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The effectiveness of listening to memory songs in reducing depression in the elderly

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ABSTRACT

Introduction: Depression is a prevalent psychological issue among the elderly, often exacerbated by isolation and various physical and mental health challenges. As a non-pharmacological intervention, music therapy has shown potential in alleviating depressive symptoms. This study examines the effectiveness of listening to nostalgic songs in reducing depression among elderly residents.

Methods: This study used a pre-experimental design with a one-group pretest-posttest approach. A total of 28 elderly participants who met the inclusion criteria were selected from a population of 43 individuals. The participants underwent a 20-minute intervention of listening to nostalgic songs, conducted six times over two weeks. Depression levels were measured using the Geriatric Depression Scale-15 (GDS-15) before and after the intervention. Data analysis was performed using the Wilcoxon test in SPSS version 25 to determine the significance of the intervention's effects.

Results: The analysis revealed a significant reduction in depression levels after the intervention, with a p-value of 0.000 ($p < 0.05$), indicating a statistically significant difference between pretest and posttest depression scores. This finding suggests that nostalgic music therapy effectively reduces depressive symptoms among elderly participants.

Conclusions: The results support the hypothesis that listening to nostalgic songs can serve as an effective intervention for reducing depression in the elderly. Nostalgic music therapy can be considered a beneficial non-pharmacological approach to enhancing the psychological well-being of elderly individuals. Future studies with control groups and larger sample sizes are recommended to validate these findings further.

Keywords: elderly, depression, nostalgic songs.

INTRODUCTION

Depression is a common psychological condition affecting many elderly individuals, often resulting from factors such as isolation, declining physical health, loss of loved ones, and reduced social engagement. As aging progresses, these factors can significantly decline mental health, impacting the overall quality of life (Suprapto et al., 2021). Depression among the elderly is particularly concerning, as it can lead to further health complications, including cognitive decline, decreased immunity, and a higher risk of mortality. Traditional treatments for depression include pharmacological approaches; however, these may not be suitable for all elderly individuals due to potential side effects and interactions with other medications (Perez et al., 2023). Consequently, non-pharmacological interventions, such as music therapy, have gained attention as alternative methods to address depression in older adults. Music therapy has been shown to influence mood, reduce stress, and promote emotional well-being by activating positive memories and emotions, especially when the music has personal or cultural significance (Suprapto, 2024).

Depression is a common psychological concern among the elderly, often arising from various factors, including social isolation, loss of loved ones, physical health deterioration, and the natural ageing process (Chan et al., 2023). Depression in the elderly, if left untreated, can significantly impact their quality of life, leading to increased risk of physical illnesses, cognitive decline, and even mortality. Addressing depression in older adults requires a compassionate approach, combining medical and non-medical interventions that can improve their mental well-being (Nguyen et al., 2023). Depression is a common mental health issue among elderly populations, often triggered or exacerbated by factors such as social isolation, physical decline, and a sense of loss or dependency. This condition can lead to decreased quality of life, diminished motivation, and overall health deterioration. Addressing depression in the elderly is particularly important, as it impacts both physical and mental health and can complicate other age-related health challenges (Batubara et al., 2023). While often necessary, traditional pharmacological treatments may not be sufficient or suitable due to potential side effects and the need for long-term use. Consequently, non-pharmacological interventions, such as music therapy, are increasingly being explored as supportive approaches to manage depression in older adults (Wu et al., 2023).

Nostalgic songs, or "tembang kenangan," hold particular significance for elderly individuals, as these songs often evoke memories from earlier life stages. Listening to such music can foster a sense of connection to the past, helping reduce feelings of loneliness and isolation. Given this potential, nostalgic music therapy has emerged as a promising approach to alleviate depressive symptoms in the elderly (Calatayud et al., 2024). Among the non-pharmacological interventions, music therapy has gained attention for its positive effects on mood and emotional state. Listening to nostalgic or familiar music can evoke positive memories, provide comfort, and help individuals process emotions in a supportive environment. Nostalgic songs, in particular, carry emotional and cultural significance that may resonate deeply with the elderly, potentially reducing feelings of loneliness and depression. Music therapy, especially through nostalgic or familiar songs, has been shown to evoke memories and emotions, providing a therapeutic effect that can reduce feelings of loneliness and improve mood. Nostalgic music, in particular, is known to trigger positive memories and emotions associated with an individual's past, potentially enhancing feelings of comfort and emotional stability. Such interventions can foster a sense of connection to personal history, reduce anxiety, and create a supportive atmosphere, which may be beneficial in alleviating depressive symptoms (Lam et al., 2024).

