

This presentation is based on the presenter's PhD dissertation conducted at Temple University. Although numerous meta-analyses have been conducted on the topic of music and pain, the latest comprehensive study was published more than a decade ago. Thus, a more up-to-date, comprehensive review is needed. The aim of this study was to conduct a meta-analysis in order to summarize existing research investigating the effect of music on pain. The present study included RCTs published between 1995 and 2014. Studies were obtained by searching 12 databases and hand-searching related journals and reference lists. Extra efforts were made to include unpublished grey literature. Main outcomes were pain intensity, distress from pain, vital signs, and amount of analgesic intake. The quality of the studies was evaluated according to the Cochrane Collaboration guidelines. Results demonstrated that music interventions were significantly effective in decreasing pain on 0-10 pain scales ($MD = -1.13$), other pain scales ($SMD = -0.39$), distress from pain ($MD = -10.83$), anesthetic use ($SMD = -0.56$), opioid intake ($SMD = -0.24$), non-opioid intake ($SMD = -0.54$), heart rate ($MD = -4.25$), systolic blood pressure ($MD = -3.34$), diastolic blood pressure ($MD = -1.18$), and respiration rate ($MD = -1.46$). Subgroup and moderator analyses yielded additional clinically informative outcomes. Considering all the possible benefits, music interventions may provide an effective complimentary approach for the relief of acute, procedural and cancer/chronic pain in the medical setting.