

An underlying music therapy goal for all clients is to improve quality of life. The American Music Therapy Association describes wellness as "meeting the needs of individuals looking to enhance quality of life, maximize well-being and potential, and increase self-awareness" (AMTA). To what degree of wellness and quality of life is possible depends upon individual needs; but there are common challenges that people experience not only when meeting life through a broad spectrum of diagnoses, medical, mental and physical; but in daily lives as well.

Stress is a common challenge that can lead to medical and mental conditions that impact wellness and quality of life. Some examples of common challenges that can be addressed through music therapy are: stress and anxiety, chronic and acute pain, sleep quality, altered mood, inability to express feelings, inability to communicate in a typical manner, bereavement, lack of socialization leading to isolation, inability to relax, lack of motivation in rehabilitation, and a safe and nurturing environment to heal mentally and physically.

Music therapy can utilize its unique approach to address:

- -needs of the individual and adapting in the moment as necessary;
- -the need for social interaction;
- -the need of self-expression to reflect on feelings and inner moods and emotions;
- -the need to reduce pain, anxiety, and depression;
- -the need to find spiritual healing;
- -the need for companionship and support;
- -the need to communicate both verbally and non-verbally;
- -the need for relaxation;
- -the need to reduce stress and the physical manifestations of stress;
- -the need to find healthy coping methods;
- -the need to find normalcy during serious illness and retain sense of self; and
- -the need to maintain positivity in rehabilitation and necessary medical procedures to attain wellness.



How do music therapists use music to achieve these benefits?

- -Facilitating songwriting to express feelings, emotions, thoughts and reflections; -distracting from pain and other symptoms;
- -activating engagement or alternatively aiding relaxation;
- -developing coping skills;
- -expressing emotions through music that has special meaning;
- -supporting physical exercise and positive emotions in rehabilitation;
- -freeing the voice or releasing emotions and feelings through singing or vocalization with no words;
- -analyzing lyrics of songs to help express emotions and feelings;
- -singing, listening to music, or playing an instrument as a means for social engagement and bonding;
- -facilitating a choir or instrumental group to foster support and self-confidence; -exploring songs to express spirituality;
- -listening to music structured by a music therapist to aid in sleep quality;
- -facilitating interactive music before medical procedures to reduce pain, anxiety and stress to promote better outcomes;
- -providing music to achieve positive effects on blood pressure, heart rate, muscle tension, and other stress reactions;
- -choosing songs to aid in memory reminiscence and recall; and
- -communicating through music verbally and nonverbally.

What is the research behind using music therapy?

Many researchers perform meta or combined studies comparison reviews involving music therapy research in order to evaluate the efficacy of music therapy. The results of high-quality systematic reviews and meta-analyses are considered to be more definitive than individual studies in determining efficacy. Scoping reviews use the same type of methodology as systematic reviews; but are exploratory in nature and have a broad scope in exploring the research question. They may encompass II types of literature, not just research studies. Cochrane reviews are considered by

many to be the "Gold Standard", or the authoritative word in the medical conversation on a particular topic.

2022 Cochrane Reviews - Updated

This review (Gassner et al., 2022), updated five Cochrane reviews in the use of music therapy in multiple clinical areas: autism spectrum disorder (ASD), dementia, depression, insomnia, and schizophrenia. For insomnia the authors supported the original review's finding of improved sleep quality and extended that ..."sleep quality, stress, anxiety, total sleep time, disease severity and psychological quality of life improved."

The authors offered a conclusion for all updated clinical areas:

Recent findings indicate that music therapy helps patients diagnosed with ASD, dementia, depression, insomnia and schizophrenia. Based on current evidence, music therapy is a safe and low-threshold method leading to improvements in terms of physical, psychological and social aspects, though not in all of the outcomes measured. Music therapy can be seen as a non-pharmaceutical alternative and complement to other disease-specific therapies. The update search showed that for active music therapy methods, qualified and (where applicable) accredited music therapists are essential for providing music therapy sessions. For receptive approaches, also nurses and other health professionals trained in applying them are capable of providing music interventions leading to patient-related improvements. No general recommendation for active, receptive or mixed forms of music therapy can be given: music therapy methods vary, depending on the patient group.

