Music Therapy to Decrease Crying and Improve Enjoyment during Physical Therapy

Kristin Dierker and Shelby Kissel

Introduction

Does the addition of music therapy along with traditional physical therapy for infants and toddlers decrease crying and improve enjoyment for patient and parents?

Aim and goals of music therapy

- Support adaptive coping
- Decrease pain
- Decrease distress
- Increase developmentally age appropriate skills
- Improve psychosocial care
- Increase motor skills
- Improve behavior/cognition
- Improve speech and language

Music in addition to physical therapy

- Music in the background during a physical therapy treatment session to engage patient, provide interest, and improve emotional state.

Enjoyment Increased by

- Smiling
- Increased positive mood
- Increased positive interaction
- Increased feeling of security
- Decreased stressors

How crying can negatively effect a child’s emotion, recovery, and development

- With hospitalizations there is an increased number of stressors which can lead to a negative mood or decreased enjoyment. This can negatively effect the child’s health and well-being, having a negative effect on his or her prognosis.

Reasons for crying

- Fatigue
- Pain
- Stress
- Discomfort
- Hunger
- Overstimulation
- Attention seeking
- Boredom

How enjoyment can effect child’s mood and how it relates to parents

- An increase in patients enjoyment can increase the child’s positive mood. This can assist with coping and enhance overall physical well-being.
- Music also can increase parent satisfaction, which is critical to improve effectiveness of physical therapy sessions.

Future Research

- A study with a larger sample size and increased age ranges, spanning from birth to 5 years, that looks at the addition of music to a physical therapy session with crying and patient and parent enjoyment in a variety of settings.
- A study on most effective methods of collaboration between music and physical therapists in treatment of infants and toddlers.

Patient Population Researched

- Gestational age 28-40 weeks old in NICU
- Healthy 28-48 hours old
- 5 weeks-12 years with a variety of conditions and/or reasons for hospitalization

Effects of Music on Enjoyment

- Increase:
  - Enjoyment of child and parent
  - Smiling and mood
  - Parent-child interaction
  - Coping and stress management
  - Sense of security and predictability
  - Relaxation and provide calming effect
  - Physical and emotional motivation
  - Rate of smiling

Effects of Music on Crying

- Stabilize heart rate, respiratory rate, increase oxygen saturation, promote homeostasis
- Increase:
  - Tolerance to stimulation
  - Weight gain, increase sucking, increase nutrition
  - Non-stress behaviors
  - Sleep
- Decrease:
  - Pain behavior
  - Stress response
  - Duration and frequency of crying
  - Agitation
  - Release of the hormone cortisol

Conclusion

- Addition of Music/Music Therapy to PT treatment session can:
  - Decrease crying
  - Increase enjoyment for child and parent(s)
  - Lead to better prognosis
  - Promote best environment for infants/toddlers receiving PT

References