

Application Of Art Drawing Play Therapy On Anxiety Level In Children With Thalassemia At Indriati Solo Baru Hospital

Melita Karunia Wulan Sari¹ | Fakhruddin Nasrul Sani² | Muzaroah Ermawati Ulkhasanah³ | Kristina Widyastuti⁴

¹Professional Nursing Study Program, Faculty of Health Sciences, Duta Bangsa University, Surakarta

²Professional Nursing Study Program, Faculty of Health Sciences, Duta Bangsa University, Surakarta

³Professional Nursing Study Program, Faculty of Health Sciences, Duta Bangsa University, Surakarta

⁴Indriati Hospital Solo Baru

* Koresponden penulis : fahrudin_sani@udb.ac.id

Submitted : 27-02-2026

Reviewed : 03-03-2026

Accepted : 15-07-2026

ABSTRACT

Introduction: Thalassemia is a chronic hereditary disease requiring lifelong blood transfusions, which often causes anxiety in hospitalized children. Anxiety may negatively affect children's emotional well-being and cooperation during treatment. Art drawing play therapy is a simple non-pharmacological intervention that may help reduce anxiety during hospitalization.

Objectives: To evaluate the effectiveness of art drawing play therapy in reducing anxiety among hospitalized children with thalassemia.

Methods: This observational case study involved two children with thalassemia hospitalized at Indriati Solo Baru Hospital. Anxiety was assessed using the Spence Children's Anxiety Scale (SCAS) before and after a 30-minute art drawing play therapy session.

Results: Anxiety scores decreased in both participants after the intervention. The first patient's score decreased from 45 to 36, while the second patient's score decreased from 36 to 32. Both children appeared calmer and more cooperative during nursing care.

Conclusions: Art drawing play therapy effectively reduced anxiety in hospitalized children with thalassemia and can be used as a non-pharmacological nursing intervention.

Keyword: Thalassemia; Anxiety; Hospitalization; Play Therapy; Art Drawin

Jurnal Keperawatan Duta Medika diterbitkan oleh Universitas Duta Bangsa Surakarta.

Website: ojs.udb.ac.id

Introduction

As a major genetic blood disorder found across the globe, Thalassemia necessitates continuous management through lifelong blood transfusions and chelation therapy to remove excess iron. Beyond the physical toll, frequent hospitalizations and routine medical procedures often lead to psychological difficulties for individuals dealing with this condition, particularly anxiety, among pediatric patients. Anxiety during hospitalization may reduce children's cooperation with nursing procedures and negatively affect their recovery and quality of life (Asawasudsakorn et al., 2021).

Indonesia is among the countries with a high prevalence of thalassemia, with the number of patients continuing to increase each year. Preschool children are especially vulnerable to hospitalization-related anxiety because they have limited coping abilities and tend to perceive medical procedures as threatening. Therefore, effective nursing interventions are needed to minimize anxiety and improve children's adaptation during hospitalization (Aulianah & Asse, 2024).

Art drawing play therapy serves as a non-pharmacological approach that helps children release their emotions, lower stress levels, and shift their focus away from medical procedures. Earlier research shows that coloring activities can effectively decrease anxiety in hospitalized children diagnosed with thalassemia while boosting their cooperation during medical care. Even so, practical evidence regarding the use of art drawing play therapy as part of comprehensive nursing care for these children at Indriati Solo Baru Hospital is still quite scarce (Godino-Iáñez et al., 2020).

Method

This project relied on a descriptive case study framework to assess the impact of art drawing play therapy on anxiety reduction for hospitalized children suffering from thalassemia. Data collection and implementation were conducted inside the pediatric unit of Indriati Solo Baru Hospital.

This investigation focused on a study population of pediatric patients dealing with thalassemia who underwent hospitalization during the data collection period. Out of this group, two preschool-aged children with thalassemia were selected as samples since they met specific requirements: undergoing inpatient treatment for blood transfusions, experiencing anxiety while in the hospital, staying conscious, and willing to participate alongside parental consent. The selection process relied on a purposive sampling technique.

Data collection was conducted through nursing assessment, direct observation, interviews with the children and their parents, and documentation review. Anxiety levels were measured using the Spence Children's Anxiety Scale (SCAS), a standardized instrument for assessing anxiety in children. The intervention consisted of a 30-minute session of art drawing play therapy, during which participants were encouraged to color pictures using crayons under the supervision of the researcher. Anxiety was assessed before and after the intervention to evaluate changes in anxiety levels (Klein et al., 2023).

The data were analyzed descriptively by comparing the anxiety scores before and after the intervention. The findings were presented in narrative form to describe changes in anxiety levels and the children's responses to art drawing play therapy.

