



Effectiveness of Art Therapy in Improving Quality of Life Among Cardiac Patients

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ARTICLE INFO

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Dates:

Received: 15-08-2024
Accepted: 22-09-2024
Published: 25-10-2024

Keywords:

Art therapy,
Psychological distress,
Quality of life, Cardiac
patients

How to Cite:

Ragupathy V,
Neelakandan R.
Effectiveness of Art
Therapy in Improving
Quality of Life Among
Cardiac Patients. *Indian
Journal of Clinical
Psychiatry*. 2024;4(2):
29-33.

doi: 10.54169/ijocp.v4i02.121

Abstract

Art activities not only support holistic health but also act as a source of motivation for well-being. Unmanaged psychosocial stress levels can negatively impact prognosis and survival rates, especially among those with a diagnosis of cancer or cardiac disease. Art therapy is a fun and recreational approach known to maintain psychological stability. Art therapy (AT) has been shown to help unaddressed psychosocial distress in hospitalized patients and to promote better management of physical symptoms, overall well-being, and socialization. The aim of the study is to identify the effect of art therapy on modifying psychological distress and improving the quality of life among cardiac patients. The objective of the study is to know the effect of art therapy on quality of life among arrhythmia and coronary artery disease patients. About 30 patients (N = 30) screened with an indication of mental disorder using the Kessler psychological distress scale (K10) were selected using purposive sampling from a cardiac specialty hospital and were evaluated for quality of life using World Health Organisation Quality of Life Scale. Scribbling, know your depression and gratitude mandala techniques were provided for 9 days without intervals, implementing each technique for 3 days, respectively. The effectiveness of art therapy was analyzed using paired t-tests. Findings prove that there has been a significant improvement in quality of life after the intervention.

INTRODUCTION

In India, cardiovascular diseases (CVDs) represent a significant public health concern, with high prevalence rates and substantial morbidity and mortality. Rapid urbanization, sedentary lifestyles, unhealthy dietary habits, and increasing rates of obesity and diabetes contribute to the growing burden of CVDs in the country. Beyond physical manifestations, CVDs have profound psychological effects on individuals and communities. Research indicates that Indian patients with CVD often experience elevated levels of psychological distress, including anxiety, depression, and stress, which can negatively impact treatment adherence, quality of life, and clinical outcomes. Despite the recognized importance of addressing the psychological aspects of CVDs, access to mental health services and interventions remains limited in many parts of India, highlighting the need for integrated approaches to cardiovascular care that prioritize both physical and mental well-being.¹

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Art therapy has emerged as a promising intervention for addressing the psychological needs of cardiac patients in India, complementing traditional medical approaches to cardiovascular care. While research specifically focusing on art therapy for cardiac patients in India is limited, studies from other nations have demonstrated its effectiveness in reducing anxiety, depression, and psychological distress among cardiac patients. Implementing culturally sensitive and contextually relevant art therapy programs in Indian healthcare has the potential to enhance patient-centered care, improve treatment outcomes and promote overall quality of life for individuals living with cardiovascular diseases.²

QoL is influenced by a multitude of factors, including personal characteristics, socioeconomic status, cultural norms, and access to resources and opportunities. It is a dynamic construct that can change over time in response to life events, transitions, and interventions aimed at enhancing well-being.³ Research indicates that cardiac patients often experience compromised QoL due to symptoms such as chest pain, fatigue, shortness of breath, and limitations in physical activity. Psychological factors such as anxiety, depression, and stress further contribute to the overall burden of the disease, affecting patients' subjective perception of their health status and overall satisfaction with life. Studies have shown that QoL among cardiac patients is influenced by various factors, including disease severity, treatment modalities, social support, socioeconomic status, and individual coping mechanisms.⁴

Art therapy has emerged as a promising intervention to improve quality of life (QoL) by providing individuals with a creative outlet to express themselves, explore their emotions, and enhance overall well-being. Using visual arts, such as drawing, painting, and sculpting, art therapy enables participants to communicate and process complex thoughts and feelings that may be difficult to verbalize. By engaging in the artistic process, individuals can gain insight into their inner experiences, develop coping skills to manage stress and emotional challenges and foster a sense of empowerment and self-efficacy. Research studies, such as those

by Monti *et al.* (2006) and Kaimal *et al.* (2017), have demonstrated the

“..positive impact of art therapy on QoL outcomes, highlighting its potential as a complementary approach to traditional psychotherapy and medical treatments for enhancing overall well-being”

The aim of this study has been to propose an intervention to improve the quality of life among people with cardiovascular disease and who underwent cardiac surgery. To identify the effectiveness of art therapy over the quality of life among cardiac patients.

METHODOLOGY

The present study has adapted the quasi-experimental research with a pre-test, post-test design. The following hypothesis was formulated based on the objectives of the study.

There will be a significant difference in the effectiveness of art therapy in the levels of quality of life among the selected participants before and after intervention.

