Integrative Review: Effects of Music on Cancer Pain in Adults

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Despite advances in pain neurophysiology, assessment, and treatment, the burden of cancer pain is significant and one of the most common and distressing symptoms in patients with cancer (Hui & Bruera, 2014). This challenge continues to increase because of the rising global prevalence of pain and cancer. The World Health Organization estimates that limited or no treatment for cancer pain affects as many as 5.5 million people (Popat, McQueen, & Feeley, 2013). In addition, an estimated 12 million individuals are diagnosed with cancer each year throughout the world, with 7 million people dying annually (Popat et al., 2013). Cancer pain, a common and feared symptom among patients, is broadly classified into nociceptive (somatic and visceral) and neuropathic pain. Nociceptors, sensory receptors preferentially sensitive to noxious stimuli, are primary afferent nerves with peripheral terminals. Neuropathic pain is characterized as a complex combination of syndromes with inflammatory and ischemic components involving multiple sites (de la Cruz & Bruera, 2010). Neuropathic pain related to treatment surpasses tumor effects as the major contributor to chronic pain in survivors (Paice, 2011). Estimates indicate that pain affects about 49%–57% of survivors and 56%–75% of patients with extensive disease (Hui & Bruera, 2014). Based on a systematic review of the past 40 years, prevalence of cancer pain for patients at all disease stages was reported to be 53%, with more than 33% of patients rating their pain as moderate to severe (van den Beuken-van Everdingen et al., 2007).

Recommendations to improve pain control include evidence-based clinical practice guidelines that integrate a variety of pharmacologic and nonpharmacologic options (Miaskowski et. al., 2005; Paice & Ferrell, 2011). Nonpharmacologic interventions are categorized as alternative medical systems, manipulative and body-based methods, energy therapies, and mind-body medicine (Bardia, Barton, Prokop, Bauer, & Moynihan, 2006). Music is frequently classified within the category of mind-body interventions (Bardia et al., 2006; Elkins, Fisher, & Johnson, 2010). Complementary methods such as music are gaining increasing interest among patients and providers and may be administered as an...