Result

This study involved two preschool-aged children diagnosed with thalassemia who experienced anxiety during hospitalization. Both participants received a 30-minute session of art drawing play therapy as part of nursing care. Anxiety levels were assessed using the Spence Children's Anxiety Scale (SCAS) before and after the intervention.

The results showed a reduction in anxiety scores in both participants following the intervention. The first participant's SCAS score decreased from 45 to 36, indicating a 20% reduction in anxiety. The second participant's score decreased from 36 to 32, representing an 11% reduction. In addition to the quantitative findings, both children appeared calmer, more cooperative during nursing procedures, and showed improved emotional responses after participating in the art drawing activity. These findings indicate that art drawing play therapy contributed to reducing hospitalization-related anxiety in children with thalassemia.

Discussion

Based on the research findings, art drawing play therapy effectively decreased anxiety among hospitalized pediatric patients with thalassemia. The drop in SCAS scores combined with positive behavioral improvements post-intervention indicates that art drawing functions as a reliable non-pharmacological nursing strategy. By participating in drawing and coloring routines, children manage to convey their feelings, distract themselves from intimidating clinical steps, and achieve a state of calm during their hospital admission (Godino-Iáñez et al., 2020).

These results align with earlier research indicating that play therapy successfully lowers anxiety among pediatric patients in hospitals. Specifically, Rahayu et al. (2025) noted that coloring therapy led to a notable drop in anxiety scores for children dealing with thalassemia who were receiving blood transfusions. Similarly, Hasanah and Dewi (2023) reported that structured play therapy improved children's emotional adaptation during hospitalization. Art drawing therapy also supports children's cognitive and emotional development by

encouraging self-expression and enhancing coping abilities in stressful situations.

The greater reduction in anxiety observed in the first participant compared with the second may be related to individual differences, including age, previous hospitalization experiences, family support, and baseline anxiety levels. Despite these differences, both participants demonstrated positive responses to the intervention, indicating that art drawing play therapy may be beneficial for children with thalassemia regardless of their initial anxiety level (Rheel et al., 2022).

Overall, the findings support the integration of art drawing play therapy into pediatric nursing practice as a simple, safe, and low-cost intervention to reduce anxiety and improve children's cooperation during hospitalization. However, because this study was limited to two case subjects, further research with larger samples and stronger study designs is recommended to confirm the effectiveness of this intervention (Delone et al., 2024).

Tabel 1 Hasil Perbandingan Skor Kecemasan An. A dan An. R

Pasien	Diagnosa	Skor Pre-test (SCAS)	Skor Post-test (SCAS)
Pasien 1 (An. A)	Thalasemia	45 (Kecemasan Sedang)	42 (Kecemasan Sedang, Menurun)
Pasien 2 (An. R)	Thalasemia	36 (Kecemasan Sedang)	32 (Kecemasan Sedang, Menurun)

Conclusion

Clinical nurses should be advised to include art drawing play therapy as part of routine pediatric care to manage anxiety during hospitalizations. Healthcare facilities are also expected to provide adequate tools and environments to support such therapeutic play programs. Furthermore, subsequent studies should look into incorporating larger sample groups and experimental methodologies to gain a deeper understanding of art drawing therapy's impact on children with thalassemia or other chronic health issues.

Suggestion

Implementing art drawing play therapy showed positive results in reducing anxiety for children dealing with thalassemia in inpatient settings. Both individuals displayed a reduction in anxiety measurements after the activity, matched by better emotional behavior and willingness to cooperate with nurses. Taken together, these findings point out that art drawing play therapy is a straightforward, safe, and non-pharmacological nursing solution to help kids cope with the stress of staying in the hospital.

References

- Aryani, D., & Zaly, N. W. (2021). Pengaruh Terapi Bermain Mewarnai Gambar Terhadap Kecemasan Hospitaslisasi Pada Anak Prasekolah. *Jurnal Akademika Baiturrahim Jambi*, 10(1), 101-108.
- Asawasudsakorn, N., Lauhasurayotin, S., Poparn, H., Chiengthong, K., Sosothikul, D., Chaivasit, N., & Techavichit, P. (2021). Prenatal Diagnosis Leads to Early Diagnosis of Transfusion-Dependent Thalassemia and Better Growth Outcomes. *Global Pediatric Health*, 8, 159–166. <https://doi.org/10.1177/2333794X211046104>
- Aulianah, H., & Asse. (2024). Faktor - Faktor yang Berhubungan Dengan Kualitas Hidup Anak Thalasemia beta mayor Hili Aulianah 1 , Asse 2. *Jurnal Aisiyyah Medika*, 9.<https://jurnal.stikes-aisiyyah-palembang.ac.id/index.php/JAM/article/view/1170>
- Delone, A. M., Et Al. (2024). The Efficacy Of Procedural Support Interventions On Coping And Distress For Children With Newly Diagnosed Leukemia: A Prospective Pilot Study. *Child Life Research*. <https://Childlife.Scholasticahq.Com/Article/127276>
- Euklesia, F. (2021). Pengaruh Terapi Bermain Mewarnai Gambar Terhadap Tingkat Kecemasan.

