



Utilizing Puzzle Play Therapy for Alleviating Anxiety in Hospitalized Preschool Children

Oktaviany Ayu Prawita Sari¹, Maryatun¹, Suciana Ratrinaningsih¹
¹Department of Nursing, Universitas 'Aisyiyah Surakarta, Indonesia

Correspondence author: Oktaviany Ayu Prawita Sari

Email: oktaviany.students@aiska-university.ac.id

Address : Pulosari 02/04, Malangjiwan, Colomadu, Karanganyar, Jawa Tengah, 57177, Indonesia

Telp. 085727634133

DOI: <https://doi.org/10.56359/gj.v5i1.342>



This work is licensed under a Creative Commons Attribution 4.0 International License.

ABSTRACT

Objective: The aim of this study is to explore the effectiveness of puzzle play therapy in reducing anxiety levels among hospitalized preschool children (aged 3 - 6 years old) in the Flamboyan Ward at Dr. Moewardi Hospital.

Method: Using a descriptive approach, the research adopts a case study design.

Results: Both participants demonstrated a reduction in anxiety levels as per the Preschool Anxiety Scale (PAS) assessments conducted before and after the intervention. An. Ab's anxiety level decreased from 4 (very severe anxiety) to 2 (moderate anxiety), while An. Ak's anxiety level decreased from 3 (severe anxiety) to 1 (mild anxiety).

Conclusion: The findings indicate that puzzle play therapy effectively reduces anxiety levels in preschool children, including those with severe and very severe anxiety levels. The author's implementation of puzzle play therapy has proven to be successful in alleviating anxiety in children.

Keywords: anxiety, puzzle, preschool

Introduction

During the preschool years, which typically encompass ages 3 to 6, individuals undergo significant growth and developmental changes. This stage is considered vital for children's overall development, accounting for approximately 80% of their growth trajectory (Mulyanti et al., 2021). The preschool phase is characterized by heightened vulnerability to illnesses due to the immaturity of children's immune systems. The hospitalization rate among toddlers has been on the rise, with statistics indicating that 5 out of 100 toddlers were hospitalized in the past year. Projections suggest a further increase in the morbidity rate among children, expected to reach 13.11% by 2023. Urban areas have seen approximately 2.99% of children

hospitalized within the past year, with toddlers exhibiting a relatively high prevalence of health complaints at 37.40% compared to other age groups (Kemenkes, 2018).

The hospitalization experience can be challenging for children, leading to heightened stress and anxiety as they navigate unfamiliar environments and separation from familiar routines and peers. This stress and anxiety may manifest in sleep disturbances, appetite disruptions, and developmental setbacks, potentially hindering the healing process and triggering feelings of fear, loneliness, and restlessness, as outlined in a study by Safira et al. (2023).

Anxiety, characterized by excessive fear, worry, or perceived threats, can significantly impact a child's psychological well-being. Fear, rooted in uncertainty and helplessness in new settings, is a natural response. Continuous anxiety across various contexts necessitates special attention, as noted in studies by Nurasyiah et al. (2023) and Saputra (2020). Left unaddressed, anxiety related to hospitalization may lead to treatment refusal, longer hospital stays, serious health complications, and adverse emotional outcomes.

To mitigate the negative effects of the hospital environment on children, play therapy interventions serve as valuable tools. Play therapy offers a child-centered approach to facilitate emotional expression, increase comfort levels, enhance interaction with healthcare professionals, streamline treatment procedures, and promote recovery, as indicated by Godino-lanez et al. (2020). Puzzle play therapy, a specific modality within play therapy, engages children in cognitive challenges, promotes problem-solving skills, enhances concentration, and provides a therapeutic outlet for anxiety relief, consistent with findings from Aprina et al. (2019) and Israeli et al. (2020).

Observations within Ward Flamboyan 9 revealed common indicators of emotional distress among child patients, including crying, screaming, anxiety, and treatment resistance. Notably, two out of ten observed children exhibited very severe anxiety and severe anxiety, as assessed through the Preschool Anxiety Scale (PAS) questionnaire. Building upon these observations, the researchers aim to explore the efficacy of Application of Puzzle Play Therapy for Pre-School Children (3 - 6 Years) to Reduce Anxiety Due to Hospitalization in the Flamboyan Ward of Dr. Moewardi Hospital.

Objective

The aim of this study is to explore the effectiveness of puzzle play therapy in reducing anxiety levels among hospitalized preschool children (aged 3 - 6 years old) in the Flamboyan Ward at Dr. Moewardi Hospital.

