



# Music and Pain: A Music Therapy Perspective

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# Music therapy definition

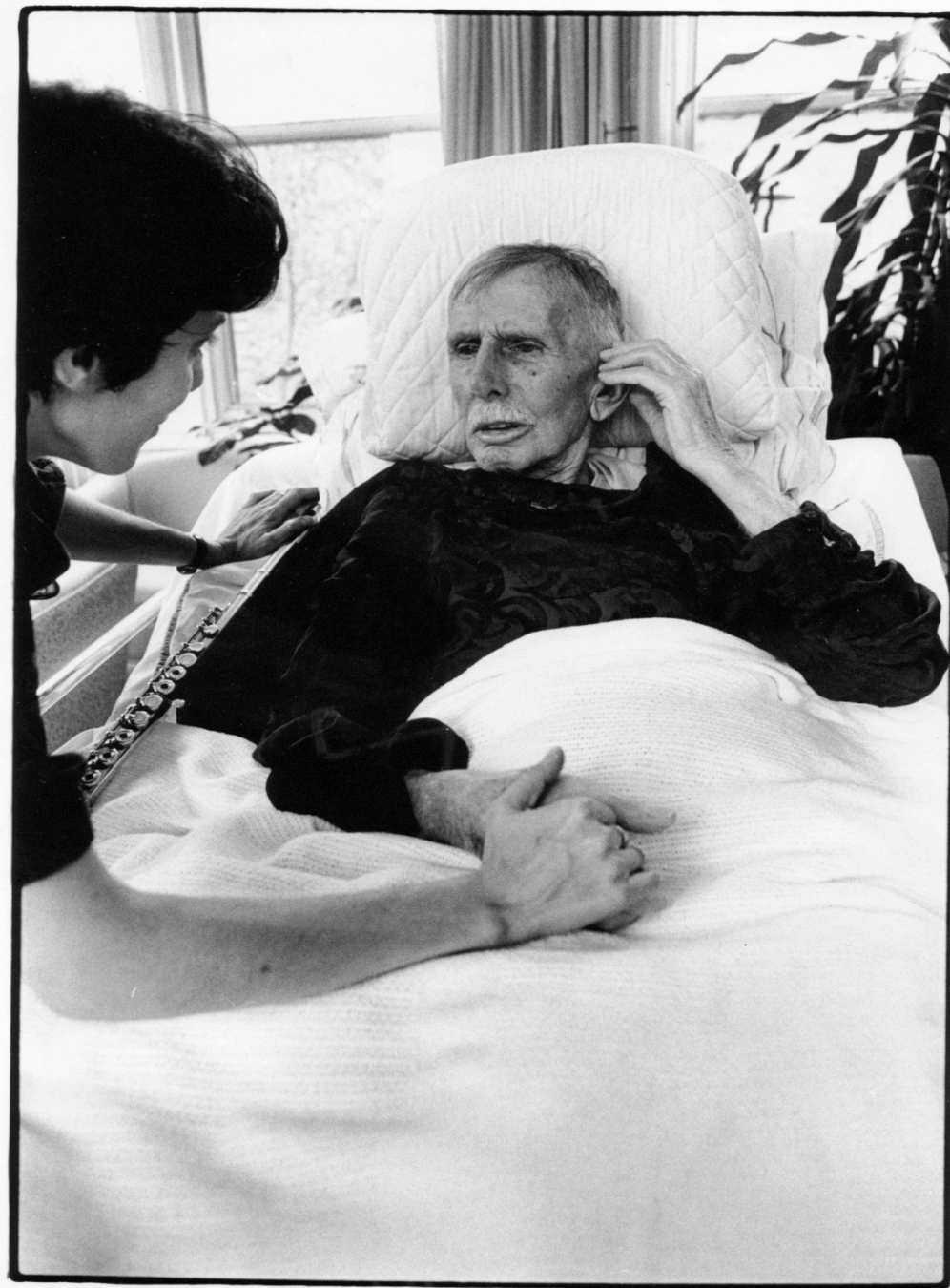
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- Music therapy is the *skillful use* of music and musical elements by an *accredited music therapist* to *promote, maintain, and restore mental, physical, emotional, and spiritual health*.
  - Music has nonverbal, creative, structural, and emotional qualities.
  - These are used in the *therapeutic relationship* to facilitate contact, *interaction, self-awareness, learning, self-expression, communication, and personal development*.
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- Canadian Association for Music Therapy

# Music therapy definition

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- *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

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- 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

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- 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*

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- 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*

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- 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*

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- **Siedliecki, S & Good, M. (2006). Effect of music on power, pain, depression & disability. *Jnl Advanced Nsg*, 54(5), 553-562**
- 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*

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- **Mitchel, L et al, (2007), A survey investigation of the effects of music listening on chronic pain. *Psych of Music*, 35(1), 37-57**
- 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*

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- **Richards T; Johnson J. et al (2007). The effect of music therapy on patients' perception and manifestation of pain, anxiety, and patient satisfaction. *MEDSURG Nursing*, 16(1), 7-15**
- 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**

# ...Literature review

## *Music medicine*

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- **Nilsson U. (2008). The anxiety and pain-reducing effects of music interventions: a systematic review. *AORN Jnl*, 87(4), 780, 782, 785-94**
- 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*

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- **Lim, P. and Locsin, R. (2006). Music as Nursing Intervention for Pain in **Five Asian Countries**. *International Nursing Review*, 53(3), 189-196.**
- 5 studies: significant decrease in pain
- 3 studies: mixed results
- Conclusion: **with music, pain relief possible**
- Recommend further study

# ...Literature review

## *Music medicine*

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- **Cepeda, M, Carr, D et al. (2006). Music for Pain Relief. *Cochrane Database of Systematic Reviews* (2)**
- 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*

