

SYSTEMATIC REVIEW**COMPLEMENTARY THERAPY IN OVERCOMING DEPRESSION IN PATIENTS SCHIZOPHRENIA****I Wayan Septa Wijaya***, I Gede Putu Oka, Satriya Pranata, Fatkhul Mubin

Master of Nursing, MuhamMadyah University of Semarang, Semarang, Central Java, Indonesia

*Corresponding author: septawijaya220895@gmail.com**ARTICLE INFO***Article history:**Received: 7 January 2026**Revised: 2 February 2026**Accepted: 6 February 2026**Keywords:**Complementary:**Depression;**Music;**Relaxation;**Schizophrenia.***ABSTRACT**

Background: Schizophrenia is a mental health condition that places a significant burden on those affected. It typically emerges during adolescence or early adulthood and is often marked by recurrent positive symptoms. When depressive symptoms are present in individuals with schizophrenia, these individuals often struggle to fulfill their roles within their families and society effectively. Treatment options include both pharmacological and non-pharmacological strategies. Non-pharmacological interventions can be delivered through complementary therapies. **Aims:** This literature review aims to identify such therapies that can help alleviate depression in patients with schizophrenia. **Method:** In the process article search via PubMed and Science Direct using the keyword "Depression and schizophrenia and complementary therapy" found of 797 article, PubMed 407 and Science Direct 390. 197 duplicate articles were removed, leaving 600 articles. The next step was filtering, filtering the titles and abstracts of 600 articles, resulting in 556 irrelevant articles, leaving 44 articles was in accordance with of the 44 artcles was in accordance with the inclusion an exclusion criteria, and 40 articles were not in accordance with the topic, so 4 articles were reviewed. **Result:** The analysis of selected studies indicates that these complementary therapies play a crucial role in non-drug management approaches and have demonstrated effectiveness in reducing depressive symptoms among patients with schizophrenia. **Conclusion:** It can be concluded that the provision of complementary therapy has proven effective in treating depression in pattients with schizophrenia.

BACKGROUND

Schizophrenia is a disorder that places a significant burden on the individuals affected. It typically occurs in adolescence or early adulthood and is characterized by recurrent positive symptoms (Maurus et al., 2023). Symptoms of schizophrenia include psychotic episodes, such as hallucinations, and cognitive impairments that lead to social withdrawal and lack of motivation. People with schizophrenia experience mental disorders and disabilities throughout the course of the disease, which can lead to dysfunction in daily routines and reduced life expectancy (Hung et al., 2021).

The inadequate recovery rate of social functioning has prompted exploration of clinical factors related to social functioning recovery and the relationship between cognitive function and social functioning recovery in the early or chronic phase (Takeda et al., 2024). Frequently occurring behaviors in schizophrenia patients include lack of motivation (81%), social isolation (72%), difficulty managing finances (72%), untidy and unclean appearance (64%), forgetting to do things (64%), lack of attention from others (56%), and irregular medication use (40%). Social isolation refers to the objective absence or scarcity of interactive contact between a person and their social network (Pardede & Ramadia, 2021).

Based on the 2018 Basic Health Research report, the prevalence of Mental Emotional Disorders (GME) in the Indonesian population was 9.8%. This indicates the persistent high prevalence of GME in Indonesia. The highest prevalence occurred in the age group >75 years at 15.8% and the lowest in the age group 25-24 years at 8.5%. Furthermore, by gender, the prevalence in women (12.1%) was higher than in men (7.6%). Although it does not directly cause death, GME can affect daily activities, resulting in decreased productivity. In general, the percentage of GME indicators among the population over 15 years who received services in 2021 was still very low. The achievement of all provinces was less than 10%. Of the 32 provinces that reported the percentage of GME indicators for residents over 15 years of age who received services, the highest were achieved by Lampung Province, Bangka Belitung Islands, and Jambi at 2.5%, 2.0%, and 1.9%, respectively (Kementerian Kesehatan RI, 2021).

