 or 2. Subjects were selected using purposive sampling with the following inclusion criteria:

1. children aged 3-6 years,

2. showing signs of anxiety during treatment,
3. never having received play therapy during treatment, and
4. parents or caregivers providing informed consent.

D. Intervention Procedure

The study was conducted over two days in the Orchid Infection Ward of Arifin Achmad Regional Hospital, Riau Province. Plasticine play therapy was administered for 15 minutes before the children underwent invasive procedures. The subjects were two preschool-aged patients (3-6 years old), consisting of one managed patient and one resume patient

E. Data Collection

Data was collected through the following techniques:

1. Direct observation, to assess the child's behavior and emotional responses before and after the intervention
2. Interviews with parents/caregivers, to obtain information about the child's behavior during care.
3. The FIS (Facial Image Scale) questionnaire was filled out by parents, as an instrument for measuring anxiety levels before and after the intervention (pre-test and post-test) and SLKI (Indonesian Nursing Outcome Standards).
4. Documentation, in the form of daily field notes and minute sheets

F. Indicators of Success

The success indicators were based on the Indonesian Nursing Outcomes Standards (SLKI), which include:

1. Anxious Behavior
2. Tense Behavior
3. Pale
4. Breathing Frequency
5. Pulse Frequency
6. Tremor

G. Data Analysis

The data analysis used in this Evidence-Based Nursing (EBN) practice is descriptive, describing the results of measuring children's anxiety levels during the pre-test and post-test. Intervention data is presented in the form of distribution and frequency tables to facilitate interpretation of changes in anxiety levels after the implementation of play therapy.

RESEARCH RESULTS

The plasticine play therapy intervention was carried out over two days. On the first day, Thursday, July 24, 2025, at 10:00 a.m. WIB, researchers visited the patient's treatment room to provide plasticine play therapy. Before beginning, researchers explained the benefits of the therapy, the implementation procedure, and the goal of the intervention, which is to help patients reduce anxiety before undergoing invasive procedures.

In this session, an initial anxiety level (pre-test) was measured using the Facial Image Scale (FIS) questionnaire. The measurement results showed that patient 1 had an FIS score of 4 (moderate anxiety) and patient 2 had an FIS score of 3 (mild anxiety). After that, the researcher made a time contract with the family to continue the second session and conduct a final anxiety level measurement (post-test) the following day. The family agreed to hold the next session on Friday afternoon, July 25, 2025.

On the second day, Friday, July 25, 2025, the researcher returned to the treatment room to carry out the second session of plasticine play therapy. During the implementation, the

patient looked more relaxed and began to enjoy the plasticine play activity. Although they would undergo the next invasive procedure, patient 1 had a blood transfusion and patient 2 received medication via the intravenous route. Both patients looked calmer than before.

Post-test results showed a decrease in anxiety levels in both patients. Patient 1's FIS score decreased from 4 to 3 (mild anxiety), while patient 2's decreased from 3 to 1 (very little anxiety). These changes indicate that plasticine play therapy has a positive effect in helping reduce anxiety in preschool-aged children facing invasive procedures in the hospital

Patient Al is a 5-year-old girl who has not yet attended school, being treated in the children's ward of Hospital X. The patient looks pale and weak, shows restless behavior, and expresses fear of the nurse. The patient's mother said the child cries easily and is afraid of new people. The action plan includes blood transfusion and NGT placement. Meanwhile, patient A, a 6-year-old boy with kindergarten status, is being treated in the children's ward of Hospital X. The patient looks pale, expresses fear of the nurse, and shows fear of new people. The action plan includes installing an IV and administering medication through the intravenous line

DISCUSSION

In the implementation case, the focus was on plasticine play therapy and was carried out based on previously made plans, namely making a time contract with the patient, providing plasticine play therapy and filling out the FIS Therapy questionnaire for 2 days for each respondent. On the first day, Thursday, July 24, 2025, the researcher carried out actions according to the previous plan, namely identifying the child's feelings expressed during play, monitoring the use of children's play equipment, monitoring the child's response to therapy (plasticine play therapy), monitoring the child's anxiety level during therapy, creating a safe and comfortable environment, providing sufficient time to allow effective play sessions, organizing play sessions to facilitate the expected results, setting boundaries for therapeutic exercise sessions, providing play equipment (plasticine play therapy), motivating children to share feelings, knowledge, and perceptions, communicating acceptance of feelings, both positive and negative, expressed through play, continuing play sessions regularly to build trust and reduce fear of unknown equipment or treatments, documenting observations made during play sessions, explaining the purpose of play to children and parents and explaining play procedures to children and/or parents in language that is easy to understand to patients 1 and 2, and filling out the FIS questionnaire by the patient's parents.

