

Music Therapy for Decreasing Procedural Related Pain and Anxiety in Pediatric Patients: A Best Practice Approach

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Purpose

- To develop a best practice protocol for decreasing pain and anxiety in pediatric patients undergoing painful procedures
- To improve the experience of pediatric patients and their families by providing an intervention that can be easily implemented by parents or guardians

Background

- Music therapy has emerged as a specialized division of complementary medicine and has been used therapeutically in the treatment of many disorders

Short Term Effects of Pain:

- Increased levels of distress/anxiety
- Negative behavioral responses such as crying, screaming, verbal opposition, and physical avoidance



Long Term Effects of Pain:

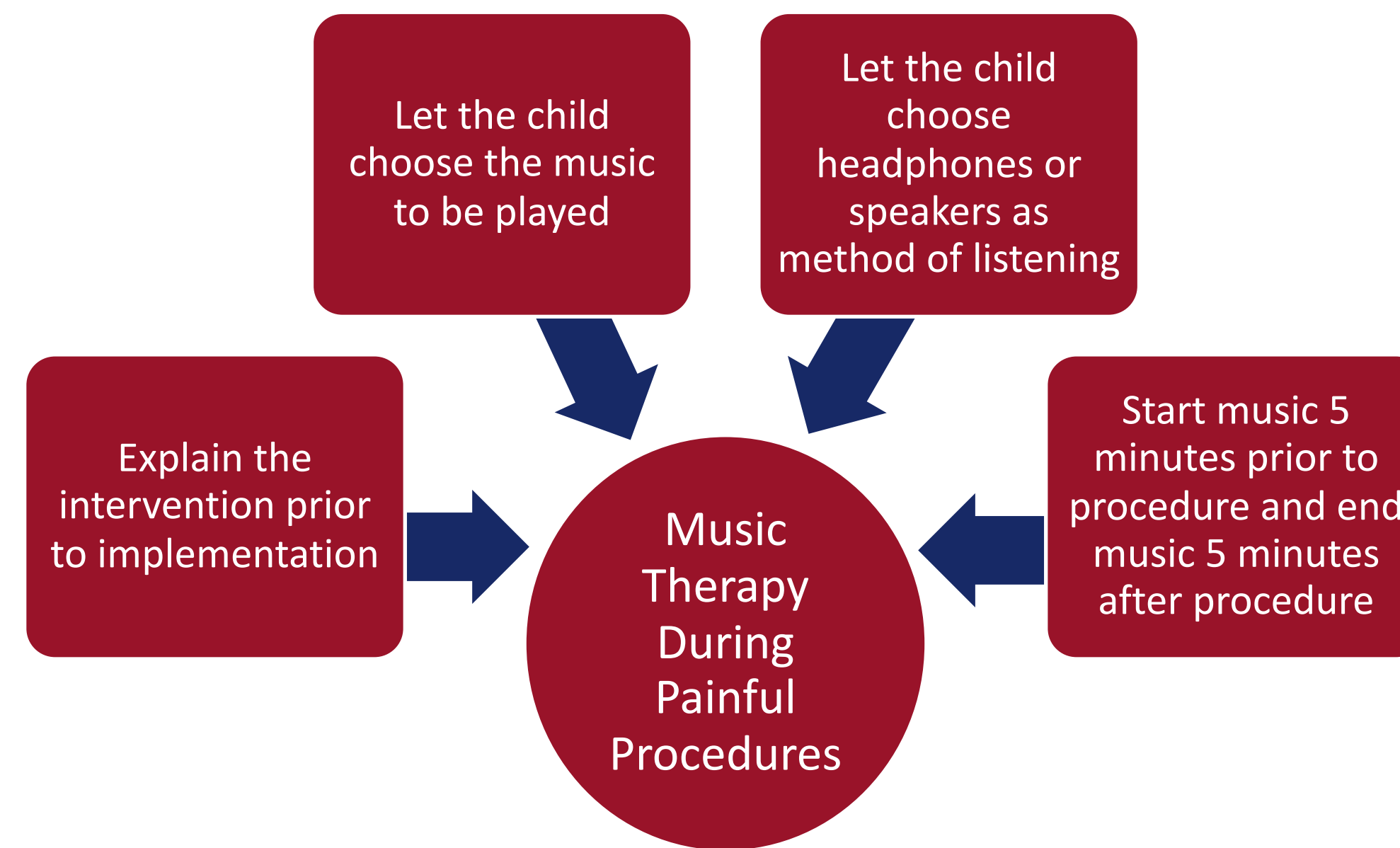
- Accurate memories of past painful events
- Adverse pain responses as an adult
- Changes in the neuronal structure of the brain

- Increased levels of pain and anxiety can be detrimental to the well-being of children, particularly those who undergo painful procedures on a regular basis related to a chronic illness
- Repeated painful procedures with inadequate treatment may result in negative long-term effects and adverse pain responses in the future

Approach

- Review of evidence of music therapy as an intervention in pediatric patients using PubMed, EBSCO, and CINAHL; 20 articles utilized in total
- Keywords used: “music therapy,” “pediatric,” “pain,” and “anxiety”

Evidence-Based Recommendations



Benefits of Music Therapy

- Research has shown a significant decrease in stress, anxiety, and behavioral distress in pediatric patients listening to music, as compared to a control group
- Some studies have shown a decrease in heart rate and respiratory rate in pediatric patients listening to music, as compared to a control group
- Overall, pediatric patients rated their experience with music therapy during painful procedures as a positive one
- Overall, parents supported the use of music therapy during their child’s time in a medical setting and felt that it was beneficial in decreasing their child’s level of distress
- Parents also reported benefitting from music therapy themselves, as it allowed them to share a positive emotional experience with their child and promoted meaningful conversations

Conclusions

- Music therapy can be effective in decreasing levels of pain and anxiety in pediatric patients undergoing painful procedures and should be used in conjunction with other therapies
- Pediatric patients and their families describe music therapy as a positive experience and one that they would be interested in using in the future

Future Research Directions

- Incorporation of more recent research on music therapy in pediatric patients
- Further investigation into the long-term effects of inadequately treated pain in children
- Research on the effectiveness of music therapy when implemented by a parent, as opposed to a music therapist

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