

## General Article

**MUSIC THERAPY FOR STRESS REDUCTION- A REFLECTION FROM CLINICAL PRACTICE**<sup>1</sup>Dr. Baishali Mukherjee

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**ABSTRACT**

This article is a comprehension and reflection of experiences with the ways that music therapy can potentially reduce physical and psychological symptoms of stress, gathered from research, teaching, and working with people in a variety of contexts, such as communities, healthcare, education, corporate settings, and so forth. Stress is a multifaceted concept that denotes emotional strain, pressure, and suffering. Human reactions to stressors are non-specific, vary according to the context, and are individualistic. In the current scenario, stress is understood as a condition that is plausibly linked to a number of serious physical and mental illnesses, making it a highly relevant area of research and clinical practice. Music therapy is a contemporary approach in healthcare that applies integrative, holistic, and complementary interventions that can both prevent and lessen the negative effects of stress on the mind and body. As a synthesis of art and science, music has the power to influence every facet of human existence, including the biological, social, psychological, spiritual, and aesthetic. The scientific application of music as a therapeutic tool can bring harmony into all of these factors of life for better health and well-being. The article aims to highlight how music therapy upholds the salutogenic power of music to be used in health care settings for reducing stress and restoring physical and mental health and in promoting a better quality of life and overall well-being.

**Keywords:** Complementary intervention, Mind and Body, Music Therapy, Stress**STRESS AND STRESSORS ON HEALTH**

The term stress implies both physical and psychological responses associated with challenges or changes one experiences in life. Like any other phenomenon, stress too has positive and negative impacts in our day-to-day life. In psychology, stress is defined as a 'feeling of emotional strain and pressure' [1]. Stressful experience influences the way a person senses, thinks, and responds to the environment. Stress at a minimal level can be beneficial on one's motivation and performance. Excessive stress triggers a need for coping with something unknown, unwanted, unacceptable, unexpected, and untimely—in which one perceives himself as a victim or a passive recipient of a situation. At the root of all behaviours lie the connection between stimulus and response. Responses are guided by the central nervous system, how it processes the external signals and its functional connections with the other systems in the body. At this juncture the relation between mind and body plays a vital role. The stress response is defined by how one perceives the life events and interprets him/herself in such situations, commonly appraised as helpless, hopeless, unable to overcome, victimized, or unfortunate, associated with physical and psychological vulnerabilities.

Stress is a non-specific response to the stressors of life [2]. The stressors of life may include a range of minor and major life events [3], from day-to-day hassles in family, work, lifestyle, relationships to long-term problems like poverty, divorce, illness, poor health, traumatic/ catastrophic experiences, loss, etc. The common factor in all events is that an inconsistent experience emerges from the gap between the expected and perceived events, meaning the difference perceived between 'set value'

and ‘actual value’ [4]. It determines the way one evaluates or appraises both the external events and inner resources or capacities to deal with them in an effective manner. By changing perception or reappraising a situation, it is possible to realize the inner potentialities and resources to cope with stressors and respond constructively. This leads to a personal growth, self-awareness, and self-reflection of one’s efforts to cope with stressful situations [5]. On the other hand, a faulty appraisal can also give rise to a state of high arousal, leading to a sense of fear, confusion, and insecurity, affecting physical reactions, emotional reactions, and cognitive responses all together [3]. Stress reaction with a sense of fear increases the vulnerability for psychological disorders like generalized anxiety disorder, social phobia, panic attack, bipolar disorder, post-traumatic stress disorder, depression, etc [6], [7]. Stress is also linked to the state of psychosis including dissociation, hallucination, delusion, personality change, etc [8].