- Jurnal Penelitian Keperawatan, 3(2). 8-16.
- Fernandes, A. (2020). Kelelahan Pada Anak Dengan Leukemia Limfoblastik Akut Dalam Menjalani Kemoterapi Fase Induksi. *Jurnal Kesehatan Perintis*, 7(1), 69-74.
- Godino-Iáñez, M. J., Camacho-Montaño, C., & Rojo-Martínez, G. (2020). Play Therapy As An Intervention In Hospitalized Children: A Systematic Review. *Healthcare*, 8(3), 239. <https://doi.org/10.3390/Healthcare8030239>
- Hasanah, U., & Dewi, A. R. (2023). *Play therapy pada anak dengan thalasemia untuk mengatasi kecemasan*. *Jurnal Pengabdian Masyarakat Jajama (JPMJ)*, 2(1), 24–34. <https://doi.org/10.47218/jpmj.v2i1.287>
- Harahap, N., Waluyo, A., Nuraini, T., & Sutarni, N. (2024). Beban Perawatan, Kesiapan Merawat, Dan Kecemasan Pada Family Caregiver Anak Dengan Kanker Di Indonesia. *Jurnal Ilmiah Keperawatan IMELDA*, 10(2), 193-201.
- Jadhav, S. S. (2023). Growth Profile Of Children With Beta-Thalassemia major. *International Journal of Contemporary Pediatrics*, 10(8), 1205–1210. <https://doi.org/10.18203/2349-3291.ijcp20232235>
- Klein, B., Rajendram, R., Hrycko, S., Poynter, A., Ortiz-Alvarez, O., Saunders, N., & Andrews, D. (2023). Anxiety In Children And Youth: Part 1—Diagnosis. *Paediatrics & Child Health*, 28(1), 45-51.
- Loreskär, P., & Binder, P.-E. (2024). *Nothing Less Than A Creative Triumph: A Study Of Children Admitted To Hospital For Serious Somatic Illness Or Injury And Their Experience Of Art Therapy*. *Frontiers In Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1353507>
- Malfasari, E., Driposwana Putra, I., Trisnawati, N., Profesi Ners, P., Keperawatan, F., & Kesehatan Payung Negeri, I. (2025). *Medic Nutricia Penerapan Terapi Bermain Mewarnai Gambar Untuk Menurunkan Tingkat Kecemasan Pada Anak Usia Prasekolah Yang Mengalami Hospitalisasi*. 19. <https://doi.org/10.5455/Mnj.V1i2.644>
- Mediani, H. S., Ramdhania, G. G., & Fikri, A. (2022). Kualitas Hidup Anak Usia Sekolah Penyandang Thalasemia. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 6(3), 2243–2250. <https://doi.org/10.31004/obsesi.v6i3.1933>
- Mcguire, R., Halligan, S. L., Schweizer, S., Et Al. (2023). Cognitive And Affective Control For Adolescents In Care Versus Their Peers: Implications For Mental Health. *Child And Adolescent Psychiatry And Mental Health*, 17, 128. <https://doi.org/10.1186/S13034-023-00668-X>
- Oktiawati, A., Widyantoro, W., Mey, A., Fardlillah, F., Stikes, D., Mandala, B., Slawi, H., Program, D., S1, S., Stikes, K., Program, M., & Iii, S. D. (2020). Bermain Terapeutik Clay Menurunkan Tingkat Kecemasan Pada Anak Usia Prasekolah Saat Tindakan Injeksi. *Menuju: Malahayati Nursing Journal*, 2(4), 695–704.
- Putri, P. Y. (2023). Perkembangan Sosial, Emosi, Moral Anak Sekolah Dasar. *Journal Of Islamic Primary Education*, 1(2), 51-58.
- Putri, P. A., Kadek, C. U., & Juniarta, I. G. N. (2020). Gambaran Tingkat Kecemasan Pada Anak Kanker Sebelum Menjalani Kemoterapi Di Rumah Singgah Yayasan Peduli Kanker Anak Bali. *Coping: Community Of Publishing In Nursing*, 8(3), 243. <https://doi.org/10.24843/Coping.2020.V08.I03.P04>
- Pujiati, W., Saribu, H. J. D., Rahman, Z., & Khariroh, S. (2021). Penurunan Tingkat Kecemasan Anak Melalui Terapi Bermain Di Rumkital Dr. Midiyato Suratani Tanjungpinang. *Jurnal Pengabdian Masyarakat Indonesia*, 1(6), 371–376. <https://doi.org/10.52436/1.Jpmi.73>
- Rahayu, S. F., Mariani, M., & Purba, S. L. (2025). *Pengaruh terapi bermain mewarnai gambar terhadap tingkat kecemasan anak dengan thalasemia yang menjalani transfusi darah di ruang flamboyan RSUD dr. Doris Sylvanus Palangka Raya*. *Indonesian Journal of Health Science*, 5(5), 982–988. <https://doi.org/10.54957/ijhs.v5i5.1651>
- Rai, J., Predy, M., Wiebe, S. A., Rinaldi, C., Zheng, Y., & Carson, V. (2023). Patterns Of Preschool Children's Screen Time, Parent–Child Interactions, And Cognitive Development In Early Childhood: A Pilot Study. *Pilot And Feasibility Studies*, 9(1). <https://doi.org/10.1186/S40814-023-01266-6>
- Ratnawati, A. S., Rakhmawati, W., Ermiati, E., Mediani, H. S., & Hendrawati, H. (2024). Gambaran Masalah Psikososial Pada Anak Usia Sekolah Dengan Kanker Di Yayasan Rumah Pejuang