Before the onset of positive or negative symptoms, patients with schizophrenia experience early symptoms, namely depression (Kumalasari et al., 2021). Depressive symptoms are common in patients with schizophrenia. Approximately one-quarter of people with schizophrenia meet the criteria for a depressive disorder at some point in their lives. This is due to the difficulty distinguishing between symptoms of mood disorders that coexist with schizophrenia syndrome, which is characterized by disturbed affect and difficulty expressing internal emotions as the main negative symptom (Mardiyah et al., 2024). Patients with depression have a negative view of themselves, the world, and their future. Patients with depression will view themselves as lacking self-esteem, lacking abilities, and always feeling lonely. Patients with these depressive symptoms assume and believe that the problems they face will not improve and have no purpose. This condition leads individuals to commit suicide. (Kumalasari et al., 2021)

Various symptoms of depression have been identified in schizophrenia patients. A person experiencing these symptoms will not be able to function optimally in their family and social roles. One treatment option is pharmacological and non-pharmacological therapy. Non pharmacological treatment can be achieved through Complementary Therapy in Overcoming Depression in Schizophrenia Patients: Literature Review. Complementary therapy is a combination of conventional and complementary therapies. Complementary practices are an important component of providing therapy to patients with depression.

OBJECTIVE

To identify of complementary therapies and their effectiveness in reducing depressive symptoms among patients with schizophrenia.

METHOD

Eligibility Criteria

1. Inclusion Criteria

The inclusion criteria were: (1) published between 2020 and 2025; (2) involved adult patients diagnosed with schizophrenia; (3) investigated complementary therapy interventions aimed at reducing depressive symptoms; (4) used quantitative research designs including randomized controlled trials and quasi-experimental studies; (5) published in English; and (6) available in full text.

2. Exclusion Criteria

The exclusion criteria included, among others, articles that were reviews, conference proceedings, editorial reports, case reports, study protocols, duplicate publications, or did not report depression outcomes among patients with schizophrenia.

Information Sources and Search Strategy

The literature search was conducted using PubMed and ScienceDirect databases between January and February 2025. Boolean operators were applied using the following search strategy: ("Schizophrenia") AND ("Depression") AND ("Complementary Therapy" OR "Music Therapy" OR "Relaxation Therapy"). Manual searches were also conducted by reviewing the reference lists of eligible articles.

Selection and Data Collection Process

Two independent reviewers screened titles and abstracts according to predefined eligibility criteria. Full texts were assessed independently. Data extracted included author, year, country, study design, sample size, intervention, outcome measurement, and main findings.

Synthesis Methods, Reporting Bias and Certainty Assessment

Randomized controlled trials were evaluated using RoB 2, while quasi-experimental studies were assessed using the Joanna Briggs Institute Critical Appraisal Checklist. The primary outcome was the reduction of depressive symptoms measured using standardized depression instruments. A narrative synthesis was conducted because the included studies were heterogeneous in intervention types, outcome measures, and study designs.

The present study employed a systematic review design in accordance with PRISMA 2020 guidelines. Literature searches were conducted in PubMed and ScienceDirect databases for articles published between 2020 and 2025. A total of 797 articles were identified (407 from PubMed and 390 from ScienceDirect). After removing 197 duplicates, 600 records remained. Following title and abstract screening, 556 articles were excluded. Forty-four full-text articles were assessed, and 40 were excluded for not meeting the eligibility criteria, resulting in four studies included in the qualitative synthesis.

