

#### **Music Therapy Research**

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## **Current Recognition**

- US Code disease prevention and health promotion service and supportive service under Title 42
- Healthcare Common Procedure Coding System (HCPCS) Code G0176 for billing Medicare in Partial Hospitalization Programs
- Procedure Code 93.84 in the International Classification of Diseases (ICD-9)
- US General Services Administration (GSA) schedule under professional and allied healthcare staffing services
- Eligible to apply for National Provider Identification (NPI) system
- Minimum Data Set (MDS) lists music therapy under special treatments and procedures and recreational therapies
- NIH lists music therapy as a mind-body intervention under complementary and alternative medicine
- Related service under Individuals with Disabilities Education Act (IDEA) and can be included on IEP
- Joint Commission and Commission on Accreditation of Rehabilitation Facilities (CARF) recognize music therapists as qualified individuals who can provide services

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## **Research Outcomes**

- Brain Injury: <a href="https://www.youtube.com/watch?v=tiJ9X\_wLSWM">https://www.youtube.com/watch?v=tiJ9X\_wLSWM</a>
- Dementia: <a href="http://www.pbs.org/wnet/musicinstinct/blog/cognition/how-music-can-reach-the-silenced-brain/31/">http://www.pbs.org/wnet/musicinstinct/blog/cognition/how-music-can-reach-the-silenced-brain/31/</a>
- Asthma: <a href="http://respiratory-care-sleep-medicine.advanceweb.com/Article/The-Sound-of-Music-4.aspx">http://respiratory-care-sleep-medicine.advanceweb.com/Article/The-Sound-of-Music-4.aspx</a>
- Pain: http://www.cleveland.com/healthfit/index.ssf/2011/01/music therapy eases patients p.html
- Autism: <a href="http://www.shsu.edu/~pin\_www/T@S/sliders/2012/lim.html">http://www.shsu.edu/~pin\_www/T@S/sliders/2012/lim.html</a>
- Premature Infants: <a href="https://www.youtube.com/watch?v=YfEtX4VEYSq">https://www.youtube.com/watch?v=YfEtX4VEYSq</a>
- Parkinson's: <a href="http://www.themiamihurricane.com/2013/02/07/music-therapy-helps-tackle-parkinsons/">http://www.themiamihurricane.com/2013/02/07/music-therapy-helps-tackle-parkinsons/</a>

### Medical Research

- Women respond with greater effect than men
- Children/adolescents respond with greater effect than adults
- Music is slightly more effective when pain is present; becomes less effective as pain increases
- Self-report show the least conservative effects, whereas behavioral observation and physiological measures are slightly more conservative
- Effects vary according to diagnosis
- Live music is more effective than recorded music
- Effects vary by dependent measure

# Techniques in Medical Music Therapy

- Music Listening and Anesthesia, Analgesia, and/or Suggestion
- Music Listening or Participation with Exercise or Speech Practice
- Music Listening or Participation with Counseling
- Music Listening or Participation with Developmental or Educational Objectives
- Music Listening and Stimulation
- Music and Biofeedback



- Provides social and emotional benefits
- Improves physical, social/emotional, and cognitive functioning
- Increases social/emotional and cognitive outcomes
- Decreases negative effects across all three domains

# Visually Impaired

- Music as a contingency to modify non-music behavior
  - Reinforcement of in-seat behavior
  - Reduction/Elimination of stereotypic behavior
  - Music as incompatible response
- Music as a stimulus cue or prompt to teach non-musical skills
  - Music as pleasure
  - Music as a cue to teach spatial orientation and mobility
  - Music reading

# \*Visually Impaired

- Music as a structured activity to teach non-music skills
  - Music as structure for assessment
  - Music as structure for learning
- Music as other
  - Comparison of persons with sight and persons with blindness

# Hospice and Palliative Care

- Decrease in perception of nausea and episodes of vomiting
- Greater expression and discussion of emotions
- Use of music for enjoyment and diversion
- Long-term gains in increasing self-reported relaxation, endurance, cooperative behavior, participation levels, and comfort levels
- Short-term increases in relaxation and comfort levels
- Decrease in pre and post-intervention scores on state anxiety

# \*Continued...

- Feelings of empowerment
- Pre-post session reduction in perceived pain intensity
- Reducing the level of a stress hormone and positive effect on attitude
- Decrease in mean heart rate, respiration, and extremity scores
- Decrease in tension-anxiety and physical discomfort

### \* References

- American Music Therapy Association (2014). *Music therapy* and military populations: A status report and recommendations on music therapy treatment, programs, research, and practice policy. Silver Spring: AMTA.
- American Music Therapy Association (2000). *Effectiveness of music therapy procedures: Documentation of research and clinical practice*. Silver Spring: AMTA.