



American Music Therapy Association, Inc.

8455 Colesville Road, Suite 1000, Silver Spring, MD 20910 (301) 589-3300 fax (301) 589-5175
email: amta@musictherapy.org website: www.musictherapy.org

MUSIC THERAPY IN THE TREATMENT AND MANAGEMENT OF PAIN

What is Music Therapy?

Music Therapy is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program. Music therapy is an established health profession that uses music and the therapeutic relationship to address physical, psychological, cognitive and/or social functioning for patients of all ages and disabilities. Because music therapy is a powerful and non-invasive medium, unique outcomes are possible when interventions are directed to reduce pain, anxiety, and depression. These outcomes appear to be mediated through the individual's emotional, cognitive and interpersonal responsiveness to the music and/or the supportive music therapy relationship.

Annotated Bibliography of Research: 1992 - 2003

- **Reviews of Music Therapy in Medical Settings.**

Standley, J.M. (2000). Music research in medical treatment. In D. Smith (Ed.) *Effectiveness of Music Therapy Procedures: Documentation of Research and Clinical Practice*. American Music Therapy Association: Silver Spring, MD.

Standley, J.M. (1992). Meta analysis of research in music and medical treatment. Effect size as a basis for comparisons across multiple dependent and independent variables. In R. Spintge and R. Droh (Eds). *Music Medicine*, St Louis: MMB.

- **Music Therapy reduces pain.**

Colwell, C. (1997). Music as distraction and relaxation to reduce chronic pain and narcotic ingestion: A case study. *Music Therapy Perspectives*, 15, 24-31.

Edwards, J. (1998). Music therapy for children with severe burn injury. *Music Therapy Perspectives*, 16, 21-26.

Fratianna R.B, Presner, J.D., Houston, M.J., Super, D.M., Yowler, C.J.& Standley, J.M. (2001). The effect of music – based imagery and musical alternate engagement on the burn debridement process. *Journal of Burn Care & Rehabilitation*. 22(1): 47-53

Good, M., Anderson, G.C., Stanton-Hicks, M., Grass, J.A. & Makil, M. (2002). Relaxation and music reduce pain after gynecologic surgery. *Pain Management Nursing*, 3 (2): 61-70.

Loewy, J. (1997). Music therapy pediatric pain management: Assessing and attending to the sounds of hurt, fear and anxiety. In J. Loewy (Ed.), *Music Therapy and Pediatric Pain*, (pp. 45-56). Jeffrey Books.

- **Music Therapy reduces physiological indicators of anxiety and reduces need for sedation and analgesia, increases completion rate, and shortens examination time during colonoscopy.**

Smolon, D., Topp, R. & Singer, L. (2002). The effect of self-selected music during colonoscopy on anxiety, heart, rate, and blood pressure. *Applied Nursing Research*. 15 (3): 126-36.

Schiemann, U., Gross, M., Reuter, R. & Kellner, H. (2002). Improved procedure of colonoscopy under accompanying music therapy. *European Journal of Medical Research*. 7 (3): 131-4.

- **Music Therapy reduces physiological indicators of pre-operative stress.**

Miluk-Kolasa, B., Matejek, M. & Stupnicki R. (1996). The effects of music listening on changes in selected physiological parameters in adult pre-surgical patients. *Journal of Music Therapy*, 33, 208–218.

Robb, S.L., Nichols R.J., Rutan R.L. & Bishop B.L. (1995). The effects of music assisted relaxation on preoperative anxiety. *Journal of Music Therapy*, 32, 2–21.

- **Music Therapy reduces cortisol in healthy adults.**

McKinney, C.H., Antoni, M.H., Kumar, M., Tims, F.C. & McCabe, P.M. (1997). Effects of Guided Imagery and Music (GIM) Therapy on mood and cortisol in healthy adults. *Health Psychology* 16 (4). 390–400.

- **Music Therapy reduces physiological and psychological indicators of distress in post-operative cardiac patients.**

Cadigan, M.E., Caruso, N.A., Halderman, S.M., McNamara, M.E., Noyes, D.A., Spadafora, M.A. & Carrol, D.L. (2001). The effect of music on cardiac patients on bed rest. *Progress in Cardiovascular Nursing*. 16 (1): 5-13.

- **Engaging in group music therapy and listening to music reduces anxiety associated with chemotherapy and radiotherapy.**

Cai, G., Qiao, Y., Li, P., & Lu, L. (2001). Music therapy in treatment of cancer patients. *Chinese Mental Health Journal*, 15(3), 179-181.

Harper, E.I. (2001). Reducing Treatment-Related Anxiety in Cancer Patients: Comparison of Psychological Interventions. *Dissertation: Southern Methodist University, USA*.

Sabo, C.E. & Michael, S.R. (1996). The influence of personal message with music on anxiety and side effects associated with chemotherapy. *Cancer Nursing*, 19(4), 283-289.

- **Listening to music reduces nausea and emesis for patients receiving chemotherapy.**

Standley, J.M. (1992). Clinical applications of music and chemotherapy: The effects on nausea and emesis. *Music Therapy Perspectives*, 10, 27-35.

- **Participating in Music Therapy sessions increases comfort and motivates bone marrow transplant patients during treatment.**

Boldt, S. (1996). The effects of music therapy on motivation, psychological well-being, physical comfort, and exercise endurance of bone marrow transplant patients. *Journal of Music Therapy*, 33, 164-88.