- Kanker Ambu. *MAHESA: Malahayati Health Student Journal*, 4(5), 1965-1979.
- Rheel, E., Malfliet, A., Van Ryckeghem, D. M., Pas, R., Vervoort, T., & Ickmans, K. (2022). The Impact Of Parental Presence On Their Children During Painful Medical Procedures: A Systematic Review. *Pain Medicine*, 23(5), 912-933.
- Roganović, J., & Bulić-Jakuš, F. (2024). Genetic Predisposition To Childhood Cancer. *International Journal Of Molecular Sciences*, 25(4), 2071. <https://doi.org/10.3390/ijms25042071>
- Sadiq, I. Z., Abubakar, F. S., Usman, H. S., Abdullahi, A. D., Ibrahim, B., Kastayal, B. S., Ibrahim, M., & Hassan, H. A. (2024). To prevent iron overload, management usually entails routine. *Thalassemia Reports*, 14(4), 81–102. <https://www.mdpi.com/2039-4365/14/4/10>
- Sari, N., Dkk. (2025). *Effects Of Art Therapy On Psychological Outcomes Among Children And Adolescents With Cancer: A Systematic Review And Meta-Analysis*. *BMC Complementary Medicine And Therapies*.
- Sari, P. I., Pordaningsih, R., Erwinsyah, E., & Prasetya, R. D. (2023). Penerapan Terapi Bermain Mewarnai Untuk Menurunkan Tingkat Kecemasan Hospitalisasi Pada Anak Usia 3-6 Tahun: Studi Kasus. *Jurnal Ilmiah Ners Indonesia*, 4(1), 109-115.
- Stein, R. E. K. (2024). Defining Child Health In The 21st Century. In *Pediatric Research* (Vol. 96, Issue 6, Pp. 1438–1444). Springer Nature. <https://doi.org/10.1038/S41390-024-03423-W>
- Taufik, M., Riani, R., & Putriana, N. (2024). Pemberian Terapi Bermain Mewarnai Terhadap Kecemasan Pada Anak Prasekolah Dengan ALL Di Ruang Anggrek 2 RSUD Arifin Achmad Pekanbaru. *Excellent Health Journal*, 3(1), 596-603.
- Yunike, Y., Kusumawaty, I., & Winta, M. V. I. (2024). TINJAUAN LITERATUR KONDISI PSIKOLOGIS REMAJA PENDERITA KANKER. *Berajah Journal*, 4(1), 129-142.
- Yürük, E., Todil, T., Aşkan, F., Kara, M., & Hacisalihoğlu, A. (2026). Effects of mandala art therapy (coloring) on nausea, vomiting, pain and anxiety in children and youth receiving outpatient chemotherapy. *Journal of Pediatric Nursing*, 86, 366-374.
- Zaini, M. (2020). *Asuhan Keperawatan Jiwa Masalah Psikososial Di Pelayanan Klinis dan Komunitas* (1st Ed.). Deepublish