



# Healing Through Harmony: Music Therapy as a Complementary Treatment for Post-Traumatic Stress Disorder: A Systematic Review

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## ABSTRACT

**Introduction:** Post-traumatic stress disorder (PTSD) is a severe mental illness that affects both physical and mental health, decreases quality of life, increases suicide risk, and adds to the healthcare burden. According to WHO, about 70% of people worldwide will experience a potentially traumatic incident, but only 5.6% will develop PTSD. Approximately 3.9% of the global population has experienced PTSD at some points in their lives. The World Federation of Music Therapy defines music therapy as the professional application of music and its elements in various contexts, including medical, educational, and daily life, to enhance physical, social, emotional, intellectual, and spiritual well-being. This study aimed to evaluate the effects of music therapy on PTSD patients and its impact on their quality of life.

**Search Strategy:** Data were collected from English (PubMed and Google Scholar) and local Persian (SID and Civilica) databases using keywords and MeSH terms "Music Therapy" and "Post-Traumatic Stress Disorder" from 2000 to May 31, 2024. After screening 52 papers, 15 original studies were included based on the PRISMA protocol.

**Results:** The results suggested that music therapy can be regarded as a favorable non-medical treatment for PTSD patients across different age groups, including adults, adolescents, and children. Research has evaluated its impact on refugees, military service members, veterans, and war-induced PTSD, showing similar positive outcomes. Previous studies have examined the effects of music therapy on various PTSD symptoms across different domains. In the social domain, music therapy has been shown to improve communication and engagement in the therapeutic process. Physiologically, it helps reduce sleep disturbances, lower heart rate, and modulate sympathetic and parasympathetic responses. Cognitively, it enhances arousal, attention, mood, and cognition and lowers depressive symptoms. Additionally, music therapy was indicated to reduce stress levels, potentially lowering the risk of developing PTSD.

**Conclusion and Discussion:** Our findings highlight that music therapy could serve as a complementary and alternative medicine for PTSD and related symptoms. However, it cannot be regarded as the primary treatment. Further research is needed, especially among younger adults, children, and gender-specific groups, to define the role of music therapy more explicitly.

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