

The study recruited 40 children between the ages of 7 and 14. Half the kids received no exposure to music while the other half listened to music before and after the lumbar puncture procedure. The children who listened to music rated their pain and anxiety lower than the control group. The researchers also saw heart rate, blood pressure and respiratory rate decrease compared to the children who did not listen to music.³

Music's Influence on Specific Health Problems

Scientists have also looked at how music influences pain and stress in a number of specific diseases and conditions.

Knee Osteoarthritis

This health condition causes degeneration of cartilage in the knee joint and is a significant cause of disability in North America. Surgery may be required in severe cases. The journal *Clinical Rheumatology* published a study evaluating the effect of music on patients with knee osteoarthritis undergoing a joint lavage treatment. Patients who listened to music just prior to the procedure showed reductions in anxiety and an increase in pain tolerance compared to patients not exposed to music.⁴

Cancer

When it comes to cancer, researchers discovered patients listening to pre-recorded music or engaging in music with trained therapists endured considerably less anxiety and were likely to also see a boost in mood and overall quality of life.

Although the amount of pain varied from one individual to the next, the study reported that “75% of cancer patients had at least some response and 47% had a moderate or greater response.”⁵

Heart Disease & Stroke

Undergoing serious surgery often causes major physical and mental stress in patients. Stress can increase the risk of complications. Research evaluated by a Cochrane Systematic Review showed the patients receiving treatment for coronary heart disease who listened to pre-recorded music reported less anxiety. This reduction in anxiety may have been responsible for a decline in the patients' heart rate and blood pressure, both of which were also tested.

Another Cochrane Systematic Review looked at the benefits of music therapy in the rehabilitation of stroke patients. Damage to the brain caused by stroke can make it difficult for patients to move their bodies and limbs. Improvement in movement was seen in stroke victims who underwent a type of therapy known as rhythmic auditory stimulation (RAS), which includes exposing the stroke patients to music of a specific tempo. When compared to patients who only received movement therapy, the RAS patients boosted their walking speed by 14 meters per minute, took longer steps and improved arm movement.⁶



Quote to Inspire

“There's nothing like music to relieve the soul and uplift it.”

Mickey Hart

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