Music and Pain: A Music Therapy Perspective

Deborah Salmon, MA, MTA, CMT
BRAMS, Université de Montréal
February 27, 2009
Music therapy definition

- Music therapy is the *skillful use* of music and musical elements by an *accredited music therapist* to *promote, maintain, and restore mental, physical, emotional, and spiritual health*.

- Music has nonverbal, creative, structural, and emotional qualities.

- These are used in the *therapeutic relationship* to facilitate contact, *interaction, self-awareness, learning, self-expression, communication, and personal development*.

- Canadian Association for Music Therapy
Music therapy definition

- **skillful use**: University-based training
- **accredited MT**: Professional standards, ethics,..
- **to promote, maintain, and restore mental, physical, emotional, and spiritual health**: Therapeutic intent
- **therapeutic relationship**: client, therapist, music
- **facilitate contact, interaction, self-awareness, learning, self-expression, communication, and personal development**: Therapeutic goals
Music therapy to be distinguished from other music-based approaches

- Music Medicine; receptive, recorded music listening, (no therapist)
- Music thanatology; prescribed music
- Certified Music Practitioner; limited training
- Harp therapy
- Vibroacoustic therapy; body treatment
- Music in recreation therapy
Music and Pain: clinical impressions

- Music therapy helps decrease pain some of the time with some of the people.
- Pain is a complex, multifactoral, perceptual experience; requires careful assessment (pain, anxiety, suffering).
- Music; also many elements to consider.
- Complementary approach rather than alternative (music may potentiate medication and visa versa).
- Combined approaches most effective (eg: music and imagery, breathing, relaxation).
Literature review

Music medicine

- Mostly music medicine research
- Quantitative, RCT
- Pain: chronic, acute, cancer, procedural, medical, surgical
- Pre-recorded music listening
- Music: preferred, selected or prescribed
- Literature: positive and mixed results
Literature review

Music therapy

- Fewer studies, need more research
- Quantitative (pre/post) + qualitative
- Pain: cancer, procedural (pediatric), acute (labour)
- Mostly live music; preferred, improvised
- Engaged interaction
  - Singing, focused listening, choosing, instrument playing, visualizing, talking
- Addresses multidimensional aspects of pain
  - Physical, psychological, social, spiritual
…Literature review

Music medicine


- Chronic, non-malignant pain, working-age adults
- More ‘power’, less pain, depression and disability in music groups than control
- No significant difference between preferred and researcher-provided music.
…Literature review

Music medicine

- N=318 chronic pain sufferers surveyed.
- Perceived benefits: *distraction, relaxation*
- *Frequent listening* and personal importance of music related to higher *quality of life*
- *Personal importance* significantly related to listening to music to help pain
...Literature review

Music medicine


- 9 articles: impact of ‘music therapy’ *(recorded music)* in medical, surgical settings on:
  - Pts’ perceptions of pain: 4 sig., 5 no sig. effect
  - Anxiety: 6 studies, only 1 showed statistical significance, but satisfaction and perceived benefit was high
  - Satisfaction (survey) with hospital Celtic harpist *(Certified Music Practitioner)* was very high

- Systematic review of 42 RCTs of the effects of music interventions (listening to recorded music) in perioperative settings.
- Music intervention had positive effects on reducing patients' anxiety and pain in approximately half of the reviewed studies.
Literature review

Music medicine


- 5 studies: significant decrease in pain
- 3 studies: mixed results
- Conclusion: with music, pain relief possible
- Recommend further study
Literature review

Music medicine

- 51 studies: effect of music on acute, chronic, and cancer pain
- Greater effects in *postoperative pain*
- Listening to music reduces pain intensity levels and opioid requirements, but the magnitude of these benefits is small and, therefore, its clinical importance unclear
- Music should not be considered a first line treatment for pain relief
- (complementary, not alternative therapy)
...Literature review

**Medical Music Therapy**

- 183 studies reviewed for meta-analysis
- Music therapy interventions appeared to be much more effective than music medicine interventions for pain management.
- Music therapy interventions may improve patient well-being and life satisfaction.
- Small number of MT studies, more needed
- Patient preferred music did not have sig. greater effect.
...Literature review