- **Listening to music alleviates pain, fatigue, and anxiety of hospice cancer patients.**

Longfield, V. (1995). The effects of music therapy on pain and mood in hospice patients. *Unpublished master's thesis: Saint Louis University, USA*.

- **Music Therapy serves to decrease behavioral distress among pediatric oncology patients during needle sticks.**

Malone, A. B. (1996). The effects of live music on the distress of pediatric patients receiving intravenous starts, venipunctures, injections, and heel sticks. *Journal of Music Therapy*, 33(1), 19-33.

- **Music provides an environment for engaging behaviors and decreasing distress behaviors for isolated pediatric oncology patients.**

Robb, S. L. (2000). The effect of therapeutic music interventions on the behavior of hospitalized children in isolation: developing a contextual support model of music therapy. *Journal of Music Therapy*, 37(2), 118-46.

How Does Music Therapy Make a Difference?

Music therapy has been shown to be an efficacious and valid treatment option for patients experiencing pain related to a variety of diagnoses. Music therapy interventions can focus on pain management for physical rehabilitation, cardiac conditions, medical and surgical procedures, obstetrics, oncology treatment, and burn debridement, among others. Music is a form of sensory stimulation, which provokes responses due to the familiarity, predictability, and feelings of security associated with it. Research results and clinical experiences attest to the viability of music therapy even in those patients resistant to other treatment approaches.

What Do Music Therapists Do?

Music therapy utilized in the treatment and management of pain complies with the expectations and requirements inherent in the medical model of treatment. Music therapy programs are based on individual assessment and collection of extensive data for the development of complex patient histories and client-centered treatment plans. Patient objectives are specific and relevant to medical diagnosis, course of treatment, and discharge timeline.

Once goals and objectives are established, music therapists use music activities, both instrumental and vocal, designed to facilitate changes that are non-musical in nature. Through a planned and systematic use of music and music strategies, the music therapist provides opportunities for:

- Anxiety and stress reduction
- Nonpharmacological management of pain and discomfort
- Positive changes in mood and emotional states
- Active and positive patient participation in treatment
- Decreased length of stay

Functioning as members of an interdisciplinary team, music therapists also evaluate the patients during the course of treatment, implement changes that are indicated by the patient's response, and document benefits in medical, not musical, terms.

How Does Music Therapy Help Patients?

Music therapy can help to relieve pain and reduce stress and anxiety for the patient, resulting in physiological changes, including:

- Improved respiration
- Lower blood pressure
- Improved cardiac output
- Reduced heart rate
- Relaxed muscle tension

Music therapy has been shown to have a significant effect on a patient's perceived effectiveness of treatment, self-reports of pain reduction, relaxation, respiration rate, behaviorally observed and self-reported anxiety levels, and patient choice of anesthesia and amount of analgesic medication.

Music Therapy Protocol for Pain Management

“[This protocol]... is based on a cognitive behavioral model of therapy, which posits that new thoughts, feelings and body states may be conditioned to replace dysfunctional patterns. Specifically, a relaxed body and pleasant visual images may replace tension and worry when they are conditioned as a response to familiar, calming music. The conditioning process takes place when listening to this music is paired with deep relaxation through repeated practice. Over time, the music alone cues the response...

The music therapy protocol is designed to perform several functions:

1. To direct attention away from pain or anxiety, distracting the listener with comforting music.
2. To provide a musical stimulus for rhythmic breathing.
3. To offer a rhythmic structure for systematic release of body tension.
4. To cue positive visual imagery.
5. To condition a deep relaxation response.
6. To change mood.
7. To focus on positive thoughts and feelings and to celebrate life.”

- Professor Suzanne Hanser, EdD, MT-BC, Berklee College of Music

Who is Qualified as a Music Therapist?

Graduates of colleges or universities from more than 70 approved music therapy programs are eligible to take a national examination administered by the Certification Board for Music Therapists (CBMT), an independent, non-profit certifying agency fully accredited by the National Commission for Certifying Agencies. After successful completion of the CBMT examination, graduates are issued the credential necessary for professional practice, Music Therapist-Board Certified (MT-BC). In addition to the MT-BC credential, other recognized professional designations are Registered Music Therapists (RMT), Certified Music Therapists (CMT), and Advanced Certified Music Therapist (ACMT) listed with the National Music Therapy Registry. Any individual who does not have proper training and credentials is not qualified to provide music therapy services.

Where Do Music Therapists Work?

Music therapists offer services in medical hospitals, skilled and intermediate care facilities, rehabilitation hospitals, adult day care centers, senior centers, hospices, psychiatric treatment centers, drug and alcohol programs, schools and other facilities. In pain management applications, music therapists can work in many different hospital units, including ICU, NICU, Pre- and Post-Op, surgery, cardiac care, obstetrics, emergency, pediatrics, physical rehabilitation, and outpatient programs. Some therapists are self-employed and work on the basis of independent contracts, while others are salaried hospital employees.

How Can You Find a Music Therapist or Get More Information?

American Music Therapy Association

8455 Colesville Road, Suite 1000

Silver Spring, MD 20910

Phone: (301) 589-3300

Fax: (301) 589-5175

Web: www.musictherapy.org

Email: info@musictherapy.org