The studies show that even short trials, i.e. 6 days, with low frequencies (30 min per session), yielded patient-related improvements. In the trials identified for the update, long-term effects extending over more than 6 months have received limited attention. High-quality research on long-term effects, intensity of music therapy and long-term follow-up assessments are needed.

2021 Systematic Review

In a systematic review (Wong et al., 2021) of 14 studies on the effects of music interventions on neuroendocrine biomarkers such as plasma cortisol, salivary cortisol

and salivary α -amylase the authors determined:

The variety of stress biomarkers used and the variance in study protocols makes it difficult to assess the magnitude of effect of music interventions on psychological stress. However, our findings suggest that music interventions have the potential for reducing both stress biomarker levels and psychological stress in acute stress situations.

2021 Systematic Review

In a systematic review and meta-analysis (Chen et al., 2021) of 5 studies on the effect of music therapy to improve sleep quality in older adults, the authors concluded:

Music therapy is safe and easy to administer and can effectively improve sleep quality among older adults, particularly those listening to more sedative music for at least a four-week duration.

2021 Systematic Review

In a systematic review (Chu et al., 2021) of 11 music therapy, 9 relaxation therapy and 6 spiritual therapy randomized control trials (RCT) for effectiveness to reduce anxiety, pain and depressive symptoms in non-chronic kidney disease (CKD) patients, the authors concluded:

Music therapy, relaxation and spiritual therapies are more well-studied MBIs which were shown to reduce anxiety, depressive symptoms and pain in CKD patients. Larger RCTs are required to confirm the efficacy and safety of promising MBIs.



2020 Systematic Review

In a systematic review and meta-analysis (de Witte et al., 2020) of 47 studies with 2,747 participants to assess the strength of the effects of music therapy on both physiological (e.g. blood pressure, heart rate, hormone levels) and psychological (e.g. state anxiety, restlessness or nervousness) stress-related outcomes, and potential moderators of the intervention effects, the authors found:

Overall, we found a significant medium-to-strong effect (d = 0.723, [0.51, 0.94]) of music therapy on stress-related outcomes, indicating that participants receiving music therapy benefited more than controls. We conclude that music therapy is effective in reducing stress-related symptoms in both mental healthcare and medical settings.

The current meta-analytic review provides evidence that music therapy can be effective in reducing stress and provides justifications for the increasing use of music therapy carried out by a qualified music therapist in both mental health care practice and medical settings.

2019 Systematic Review

In a systematic review and two multi-level meta-analyses (de Witte et al., 2019) of 104 studies involving 9,617 participants and music interventions to reduce stress, the authors summarized:

The current meta-analytic review provides high-level evidence that music interventions can be effective in reducing stress and provides justification for the increasing use of music interventions for stress reduction in both medical and mental health care practice. Considering the low costs and lack of side effects of music interventions, the moderate tranquilising effects of music are very significant for the prevention and treatment of stress-related problems. However, the development of music (therapy) intervention protocols are necessary to set up more robust research into the effects of music interventions, and to gain more insight into the effect moderating characteristics of music intervention for stress reduction.

2019 Scoping Review

In a scoping review (Gooding & Langston, 2019) of 27 publications of music therapy treatment for both active and veteran military, the authors concluded:

Music has long been used with the military to enhance quality of life, and today music therapy interventions are used to promote health, enhance quality of life, and improve functioning in military personnel. Evidence on the use of music interventions with military service members is still emerging, but results from this scoping review suggest that music therapy may be a viable and effective option for treating service members with PTSD [post-traumatic stress disorder], TBI [traumatic brain injury], and other conditions. The anecdotal reports, white papers/briefs, case studies, historical reviews, clinical program descriptions, and research studies included in this review suggest that music therapy interventions are well received by both active duty and veteran service members, and that active music therapy interventions like drumming are regularly used to increase emotional expression and/or regulation, increase socialization, and decrease loneliness.

