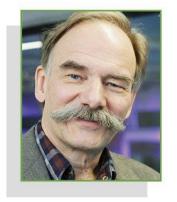
Q&A: Music may be 'useful, effective and harmless' pain management strategy

Janel Miller

Growing evidence suggests that music therapy can be an effective method for relieving pain, according to researchers.

Amid the opioid epidemic, the National Academies of Science, Engineering and Medicine, NIH and other medical organizations encourage nonpharmacological approaches to pain management.



Music should be considered as an evidence-based part of pain treatment regimens.

Seppo Soinila, MD, PhD



"Generally, the level of analgesia obtained by the majority of chronic pain patients is unacceptably low, and treatment is too often based merely on pharmacological approach," **Seppo Soinila, MD, PhD,** a professor of neurology at Turku University Central Hospital and the Centre of Excellence in Music, Mind, Body and Brain in Finland, told Healio.

Soinila recently co-authored a review in the *Journal of Pain* that examined the evidence supporting music as an alternative therapy for chronic and acute pain.

"Considering the growing research evidence, music should be considered as an evidence-based part of pain treatment regimens, rather than merely a recreational factor," he said. "It is supplementary to the traditional treatments. It is cost effective and safe and might produce — in addition to analgesia — also relief from pain-associated depression, anxiety and insomnia."

In an interview with Healio, Soinila provided more information on music's potential role as a pain management strategy.

Healio: What evidence is there to suggest that music helps alleviate chronic pain?

Soinila: Over the last 20 years, several good-quality randomized controlled trials have been published on the analgesic effects of music-related procedures in various clinical entities, such as cancer pain, osteoarthritis, fibromyalgia and others.

Healio: How strong is the evidence?

Soinila: In general, the evidence is convincing. Music has been shown to be useful, effective and harmless. Its efficacy has been confirmed in a recent meta-analysis of 14 trials. Yet, a limitation is that the interventions used are heterogenous. In some studies the cohorts are relatively small and long-term effects are largely unknown. Also, studies on music-induced analgesia in neuropathic or nociplastic pain conditions have not been published.

Healio: Is music therapy intended to replace more traditional pain management strategies? Why or why not?

Soinila: There is no evidence to suggest that music-related therapies should replace medication or other nonpharmacological therapies. Interestingly though, evidence from studies on post-operative pain shows that regular music listening does reduce the need for opioids.

Healio: What kind of music works best in reducing chronic pain?

Soinila: The current evidence indicates that patient-selected music is more effective than researcher-selected music. Otherwise, no comparisons of the analgesic efficacy of various music genres have been published. Yet, the common assumption that music-induced analgesia relates to relaxing characteristics (slow tempo, no lyrics) has been challenged by a recent study reporting that pain patients favor danceable high-energy music with lyrics.

Healio: Which patients are most responsive to music therapy?

Soinila: This is largely an unknown area. Interestingly, it seems that musicality is not a prerequisite for a positive response to music-related therapy.

Healio: What are the preconditions of successful implementation in a primary care setting?

Soinila: In essence, the intervention should be tailored to the patient's clinical condition and to his/her personal interest and motivation. Technical realization should be properly fit for the limitations of the pain state. Sufficient supervision and follow-up by a pain nurse and support from spouse, relatives, etc., are desirable.

Healio: Is there anything you would like to add?

Soinila: Although, generally, music listening is safe, assessment of an individual patient as a recipient of music-related pain therapy should include consideration of potential negative effects. Some migraine patients may be hypersensitive to acoustic stimuli and some stroke patients may suffer from amusia, eg, inability to perceive music.

References:

A treatment improvement protocol. Managing chronic pain in adults with or in recovery from substance use disorders. https://store.samhsa.gov/sites/default/files/d7/priv/sma13-4671.pdf. Accessed Feb. 22, 2022.

Devitt M. Nonpharmacologic therapies can improve chronic pain outcomes. https://www.aafp.org/news/health-of-the-public/20200115nonpharmtx.html. Published Jan. 15, 2020. Accessed Feb. 22,

2022.

Nonpharmacologic management of pain. https://www.nccih.nih.gov/about/nonpharmacologic-management-of-pain. Accessed Feb. 22, 2022.

Qaseem A, et al. *Ann Intern Med.* 2017;doi:10.7326/M16-2367.

Relieving pain in America: A blueprint for transforming prevention, care, education and research. https://pubmed.ncbi.nlm.nih.gov/22553896/ Published 2011. Accessed Feb. 22, 2022.

Sihvonen AJ, et al. *J Pain*. 2022;doi:10.1016/j.jpain.2022.01.003.