Method

Utilizing a descriptive methodology, this study is framed within a case study research design encompassing key nursing components such as assessment, diagnosis, intervention, implementation, and evaluation. This structured design facilitates the implementation of play therapy interventions for children experiencing anxiety linked to hospitalization in the Flamboyant Ward of Dr. Moewardi Hospital. The case study involved two hospitalized patients at the Flamboyan Ward of RSUD Dr. Moewardi, selected in February 2024.

Result

Table 1. The level of anxiety in preschool children (3-6 years) who were hospitalized before undergoing puzzle play therapy using the preschool anxiety scale (PAS)

	An. Ak	An. Ab
Day 1	Total Score 70 (Severe Anxiety)	Total Score 114 (Panic Level Anxiety)
Day 2	Total Score 57 (Severe Anxiety)	Total Score 95 (Panic Level Anxiety)
Day 3	Total Score 47 (Moderate Anxiety)	Total Score 77 (Severe Anxiety)
Day 4	Total Score 35 (Moderate Anxiety)	Total Score 57 (Severe Anxiety)

Based on table 1, showing data before implementing play therapy with puzzles, it was found that children experienced anxiety due to hospitalization. Obtained results An. Ab experiences very severe anxiety and An. Ak experiencing severe anxiety.

Table 2. Anxiety levels in preschool children (3-6 years) who were hospitalized after puzzle play therapy using the preschool anxiety scale (PAS)

	An. Ak	An. Ab
Day 1	Total Score 61 (Severe Anxiety)	Total Score 104 (Panic Level Anxiety)
Day 2	Total Score 55 (Moderate Anxiety)	Total Score 89 (Severe Anxiety)
Day 3	Total Score 39 (Moderate Anxiety)	Total Score 73 (Severe Anxiety)
Day 4	Total Score 27 (Mild Anxiety)	Total Score 42 (Moderate Anxiety)

Based on table 2, shows that data after implementing play therapy with puzzles showed that children experienced a decrease in anxiety due to hospitalization. Obtained results An. Ab experienced a decrease from very severe anxiety to moderate anxiety and An. Ak experienced a reduction from severe anxiety to mild anxiety after doing puzzle playing therapy.

Table 3. Comparison of anxiety levels in preschool children (3-6 years) who were hospitalized before and after puzzle play therapy using the preschool anxiety scale (PAS)

Respondents	Before	After	Score
An. Ab	Score 4 (Panic Level Anxiety)	Score 2 (Moderate Anxiety)	2
An. Ak	Score 3 (Severe Anxiety)	Score 1 (Mild Anxiety)	2

Based on table 3, the results of the application before and after being measured using PAS (Preschool Anxiety) in the table above, it shows that both respondents experienced a decrease in anxiety levels. Decreased anxiety levels in An. Ab is 4 from very severe anxiety to moderate anxiety and An. Ak has a score of 3 from severe anxiety to mild anxiety.

Discussion

Based on Table 1, it is evident that post-implementation of play therapy with puzzles resulted in reduced anxiety levels in children due to hospitalization. The outcomes revealed a decrease in anxiety levels for An. Ab, transitioning from very severe anxiety to moderate anxiety, and for An. Ak, the shift was from severe anxiety to mild anxiety.

Pre-implementation data from Table 1 indicated that children experienced anxiety associated with hospitalization. Prior to intervention, An. Ab exhibited very severe anxiety, while An. I showed symptoms of severe anxiety. Both cases demonstrated common signs of anxiety, including tension, fear, and restlessness. Various anxiety symptoms were observed, such as restlessness, heightened muscle tension, attention-seeking behaviors, and irritability, stemming from causes such as anxiety towards healthcare professionals, unfamiliar medical procedures, being in an unfamiliar environment, separation from familiar individuals, and experiencing physical discomfort, including pain.

These findings align with the concept that hospitalization can provoke stress in children, as stated by Anisha and Lestari (2022). Stressors faced during treatment encompass the unfamiliar hospital setting, physical discomfort, medical procedures, and health assessments, which can induce sleep disturbances, appetite changes, and developmental issues, potentially slowing down the healing process. Additionally, according to Godino-lanez et al. (2020), children may experience anxiety during hospitalization due to health changes or unfamiliar environments, leading to the development of adaptive coping mechanisms.

Table 2 presents data post-play therapy implementation, revealing decreased anxiety levels in children due to hospitalization. An. Ab's anxiety decreased from very severe to moderate, while An. Ak experienced a reduction from severe to mild anxiety after engaging in puzzle play therapy. These results are consistent with the observations of Yulianto et al. (2021), who noted a calming effect and improved communication during play therapy sessions. Play therapy serves as a therapeutic tool, allowing children to express emotions and engage in soothing activities, as supported by Farhan et al. (2022).