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- **Dileo, C. and Bradt, J. (2005). *Medical Music Therapy: A Meta-Analysis and Agenda for Future Research*. Cherry Hill, NJ: Jeffery Books.**
- 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*

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- **Caprilli, S., Anastasi, et al (2007). Interactive music as a treatment for pain and stress in children during venipuncture : a randomized prospective study. *Journal of Developmental and Behavioral Pediatrics*. 28(5), 399-403**
- **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*

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- **Whitehead-Pleaux, A. Zebrowski, N et al. (2007).**  
**Exploring the effects of music therapy on pediatric pain. *Journal of Music Therapy*. 44(3)**
- *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

# Literature review

## *Music therapy*

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- **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

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

# Assessment cont'd.

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- 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

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- 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

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- Influence perception of pain (reduce pain)
  - Potentiate analgesics
  - Decrease agitation, anxiety
  - Regulate breathing, HR, O2 saturation
  - Promote sleep
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- *Ms. A – epidural catheter insertion; teamwork*

# Goals of MT: psychological

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- 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
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- *Mr. X; 'Pina coladas on the beach' for insomnia*

# Goals of MT: cognitive

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- Distraction (re-focus attention)
- Learn coping strategies (eg: relaxation techniques, focused listening)
- Improve (perception of) quality of life



# Goals of MT: social

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- 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

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- Focus on meaning
- Foster connection to higher power, larger context
- Find peace, hope, comfort
- Access spiritual resources (hymns, imagery...)
- (Legacy work, funeral planning)

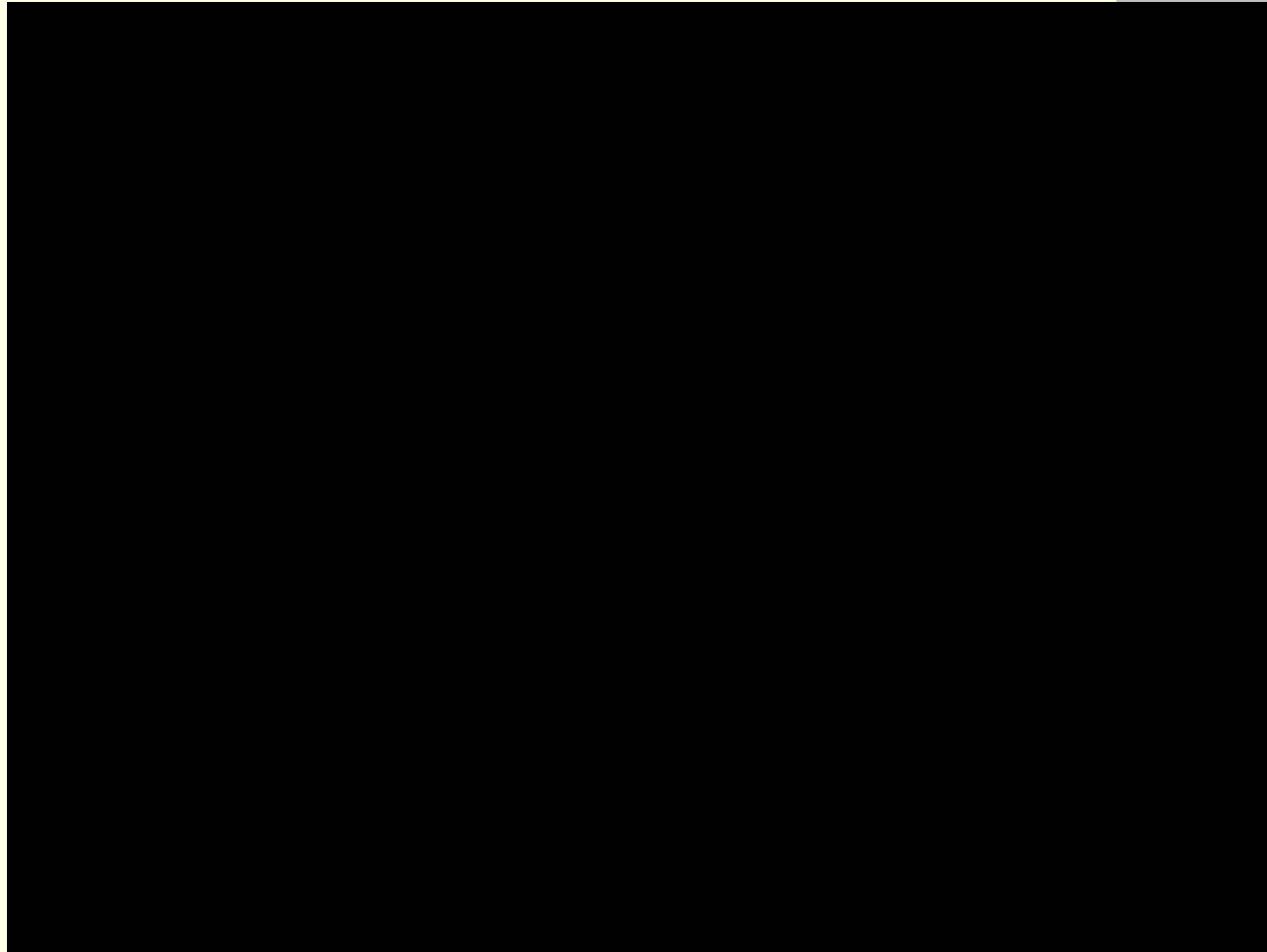
# On Wings of Song: Ms. F

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- 47 year old, end-stage cancer
- Neuropathic pain
- Mental health issues
- Social isolation; partner
- Spirituality
- Music as 'transitional object'

# On Wings of Song

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## P.S. Administrative benefits of music

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- 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!

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