Stress is not only considered as a trigger for mental health conditions; there is a plausibility of the belief that stress contributes to a variety of disease processes, particularly for depression, cardiovascular disease, human immunodeficiency virus/AIDS, and cancer [9]. Stressors affect the health when they are chronic, disruptive and perceived by the individual as uncontrollable [3]. In such cases stress turns into chronic stress, also known as distress, the effects of which are sustained and pronounced and weaken an individual’s overall health and well-being. Chronic stress can lead to long-lasting health issues affecting systemic functions, including cardiovascular, immune, digestive, reproductive systems, and so on. Deliberate self-harm and suicidal behaviour are often attached to high levels of stress experience [7]. The Diagnostic and Statistical Manual for Mental Disorders (5th ed; DSM-5; American Psychiatric Association, 2013) classifies stress-related disorders as trauma- and stress-related disorders [10].

An acute stress disorder (ASD) or posttraumatic stress disorder (PTSD) can occur at any age, including childhood, the effects of which can last longer in personal, social, family, and occupational life [10]. Women are at least twice as likely as men to develop stress disorders. Among many stressors, the most common are abuse, disasters, victimization, and combat. Again, the stressful events alone can’t explain the stories of stress in someone’s life. The biological and genetic factors, childhood experiences, socio-cultural factors, social support system, and the severity of the traumas influence the growth of stress in someone’s life. Several of these factors get closely linked and lead to pathology. The understanding of the interaction among bio-psycho-social factors is important for the intervention of stress and its related disorders [11] [12]. Several effective treatments are available to deal with stress at different levels. Behavioural medicines have developed and extended to prevent or cure medical problems that combine psychological and physical interventions. To deal with stress related conditions, drug therapy, exposure therapy, insight therapy, family therapy, group therapy, and community therapies are the common and well-known methods of treatment. The stress management programmes related to different contexts and conditions also gained a lot of attention as a preventive measure before stress turns into a chronic condition.

## **MUSIC THERAPY AS A COMPLEMENTARY MEDICINE FOR STRESS MANAGEMENT- METHODS AND MECHANISMS**

Further progression in scientific research recognized the benefits of complementary and alternative therapies on human stress responses [13] [14]. The connection between arts and science is an old, unique phenomenon across all cultures. In this context, music in particular plays a significant role with the belief that harmonious effects of music can resonate in the mind and body [15], can connect and tune bio-psycho-social-spiritual aspects of an individual’s life. The perspective of music therapy holds a holistic, positive, and dynamic approach by focusing on overall growth, health, and well-being of an individual in health care settings [15]. It is an evidence-based practice that uses culturally

responsive music and musical methods in intervention to nurture individual needs of patients in clinical settings.

Music therapy and music listening have been reported in the literature to have positive effects on stress related conditions like bodily pain, headache, anxiety, depression, trauma, and sleeplessness associated with medical illness and hospitalization [16]. But the applications of music therapy for stress reduction in various healthcare settings are scarce and varied, often related to the study of arts, music, nursing, psychophysiology, psychotherapy, and medicine, indicating the need for more structured and vigorous effort for research in the field [15].

The role of music as a therapeutic tool in therapy goes beyond relaxation training and verbal barriers of language between therapist and client. It helps directly to connect with feelings, explore, release, and process difficult emotions, and revoke and settle with traumatic experiences [15]. There are reported effects of music on reducing pain caused by chronic underlying stress [16]. The mechanism includes altering the pain perception through a change in mood followed by listening to music [17] that can help in distraction from stressors, induce relaxation, increase sense of control, use prior musical skills, and nurture creativity [15]. In music therapy sessions, the therapist composes or improvises vocally or by playing musical instruments to intervene in the clinical needs of patients in a way the patient prefers, matches with his/her personality style, and socio-cultural background [18].