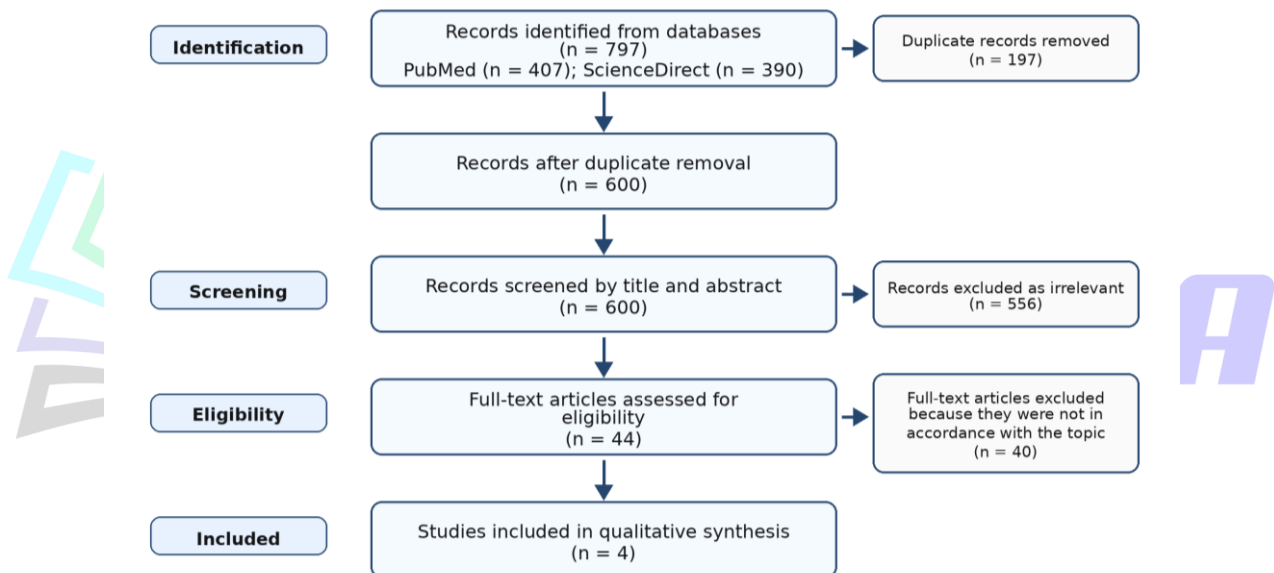


Figure 1. PRISMA flow diagram of article selection.

RESULTS

Table 1. Article Summary (n=4)

<i>Source</i>	<i>Objective Study</i>	<i>Design Respondents</i>	<i>Research</i>	<i>Type Therapy</i>	<i>Results</i>
(Avci & Coskun, 2025)	The aim of this study was to determine the effect of listening to therapeutic music on depression and sleep quality in chronic schizophrenia sufferers.	RCT	56 Respondents	Music therapy	The results of this study showed that depression and sleep quality scores in the post-intervention and follow-up tests of chronic schizophrenia patients in the music listening group were lower than those in the control group, and the differences were statistically significant. Furthermore, there was a significant decrease in depression levels in patients in the music listening group from the pre-intervention to the post-intervention test and from the post-intervention to the follow-up test. There was a significant increase in sleep quality in the post-intervention test compared to the pre-intervention test, but there was no significant difference between the follow-up and post-intervention scores.
(Hong et al., 2025)	This study aims to investigate the effects of a comprehensive group music therapy intervention on the	RCT	28 Respondennts	Music therapy	The music therapy group showed significant improvements in positive affect, social activities and self-care, as measured by the

	<i>emotional state and social functioning of individuals with schizophrenia undergoing community rehabilitation.</i>				<i>PANAS and SDSS, respectively. Semi-structured interviews further supported these findings, with participants in the intervention group reporting enhanced emotional state and improved social functioning.</i>
<i>(Khanmohammadi et al., 2025)</i>	<i>The aim of this study was to determine the effects of exercise aerobic, intervention cognitive and music depression, balance and mobility in schizophrenia</i>	<i>RCT</i>	<i>84 Respondents</i>	<i>Aerobic exercise, cognitive and music therapy</i>	<i>The results of this study showed significant improvements in depression, balance and mobility in the treatment group. All</i>
<i>(Firmawati et al., 2024)</i>	<i>The aim of this study was to determine the effect of relaxation techniques on changes in the mental status of schizophrenia patients in the Limboto Community Health Center work area.</i>	<i>Pre-experimental with one group pre-post test design</i>	<i>19 Respondents</i>	<i>Relaxation techniques</i>	<i>The results of the study showed that the majority of schizophrenia patients before being given relaxation techniques mostly had severe mental status as many as 14 respondents (73.7%) and after being given relaxation techniques, the majority were categorized as moderate as many as 10 respondents (52.6%), and the p-value obtained was 0.000 (<α 0.05). It was concluded that there was an effect of relaxation techniques on changes in the mental status of schizophrenia patients in the work area of the Limboto Community Health Center.</i>

Four studies met the eligibility criteria. Three used randomized controlled trial designs and one used a quasi-experimental design. Complementary therapies included therapeutic music, group music intervention, aerobic exercise combined with music and cognitive intervention, and relaxation techniques. Overall, complementary therapies reduced depressive symptoms, with music therapy improving depression scores and sleep quality, while relaxation techniques improved mental status.

DISCUSSION

Depression is one of the most significant deconditioning factors among patients with schizophrenia, which significantly reduces the quality of life and prognosis of the disease as a whole. In addition, depression that is not treated properly can cause unwanted outcomes such as suicide. The risk of suicide among patients with schizophrenia is 20 times higher than the general population, with around 50% of patients with schizophrenia attempting suicide and about 10% dying by suicide (Zhao et al., 2023). One of the alternative treatments that is often used in patients with depression is schizophrenia is a complementary therapy.

