EVIDENCE-BASED CARE SHEET

Music Therapy and Pain in Patients with Cancer

What We Know

- Music therapy is a complementary therapy in the category of mind-body medicine, in which board-certified music therapists use music to evaluate and treat impairments in patients' emotional, physical, cognitive, and social functioning; music therapy studies have also investigated the effect of recorded music with or without guidance from a music therapist^(1, 2, 3, 5)
 - Although there is a physiologic basis for pain, the experience and response to pain are subjective⁽²⁾
 - The goal of music therapy is to act on the mind-body connection to reduce stress, induce an inner calm and stability, and quiet the mind to reduce reactivity to stimuli (e.g., pain)^(1, 4)
- Research results are conflicting regarding the efficacy of listening to music to control pain in patients with cancer^(1, 2, 4, 6)
 - In a small randomized controlled study of patients undergoing surgery for brain cancer, patients in the treatment arm received 20-30 minutes of live music therapy (i.e., music performed by a musician at the bedside), including music in their preferred genre, prior to surgery and each day of subsequent hospitalization⁽⁶⁾
 - Music therapy was shown to improve 4 of 6 quality of life measures (improvements were in measures of anxiety, perception of hospitalization, relaxation, stress), but did not have a statistically significant effect
 - A meta-analysis of 51 studies of the use of music therapy for management of pain, including cancer pain, found that music therapy provided small benefits in pain reduction and reduced opioid needs⁽¹⁾
 - Music therapy did not show any benefit in pain control over simple distraction in cancer patients undergoing invasive procedures. (4) Other reviewers have interpreted these results as evidence that music is simply a form of distraction(2)
 - Some patients reported that listening to music disturbed them and that they preferred to focus their attention on the procedure⁽⁴⁾
- A survey of 724 oncology staff nurses who were members of the Oncology Nursing Society collected information on adherence and beliefs regarding the use of 4 non-drug interventions—music, guided imagery, relaxation, and distraction—as recommended in cancer pain management guidelines⁽⁵⁾
 - 92% of respondents were familiar with music therapy as an intervention
 - Approximately half of respondents reported using music as an intervention at least sometimes
 - · Belief in its effectiveness, on-site support (e.g., availability of equipment), and more years of clinical experience predicted use of music as an intervention for pain
 - · Nurses without certification in oncology nursing were more likely than nurses with oncology certification to use music therapy for pain intervention to treat their patients with cancer
 - · Nurses working in outpatient settings were less likely to use music therapy for pain intervention for their patients with cancer

What We Can Do

- Learn about music therapy for reducing pain in cancer patients and consider how it might be used in your clinical setting; share this knowledge with your colleagues
- Discuss with colleagues whether or not music therapy might be appropriate in your clinical setting
- Involve a trained music therapist in implementation of music therapy when possible
- If administering music therapy at your clinical site,
 - assess each patient's interest in receiving music therapy
 - · provide a variety of music to patients and allow patients to choose their preferred music

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• use headphones when playing recorded music to minimize noise distractions. Check to be sure headphones are appropriately cleaned and wiped, or use disposable ear pads

Note

Recent review of the literature has found no updated research evidence on this topic since previous publication on August 13, 2010.

Coding Matrix

References are rated in order of strength:

- M Published meta-analysis
- SR Published systematic or integrative literature review
- RCT Published research (randomized controlled trial)
 - R Published research (not randomized controlled trial)
- C Case histories, case studies
- **G** Published guidelines
- **RV** Published review of the literature
- RU Published research utilization report
- **QI** Published quality improvement report
- L Legislation
- PGR Published government report
- PFR Published funded report
- **PP** Policies, procedures, protocols
- $\boldsymbol{\mathsf{X}}$ Practice exemplars, stories, opinions
- GI General or background information/texts/reports
- U Unpublished research, reviews, poster presentations or other such materials
- CP Conference proceedings, abstracts, presentations

References

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- 3. Ignatavicius, D. D. (2010). Introduction to complementary and alternative therapies. In D. D. Ignatavicius, & M. L. Workman (Eds.), Medical-surgical nursing: Patient-centered collaborative care (6th ed., pp. 8-14). St. Louis: Saunders Elsevier. (GI)
- 4. Kwekkeboom, K. L. (2003). Music versus distraction for procedural pain and anxiety in patients with cancer. Oncology Nursing Forum, 30(3), 433-440. (RCT)
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