

Music strikes a soothing chord

But the evidence is mixed on 'audio analgesic' benefit



Keith Simmons, USA TODAY

By Kim Painter

Have a throbbing head or an aching back? Here's one possible prescription: Take two Mozart movements — or a big dose of pop, country or jazz, if you prefer — and call the doctor in the morning.

Decades of studies, including one published recently, suggest that music might be a moderately effective pain reliever, an "audio analgesic." At some hospitals, music therapists are on call to help patients through painful procedures; when medications fail, some even sing patients to sleep.

Those who prescribe music aren't sure how it might work.

"It obviously has something to do with mind-body interaction," says Sandra Siedlecki, a nursing researcher

at the Cleveland Clinic who co-wrote the recent study on music and pain with Marion Good of Case Western Reserve University in Cleveland.

Their study, published in the *Journal of Advanced Nursing*, involved 60 patients with chronic, non-cancer pain. Those who listened to music on headphones for an hour a day reported significantly less pain and depression and an increased sense of control.

One theory is that music might induce hormonal or immune system changes that reduce pain. Another is that music is simply a pleasant, but powerful, form of distraction.

"It probably works on several levels," Siedlecki says.

It should be noted that "there are studies that show music doesn't help pain," says Michael Thaut, a professor of music and neuroscience at Colorado State University in Fort Collins. "The evidence is inconsistent."

Pain isn't the only symptom treated with music. Thaut's own research focuses on the use of specially designed rhythmic music to treat adults who have impaired motor skills because of stroke and Parkinson's disease. The technique, which has shown particular success in improving walking, has become a standard part of rehabilitation programs nationwide, he says.

Newer studies are investigating whether similar methods can help children who have cerebral palsy, he says.

The movement research is based on the idea that music and the human nervous system have deep, biological connections, Thaut says. "You play music with a strong beat and people start tapping their feet. That's a biological process, not a cultural process."

Meanwhile, others are using music in a variety of ways. For example:

► **Infants:** Premature babies who listen to specially selected music for four hours a day gain weight more quickly and go home two weeks earlier than similar infants, says Jayne Standley, director of the music therapy program at Florida State University in Tallahassee. Standley also has tested a pacifier that triggers music when the babies suck — and reports that it helps calm the infants, something that could aid the development of their nervous systems.

► **Emotional trauma:** Music therapists were among professionals who flocked to the Gulf Coast region last year after Hurricane Katrina and who are still there, helping children and others recover from emotional trauma, says Barbara Else, a music therapist and researcher who coordinated the response for the American Music Therapy Association.

Music also is used to help women in labor, people with mental health problems, and children and adults with autism and other developmental disorders.

One of the oldest uses of music is in dentistry. (If you haven't tried it

already, bring an iPod to your next appointment and see whether you can tune out any noise or discomfort.)

And, no, therapeutic music doesn't have to be classical or slow or instrumental, at least for most uses,

researchers say.

"Mozart isn't right for everyone," Standley says. "It's going to drive some people crazy."

Just what is a music therapist?

Though all sorts of health care professionals — including nurses and speech therapists — may use music in their work, a music therapist is a specialist with some extra college training and credentials.

Those who complete exams offered by the Certification Board for Music Therapists are considered board-certified.

Music therapists work in private practice but also are found in some hospitals, nursing homes, outpatient clinics, schools and other facilities.

Insurers, including Medicare, increasingly cover music therapy, according to the American Music Therapy Association. Medicaid coverage varies by state.

► For more, visit www.musictherapy.org.

DISCUSSION

- What is an "audio analgesic"?
- What theories have researchers developed to explain the effect of music on pain?
- How does music help improve the motor skills of those who have lost dexterity due to Parkinson's disease or a stroke?
- What other types of patients benefit from music therapy?
- Why do people tap their feet when they listen to music?
- What kind of music do you find soothing? Why do you think two people can have very different reactions to the same song?
- Why do many athletes listen to music before games or competitions? Why do politicians adopt songs for their campaigns? What other professionals look to music for inspiration?

ACTIVITY

Adopt the role of a music therapist. Imagine that you have the following clients: an actor who has developed stage fright; a child who has experienced an emotional trauma; a professional athlete who has been underperforming; a mom who suffers from migraines; and an elderly man with Parkinson's disease. Decide what kind of music (or what specific song) would help each individual improve her or his performance or health. Explain your choices in writing. Then, identify a song or style of music that could help you overcome an obstacle in your life. Record your insights in a chart similar to the one below.

Individual	Music/Song	Rationale
Actor with stage fright		
Child who has experienced a trauma		
Pro athlete who has been underperforming		
Mom who suffers from migraines		
Elderly man with Parkinson's disease		
(Describe your problem here.)		

Pre-Reading Strategy: Cubing

Directions: Cubing is a way to activate your prior knowledge of a topic by looking at it from different viewpoints. Today, you will be reading an article about music therapy – a way of helping people cope with their problems by having them listen to specific rhythms, songs or styles of music. The questions below will get you thinking about music therapy. Then, when you read the article, your mind will be warmed-up and ready to learn about the topic.

Topic: Music Therapy

Describe: Think about the words “music” and “therapy.” Then, describe the techniques you think music therapists might use.

Compare: What is music therapy similar to? What is it different from?

Associate: What do the words “music therapy” make you think of? What specific images come to mind?

Analyze: How do you think music therapy works? Why does it work?



Apply: How could music or music therapy improve your life? What other individuals or groups might benefit from it?

Argue: Do you think listening to music can have a measurable effect on a person's mood, outlook, confidence, etc.? Why or why not?