2014 Meta-Analysis

In a meta-analysis (Wang et al., 2014) of 10 randomized studies involving 557 participants to evaluate the effectiveness of music therapy with both acute and chronic sleep disorders, the authors concluded:

Music appears to be effective in treating acute and chronic sleep disorders. It is low cost and safe, and could be used to improve sleep quality in various populations with different ages and culture backgrounds, in hospital or in community. Our study also gives an indication that music shows a cumulative dose effect for chronic sleep disorders. A follow-up duration of more than three weeks is necessary for assessing the efficacy of music, which has an implication for the design of trial evaluating the efficacy of music therapy for chronic sleep disorders.



2008 Systematic Review

In a systematic review (Nilsson, 2008) of 42 random control trials with 3,936 patients, who had elective surgery, to determine the effectiveness of music interventions to reduce anxiety and pain after surgery, the author concluded:

This systematic review shows that music intervention can have an effect on reducing patient anxiety and pain in the perioperative setting. This was demonstrated in approximately 50% of the outcomes in the studies included in this review. In quantitative measures, music intervention was found to reduce the use of sedatives and analgesics. Some minor but still significant effects of music interventions were documented in the reduction of heart rate, blood pressure, respiratory rate, and reduced blood cortisol levels.

How Does Music Therapy Compare to Other Approaches?

The common life experience of stress can be addressed through music therapy. While there are different types of stress: acute, episodic-acute and chronic, with varying degrees of physiological response (Unsal, 2008), they all cause a fear response with a release of hormones. Music can override this response by accessing the brain through the senses without conscious cognition (Berger & Schneck, 2003). Music can influence a) the sympathetic nervous system e.g. blood pressure, heart rate; b) muscle tension; c) gene markers for stress, d) allergic stress reactions; and e) the immune system by reducing stress induced hormones that compromise the immune system (Bittman et al., 2001).

While music itself holds power, it is important to note that music therapy is key to achieving the greatest benefits. A comparison might be made to doing physical exercises that may be beneficial; but with a specific ailment, patients would receive exercises in physical therapy that are designed specifically for the ailment (Patients, 2009). In a study where a music therapist created five minutes of music designed to reduce stress and anxiety, college/university students saw a significant decrease in stress and anxiety levels after listening only one time (Fiore, 2018).

In a study which compared changes in feelings of anxiety, fatigue and quality of life for caregivers of hospice patients using four conditions of silence, music listening, progressive muscle relaxation and progressive muscle relaxation with music, it was found that after 4 sessions over 2 weeks all four conditions saw significant decreases. The greatest decreases were for progressive muscle relaxation with music for anxiety and music listening for fatigue (Choi, 2010).

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In a study with participants on sick leave with work-related stress, one group received music therapy with guided imagery and the second group received standard care. After 6 sessions over 9 weeks, the guided imagery group saw a significant decrease in biological and psychological stress symptoms compared to the standard care group (Beck et al., 2015).

Burnout is a common experience in work related stress. A study was conducted comparing cognitive behavioral therapy in counseling groups and cognitive behavioral music therapy for elementary school teachers. After six weeks, it was found that the music therapy group self-reported lower levels of burnout symptoms than the counseling group (Cheek et al., 2003.

Music therapy can have an impact on recovery-based objectives for people meeting the challenges of substance abuse. Silverman (2020) found that one therapeutic songwriting intervention on a detoxification unit elicited higher perceived social support and lower perceived stigma reports than standard care. Silverman (2021) found that using both lyrical analysis and song writing interventions resulted in significant differences in the sharing of emotions and experiences over recreational music therapy.

Females in a substance abuse rehabilitation program participated in music therapy sessions twice a week for six weeks with three types of music therapy (2 weeks each): movement to music activities, rhythm activities and competitive games. Levels of depression, stress, anxiety and anger were measured. The authors reported (Cevasco et al., 2005):

After each intervention state-trait anxiety and levels of anger were measured. A repeated-measures ANOVA indicated no significant differences for the three types of music therapy interventions; however, data collected on daily scores, immediately before and after each session, indicated that individuals reported a decrease in depression, stress, anxiety, and anger immediately following the music therapy sessions.

