

Does music therapy improve psychological and physical outcomes for people with cancer?

Clinical Question	What is the effect of music therapy and music medicine interventions for psychological and physical outcomes in people with cancer?
Bottom Line	<p>Results of 26 trials suggest that music therapy and music medicine interventions may have a beneficial effect on anxiety in adults with cancer, with a reported anxiety reduction of 7.73 units, on average, on the STAI-S (score range: 20 to 80) scale and -0.76 standardized units on other anxiety scales (which is considered a moderate to large effect).</p> <p>Twelve studies further found that music interventions may reduce depression in adults with cancer. The results of a single study suggest that music therapy may help adolescents and young adults employ positive coping strategies during stem cell transplant, a high-risk and high-intensity treatment. We found no evidence of effect for distress or mood.</p> <p>The results of two studies suggest that music interventions may increase hope in adult cancer patients by an average of 3.19 units on the Herth Hope Index (score range: 12 to 48).</p> <p>As for the effect of music on physical symptoms in adults, the results of 12 trials suggest that music has a moderate pain-reducing effect of -0.67 standardized units. Music interventions also had a small effect on fatigue (-0.28 standardized units). The results of a single study suggest similar pain-reducing effects in children. Listening to music may reduce heart rate up to an average of three to four beats per minute in adults. However, there was no evidence for an effect of music on other physiological responses, physical functioning, or length of hospital stay.</p>
Caveat	<p>Because of the large number of trials at high risk of bias, readers should interpret the findings of this review with caution. Often blinding of participants is not possible in music medicine or music therapy studies. For anxiety and quality of life, there were large effects across studies. The trials did not agree on the size of effect, with some reporting much larger beneficial effects than others, resulting in large confidence intervals. For both outcomes, the certainty of the evidence was low and very low, respectively. For pain and mood, the pooled effect sizes were moderate to large but the evidence was very uncertain. For depression, the pooled effect was small to moderate but here too, there was very low-certainty evidence. Finally, the pooled effect for fatigue was small and the evidence was of low certainty</p>
Context	<p>Having cancer may result in extensive physical, emotional, and psychosocial suffering. Music interventions have been used to alleviate symptoms and treatment side effects in people with cancer. This review includes music interventions defined as music therapy offered by trained</p>

music therapists, as well as music medicine, which was defined as listening to pre-recorded music offered by medical staff.

**Cochrane
Systematic
Review**

Bradt J, Dileo C, Myers-Coffman K, Biondo J. Music interventions for improving psychological and physical outcomes in people with cancer. Cochrane Database of Systematic Reviews 2021, Issue 10. Art. No.: CD006911. DOI: 10.1002/14651858.CD006911.pub4. This review contains 81 trials with a total of 5,576 participants.

Pearls No. 689, October 2021, written by Vanessa MB Jordan.

Systematic review link:

<https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006911.pub4/full>