The application of play therapy, specifically puzzle play therapy, aids in fear reduction and behavioral improvements, as emphasized in studies by Yulianto et al. (2021) and Farhan et al. (2022). Puzzle games are not only engaging but also beneficial for fostering fine motor skills, hand-eye coordination, and psychosocial development post-trauma in children (Setiawan et al, 2023).

Analyzing data before and after utilizing the Preschool Anxiety Scale (PAS), both respondents demonstrated decreased anxiety levels. An. Ab's anxiety decreased from very severe to moderate, whereas An. Ak's anxiety reduced from severe to mild. Consistent with previous research by Suyami et al. (2019), puzzle play therapy effectively reduced anxiety in children, improving their emotional well-being.

Moreover, Dewi et al. (2020) reported a significant decrease in anxiety scores post-puzzle play therapy application compared to pre-treatment scores, corroborating the therapeutic benefits of puzzle play therapy in anxiety reduction. In another study by Anisha and Lestari (2022) at Arifin Achmad Regional Hospital, Riau Province, puzzle play therapy demonstrated anxiolytic effects in children, further supporting the therapeutic value of this intervention.

Age and hospital visit frequency were identified as factors influencing anxiety outcomes in children (Setiawan, 2021; . Older age was associated with lower anxiety levels, consistent with observations by Zulaikha et al. (2021). Additionally, regular hospital visits were linked to reduced anxiety levels, as frequent exposure to healthcare settings mitigated anxiety levels, as noted by Sulistia et al. (2022).

Conclusion

Through the implementation of puzzle play therapy, children, including those with initially very severe and severe anxiety levels, demonstrated a significant decrease in anxiety. The successful application of puzzle play therapy by the researcher underscores its effectiveness in reducing anxiety among hospitalized children. This study highlights the importance of integrating play therapy activities into nursing care to alleviate anxiety levels, aiming to foster greater compliance with treatment and care among children. For future research endeavors, it is encouraged to explore additional variables related to anxiety in hospitalized children. By delving deeper into these interconnected factors, researchers can further enhance the development of comprehensive care strategies tailored to address anxiety in children undergoing hospitalization.

Conflict of interest

There is no conflict of interest.

Authors' contribution

Each author contributed equally in all the parts of the research. All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

References

1. Anisha, N., & Lestari, R. F. (2022). Penerapan Terapi Bermain Puzzle Untuk Mengatasi Tingkat Kecemasan Pada Anak Usia Prasekolah (3-6 Tahun) Saat Hospitalisasi. *Coping: Community of Publishing in Nursing*, 10(6), 624. <https://doi.org/10.24843/coping.2022.v10.i06.p06>
2. Aprina, A., Ardiyansa, N., & Sunarsih, S. (2019). Terapi Bermain Puzzle pada Anak Usia 3-6 tahun terhadap Kecemasan Pra Operasi. *Jurnal Kesehatan*, 10(2), 291. <https://doi.org/10.26630/jk.v10i2.1561>
3. Dewi, D. R., Lestari, A., & Vellyana, D. (2020). The Effect of Therapy Containing Puzzle on Decreasing Anxiety of Hospitalized Children Aged 3–6 Years. *27(ICoSHEET 2019)*, 413–415. <https://doi.org/10.2991/ahsr.k.200723.105>
4. Farhan, M., Santosa, D., Rudyarti, E., Program, 2, Keselamatan, S., & Kerja, K. (2022). Tingkat Pengetahuan Kesiapsiagaan Bencana Terhadap Tanggap Darurat Kebakaran Pada Mahasiswa Tingkat Akhir Universitas X. *01(01)*, 1–10. <http://ejournal.medikasuherman.ac.id:8083/ejournal/index.php/CMJ>
5. Godino-láñez, M. J., Martos-Cabrera, M. B., Suleiman-Martos, N., Gómez-Urquiza, J. L., Vargas-Román, K., Membrive-Jiménez, M. J., & Albendín-García, L. (2020). Play therapy as an intervention in hospitalized children: A systematic review. *Healthcare (Switzerland)*, 8(3), 1–12. <https://doi.org/10.3390/healthcare8030239>
6. Islaeli, Yati, M., Islamiyah, & Fadmi, F. R. (2020). The effect of play puzzle therapy on anxiety of children on preschooler in Kota Kendari hospital. *Enfermeria Clinica*, 30, 103–105. <https://www.sciencedirect.com/science/article/abs/pii/S1130862120300644>
7. Kemenkes. (2018). Laporan Nasional RKD2018 FINAL.pdf. In Badan Penelitian dan Pengembangan Kesehatan (p. 674). http://labdata.litbang.kemkes.go.id/images/download/laporan/RKD/2018/Laporan_Nasional_RKD2018_FINAL.pdf