Trained musician


- Musicians trained to work in medical setting *(live music)*
- N=108 children 4-13 yrs.
- *Interaction* w. musician + parent vs parent only
- Distress and pain intensity was sig. lower before, during, and after blood test for music group
Literature review

Music therapy


- Music therapist, live, pt. selected and improvised music, *engaged interaction* (eg: singing, focused relaxation, affirming)

- 9 pediatric burn pts during nursing procedure

- Qualitative and quantitative data

- MT reduced pain, anxiety and behavioral distress
  - *engagement* in MT enhanced relaxation, provided distraction
  - *parents and nurses* also reported feeling more relaxed with MT
Krout, R. (2001). The effect of single-session music therapy interventions on the observed and self-reported levels of pain control, physical comfort and relaxation of hospice patients. *American Journal of Hospice and Palliative Care, 18*(6), 383-90

- 80 subjects, 90 sessions, 6 MT-BCs
- Various settings (home, hospice, hospital, nsg home)
- Regular MT interventions; live, active and passive music-based experiences
- Independent observation + subject self-report on 3 variables
- Results suggest that single-session MT effective in increasing *pain control, physical comfort, and relaxation*
Assessment: the *person* with pain

- Type of pain: intensity, location, frequency, description, etc.
- Other physical factors (e.g., shortness of breath, hearing, etc.)
- Meaning of pain (e.g., birth, death, punishment?...)
- Meaning of music: musical history, importance
- Music preferences, requests
- Previous use of complementary approaches (Yoga, Lamaze, visualization)
Assessment cont’d.

- Interests (travel, nature, art…)
- Psychological factors (mood, anxiety, character)
- Psychosocial factors (role, family, finances, other stressors)
- Spiritual factors (religion, meaning, spiritual beliefs, practices, resources – Mr. B)
- Cultural factors (eg: language, stoicism, expressivity)
- Receptivity
Music therapy interventions

- Listening (live, recorded)
- Music-assisted relaxation (autogenic, breathing)
- Music and imagery, GIM
- Active music making (singing, playing)
- Song / music choice
- Songwriting, composition
- Legacy work
- Toning, chanting
- Improvisation
- Entrainment (matching)
- Music with art, movement
- Verbal processing
Goals of MT: physical

- Influence perception of pain (reduce pain)
- Potentiate analgesics
- Decrease agitation, anxiety
- Regulate breathing, HR, O2 saturation
- Promote sleep

Ms. A – epidural catheter insertion; teamwork
Goals of MT: psychological

- Improve mood, increase pleasure
- Reduce negative affective experience of pain
- Increased sense of control, autonomy, safety
- Decrease anxiety / increase relaxation
- Encourage emotional engagement, expression
- Encourage reminiscence

- *Mr. X; ‘Pina coladas on the beach’ for insomnia*
Goals of MT: cognitive

- Distraction (re-focus attention)
- Learn coping strategies (e.g.: relaxation techniques, focused listening)
- Improve (perception of) quality of life
Goals of MT: social

- Nurture relationships between pt. and loved ones (support family, children)
- Foster positive, meaningful interaction
- Support links to cultural heritage
- Enhance communication
- Reduce isolation
Goals of MT: spiritual

- Focus on meaning
- Foster connection to higher power, larger context
- Find peace, hope, comfort
- Access spiritual resources (hymns, imagery…)

- (Legacy work, funeral planning)
On Wings of Song: Ms. F

- 47 year old, end-stage cancer
- Neuropathic pain
- Mental health issues
- Social isolation; partner
- Spirituality
- Music as ‘transitional object’
On Wings of Song
P.S. Administrative benefits of music

- Low cost
- Ease of administration
- Minimal-to-no risk of harmful side effects
- Potential to improve the hospital experience
- Improves staff morale
- Patients more satisfied with their care
Thank-you!

deborah.salmon@muhc.mcgill.ca