

Are You in Pain? Let's Try Some Music!

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Child nurturing is always challenging. My nine-month-old daughter has been receiving a series of vaccinations since her birth. Although, I am a nurse by profession, it is still always painful to see my own child crying during vaccination. A month ago, I took her for routine vaccination anticipating that she will cry again. But this time it was different and I was pleasantly surprised; my daughter did not cry! When I reflected, I realized that as soon as the nurse was about to inject the vaccine, my cell phone rang; it had a musical tone, in-fact a very melodious song with a rhythmic sound, which probably had distracted my daughter and she felt much less pain than what was expected. I purposefully replicated the same approach on her next vaccination visit and to my amazement, my daughter again did not cry. This little personal experience convinced me that music really works for pain control. Since music affects us physically, psychologically, mentally, socially, emotionally and spiritually, it can ease pain and anxiety by moving conscious thoughts away from the symptoms. According to the Gate Control Theory of Pain, pain receptors act together to send pain signals to the brain, therefore distracters such as music can block certain pain pathways and diminish the amount of perceived pain [1]. Researchers have also highlighted that music is associated with release of endorphins and serotonin. It affects a person's metabolism, blood pressure, pulse rate, and brain wave activity. Sessions led by music therapists allow the individual to express feelings of pain and anxiety in healthy ways, such as through improvised songs and playing instruments [2]. Pain and anxiety are intrinsically linked, as children with higher levels of anxiety will perceive higher levels of pain and conversely, pain or fear of pain may result in higher anxiety [3]. Therefore, interventions directed towards decreasing children's pain should also address the associated anxiety. Music therapy can be beneficial for chronic pain, such as pain due to cancer. Since treatment of cancer requires a comprehensive management approach to address the physiological, psychological, social, and spiritual needs of the patient, music therapy can play a significant role. Several studies have shown that music therapy can increase patients' pain

tolerance and decrease heart rate and severity of depression. In addition to chronic pain, music therapy is helpful for the treatment of short-term/acute pain. When used with analgesics, it can reduce the overall intensity of patients' experience of pain⁴. Music therapy can be used as an independent pain-relieving intervention. In a few clinical trials, slow and steady music was able to promote relaxation by altering the perception of pain and by decreasing the need for pain medication.

In summary, music can be considered as an adjunctive therapy in clinical situations that produce pain or anxiety. Clinicians should consider provision of music therapy in the clinical setting, especially ones where anxiety plays a major role, such as during vaccination. While the evidence is supportive, further research is needed to fully explore the role of music in treating chronic cancer pain. In addition, further research is needed to identify the role of music therapists and the effect of the type of music in pain control, and how these interventions can be tailored to an individual patient's needs.

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