The sampling method chosen for this study was purposive sampling. Consenting cardiac patients either affected with cardiovascular disease or underwent a cardiac surgery of any severity, of both sexes, aged 30 to 80 years, who have not undertaken any art therapy session before were included in the study. Data was collected from 60 follow-up cardiac patients using purposive sampling among 120 patients in a cardiac multi-specialty hospital in the Pollachi division. Only 30 participants met the inclusion criteria of the study.

Kessler psychological distress scale (K10) (Kessler *et al.*, 2002)⁵ was used to screen levels of psychological distress. Participants indicating moderate to very high psychological distress to the diagnosis were chosen to participate further in the study. The selected participants were measured on their baseline levels using World Health Organization Quality of Life Scale (WHOQoL-BREF) as shown in Table 1.

The WHOQoL-BREF⁶ was used in the experimental study to assess the levels of quality of life pre-and post-intervention.

The participants were provided art therapy sessions for three weeks by the researcher. The

art therapy stages included 3 stages involving the following techniques: Scribbling, drawing your depression and gratitude mandala. The researcher has obtained training in art therapy from professionals and as a part of their master's degree in clinical psychology (Integrated) and is fully eligible to guide these sessions. The art therapy sessions focused on introspection, analysis and intervening in the quality of life among the participants. This intervention integrates some of the core principles of cognitive behavioural therapy (CBT), existentialism, fostering self-awareness and personal growth. The participants were asked to reflect upon every session to make the session lively and receive continuous feedback. After the period of intervention was completed, the participants were asked once again to answer the WHOQoL-BREF. Pre- and post-intervention data were analyzed and compared.

Statistical Analysis

As a quantitative study, data collected using selected instruments were analyzed using IBM SPSS Statistics v.26. Central tendency analysis, including mean and standard deviations, was obtained for continuous data and frequency table, and percentages were calculated for the categorical variable in screening. A paired t-test was used to assess the difference in levels of quality-of-life pre-post art therapy intervention. The level of significance was set at $p < 0.05$ as shown in Table 2.

RESULTS

Sample Characteristics

From the presented, it can be inferred that among 67 participants, 23 of the participants were likely to have low psychological distress, 17 of the participants showed to have moderate psychological distress, 14 of the participants showed to have high psychological distress and 6 of the participants showed to have very high psychological distress. Therefore, there is a variation in the levels of psychological distress among the participants. Only the participants with moderate to very high psychological distress were further chosen to participate in the study.

Table 1: Levels of psychological distress in Kessler's psychological distress scale among the participants

	Levels	N	Percentage (%)
Psychological distress	Low psychological distress	23	38.33
	Moderate psychological distress	17	28.33
	High psychological distress	14	23.33
	Very high psychological distress	6	10

(Source: Primary Data)

*Note: N= Number of Participants

Research Question Results

In the physical domain, it is observed that the participants' mean scores pre-intervention is 31.6, meaning poor quality of life and post-intervention is 64.8, meaning good quality of life. The calculated t-value is 15.89 and the obtained *p-value* is $p < 0.001$ ($p < 0.05$), which means the result is significant.

In the psychological domain, it is inferred that the participants' mean scores pre-intervention is 29.9 poor quality of life and post-intervention is 58.9, meaning moderate quality of life. The calculated t-value is 16.43 and the obtained *p-value* is $p < 0.001$ ($p < 0.05$), which means the result is significant.

In the social domain, it is inferred that the participants' mean scores pre-intervention is 33.5, meaning poor quality of life and post-intervention is 56.3, meaning moderate quality of life. The calculated t-value is 10.81 and the obtained *p-value* is $p < 0.001$ ($p < 0.05$), which means the result is significant.

In the environmental domain, it observed that the participants' mean scores pre-intervention is 49.1, meaning moderate quality of life and post-intervention is 61.1, meaning good quality of life. The calculated t-value is 7.77 and the obtained *p-value* is $p < 0.001$ ($p < 0.05$), which means the result is significant.

Therefore, the proposed alternate hypothesis, "there will be a significant difference in the quality of life among the selected participants before and after art therapy intervention," is accepted.

Table 2: Mean, SD, t-value in the selected participants during pre- and post-intervention in quality of life (N = 30)

	Dimensions	Pre/Post intervention	Mean of QoL	S. D	t-value	p-value
Quality of Life	Physical	Pre-intervention	31.6	9.8	15.89	p < 0.001 (S)
		Post-intervention	64.8	8.3		
	Psychological	Pre-intervention	29.9	9.4	16.43	p < 0.001 (S)
		Post-intervention	58.9	5.5		
	Social	Pre-intervention	33.5	11.3	10.81	p < 0.001 (S)
		Post-intervention	56.3	5.5		
	Environmental	Pre-intervention	49.1	10.4	7.77	p < 0.001 (S)
		Post-intervention	61.1	7.2		

(Source: Primary data)

*Note: N = Number of participants

SD = Standard Deviation

S = Significant at 0.05 level

DISCUSSION

The study has inferred that cardiac patients were affected with psychological distress. A major part of the study was conducted with respect to this finding - measuring the effectiveness of art therapy in improving the quality of life among cardiac patients.

