

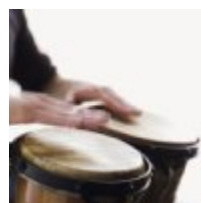
What is music therapy?

Music therapy is a specific form of rehabilitation that is typically facilitated by an accredited music therapist and uses music in a variety of ways to help achieve therapeutic goals. Music therapy has been found to be helpful for people who have had a stroke. Since music is emotionally and intellectually stimulating, this form of therapy can help to maintain or improve one's physical and mental health, quality of life, and well-being.

Are there different kinds of music therapy?

Music therapy can be provided in different forms, depending on your needs and preferences. Various ways of conducting music therapy and its benefits include:

- Active listening – develops attention, memory, and awareness to your environment.
- Composing/songwriting – can be a way of sharing your feelings and being able to express yourself.
- Improvising movements to music – a creative, non-verbal way of expressing feelings. Since improvisation does not require any previous musical training anyone can participate.
- Rhythmic movements and dancing – improves movement, speed, balance, breathing, stamina, relaxation of muscles, and walking.
- Playing instruments – increases coordination, balance, and strength. As an example, hitting a tambourine with a stick is a good exercise to improve your hand-eye coordination and develop strength in your arms and hands. This is a great activity whether or not you have previous experience playing instruments.
- Singing – improves communication, speech, language skills, articulation, and breathing control. Singing is particularly useful after a stroke for those who are unable to speak, because sometimes even though speech is affected, the individual is still able to sing. This happens because the speech center located in the brain is in a different location than the brain area used for singing. So, someone may have damage to the brain area responsible for speech, but no damage to the area responsible for singing.





Is music therapy offered individually or in a group?

Music therapy can be offered either way, so it is your choice. You and your music therapist can plan your music therapy sessions together. Benefits to participating in a group includes improving communication and social skills, making new friends, and the opportunity to share feelings and experiences. Playing instruments in a group can help develop cooperation and attention, as well as improve self-esteem and well-being. Composing and songwriting is another activity that works well in a group, as it allows you to communicate and work along with others. If you are not comfortable working in a group, music therapy sessions can also be offered on an individual basis. Individual sessions may lead to group sessions later on in the rehabilitation process, or the treatment plan may involve a combination of both. For people who are restricted to bed, music therapy can even be offered at their bedside with portable instruments.



Why use music therapy after a stroke?

Music therapy has the ability to help in the rehabilitation of individuals who have had a stroke. The research on the effects of this intervention is still quite new. There is some limited evidence suggesting that music therapy can help improve the movement of the arms, walking, pain perception, mood, and behaviour

after stroke. Courtesy of the Institute for Music and Neurologic Function

Do music-based treatments work in post-stroke rehabilitation?

Researchers have studied how different music-based treatments can help patients with stroke:

In individuals with ACUTE stroke (up to 1 month after stroke), studies found that:

- *Listening to music* is MORE helpful than comparison treatment(s) in improving attention, memory, mood and affect. It is AS helpful as comparison treatment(s) in improving executive functions (cognitive processes that assist in managing oneself and one's resources in order to achieve a goal), language, music cognition, quality of life, and the ability to identify visual and spatial relationships among objects.

- *Music-movement therapy* is MORE helpful than comparison treatment(s) in improving mood and affect, and range of motion. It is AS helpful as comparison treatment(s) in improving functional independence in self-care activities (e.g. dressing, feeding), and muscle strength.
- *Rhythmic music interventions* are MORE helpful than comparison treatment(s) in improving walking ability.

In individuals with SUBACUTE stroke (1 month to 6 months after stroke), studies found that:

- *Music training* is MORE helpful than a comparison treatment in improving hand and arm function.

In individuals with CHRONIC stroke (more than 6 months after stroke), studies found that:

- *Music therapy + occupational therapy* is MORE helpful than comparison treatment(s) in improving functional independence in self-care activities (e.g. dressing, feeding), quality of life, sensation, and arm function. It is AS helpful as comparison treatment(s) in improving consequences of stroke, and arm movement quality.
- *Melodic intonation therapy* is AS helpful as a comparison treatment in improving language.
- *Rhythmic music interventions* are MORE helpful than comparison treatment(s) in improving balance, behavior, walking ability, grip strength, interpersonal relationships, quality of life, legs range of movement, consequences of stroke, and mood and affect. They are AS helpful as comparison treatment(s) in improving cognitive functions (e.g. attention), dexterity, language, musical behavior, occupational performance, arm function, memory, and walking endurance.

In individuals with stroke (acute, subacute and/or chronic), studies found that:

- *Melodic intonation therapy* is MORE helpful than a comparison treatment in improving language.

- *Music performance* is AS helpful as comparison treatment(s) in improving dexterity and arm range of motion and function.
- *Rhythmic music interventions* are MORE helpful than comparison treatment(s) in improving balance, and walking ability. They are AS helpful as comparison treatment(s) in improving dexterity, sensation, strength, stroke consequences, arm function and activity.

Who provides the treatment?

Many hospitals and rehabilitation centers have music therapy programs that are conducted by accredited music therapists. The music therapist will meet with you to assess your needs and discuss preferences, so that he or she can design a program specific to your needs. In some centers it may be a recreational therapist or leisure therapist who provides music therapy. Ask your health professional or family members to help you find out more about the music therapy services offered in your hospital, rehabilitation center or community.

Are there any side effects or risks?

You do not face any risks when participating in music therapy after a stroke, as long as activities are practiced in a manner that fits your abilities. Consult your physician or rehabilitation healthcare professional for the best advice on how to participate safely. This is especially important if you are going to incorporate dancing or rhythmic movements into your music sessions and have some balance difficulties. *Family members/friends: it is important to help the person who has had a stroke seek out new activities such as music therapy that may be both pleasant and therapeutic.

Information on this web site is provided for informational purposes only and is not a substitute for professional medical advice. If you have or suspect you have a medical problem, promptly contact your professional healthcare provider.