



Effectiveness of Therapeutic Play on Anxiety Among Hospitalized Preschool children

Hiral Bhardiya

1. M.Sc. (Nursing), Assistant Professor, Pioneer Nursing College, Vadodara. Gujarat

Corresponding Author Name: **Hiral Bhardiya** Email: hiral2497@gmail.com

Article Information:

Type of Article: *Original Article*

Received On: 05/07/2025

Accepted On: 14/07/2025

Published On: 18/07/2025

Abstract

Hospitalization poses a significant threat to the psychological and emotional stability of preschool children. With limited cognitive maturity and emotional expression skills, children aged 3–6 often react to the unfamiliar hospital setting with intense anxiety, fear, and resistance to treatment. This study evaluates the role of therapeutic play as a non-pharmacological nursing intervention to reduce anxiety levels in hospitalized preschool children. Conducted in selected hospitals of Gandhinagar, Gujarat, this research employed a one-group pre-test post-test design involving 60 preschool children selected through purposive sampling. The Modified Hamilton Anxiety Scale was used to assess anxiety levels before and after the therapeutic play intervention. Children participated in structured play sessions over two consecutive days, involving age-appropriate activities like coloring, musical toys, and storytelling. The mean pre-test anxiety score was 22.68, which significantly reduced to 12.12 in the post-test ($p < 0.001$). The findings support the inclusion of therapeutic play in pediatric nursing care, as it effectively reduces anxiety and promotes a sense of comfort, expression, and understanding in hospitalized children. In addition to enhancing emotional outcomes, therapeutic play supports patient cooperation with treatment and fosters a child-friendly hospital culture. The study further emphasizes the importance of educating healthcare providers on the psychosocial needs of children and equipping pediatric units with play-based resources.

Keywords: Therapeutic play, anxiety, preschool children, hospitalization, pediatric nursing, emotional well-being, non-pharmacological intervention



Introduction

Hospitalization is often a stressful and anxiety-inducing experience for young children. Children aged 3 to 6 years, categorized as preschoolers, are especially vulnerable due to their limited cognitive understanding and emotional coping mechanisms. Anxiety in this age group can stem from separation from family, unfamiliar environments, pain, fear of procedures, and loss of control. Therapeutic play has been used increasingly to help mitigate these feelings by providing a structured, developmentally appropriate outlet for emotional expression and stress relief. Play is a universal and essential aspect of childhood development. It serves not only as a recreational activity but also as a medium for communication and emotional expression. Therapeutic play leverages this natural behavior to support psychological well-being in children, particularly in stressful settings such as hospitals. This study aims to examine the effectiveness of therapeutic play in reducing anxiety among hospitalized preschool children in selected hospitals of Gandhinagar, Gujarat.

Methodology

A quantitative, pre-experimental research design with one-group pre-test and post-test was employed for this study. The setting included three hospitals in Gandhinagar: Shantam Children Hospital, Kalp Children Hospital, and Divine Multispeciality Hospital. The population comprised hospitalized children aged 3–6 years who were admitted for the first time and met the inclusion criteria. A total of 60 children were selected using non-probability purposive sampling. Inclusion criteria were children aged 3 to 6 years who were experiencing mild to severe anxiety and able to understand Gujarati or Hindi. The Modified Hamilton Anxiety Rating Scale (HAM-A), consisting of 14 items scored on a 5-point Likert scale, was used to measure anxiety levels. Therapeutic play sessions were conducted over two consecutive days, with each session lasting 30 to 60 minutes. Activities included drawing, coloring, playing with musical toys, puzzles, and other age-appropriate games. Pre-test anxiety scores were recorded before the intervention, and post-test scores were collected after the completion of both sessions.

Results

The analysis revealed a significant reduction in anxiety levels post-intervention. The mean pre-test anxiety score was 22.68 with a standard deviation of 9.13. The mean post-test anxiety score dropped to 12.12 with a standard deviation of 7.28. The mean difference was 10.6, and the calculated t-value was 15.512, which was statistically significant at $p < 0.05$.

The study included 60 hospitalized preschool children aged between 3 to 6 years. The anxiety levels were measured using the Modified Hamilton Anxiety Rating Scale (HAM-A) before and after the therapeutic play intervention.