Complementary and Alternative Medicine (CAM) therapies are commonly used, and clinicians can benefit from understanding the psychiatric indications and safety of this therapy. There is growing evidence supporting the efficacy of certain therapies in treating mental health conditions (Berman et al., 2020). Complementary therapies consist of five categories. The first category, mind-body therapy, includes, for example, yoga, music therapy, and tai chi. The second category includes alternative medical systems such as naturopathy, homeopathy, and traditional Chinese medicine. Then, the third category is biological therapy, for example, herbal therapy, nutritional therapy, and food combining. The fourth category is manipulative therapy and body systems, for example, massage, light and color therapy, hydrotherapy. The fifth category is energy therapy, such as Reiki, acupuncture, and acupressure (Ridho, 2023).

Deep-breathing relaxation is one of the complementary therapies to reduce psychological problems. This technique is low-risk and safe. Deep breathing relaxation is often cited as an integral component of psychological therapy for managing anxiety and depression (Toussaint et al., 2021). Relaxation techniques are defined as a series of strategies to reduce the physiological response (Ridho, 2023). These techniques can be delivered in various forms, such as single psychological interventions or part of multiple therapy settings. Otherwise, relaxation techniques improve physiological responses to stress. Other forms of relaxation techniques, such as meditation, yoga, and tai chi, are sometimes classified into the broad category of relaxation techniques (Hamdani et al., 2022).

Complementary therapy for depression sufferers is music therapy. Music therapy is more effective. Easily enters the brain through cognitive pathways. In interpreting music, it does not require intellectual intelligence, so this therapy can be given to clients without paying attention to the client's education and background. As part of the

treatment, listening to music is a viable, effective, economical, and therapeutic approach that is safe. For this reason, listening to music is one of the nursing interventions that is evidence-based, where psychiatric nurses use a holistic and recovery-oriented care model (Avci & Coskun, 2025). Music therapy uses various musical components, such as melody, timbre, rhythm, harmony, and tone, to support and improve physical, psychological, and social well-being. This study provides evidence that listening to music can be an effective intervention in reducing depression and improving sleep quality in schizophrenia patients receiving treatment with atypical antipsychotics. This intervention is related to the fact that listening to music can increase feelings of joy, peace, vitality, and comfort, and improve interactions between schizophrenia patients and other people (Avci & Coskun, 2025).

CONCLUSION

This systematic review demonstrates that music therapy and relaxation techniques are effective complementary approaches for reducing depressive symptoms among patients with schizophrenia. Larger randomized controlled trials are recommended to strengthen the evidence base.

REFERENCES

- Avci, D., & Coskun, B. (2025). Effects of therapeutic music listening on depression and sleep quality in people with chronic schizophrenia: Pilot randomized controlled trial. *J Arch Psychiatr Nurs*, 56. <https://doi.org/10.1016/j.apnu.2025.151865>
- Berman, S., Mischoulon, D., & Naidoo, U. (2020). Complementary Medicine and Natural Medications in Psychiatry: A Guide for the Consultation-Liaison Psychiatrist. *J Psychosomatics*, 61(5), 508-517. <https://doi.org/10.1016/j.psym.2020.04.010>
- Firmawati, Retni, A., & Anggraini, D. P. (2024). Pengaruh Teknik Relaksasi terhadap Perubahan Status Mental Pasien Skizofrenia di Wilayah Kerja Puskesmas Limboto The Effect of Relaxation Techniques on Changes in Mental Status of Schizophrenia Patients in the Limboto Community Health Center Working Area. *Jurnal Pengabdian Bidang Kesehatan*, 2(3), 62-72. <https://doi.org/10.57214/jpbidkes.v2i3.114>
- Hamdani, S. U., Zill-e-Huma, Zafar, S. W., Suleman, N., Um-ul-Baneen, Waqas, A., & Rahman, A. (2022). Effectiveness of relaxation techniques 'as an active ingredient of psychological interventions' to reduce distress, anxiety and depression in adolescents: a systematic review and meta-analysis. *International Journal of Mental Health Systems*, 16(1), 1-17. <https://doi.org/10.1186/s13033-022-00541-y>

