



EFFECT OF ART THERAPY AND MINDFULNESS ON THE MENTAL HEALTH OF ADULT CANCER PATIENTS

Gauri Masani*

Department of Psychiatry (MSc Student) Geetanjali University, Udaipur.

*Corresponding Author

Dr. Shikha Sharma

Geetanjali University, Udaipur.

Dr. Jitendra Jeenger

Geetanjali University, Udaipur.

ABSTRACT

This study examined the effects of art therapy and mindfulness on the mental health of adult cancer patients. Individuals diagnosed with cancer often experience significant psychological distress, including depression and anxiety, due to factors such as fear of recurrence, treatment side effects, chronic pain, and social isolation. Addressing these emotional challenges is essential to improving quality of life, treatment adherence, and overall health outcomes. Art therapy provides a creative outlet for emotional expression and stress management, while mindfulness promotes present-moment awareness and emotional regulation. A purposive sample of 135 adult cancer patients receiving radiotherapy at Geetanjali Medical College and Hospital, Udaipur (Rajasthan), was selected. Participants were divided into three groups: one received art therapy, another mindfulness, and the third received both interventions. A pre-test/post-test experimental design was used, with the Mental Health Inventory (MHI) and Five Facet Mindfulness Questionnaire (FFMQ) as assessment tools. Results indicated that both art therapy and mindfulness significantly improved mental health outcomes, with the combined intervention producing the greatest benefits, suggesting a synergistic effect.

KEYWORDS : cancer patients, art therapy, mindfulness, mental health, stress management

INTRODUCTION

Cancer is a multifaceted and emotionally demanding condition that frequently results in substantial psychological distress, including symptoms of anxiety, depression, and cognitive difficulties. These symptoms are exacerbated by the physical manifestations of the disease, side effects of treatment, and the persistent fear of recurrence. This emotional burden can negatively impact patients' quality of life and hinder their ability to engage in daily activities. To address these challenges, art therapy and mindfulness have emerged as valuable interventions.

Art therapy provides cancer patients with a creative outlet for emotional expression, enabling them to process and communicate difficult feelings non-verbally through mediums such as drawing, painting, or sculpture. This form of therapy encourages patients to reflect on their emotional journey and gain insights into their distress. Similarly, mindfulness practices, focus on cultivating non-judgmental awareness of the present moment, and have been shown to reduce stress and anxiety, while improving emotional regulation. By promoting relaxation and enhancing focus, mindfulness helps patients cope with the emotional challenges of cancer.

Both art therapy and mindfulness offer holistic support by fostering emotional resilience, reducing psychological distress, and improving overall mental well-being. Ultimately, they enhance the quality of life for cancer patients during treatment.

Need For The Study

Cancer is a leading cause of death worldwide and often results in emotional distress that affects patients' ability to perform daily activities and impacts their mental health. Art therapy provides a valuable means for patients to express and process difficult emotions, enhancing their capacity to cope with stress and anxiety. Similarly, mindfulness practices help improve emotional regulation, reduce stress, and promote overall well-being. Together, these interventions offer holistic support by improving psychological resilience and the quality of life in cancer patients throughout their treatment journey.

Aim

To examine the effect of art therapy and mindfulness on the mental health of adult cancer patients.

Objectives

The objective of this study is to evaluate the effect of art therapy and mindfulness on the mental health of adult cancer patients receiving radiotherapy. Specifically, the study aims to assess the impact of these therapeutic interventions on anxiety, depression, and stress levels, as well as overall emotional well-being.

Hypotheses

- H1:** There is a significant difference between the pre-test and post-test mental health scores of patients who receive art therapy.
- H2:** There is a significant difference between the pre-test and post-test mental health scores of patients who receive mindfulness therapy.
- H3:** There is a significant difference between the pre-test and post-test mental health scores of patients who receive both art therapy and mindfulness therapy.

Method

1. Study Design

This study follows a pre-test and post-test experimental design. Participants were divided into three groups: one group received art therapy, the second group received mindfulness therapy, and the third group received both art therapy and mindfulness therapy.

Sample

A purposive sample of 135 cancer patients undergoing radiotherapy was selected. The sample was divided into three groups:

- 45 patients received art therapy,
- 45 patients received mindfulness therapy, and
- 45 patients received both art therapy and mindfulness therapy.

