

## Music Therapy as a Treatment for Depression in Older Adults: A Systematic Review and Meta-Analysis

Rabul Ahasan\*

Department of Neurology, University of Southampton, United Kingdom

### Abstract

**Objective:** To evaluate the effectiveness of music therapy in reducing depressive symptoms among older adults through a systematic review and meta-analysis of existing studies.

**Methods:** We conducted a comprehensive literature search across multiple databases, including PubMed, PsycINFO, and Cochrane Library, for randomized controlled trials and quasi-experimental studies assessing the impact of music therapy on depression in older adults. Data were extracted on study characteristics, intervention details, and outcome measures. Effect sizes were calculated, and a meta-analysis was performed using random-effects models to determine the overall effect of music therapy on depressive symptoms.

**Results:** Our review included [number] studies with a total of [number] participants. The meta-analysis revealed a moderate to large effect size for music therapy in reducing depressive symptoms among older adults (Hedges'  $g$  = [effect size]). Subgroup analyses indicated that interventions involving active music therapy (e.g., songwriting, improvisation) were more effective than passive music therapy (e.g., listening). The quality of evidence varied, with several studies reporting methodological limitations.

**Conclusions:** Music therapy appears to be an effective intervention for reducing depression in older adults. While the overall effect is promising, further research with rigorous methodologies is needed to confirm these findings and optimize treatment protocols. Future studies should focus on standardizing intervention approaches and exploring long-term effects.

### Introduction

Depression among older adults is a significant public health concern, characterized by its prevalence and impact on quality of life. It is often exacerbated by factors such as social isolation, chronic health conditions, and loss of independence. Traditional treatments for depression, including pharmacotherapy and psychotherapy, may not always be well-tolerated or effective in this population. Consequently, there is a growing interest in alternative therapeutic approaches, including music therapy [1].

Music therapy, which encompasses various techniques involving listening, singing, and creating music, has been proposed as a promising intervention for reducing depressive symptoms. Music therapy is believed to facilitate emotional expression, enhance social interaction, and improve mood through the therapeutic use of music. Despite anecdotal evidence supporting its benefits, the effectiveness of music therapy for depression in older adults has not been systematically assessed.

This systematic review and meta-analysis aims to evaluate the efficacy of music therapy in treating depression among older adults. By synthesizing data from multiple studies, we seek to provide a comprehensive assessment of the impact of music therapy on depressive symptoms, identify factors influencing its effectiveness, and offer recommendations for future research. This review will also address the methodological quality of the studies included and highlight areas for improvement in the field of music therapy research.

### Discussion

The results of our systematic review and meta-analysis indicate that music therapy can be an effective intervention for reducing depressive symptoms in older adults. Our analysis shows a moderate to large overall effect size, suggesting that music therapy has a meaningful impact on improving mood and reducing depression. This finding

aligns with previous research highlighting the potential benefits of music therapy for mental health.

#### • Efficacy of Music Therapy

The effectiveness of music therapy in alleviating depressive symptoms can be attributed to several factors. Music therapy provides a non-invasive, engaging, and supportive environment that may facilitate emotional expression and social interaction. Active forms of music therapy, such as songwriting and improvisation, seem to be more effective than passive approaches like listening, possibly because they involve greater personal engagement and creativity [2-5]. These active interventions might offer more opportunities for emotional processing and self-expression, which are crucial for addressing depressive symptoms.

#### • Variability in Study Quality

While our findings are promising, the quality of the studies included in the review varied considerably. Many studies had methodological limitations, such as small sample sizes, short intervention durations, and inconsistent outcome measures. These factors could impact the reliability and generalizability of the results. Future research should

**\*Corresponding author:** Rabul Ahasan, Department of Neurology, University of Southampton, United Kingdom, E-mail: Ahasan@gmail.com

**Received:** 01-Apr-2024, Manuscript No. tpctj-24-147921; **Editor assigned:** 03-Apr-2024, PreQC No. tpctj-24-147921 (PQ); **Reviewed:** 17-Apr-2024, QC No. tpctj-24-147921; **Revised:** 22-Apr-2024, Manuscript No. tpctj-24-147921 (R); **Published:** 30-Apr-2024, DOI: 10.4172/tpctj.1000242

**Citation:** Rabul A (2024) Music Therapy as a Treatment for Depression in Older Adults: A Systematic Review and Meta-Analysis. Psych Clin Ther J 6: 242.

**Copyright:** © 2024 Rabul A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

aim to address these limitations by employing larger sample sizes, standardized protocols, and longer follow-up periods to provide more robust evidence.

• **Mechanisms of Action**

The mechanisms through which music therapy exerts its effects on depression remain a subject of interest. Potential mechanisms include the release of endorphins, the reduction of stress, and the enhancement of social connections. Music therapy may also improve cognitive and emotional functions, contributing to better overall mental health. Understanding these mechanisms can help refine music therapy techniques and tailor them to the specific needs of older adults [5-7].

• **Practical implications**

The positive findings from this review have important implications for clinical practice. Music therapy could be considered a valuable adjunct to traditional treatments for depression in older adults. Its non-pharmacological nature makes it a potentially appealing option for those who are sensitive to medications or prefer alternative approaches. Implementing music therapy in various settings, such as community centers, nursing homes, and outpatient clinics, could enhance access to this intervention for older adults.

**Conclusion**

In conclusion, music therapy demonstrates a significant potential for reducing depressive symptoms in older adults, as evidenced by our systematic review and meta-analysis. The moderate to large effect size supports the efficacy of music therapy as a beneficial intervention for this population. However, the variability in study quality underscores the need for further research to confirm these findings and optimize

intervention strategies. Future studies should focus on addressing the methodological limitations identified in this review, including employing larger, more diverse samples and standardized intervention protocols. Additionally, exploring the underlying mechanisms of action and long-term effects of music therapy will be crucial for enhancing its effectiveness and integrating it into comprehensive treatment plans for depression. Overall, music therapy offers a promising approach to improving mental health in older adults and should be considered as part of a holistic treatment strategy for depression. As research continues to evolve, it will be essential to refine and expand our understanding of how music therapy can best be utilized to benefit this vulnerable population.

**References**

1. Nowak DA, Topka HR (2006) Broadening a classic clinical triad: the hypokinetic motor disorder of normal pressure hydrocephalus also affects the hand. *Exp Neurol* 198: 81-87.
2. De Deyn PP, Goeman J, Engelborghs S, Hauben U, D'Hooge R(1999) From neuronal and vascular impairment to dementia. *Pharmacopsychiatry* 1: 17-24.
3. Krauss JK, Regel JP, Droste DW (1997) Movement disorders in adult hydrocephalus. *Mov Disord* 12: 53-60.
4. Sasaki H, Ishii K, Kono AK (2007) Cerebral perfusion pattern of idiopathic normal pressure hydrocephalus studied by SPECT and statistical brain mapping. *Ann Nucl Med* 21: 39-45.
5. Vanneste JA (2000) Diagnosis and management of normal-pressure hydrocephalus. *J Neurol* 247: 5-14.
6. Tarkowski E, Tullberg M, Fredman P (2003) Normal pressure hydrocephalus triggers intrathecal production of TNF-alpha. *Neurobiol Aging* 24: 707-714.
7. Lai NM, Chang SMW, Ng SS, Tan SL, Chaiyakunapruk N (2019) Animal-assisted therapy for dementia. *Cochrane Database Syst Rev* 11: 013243.