



Original Investigation | Neurology

Art Against Anxiety: Combatting Anxiety in Cancer Patients Using Mandala Art Therapy: A Systematic Review

Shabbeer Imtiaz Ahamed¹, Angel Sara Thangamuni¹

EUMD, Tbilisi State Medical University, Tbilisi Georgia¹

Key Points

Question:

How effective is Mandala art therapy in reducing anxiety and distress among cancer patients?

Findings:

Mandala art therapy lowers cortisol levels, boosts dopamine, and promotes relaxation. Patients report reduced anxiety, improved mood, and increased resilience.

Statistically significant improvements were observed in self-reported anxiety and despair levels ($p > 0.05$).

Meaning:

Mandala art therapy offers a promising supplemental psychological intervention for cancer patients, improving mental health and emotional stability during treatment. Further research on its long-term psychological and physiological effects is essential to integrate it into holistic cancer therapy.

Abstract

Importance:

Cancer patients commonly experience increased feelings of hopelessness and anxiety, which affects their quality of life and treatment outcomes. Emerging research demonstrates the therapeutic efficacy of art-based interventions, particularly Mandala art therapy, in treating these psychological burdens. With their repetitive patterns and symmetrical forms, the Mandalas provide a peaceful, controlled pastime to help patients relax and focus. Various studies suggest that mandala painting induces a "flow" state, diverting people's attention from distressing symptoms and reducing the cognitive load associated with anxiety and depression.

Objective:

We aim to find the efficacy of Mandala art therapy in treating cancer patients struggling with anxiety and distress. By assessing the psychological effectiveness of Mandalas, we can discover its future potential in cancer therapy regimens.

Evidence Review: A systemically curated search was conducted on PubMed for articles published from inception until 2024, excluding pilot studies, abstracts and articles not in English. The search focused on keywords related to Mandala art and its psychological aspect to support cancer patients dealing with distressing symptoms. This review emphasizes the efficacy of Mandala Art in the psychological improvement of cancer patients struggling with hopelessness and the blues of oncological treatments.

Findings: We identified 34 papers, out of which 10 were filtered in accordance with our inclusion criteria. Mandala art therapy has been demonstrated to stimulate the parasympathetic nervous system, which is related to relaxation and stress reduction. Regular mandala drawing sessions are proven to lower cortisol levels and boost dopamine production, hence improving their mood and overall well-being. It has resulted in statistically significant changes ($p > 0.05$) in participants' self-reported levels of anxiety and despair. In addition, patients report feeling more in control, resilient, and accepting of their health state.

Conclusions and Relevance:

These findings highlight mandala art therapy's potential as a supplemental psychological intervention for cancer patients, providing a road to emotional stability and greater mental health during treatment, thereby positively impacting the overall outcome of cancer therapy. Future research should focus on its physiological and long-term psychological effects to make mandala painting a mainstay in holistic cancer therapy.

References

- Yakar HK, Yilmaz B, Ozkol O, Gevher F, Celik E. Effects of art-based mandala intervention on distress and anxiety in cancer patients. *Complement Ther Clin Pract*. 2021;43:101331. doi:10.1016/j.ctep.2021.101331
- Moharamkhani M, Rassouli M, Mojen LK, Respini D, Aghebati A, et al. Assessing Effects of Mandala Painting on Anxiety of 9–14-Year-Old Children with Cancer. *Advances in Integrative Medicine*. Published online February 2023. doi:<https://doi.org/10.1016/j.aimed.2023.02.002>
- Gürçan M, Atay Turan S. The effectiveness of mandala drawing in reducing psychological symptoms, anxiety and depression in hospitalised adolescents with cancer: A randomised controlled trial. *Eur J Cancer Care (Engl)*. 2021;30(6):e13491. doi:10.1111/ecc.13491
- Mengqin Z, Xing L, Yan H, Jianhua R. Does Mandala Art Therapy Improve Psychological Well-Being of Gynecological Cancer Patients During the Perioperative Period? A Quasi-Experimental Study. *Integr Cancer Ther*. 2024;23:15347354241259180. doi:10.1177/15347354241259180
- Zhou S, Yu M, Zhou Z, Wang L, Liu W, Dai Q. The effects of art therapy on quality of life and psychosomatic symptoms in adults with cancer: a systematic review and meta-analysis. *BMC Complement Med Ther*. 2023;23(1):434. Published 2023 Dec 1. doi:10.1186/s12906-023-04258-4
- Liu X, Sun L, Du X, Zhang C, Zhang Y, Xu X. Reducing anxiety and improving self-acceptance in children and adolescents with osteosarcoma through group drawing art therapy. *Front Psychol*. 2023;14:1166419. Published 2023 Apr 17. doi:10.3389/fpsyg.2023.1166419
- Motlagh EG, Bakhshi M, Davoudi N, Ghasemi A, Moonaghi HK. The physical and psychological outcomes of art therapy in pediatric palliative care: A systematic review. *J Res Med Sci*. 2023;28:13. Published 2023 Mar 16. doi:10.4103/jrms.jrms_268_22
- Rakici SY, Karaman E. Colorful Screams of Silent Emotions: A Study with Oncological Patients. *Indian J Palliat Care*. 2019;25(3):361-366. doi:10.4103/IJPC.IJPC_79_19
- Collette N, Güell E, Fariñas O, Pascual A. Art Therapy in a Palliative Care Unit: Symptom Relief and Perceived Helpfulness in Patients and Their Relatives. *J Pain Symptom Manage*. 2021;61(1):103-111. doi:10.1016/j.jpainsymman.2020.07.027
- Zhang MQ, Liu X, Huang Y. Does Mandala Art Improve Psychological Well-Being in Patients? A Systematic Review. *J Integr Complement Med*. 2024;30(1):25-36. doi:10.1089/jicm.2022.0780

Article Information

Accepted for Publication: December 24-2024

Published: February 13-2025.

Open Access: This is an open-access article distributed under the terms of the Creative Commons Attribution license.

Corresponding Author: Shabbeer Imtiaz Ahamed, EUMD, Tbilisi State Medical University, Tbilisi Georgia.

Acknowledgment: - MedVentures (CPD no.-#784331) for providing financial support for Publishing, Alte University.