Table 1: Frequency Distribution of Anxiety Levels Before and After Intervention

Anxiety Level	Pre-Test Frequency (%)	Post-Test Frequency (%)	Change
Mild	10 (16.7%)	25 (41.7%)	↑
Moderate	35 (58.3%)	30 (50.0%)	≈
Severe	15 (25.0%)	5 (8.3%)	↓

There was a notable decrease in severe anxiety levels post-intervention. The number of children with mild anxiety increased, suggesting a positive outcome from the therapeutic play.

Table 2: Comparison of Mean Anxiety Scores (Pre-Test vs Post-Test)

Test	Mean Score	Standard Deviation	Mean Difference	t-value (p < 0.05)
Pre-Test	22.68	9.13	-	-
Post-Test	12.12	7.28	10.6	15.512

The mean anxiety score decreased by 10.6 points, and the t-value of 15.512 is statistically significant, confirming that therapeutic play effectively reduced anxiety among hospitalized preschool children.

These results demonstrate the effectiveness of therapeutic play in lowering anxiety levels among hospitalized preschool children. The reduction in scores was consistent across different demographic groups, including age, gender, and history of hospitalization. The statistical analysis supported the research hypothesis, rejecting the null hypothesis that there would be no significant difference between pre-test and post-test anxiety levels.

Discussion

This study reinforces existing literature that therapeutic play is an effective method for reducing anxiety in pediatric hospital settings. Children in the preschool age group benefit greatly from expressive activities that allow them to process complex emotions through familiar and engaging formats. As indicated by this study and other similar research efforts,

children who participate in structured play sessions exhibit significantly lower anxiety and improved cooperation with medical procedures.

Play provides a safe outlet for children to communicate fears, develop coping mechanisms, and regain a sense of control over their environment. By incorporating familiar objects and encouraging creativity, therapeutic play helps normalize the hospital experience. The structured approach adopted in this study showed measurable improvements in anxiety levels, supporting findings from earlier research by Pearson & Catalda (2015), Cassell (2015), and Young & Fu (2013).

The findings of this study affirm that therapeutic play is an effective, evidence-based strategy for reducing anxiety among hospitalized preschool children. The reduction in post-test anxiety scores after the intervention indicates not only statistical significance but also clinical relevance in the psychological well-being of the children.

Interpretation of Findings

Before the intervention, the majority of children displayed moderate to severe levels of anxiety. This is consistent with previous literature, which highlights hospitalization as a psychologically disruptive event for children. Factors contributing to anxiety in the pediatric population include fear of painful procedures, separation from parents, unfamiliar surroundings, and loss of routine. In this study, therapeutic play significantly reduced the proportion of children with severe anxiety and increased the number of children classified with mild anxiety.

The post-intervention drop in mean anxiety scores (from 22.68 to 12.12) supports the central hypothesis of the research. This outcome aligns with research by Cassell (2015) and Pearson & Catalda (2015), who found that play interventions create a safe, familiar, and expressive environment where children can process their fears. The use of creative outlets such as drawing, musical toys, and puzzles enables children to regain a sense of control—often lost during hospitalization.

Studies by Burnstein & Meichenbaum (2015) and Young & Fu (2013) similarly demonstrated that structured play therapy reduced preoperative and procedural anxiety. Therapeutic play not only distracts from fear but allows children to express emotions non-verbally. Compared to pharmacological interventions, therapeutic play offers a non-invasive, cost-effective, and developmentally appropriate option.

This study's results are consistent with Child Life Programs implemented in many Western pediatric hospitals. However, in India, the integration of play therapy into routine pediatric nursing care is still limited. The success of this intervention in the selected hospitals in

Gandhinagar suggests that broader implementation could yield similar benefits in other healthcare settings.

Therapeutic play works through several psychological mechanisms:

1. Cognitive restructuring: Helps children interpret the hospital environment in a less threatening way.
2. Emotional regulation: Provides an outlet for fear, sadness, or confusion.
3. Behavioral engagement: Keeps the child involved in familiar and pleasurable tasks, reducing focus on medical stressors.
4. Social interaction: In group play, it reduces isolation and fosters peer support.

The structured nature of the intervention also ensured consistency, making it easier to replicate and scale in various hospital settings. Moreover, the involvement of trained nursing staff in delivering play sessions supports nurse-led intervention models in pediatric units.

Limitations of the Study

While the study demonstrated significant findings, certain limitations should be acknowledged:

- The absence of a control group limits causal inference.
- The sample was confined to three hospitals in one geographic area, affecting generalizability.
- Anxiety was measured shortly after the intervention; long-term impacts were not assessed.
- Some responses may have been influenced by parental presence or observation bias during play.