Sleep deficiencies have been linked to chronic health problems, such as heart disease, kidney disease, high blood pressure, diabetes, stroke, obesity, and depression (Loewy, 2020). In a study with refugees who exhibited trauma symptoms and had sleep problems, there was significant improvement in global sleep quality over three weeks with participants who were given an ergonomic pillow with music composed for relaxation as compared to participants who just had the pillow. It was noted that the greatest improvement was in the first week; but while improving, there were never descriptions of "good sleep" (Jespersen & Vuust, 2012).

Music can also provide motivation to exercise. In a four week study of long-term care residents where residents either did exercises with music specifically patterned for the exercises or exercises with background music, it was found that while both types of music rated high on satisfaction, there was a significant difference in number of repetitions in synchrony with the music therapist patterned music (O'Konski et al., 2010).



Communication is also a factor in wellness and quality of life. Whether helping people regain speech after an acquired brain injury, communicating to patients in a coma, lullabies to connect parents to infants in NICUs, reminiscing, expressing emotions and thoughts, music therapy can be beneficial to establish communication. After months of music therapy, a nine-year old boy diagnosed with autism spoke a word for the first time in a music therapy session (Music Therapy, 2019).

What do people say about music therapy?

In a music therapy study (Brooks et al., 2010) to address stress causing burnout in 65 medical personnel, after 6 sessions of 1 hour sessions each week, participants expressed:

I was relaxed and comforted by this free time. It put a smile back on my face. I really can't say anything. I feel relaxed.

That was very good because I feel like I was at rest.

My mind was empty at this time like everything was gone.

I found myself feeling rejuvenated after the experience. I felt I could finish my shift with a little more ease.

I somehow again feel rejuvenated and ready to end my day with a clear head.

I found this experience to be exhilarating, calming, surreal, motivating and energizing. I was able to focus on relaxing when my mind would focus on things.

I was able to slow my thoughts down and focus on the moment. I began to feel relaxed. Anxiety went from high to low.

I felt a big weight being lifted off my shoulder. It created an avenue to channel the stress of the workday.

My thought process was more positive.

Empowerment was also experienced as greater emotional control:

It gave me control over my emotional feelings.

- I can feel more in control. I was able to support my stressed co-worker.
- I believe I can apply this in all areas of my life where I feel stress, out of control or unnerved.
- I learned how to let my body and mind de-stress, and will definitely use this again.

Participants expressed relief from pain or discomfort after music imagery:

I feel less tension in my neck which is where I carry it the most. The tension in my chest was completely gone at the end of the session. My shoulder is no longer stiff. Despite my headache, I feel calm.

I am healing and releasing the tension from the stress of the day. I felt like I was just floating. I could literally feel my body unwinding, a warm relaxing feeling.

Teachers commented (Sena Moore, 2013) about changes in behaviors of children aged 3-5 years old after twelve 20 minute music therapy sessions over 4 weeks.

I notice that from the groups, he would come back a lot more calmer, more relaxed...(I)ike less frustration...I think having the music made him probably understand how to be more calm, more relaxed...His afternoons were a lot less chaos, a lot more calm.

(I)t would be a great experience for the children because they can learn so much through the music with...the vocabulary and the...um, different things like that. I know, like, even though I have a horrendous singing voice, that if I start singing (*snaps) it grabs their attention. Like, if they're running around and you can make up any song and then they'll repeat it and they remember it months later and you/re like "who taught you that song?" oh yeah, me, I made it up, or whatever.

We noticed that he interacted more with his peers, more calmly. He interacted not having so much frustration...He was able to deal with the situations easier when interacting with peers and interacting with teachers.

There was one child who...I don't know if it was part of the group, but he...opened up. Like he would belt out "Let It Go" and like, so he started dancing and being more expressive.

It was easier for them to learn certain things with the songs like when we start letters and things.

In a three week study (Lesiuk, 2010) with 24 professional computer information systems developers where they could listen to their preferred music when they wanted and in the manner they wanted from a store of 65 CDs in 8 different genres, the participants commented:

Regarding Mood: It kept me calm and focused It seemed to put me in a good mood. Calming effects. Tension is high lately-this seemed to mellow me out somewhat. I felt refreshed at times. Kept me in a better mood—more sociable.