There are musical activities commonly used through music therapeutic techniques to engage clients in music therapy sessions, such as listening to music, singing, chanting, playing instruments, composing songs, etc. [19]. In the context of stress management, a trained, certified, and experienced therapist uses these activities for clients to help them engage purposefully, express emotions, improve communication, reduce tension, anxiety, and depression, and promote physical and mental healing [19]. Numerous studies have shown that music as a therapeutic tool is effective in stress reduction. The evidence-based researches have demonstrated that music has a profound effect on processing emotions; by evoking positive emotions, it enhances the release of happy hormones like dopamine, oxytocin, serotonin, and endorphins [14] [15] [17]. The effects of the spike in these hormones in the body are related to the feeling of pleasure, satisfaction, positive drive, bonding and attachment, perceived reduction in pain, and minimization of discomfort, and it helps to reduce anxiety, depression, and stress [14]. In chronic stress the HPA axis (Hypothalamus- Pituitary-Adrenal) becomes dysregulated, causing detrimental effects on metabolism, immunity, and behaviour [20]. Many studies in the area of medical music therapy have conclusively reported on the mechanism of how musical engagement can activate and regulate the HPA axis, which results in the decrease in cortisol level in the body, which in turn prevents the effects of stress on mind and body [20]. A review in 2013 by Frontiers in Psychology reported that music listening can lower cortisol levels by up to 60 percent [21]. The impact of music on blood pressure and heart rate is also noteworthy [15]. The stress and anxiety-induced accelerated heart rate and increase in blood pressure level can be controlled through soothing or calming melodies and comforting rhythms. Psychoacoustic research suggests 60 beats per minute music can lead to achieving a relaxed and tranquil state by altering brain waves. So, the evidence for music as therapy upholds the salutogenic power of music to be used in health care settings for restoring physical and mental health and promoting overall well-being.

## **WAYS MUSIC THERAPY CAN HELP TO REDUCE STRESS**

Music therapy for patients suffering with stress, anxiety, and related issues can include the following functions-

- To distract the attention and focus away from stress, pain, or anxiety.
- To alter the perception towards stressors.

- To create or recreate musical rhythms that can enhance regulated breathing in the place of irregular fast breathing in patients with stress and anxiety.
- To provide a melodic and rhythmic structure through musical improvisation, which will help to release bodily and mental tension.
- To use calm and slow-paced music for listening to induce relaxation.
- To guide through music to develop positive visual imageries and thoughts.
- To uplift the mood state and evoke positive emotions.
- To help to form positive orientations to memories and life experiences.
- To guide to form positive anticipation for the future in the place of apprehension.
- To condition a deep relaxation response to music to enhance sleep quality and pattern.
- To help with verbal and non-verbal communicative expressions through musical interaction.
- To help focus on the purpose and meaning of life.
- Finally, to help discuss the stressors that are causing stress.

## FINAL THOUGHTS AND REFLECTIONS

The methods and techniques of music therapy implemented through different melodies, rhythms, and musical activities are scientifically proved to have therapeutic effects on certain physiological and psychological parameters [18]. Hence the population for music therapy includes a broad spectrum in the areas of medicine, rehabilitation, special education, and community services [19]. For example, in an adult patient with acute stress disorder, therapeutic music listening as a technique coupled with clapping/tapping by hands/fingers on a drum helps a patient to synchronize movement and breathing with musical rhythm given externally by the therapist. Thus, by controlling breathing and heart rate, it is possible to improve attention and awareness of the environment created by musical stimuli—melody and rhythm. When there is an enhancement in consciousness or awareness, it significantly leads to better perception of the surrounding environment, reappraisal, and protection from misinterpretation or misperception that can potentially reduce stress in someone's life. It emphasizes the synchronization at all levels—music, body, mind, and spirit—can have a direct influence on both the physiological and psychological symptoms and improve the condition overall.

Studies on music therapy always tried to find the relationship between mind and body, advancing the field of holistic medicine. The therapeutic efficacy of music has been proved at different times by different researchers across the globe. The music therapy literature in India is still insufficient and more research is needed to fully understand the therapeutic benefits of Indian music in both clinical and community settings, as well as integrating music therapy as one of the main stream therapies in medical and other health care settings.

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