On the second day, Friday, July 25, 2025, the researcher carried out actions according to the previous plan, namely identifying the children's feelings expressed during play, monitoring the use of children's play equipment, monitoring the children's response to therapy (plasticine play therapy), monitoring the children's anxiety levels during therapy, creating a safe and comfortable environment, providing sufficient time to allow for effective play sessions, arranging play sessions to facilitate the desired development, setting limits for practice sessions therapeutic, providing play equipment (plasticine play therapy), motivating children to share feelings, knowledge, and perceptions, communicating acceptance of feelings, both positive and negative, expressed through play, continuing regular play sessions to build trust and reduce fear of unfamiliar equipment or treatments, documenting observations made during play sessions, explaining the purpose of play to the child and parents and explaining play procedures to the child and/or parents in language that is easy to understand to patients 1 and 2 and completing the FIS questionnaire by the patient's parents. Researchers identified the success of providing

This is in line with Handavani et al, (2023) the results of anxiety levels before the application of therapeutic clay are in An. A included in the severe anxiety category In An. M included in the very severe anxiety category and the results of anxiety levels after the application of therapeutic clay are in An. A decreased to the mild anxiety category. In An. M decreased to the moderate anxiety category suggesting there is a decrease with the results of severe anxiety 0% to moderate anxiety 50%

According to the researcher's assumption, implementing SIKI makes it easier for patients with anxiety before invasive procedures to overcome the problems experienced by patients by teaching them plasticine play therapy
quality of life during hospitalization.

CONCLUTIONS

On July 24, 2025 (Pre-test):

Patient 1:

Subjective data. The patient stated that he was afraid of nurses, considered them evil because they often stabbed him with needles, and that the needles were painful. The patient's mother stated that the patient cried easily when he saw nurses. Objective data: Appears restless, confused, withdraws hand during invasive procedures, wants to go home, pale face, tense hand behavior, cries easily. BP 125/75 mmHg, RR 22x/minute. Shoes FIS: 4

Patient 2

Subjective data: The patient said he was afraid of nurses, and thought nurses were rude; the patient's mother said the patient had been given an IV but was still afraid. Objective data: Appears restless, confused, withdraws hand during invasive procedures, pale face, tense behavior. BP 131/90 mmHg, RR 24x min, Pulse 105x min. Shoes FIS: 3

On July 25, 2025 (Post-test):

Patient 1

Subjective Dara, Pasten said he enjoyed playing with the nurse and thought the nurse was not bad. The patient's mother said the patient was cooperative when the nurse came. Objective data: Looks happy, doesn't cry, wants to go home to play with plasticine at home, not tense, relaxed hand behavior, BP 112 75 mmHg, RR 22x minutes. Forest FIS 3

Patient 2

Subjective data. The patient stated that he was not afraid of the nurse and did not think the nurse was evil. Objective data: The patient is cooperative, able to mold plasticine, does not withdraw his hand during invasive procedures, his face is not pale, and his behavior is relaxed. BP is 120/90 mmHg. RR is 18 times per minute, and pulse is 85 times per minute. Shoes FIS: 1

The evaluation results showed a decrease in anxiety levels in both patients after plasticine play therapy. Patient 1 experienced a decrease from moderate to mild anxiety, while patient 2 experienced a decrease from mild anxiety to very low anxiety. Thus, the intervention was deemed effective, and the patients' anxiety issues were resolved.

After providing nursing care to children with anxiety about invasive procedures through plasticine play therapy in the Orchid Room of Anfin Achmad Regional Hospital, it can be concluded that

1. Nursing assessment of patient 1 appears pale, weak, and restless. The patient says he is afraid of the nurse. The patient's mother says he cries easily and is still afraid of new people. Patient 2 appears pale, the patient says he is afraid of the nurse and is still afraid of new people. Both patients will undergo invasive procedures and show signs and symptoms of anxiety
2. Nursing diagnosis, based on the results of data analysis in the child nursing assessment carried out, supported by the existence of data that strengthens the establishment of a nursing problem, a diagnosis can be formulated, namely anxiety
3. Nursing intervention, anxiety diagnosis intervention, namely play therapy based on SIKI. The intervention provided is play therapy with plasticine for pre-school aged children selected based on evidence-based practice journals obtained
4. Implementation of nursing, applying play therapy and providing plasticine play therapy actions were carried out for 2 days in the patient's treatment room, teaching the provision of plasticine play therapy was carried out for 15 minutes in accordance with the SOP
5. Nursing evaluation from the evaluation results obtained that the problem was resolved with a decreased level of anxiety, as evidenced by a decrease in the level of anxiety in response to the application of plasticine play therapy before, namely the lowest average of 1, while the highest value was 4, the decrease in the level of anxiety in children before invasive actions were given plasticine play therapy.

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