This study evaluates the effectiveness of listening to nostalgic songs as a therapeutic intervention for reducing depression in elderly residents at two care facilities in Surakarta, Central Java. Through a pretest-posttest design, we aim to investigate whether nostalgic music therapy can lead to a measurable reduction in depressive symptoms among elderly participants. By demonstrating the potential benefits of this simple, non-invasive intervention, we hope to provide insights into practical approaches that can be implemented in elderly care settings to enhance mental health and quality of life.

MATERIALS AND METHODS

Research Design

This study uses a pre-experimental design with a one-group pretest-posttest method. In this design, there was only one group whose depression level was measured before and after being given an intervention in the form of listening to memory songs. This method was chosen to look at changes in depression levels in the elderly after the intervention, although there was no control group.

Population and Sample

Population: The study population is 43 elderly people living in both sites. Samples were selected based on inclusion criteria, i.e., seniors eligible to participate in this intervention. After the selection, the number of samples that met the criteria was 28 people.

Data Collection

Data was collected using two measurements, one of which was a depression scale for the elderly. Initial Measurement (Pretest): This was performed at the first meeting before the intervention was given. Final Measurement (Posttest): Performed at the last meeting after the intervention. Each sample received an intervention to listen to memory songs for approximately 20 minutes with a frequency of 6 times over 2 weeks.

Research Instruments

The instrument used in this study is the Geriatrics Depression Scale-15 (GDS-15), a standardized measuring tool to assess the level of depression in the elderly. GDS-15 was chosen for its reliability in detecting depression in the elderly population through 15 questions related to depressive symptoms.

Data Analysis

Data analysis was carried out to see the difference in depression rates before and after the intervention. The statistical test used is the Wilcoxon test, which is suitable for paired data with ordinal scales or data that is not normally distributed. This analysis was carried out using the SPSS version 25 program.

Research Ethics

This research has received ethical approval from the University Research Ethics Committee with Number B-335/P19/KE/IX/2024. Each participant was explained the research objectives and procedures and the guarantee of confidentiality of their data. Participants are also free to resign at any time if they feel uncomfortable.

RESULTS

Table 1. Demographic data

Variable	n	%
Age		
55-65	8	28.6
66-74	11	39.3
75-90	9	32.1
Education		
Primary school	9	32.1
Junior high school	6	21.4
High school	7	25.0
University	6	21.5

Table 1 shows that the most significant sample is over 65 years old (71.4%) with the last education history of elementary school (32.1%).

Table 2. Analysis of depression level data before and after the activity of listening to memory songs

Skor GDS-15	Interpretation	Before		After	
		n	%	n	%
0-4	Normal	0	0	20	71.4
5-8	Mild depression	22	78,6	8	28.6
9-11	Moderate depression	6	21,4	0	0
Variable		**Z**		**p-value**	
Pretest-Postest		4.667		0.000	

Table 2 informs that the majority of the sample, before listening to the memory song (pre-test score), experienced mild depression (78.6%). However, after listening to the memories, there was a change to a routine majority (71.4%). It showed a p-value = 0.000 (p <0.05), which means that there was a significant difference in depression levels between before and after listening to memory songs. The results of the study showed that listening to memory songs had a significant effect on reducing the rate of depression in the elderly. The findings were based on a p-value of 0.000 ($p < 0.05$), which showed a significant difference between depression levels before and after music therapy and memory songs. Thus, listening to memory songs can be considered an effective method to reduce depression in the elderly. This suggests that listening to memory songs is an effective method for reducing depression in older adults, providing a valuable non-pharmacological approach to improve their mental well-being and emotional health. These results support the potential for incorporating nostalgic music as a therapeutic tool in elder care settings, fostering positive emotional experiences and reducing symptoms of depression.

DISCUSSION

The findings of this study indicate that listening to nostalgic songs has a statistically significant effect on reducing depression levels among elderly participants. The intervention, which involved listening to familiar songs from the past, appears to evoke positive emotions and memories, providing comfort and a sense of connection to past experiences. This response aligns with previous research suggesting that music can activate neural pathways associated with pleasure and emotional regulation, particularly when the music is familiar and personally meaningful to the listener. For elderly individuals, nostalgic songs can help mitigate feelings of loneliness and isolation, common contributors to depression in this age group. One potential explanation for the effectiveness of nostalgic music in reducing depression is its ability to stimulate autobiographical memories, which are often associated with positive emotional experiences. Recalling these memories can reinforce a sense of identity, belonging, and continuity, countering the feelings of disorientation and disconnection that often accompany ageing. This process brings comfort and boosts self-esteem, providing a psychological anchor that helps individuals feel more grounded and resilient (Khirallah Abd El Fatah et al., 2024).