- Hong, P., Xue, C., Lu, J., Wang, M., Pan, H., & Shao, H. (2025). Effects of comprehensive group music therapy on affect and social functioning in patients with schizophrenia undergoing community-based rehabilitation: a preliminary study. *Frontiers in Human Neuroscience*, 19, 1-10. <https://doi.org/10.3389/fnhum.2025.1645981>
- Hung, C. C., Lin, C. H., & Lane, H. Y. (2021). Cystine/glutamate antiporter in schizophrenia: From molecular mechanism to novel biomarker and treatment. *International Journal of Molecular Sciences*, 22(18), 1-12. <https://doi.org/10.3390/ijms22189718>
- Kementerian Kesehatan RI. (2021). *Profil Kesehatan Indonesia Tahun 2020*. Kementerian Kesehatan Republik Indonesia.
- Khanmohammadi, R., Mirali, H., Mohammadzadeh, H., Ebrahimi, S., Shaw, I., & Shaw, B. S. (2025). Randomised active controlled trial examining effects of aerobic exercise, cognitive and music interventions on depression, balance and mobility in schizophrenia. *Scientific Reports*, 15(1), 1-12. <https://doi.org/10.1038/s41598-025-05024-x>
- Kumalasari, D. N., Dwidianti, M., & Ediati, A. (2021). Terapi Keperawatan dalam Mengatasi Depresi pada Pasien Skizofrenia: Literatur Review. *Jurnal Keperawatan Jiwa*, 9(1), 105-112. <https://doi.org/10.26714/jkj.9.1.2021.105-112>
- Mardiyah, A., Sofia, A., Putra, A. B., & Lukman, P. R. (2024). Membedakan Antara Suasana Berkabung dengan Depresi pada Skizofrenia Paranoid Kemunduran Stabil. *Journal Of The Indonesian Medical Association*, 74(2), 91-98. <https://doi.org/10.47830/jinma-vol.74.2-2024-1107>
- Maurus, I., Roell, L., Lembeck, M., Papazova, I., Greska, D., Muenz, S., Wagner, E., Campana, M., Schwaiger, R., Schneider-Axmann, T., Rosenberger, K., Hellmich, M., Sykorova, E., Thieme, C. E., Vogel, B. O., Harder, C., Mohnke, S., Huppertz, C., Roeh, A., ... Falkai, P. (2023). Exercise as an add-on treatment in individuals with schizophrenia: Results from a large multicenter randomized controlled trial. *Psychiatry Research*, 328(115480), 1-11. <https://doi.org/10.1016/j.psychres.2023.115480>
- Pardede, J. A., & Ramadia, A. (2021). The Ability to Interact with Schizophrenic Patients through Socialization Group Activity Therapy. *International Journal of Contemporary Medicine*, 9(1), 6-11. <https://doi.org/10.37506/ijocm.v9i1.2925>
- Ridho, F. M. (2023). Effectiveness of Classical Music Therapy on Decreasing the Level of Auditory Hallucinations in Schizophrenia Patients: A Literature Review. *Jurnal Psikiatri Surabaya*, 12(2), 107-113. <https://doi.org/10.20473/jps.v12i2.42373>
- Takeda, T., Umehara, H., Matsumoto, Y., Yoshida, T., Nakataki, M., & Numata, S. (2024). Schizophrenia and cognitive dysfunction. *Journal of Medical Investigation*, 71(4), 205-209. <https://doi.org/10.2152/jmi.71.205>

- Toussaint, L., Nguyen, Q. A., Roettger, C., Dixon, K., Offenbächer, M., Kohls, N., Hirsch, J., & Sirois, F. (2021). Effectiveness of Progressive Muscle Relaxation, Deep Breathing, and Guided Imagery in Promoting Psychological and Physiological States of Relaxation. *Evidence-Based Complementary and Alternative Medicine*, 1-8. <https://doi.org/10.1155/2021/5924040>
- Zhao, F. Y., Xu, P., Zheng, Z., Conduit, R., Xu, Y., Yue, L. P., Wang, H. R., Wang, Y. M., Li, Y. X., Li, C. Y., Zhang, W. J., Fu, Q. Q., & Kennedy, G. A. (2023). Managing depression with complementary and alternative medicine therapies: a scientometric analysis and visualization of research activities. *Frontiers in Psychiatry*, 14, 1-15. <https://doi.org/10.3389/fpsyt.2023.1288346>