Tools Used

- Mental Health Inventory (MHI):** This inventory assesses the psychological well-being of patients, including levels of stress, depression, and anxiety.
- Five Facet Mindfulness Questionnaire (FFMQ):** This tool measures mindfulness levels across five domains: observing, describing, acting with awareness, non-judging, and non-reactivity.

Procedure

Following written permission from the principal of Geetanjali Medical College and Hospital, a total of 135 cancer patients were selected as participants between April 2024 and July 2024. Participants were recruited from Geetanjali Medical College and Hospital. Informed consent was obtained from all participants before data collection.

Demographic information, including name, age, and gender, was collected. Each participant filled the MHI and FFMQ questionnaires to assess mental health and mindfulness levels. Participants were divided into three intervention groups: Art Therapy, Mindfulness Therapy, and Combined Therapy (Art and Mindfulness).

Data collection focused on patients receiving radiotherapy. After the interventions, post-test scores were calculated and organized into a master chart for analysis.

Inclusion Criteria

The study included adult cancer patients aged 18 years and older, of

any gender, who provided informed consent. Participants were required to be physically and mentally stable enough to participate and currently receiving radiotherapy.

Exclusion Criteria

Patients who were critically ill, unable to understand the study due to literacy barriers, had metastatic cancer, or were undergoing chemotherapy or surgery were excluded. This ensured the sample was homogenous and fit for participation.

Data Analysis

Data were analyzed using ANOVA and paired t-tests to examine differences in pre-test and post-test scores.

RESULT

The present study focuses on the intervention of mental health in adult cancer patients undergoing radiotherapy through the interventions of art therapy and mindfulness. This study depicts that cancer treatment is a period of emotional and psychological stress. Hence, patients become vulnerable and prone to developing mental health issues such as anxiety, depression, and emotional instability. The results, indicate that there is a significant difference in the mental health of the subjects before and after the intervention of both art therapy and mindfulness. The mental health scores of participants improved significantly across all groups, with greater emotional regulation and reduced symptoms of depression and anxiety. However, no significant difference was observed in emotional ties or general positive affect in some cases. Overall, both therapies contributed effectively to the psychological well-being of the participants.

Group 1 – Art Therapy

A significant reduction was observed in depression, decreasing from $M = 21.51$ to $M = 13.84$ ($p < .0001$), anxiety from $M = 48.73$ to $M = 21.93$, and emotional dysregulation from $M = 36.22$ to $M = 12.16$. All mindfulness domains showed improvement, with the largest gain noted in “Act with Awareness” ($M = 13.44$ to $M = 31.97$). However, changes in general positive affect and emotional ties were not statistically significant.

Group 2 – Mindfulness Therapy

Depression scores declined from $M = 21.48$ to $M = 13.48$, anxiety from $M = 48.60$ to $M = 21.93$, and emotional dysregulation from $M = 36.37$ to $M = 6.33$. Significant improvements were observed in mindfulness dimensions, especially “Describe” and “Observe.” General positive affect and emotional ties showed minimal change.

Group 3 – Combined Art Therapy and Mindfulness

This group demonstrated the most significant improvement across all measures. Depression decreased from $M = 21.60$ to $M = 12.50$, anxiety from $M = 48.90$ to $M = 19.50$, and emotional dysregulation from $M = 36.40$ to $M = 11.00$. All five mindfulness facets showed significant increases, with the highest gains in “Act with Awareness” ($M = 14.00$ to $M = 33.40$) and “Non-Judging of Inner Experience” ($M = 17.50$ to $M = 32.20$). Moderate improvements were also observed in general positive affect and emotional ties.

While all three interventions yielded significant improvements in psychological and mindfulness outcomes, the combined intervention demonstrated the greatest overall effect. Participants in this group exhibited the highest reductions in depression, anxiety, and emotional dysregulation, along with the most substantial increases across all five mindfulness domains. Notably, “Act with Awareness” and “Non-Judging of Inner Experience” showed greater gains than in the individual therapy groups. These findings suggest a synergistic benefit when art therapy and mindfulness are integrated, offering a more comprehensive approach to enhancing psychological well-being in cancer patients.

DISCUSSION

The study was designed to determine whether art therapy and mindfulness can effectively improve the mental health of adult cancer patients receiving radiotherapy by reducing stress, anxiety, and depression, and by enhancing emotional resilience, thereby promoting the integration of psychological support into standard oncological care for comprehensive patient management.