Unlike general music therapy, Nostalgic music is specifically selected to evoke memories and emotions linked to an individual's past. For elderly individuals, many of whom may experience a sense of isolation or loss, listening to familiar music can foster a comforting connection to earlier life experiences, reducing loneliness and enhancing emotional well-being (Chou et al., 2024). The positive outcomes in this study align with previous research, which highlights how music therapy can trigger positive memories, reduce anxiety, and provide a sense of belonging and identity, contributing to emotional stability and happiness. There are several possible mechanisms by which nostalgic music reduces depression (McArthur et al., 2024). First, familiar music can stimulate the release of dopamine, a neurotransmitter associated with pleasure and reward, thus enhancing mood and reducing depressive symptoms.

Furthermore, music that resonates personally with individuals has been shown to engage the brain's limbic system, which is involved in emotion regulation. This engagement can be particularly beneficial for elderly individuals in managing stress and mood (Mauti et al., 2024).

Additionally, nostalgic music may aid in promoting a sense of autonomy and control, as the music reflects personal history and identity, which can empower individuals and mitigate depressive feelings. One explanation for these results is that nostalgic music can evoke positive memories and emotions associated with meaningful past experiences, thus fostering a sense of identity, comfort, and connection. For elderly individuals, particularly those residing in nursing homes, the opportunity to engage with music that resonates with their past may mitigate feelings of isolation and disconnection. Nostalgic music serves as a bridge to past experiences, helping to rekindle a sense of belonging and positive self-reflection, which are crucial in addressing depressive symptoms.

Moreover, the social and sensory stimulation provided by music-listening sessions could also play a role in reducing depressive symptoms (Curzel et al., 2024). While many elderly individuals experience declining social interaction, music therapy allows them to participate in an activity stimulating the senses and emotions. This sensory engagement can alleviate stress and anxiety, promote relaxation, and provide an opportunity for mental escape, thereby reducing overall depression levels (Sahu et al., 2024). This study's results contribute to the growing body of evidence supporting non-pharmacological interventions for mental health care in the elderly. Compared to physical exercise, cognitive stimulation, or social interaction therapies, music therapy provides a unique, low-cost, and accessible form of emotional support. Unlike activities that require physical mobility or cognitive engagement, listening to music is a passive activity that even frail or bedridden elderly individuals can easily participate in (Sasarari et al., 2024). The structured approach used in this study, with regular sessions over two weeks, further supports the idea that consistent exposure to music may lead to cumulative benefits for mental health. Moreover, using nostalgic music as a non-invasive and low-cost intervention offers practical advantages for mental health care in elderly populations (Xu et al., 2024). Unlike pharmacological treatments, music therapy carries no risk of adverse side effects, making it a safer alternative or complement for elderly individuals who may already be on multiple medications. The feasibility of implementing music therapy in settings such as nursing homes also supports its potential as an accessible intervention that can be integrated into routine care with minimal disruption or resource demand (A. Sasarari et al., 2024).

While the study demonstrates positive outcomes, some limitations should be noted. The absence of a control group limits the ability to attribute changes solely to the music intervention, as other factors could have influenced the results (Sun et al., 2024). Additionally, the study's relatively small sample size and short duration may affect the generalizability of the findings. Future research could address these limitations by including a control group, increasing the sample size, and examining the long-term effects of music therapy on depression in the elderly. Exploring different genres or types of nostalgic music and personalizing playlists based on individual preferences could yield valuable insights (T. Zaatar et al., 2024).

Implications for Practice

The results of this study have practical implications for caregivers, mental health professionals, and nursing home administrators. Implementing nostalgic music therapy programs in elder care settings could be an effective and economical strategy for managing depression, particularly for individuals who may not be suitable candidates for medication due to side effects or polypharmacy risks. Caregivers could be trained to incorporate music sessions into daily routines, allowing residents to experience consistent emotional benefits from music therapy.

CONCLUSIONS

The study supports the effectiveness of nostalgic music as a therapeutic intervention to alleviate depression in the elderly. By engaging emotions and memories, nostalgic music can help foster a sense of connection and comfort, providing mental health benefits without pharmacological intervention. Future research to further explore its mechanisms and optimize its application in elder care is encouraged, potentially broadening the scope of music therapy in mental health care for ageing populations.

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