Art therapy interventions have been found to reduce psychological distress, including anxiety and depression, among cardiac surgical patients. By providing a creative outlet for self-expression and emotional processing, art therapy can help patients cope with preoperative anxiety, postoperative stress, and the emotional challenges associated with the surgical experience.⁷

Art therapy interventions have the potential to enhance the overall quality of life (QoL) for cardiac surgical patients by addressing their emotional, social, and existential needs. By promoting emotional expression, social connection, and personal growth, art therapy can contribute to a sense of meaning, purpose, and well-being among patients recovering from cardiac surgery.² As proof of the above-mentioned studies, this research stands in its own way based on the sample collected from the Pollachi division. Before intervention, the participants showed moderate quality of life. After implementing art therapy intervention for three weeks, they exhibited a good quality of life. Therefore, it is established that there are significant differences in

the participants' quality of life after intervention. So, art therapy has proved to be an effective and participative method among cardiac patients.

Limitations of the Study

The limitations of the present study are:

1. Small sample size from one locality only
2. Constraints of administration of intervention
3. Generalization of a sample under cardiac patients rather than specifying in categories
4. Limited period available for intervention and follow-up.

Implications of the Study

The present study has suggested that art therapy is a great intervention for cardiac patients in their psychological distress and quality of life. Art therapy is utilized in palliative and end-of-life care to address the emotional, spiritual, and existential concerns of individuals facing life-threatening illnesses.⁸ This study has specified the use of art therapy for patients with cardiovascular disease and those who have undergone cardiac surgery. Art therapy can also be used in rehabilitation and trauma recovery.

Recommendations for Further Studies

This study explores the effectiveness of art therapy for cardiac patients' quality of life. Many psycho-

logical interventions are provided as an adjunct treatment for surgical patients, but not many interventions seem efficient based on feasibility and flexibility. This research study ignites ideas for further studies in the selected area. Following are some suggestions for further research studies:

1. A larger sample could be selected and provided intervention for a longer period.
2. Cardiac patients could be categorized, and the effects of intervention could be specified.
3. More studies can be conducted specifically based on other demographic variables like SES, locality, and education.
4. Art therapy can be applied in other clinical and non-clinical fields to improve quality of life and reduce psychological distress.
5. Adjunct therapies like aroma therapy, music therapy, etc., could be provided for cardiac patients.
6. Art therapy can be provided for other non-psychotic problems like OCD and panic disorders.

CONCLUSION

Art therapy helps individuals question themselves to explore their hidden feelings and evoke them to explore newer perspectives. It is very easy to practice art therapy, which allows people to be themselves without any fear of judgment and art therapy also provokes the enthusiasm of individuals with fun activities and introspection. The main aspect of this study is to analyze the effectiveness of art therapy in improving the quality of life among cardiac patients. For people feeling down after a diagnosis of cardiovascular disease or after undergoing surgery, art therapy helps them cope with the situation and get ready for the next step. This doesn't mean the disease gets cured or surgery is avoided, rather, it

helps them analyze and understand their situation to face further challenges in life with optimism and insight. This study recommends using art therapy to improve the quality of life among cardiac surgery patients and those with cardiovascular diseases.

REFERENCES

1. Prabhakaran D, Jeemon P, Roy A. Cardiovascular Diseases in India: Current Epidemiology and Future Directions. *Circulation*. 2016 Apr 19;133(16):1605-20. Available from: doi: 10.1161/CIRCULATIONAHA.114.008729. PMID: 27142605.
2. Kaimal et, al. Outcomes of art therapy and coloring for professional and informal caregivers of patients in a radiation oncology unit: A mixed methods pilot study. Available from: <https://doi.org/10.1016/j.ejon.2019.08.006>
3. Field trial WHOQOL-100 February 1995 : the 100 questions with response scales, 2012 revision. World Health Organization, 1995
4. Kang K, Gholizadeh L, Inglis SC, Han HR. Correlates of health-related quality of life in patients with myocardial infarction: A literature review. *Int J Nurs Stud*. 2017 Aug;73:1-16. Available from: doi: 10.1016/j.ijnurstu.2017.04.010. Epub 2017 May 4. PMID: 28511032.
5. Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., ... & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(6), 959-976.
6. Skevington, S. M., & McCrate, F. M. (2012). Expecting a good quality of life in health: Assessing people with diverse diseases and conditions using the WHO-QOL-BREF. *Health Expectations*, 15(1), 49-62.
7. Monti DA, Peterson C, Kunkel EJ, Hauck WW, Pequignot E, Rhodes L, Brainard GC. A randomized, controlled trial of mindfulness-based art therapy (MBAT) for women with cancer. *Psychooncology*. 2006 May;15(5):363-73. Available from: doi: 10.1002/pon.988. PMID: 16288447.
8. Geue K, Rieckhof S, Buttstaedt M, Singer S. Do cancer patients with high levels of distress benefit more than less distressed patients from outpatient art therapy? *Eur J Oncol Nurs*. 2017 Oct;30:1-7. Available from: doi: 10.1016/j.ejon.2017.07.004. Epub 2017 Jul 13. PMID: 29031305.