Regarding Stress: Release stress, sadness. The music helped me unwind. Calming, focus better, feel like I accomplished more—time seemed to move faster. When something goes wrong, I find that listening to music helped me let it

go, and not dwell on the negative thing that happened.

Regarding Work Efficiency: Helped me to concentrate. Helped me block out surrounding noise (people talking) and focus on the task at hand. Feeling like I can accomplish many more things. The music reached its climax at the same time I finished a work item. It

caused a brief sense of elation followed by contentment. Just because the music was slower in pace, that didn't make it any less effective in making me more productive.

Great beat. Made the job feel it was going faster.:

Patients on a detoxification unit (Silverman, 2011) after music therapy interventions commented:

Lifted me Uplifting. Awesome way to relax and enjoy myself! Need more! Excellent! Thank you! Very distracting and brought a very diverse group together allowing us to find commonalities through music...Thx! Very fun brings us back to being peaceful and China like. I love to sing, so this was way fun!! It was good for me, it took away my craving for my drug of choice. Music is great to forget cravings and stress. Kidney transplant recipients (Ghetti, 2011) made remarks after receiving music therapy to reduce pain and psychological distress.

Music really has an effect, it can really bring you up, and that's what I need. I've had enough dark days. This is really a ministry—you are ministering through music.

...this offers a chance to transcend the daily experience of being in a hospital.

A woman survivor of domestic violence (Hernandez-Ruiz, 2020) expressed her thoughts after music therapy:

In music therapy, I was able to observe how the violence I lived made me forget my musical interests, even though in every moment of my life there has been a song with which I identify, as if my life was a swell of sound to the rhythm of the song that I liked best. Now I want to take up again my interest in music, with no other pretense than to obtain joy and better state of mind, to be at peace with myself, and to give my daughter the best of me.

After 8 sessions of songwriting in music therapy (Myers-Coffman et al., 2019), adolescents in bereavement commented:

Mainly the songwriting helped...making the lyrics, putting your heart... your blood and soul into the lyrics, which I did. So, it just helps all get out.

...it [Resilience Songwriting Program] felt helpful all the time because I would come here and then it would just kind of remind me that I'm not alone and that I can't really bring him back, so I just have to move forward.

It helped open up my eyes and see there's other people around me that are grieving how I am because they've lost this sibling as well.

I got to meet people that...don't make fun of me for being upset.

I did get to talk about some of the grief and get some of that off my shoulders.

It made me feel good cause it made me spill out my emotions more.

We completed a verse and when we got done it felt like a breath of fresh air or oxygen in the room.

The songs, that's how people express their emotions.



Finding a Music Therapist In NJ

All music therapists include wellness within their overall goals for every client. Music therapists consider wellness in the AMTA definition, as meeting the needs of individuals looking to enhance quality of life, maximize well-being and potential, and increase selfawareness. Because of this, specific music therapy locations are not listed here.

Locations where music therapy services are offered for different clinical areas are provided on those individual documents. To find a music therapist in your area, use the links below.

Find a private practice music therapist on the NJ Association for Music Therapy website Check a music therapist's MT-BC status on the CBMT website. Note: you will need the music therapist's full name. Find a music therapist AMTA on the national website.



In New Jersey music therapy services may be funded through:

Individuals with Disabilities Education Act (IDEA) Part B & Part C

State, foundation or community grants

Medicaid waiver

Although New Jersey does not offer Medicaid waivers for music therapy services, New Jersey has utilized state and county agency funds and population specific waivers (i.e., autism, developmental disabilities) to cover the provision of music therapy interventions in a variety of settings.

Division of Developmental Disabilities (Health and Human Services) Requires pre-approval.

As an adult, if you receive music therapy outside the home and you qualify for Medicaid, you may qualify to have the music therapist paid directly from the Division of Developmental Disabilities under the Supports Program. For children under age 21, DDD has proposed a pilot program to provide music therapy as an adjunct service.

Select private Insurance (with pre-approval)

Companies like Blue Cross Blue Shield, United Healthcare, Cigna, and Aetna have all paid for music therapy services at some time. Success has occurred on a caseby-case basis when the therapist implements steps within the reimbursement process and receives pre-approval for music therapy services.

Private Payment

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