Recommendations for Future Research

- Conduct randomized controlled trials (RCTs) with control groups to establish stronger causal relationships.
- Explore the longitudinal impact of therapeutic play on emotional development and hospital coping.
- Assess play interventions in different cultural, linguistic, and socioeconomic contexts.
- Integrate other non-pharmacological interventions like music therapy, storytelling, or virtual play to compare outcomes.
- Investigate the role of parental involvement in therapeutic play for hospitalized children.



Implications for Nursing Practice

This study advocates for the inclusion of therapeutic play as a standard component of pediatric care. Nurses play a central role in the emotional well-being of children and are ideally positioned to implement play-based interventions. By providing age-appropriate play materials and creating opportunities for therapeutic engagement, nurses can alleviate distress and enhance the child's hospital experience.

Additionally, incorporating therapeutic play training into nursing education can prepare future healthcare professionals to adopt child-friendly and psychologically sensitive care approaches.

Conclusion

Therapeutic play is a valuable, evidence-based intervention that significantly reduces anxiety among hospitalized preschool children. The structured sessions used in this study provided emotional relief and improved behavioral outcomes. The post-intervention scores demonstrated marked improvement, highlighting the need to integrate such practices in pediatric healthcare settings.

The findings strongly support the inclusion of therapeutic play in nursing care plans for hospitalized children. Training pediatric nurses in administering play therapy and ensuring access to appropriate play materials can enhance the overall hospital experience for young patients. It is recommended that healthcare institutions adopt therapeutic play as a standard practice in pediatric units.

Conflict of Interest

The author declares no conflict of interest in relation to this study.

Funding

This study did not receive any external funding. It was conducted using institutional resources from C.M. Patel College of Nursing.

References



1. Burnstein, S., & Meichenbahe, D. (2015). Play therapy following surgery. *Journal of Child Psychology*, 12(2), 45–51.
2. Cassell, S. (2015). Puppet therapy and cardiac catheterization anxiety in children. *Singapore Medical Journal*, 56(4), 312–318.
3. Rae, W., & Sanner, D. (2014). Non-directive play therapy effects on hospitalized children. *Clinical Pediatrics*, 53(6), 532–538.
4. Wikstrom, B. (2005). Children's drawings and games during hospitalization. *Pediatric Nursing*, 31(5), 398–403.
5. WHO. (2021). Mental health and psychosocial wellbeing in children. <https://www.who.int>
6. Hart, D., & Bossert, E. (2012). Supporting children through hospitalization: Developmentally appropriate interventions. *Pediatric Nursing*, 38(3), 135–141.
7. Gariépy, N., & Howe, N. (2003). The therapeutic power of play: Examining the play therapy process. *International Journal of Play Therapy*, 12(1), 19–30.
8. Coyne, I. (2006). Children's experiences of hospitalization. *Journal of Child Health Care*, 10(4), 326–336.
9. Moore, M., & Russ, S. (2006). Follow-up of children treated with child-centered play therapy for disruptive behavior. *International Journal of Play Therapy*, 15(2), 93–108.
10. Landreth, G. (2012). *Play therapy: The art of the relationship*. Routledge.
11. Turner, J., & Weegmann, M. (2002). The psychology of hospital play. *Nursing Children and Young People*, 14(1), 20–23.
12. American Academy of Pediatrics. (2014). Child life services. *Pediatrics*, 133(5), e1471–e1478.
13. Pearson, J., & Catalda, T. (2015). Play therapy in the pediatric ICU. *Journal of Pediatric Nursing*, 30(2), e17–e22.
14. Young, R., & Fu, L. (2013). Needle play and emotional distress. *Journal of Child Psychology*, 44(8), 1120–1130.
15. Grote, N. K., et al. (2010). Depression and birth outcomes: A meta-analysis. *JAMA Psychiatry*, 67(10), 1012–1019.
16. Bintabara, D. (2017). Awareness of obstetric danger signs among pregnant women in Tanzania. *BMC Pregnancy and Childbirth*, 17(1), 112.
17. Tsegaye, D., & Hambisa, M. T. (2018). Antenatal care visit and awareness of danger signs of pregnancy among women in Ethiopia. *Reproductive Health*, 15(1), 1–7.