8. Kusumaningtiyas, D. P. H., & Priastana, I. K. A. (2022). Pengaruh Terapi Bermain Tebak Gambar Untuk Menurunkan Kecemasan Pada Pasien Anak Usia Toddler Akibat Hospitalisasi Di Rumah Sakit the Effect of Image Playing Therapy To Reduce Hospitalization Anxiety in Toddler Age Patients At Hospital. *JPP) Jurnal Kesehatan Poltekkes Palembang*, 15(2), 2654–3427. <https://doi.org/10.36086/jpp.v15i1.564>
9. Mulyanti, S., Kusmana, T., & Fitriani, T. (2021). Pola Pengasuhan Orangtua Terhadap Perkembangan Anak Usia Pra Sekolah :Literature Review. *HealthCare Nursing Journal*, 3(2), 116–124. <https://www.journal.umtas.ac.id/index.php/healthcare/article/view/1333>
10. Nurasyiah, R., Atikah, C., Zulaikha, F., Sureskiarti, E., Septiawan, T., Sari, D. P., Nurina, I., Soedjatmiko, S., Gunardi, H., Sekartini, R., Medise, B. E., Johnson, I., Wibowo, Y., Basrowi, R. W., Lisinus Ginting, R., Cintya, J., Fadillah, N., Marpaung, N. S., Azzahra, S. N., ... Vellyana, D. (2023). Terapi Bermain Puzzle Untuk Meningkatkan Kemampuan Kognitif Pada Anak Tunagrahita Ringan. *Journal of Physics: Conference Series*, 3(1), 201–210. <https://doi.org/10.1088/1742-6596/1179/1/012129>
11. Safira, N., Irdawati, & Purnamadewi, S. (2023). Terapi Bermain Puzzle dalam Menurunkan Kecemasan Anak Akibat Hospitalisasi. *Prosiding Seminar Nasional Keperawatan Universitas Muhammadiyah Surakarta (SEMNASKEP)*, 1, 1–9.
12. Saputra, T. A. (2020). *Jurnal Bimbingan dan Konseling. Bentuk Kecemasan Dan Resiliensi Mahasiswa Pascasarjana Aceh-Yogyakarta Dalam Menghadapi Pandemi Covid-19*, 6(1), 55–61.
13. Setiawan H, Lutfi Sandi YD, Andarini E, Kurniawan R, Richard SD, Ariyanto H. (2021). The effect of genetic counseling on depression, anxiety, and knowledge level among diabetes mellitus patients. *Kontak*, 23(4):330-337. doi: 10.32725/kont.2021.035.
14. Setiawan, S., Ikhtiyarotul Fikriyah, N., & Purnama, D. (2023). Description of Cognitive Function in The Elderly with Puzzle Therapy Intervention: Case Study. *Genius Journal*, 4(1), 250–256. <https://doi.org/10.56359/gj.v4i1.246>
15. Sulistia, Ermawati, G. N., Fadhila, M., Putranto, M. Z. N., & Faridah, S. (2022). Pembuatan dan Penerapan Mainan Edukasi (Puzzle) Untuk Stimulasi Kognitif Anak Berkebutuhan Khusus di RSUD Ulin Banjarmasin. *PUSAKO : Jurnal Pengabdian Psikologi*, 01(02), 46–54.
16. Suyami, Khayati, F. N., Setianingsih, & Pranandari, C. (2019). The Influence of Educative Puzzle Game to Concentration of Children with Attention Deficit and Hyperactivity Disorder in Arogya Mitra Acupuncture Klaten. *Journal of Physics: Conference Series*, 1179(1). <https://doi.org/10.1088/1742-6596/1179/1/012129>
17. Yulianto, A., Idayati, I., & Sari, S. A. (2021). Bermain (Puzzle) Terhadap Kecemasan Anak Usia Prasekolah Yang Mengalami Hospitalisasi. *Jurnal Wacana Kesehatan*, 6(1), 39. <https://doi.org/10.52822/jwk.v6i1.172>
18. Zulaikha, F., Sureskiarti, E., Septiawan, T., Sari, D. P., & Nurina, I. (2021). Terapi Bermain Puzzle Suatu Distraksi Nyeri Pada Pasien Kanker Anak Di Rumah Singgah Kanker Kota Balikpapan. *Prosiding Seminar*, 1(2015), 229–232.