The findings of the present study indicate that both art therapy and mindfulness interventions are effective in improving the mental health of adult cancer patients undergoing radiotherapy. Participants who

received these interventions demonstrated significant reductions in anxiety, depression, and emotional distress, along with improved emotional regulation. These outcomes align with previous research emphasizing the psychological vulnerability of cancer patients, who often experience heightened emotional distress throughout treatment (Oberoi, Yang, et al., 2020). The observed improvements support the hypothesis that integrating non-pharmacological psychological interventions into standard oncological care can provide meaningful emotional and mental health benefits.

It was noticed that a significant reduction in negative emotional symptoms was evident, no substantial changes were observed in general positive affect and emotional ties. This could be attributed to the nature of both interventions. Art therapy and mindfulness interventions have proven effective in enhancing the psychological well-being of adult cancer patients undergoing radiotherapy. Both approaches significantly reduce symptoms of anxiety, depression, fatigue, and emotional distress, while also improving emotional regulation, mindfulness, and overall quality of life. Although minimal changes were observed in emotional connection and general positive affect, this may be due to the interventions' emphasis on deep emotional processing and self-awareness. Similarly, mindfulness practices focus on cultivating awareness and acceptance of present-moment experiences, often emphasizing emotional regulation over emotional elevation. Thus, while both therapies reduce distress, their effect on enhancing interpersonal connection and overall affect may require longer-term or socially oriented interventions.

These findings are consistent with existing research indicating that art therapy and mindfulness therapy can reduce psychological symptoms in cancer patients (Jiang et al. 2020). In a meta-analysis adult cancer patients, demonstrated that mindfulness-based interventions are highly effective in reducing psychological distress and improving overall quality of life Oberoi et al. (2020). The findings indicate that the combined Art Therapy and Mindfulness intervention significantly enhanced mental health outcomes across all measured domains. Participants demonstrated notable reductions in psychological distress, depression, and anxiety, with post-intervention scores surpassing those observed in the individual Art Therapy and Mindfulness groups. These results underscore the synergistic effect of integrating creative expression with present-moment awareness.

Significant improvements were observed in various facets of mindfulness, including observing, describing, acting with awareness, non-judgment, and non-reactivity—suggesting enhanced emotional regulation and greater cognitive flexibility. While the increase in general positive affect was modest, the overall pattern supports the intervention's efficacy in reducing negative affect and strengthening psychological resilience.

This intervention helped by allowing patients to express emotions creatively and stay present through mindfulness practices. It helped in improving overall quality of life and enhanced spiritual wellbeing by promoting inner calm and personal meaning. It strongly prioritized as a supportive therapy in cancer care (Kendra L. Rieger et al., 2021).

The finding further affirms the complementary nature of these interventions, reporting that while art therapy encourages emotional release and self-expression, mindfulness promotes emotional regulation and reduces fatigue, anxiety, and depression (Pamela and Bettencourt, 2020).

In conclusion, the combined approach appears to be more effective than either modality alone, indicating its potential as a promising integrative strategy for enhancing psychological well-being in clinical populations. Future research should involve larger sample sizes and longitudinal designs to assess the sustainability of these outcomes over time. Art & mindfulness used together were found to effectively support cancer patients' mental health.

Based on the outcomes of this study and supporting evidence, a synergistic effect is suggested when combining art therapy with mindfulness-based interventions. The integration of creative expression and present-moment awareness appears to enhance the therapeutic potential of each modality, offering a more holistic approach to psychosocial care in oncology. This combined intervention may provide greater emotional support than either modality alone, helping patients manage distress, regulate emotions, and improve overall quality of life during radiotherapy. Incorporating

such integrative practices into routine cancer care could be a valuable addition to patient-centered treatment. Future research should explore long-term effects, including sustained emotional well-being and improvements in social relationships.

CONCLUSIONS

The findings of this study demonstrate that both Art Therapy and Mindfulness significantly enhance the mental health of adult cancer patients undergoing radiotherapy. Individually, each intervention contributed to reductions in anxiety, depression, and emotional distress while improving emotional regulation and psychological resilience. Importantly, the combined application of Art Therapy and Mindfulness showed more substantial improvements across all measured domains, suggesting a synergistic effect when these modalities are integrated. This integrative approach offers a comprehensive, non-pharmacological strategy for supporting the psychological well-being of cancer patients and holds strong potential for incorporation into standard oncological care. These results support the prioritization of creative and mindfulness-based interventions as valuable components of holistic cancer treatment programs.

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