Expressive Therapies

Creating a safe and empowering space for equality with – race, gender, sexuality, age, economic status, cognitive, physical, spiritual needs and those living with mental illness – through trauma-informed care: music therapy, art therapy, dance/movement therapy, and psychotherapy, to improve health and well-being.







Music Therapy and Oncology

Oncology is a medical practice setting where music therapists can provide interventions and support that are beneficial and unique to the cancer population. The goal areas of these interventions are distinct from other settings and populations, with factors like type of cancer treatment, cancer experience and journey, and individual symptoms and needs all playing a role in determining what may be the most helpful to each unique person and their family. Music therapists are equipped with creative tools and interventions that promote individualized and expressive therapeutic approaches that can support the psychological, emotional, and even physiological challenges that a cancer patient and their family may be experiencing. In this newsletter, we explore the different goal areas that are critically important for this population, and the ways in which music therapy is an effective and evidence-based therapeutic approach to cancer care.

Music Therapy and Cancer

Music is clinically recognized to influence biological responses such as heart rate, blood pressure, respiration rate, cardiac output, the immune system, and endorphin production. Music therapists can use music with intention to help influence and support some of these biological responses, as they are relevant and important for patients in cancer treatment. Depending on what type of music is used, the body will entrain to music to either slow down or accelerate. Sedative music can help to lower anxiety, pain, tension, and stress levels, resulting in less use of anesthetics and pain medication, a shorter recovery period, higher patient cooperation, and higher patient and family satisfaction. Stimulating music can be a source of motivation both physically and psychologically and becomes a positive reinforcement during treatment. There are also specific music therapy practice areas that require additional training, such as Guided Imagery and Music (GIM) and Neurologic Music Therapy (NMT), and other creative arts therapies that can be highly beneficial for cancer patients. Thus, music therapy can have a significant impact on the medical care for patients with various needs, providing psychological, emotional, and physical benefits.

Type of Oncology Treatment

Oncology treatment is separated into different areas, which include: chemotherapy, radiation, surgical, hormone, and pediatric oncology. Though there will be distinct medical treatment differences between each of these oncology settings, many of the need areas that would be addressed through music therapy may be similar.

Chemotherapy and Radiation

For patients undergoing chemotherapy, important goal areas include management of pain and/or neuropathy, managing stress and anxiety, improving relaxation, and relieving nausea. Patients may be attending their appointment alone, in which case emotional and social support

may be goal areas, or patients may be attending with close friends and family, and music therapy can support meaningful connections and relationships among family members. For patients undergoing radiation treatment, goal areas for music therapy will be very similar to chemotherapy, though likely with a greater emphasis on pain management, in addition to the other goal areas described.

Surgery

For patients who will be undergoing surgery, music therapy can be beneficial prior to surgery, following surgery, and even during surgery, when indicated. Prior to surgery, music therapy can help to increase relaxation and manage stress and/or anxiety. Following surgery, music therapy can continue to support relaxation and stress management, and address any pain management needs. Music therapy can also provide procedural support during surgery, as the use of music has been shown to impact biological and physiological responses, like heart rate, blood pressure, respiration rate, endorphin production, and pain perception. In research, music has been shown to reduce postoperative pain, anxiety, and analgesia use, as well as increase patient satisfaction, but length of stay does not differ. Music is also effective even when patients are under

Stay Tuned!

In a future newsletter, we'll be highlighting the wonderful support that art therapy as well as dance/movement therapy can provide to cancer patients!

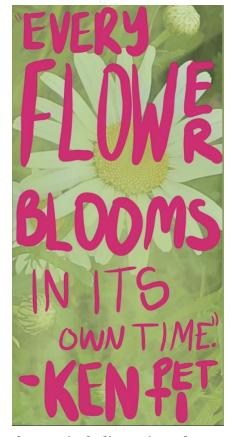




general anesthetic. For patients undergoing surgery, the use of music before, during, or after a procedure, whether it be live or a specifically curated playlist, can be highly beneficial in helping the patient regulate during a procedure that may be stressful and/or painful.

Pediatric

Music therapy is also highly beneficial for children and adolescents in pediatric oncology. Cancer is overwhelming for young patients and their families. Music therapy provides a creative outlet and motivating, meaningful experience for patients and their families. Some of the goals that may be addressed in pediatric oncology include distraction, easing pain and anxiety, procedural support, pain management, symptom management, enhancing self-expression, minimizing isolation and loneliness, memory making, relaxation, and enjoyment. It's also important to note that music therapy can help to provide a sense of normalcy for children who are hospitalized with cancer. Being in the hospital means that they can't be in school, play with their friends, or engage in the games and preferred activities the child enjoys. Music therapy provides opportunities for children to engage in something fun and just be a kid, on top of the emotional, physiological, and cognitive benefits they receive from participation.



Music Therapy Goal Areas in the Oncology Setting

The oncology medical setting presents with a number of unique therapeutic goal areas, including pain and symptom management, procedural support, addressing physiological responses, stress management and relaxation, coping strategies, self-expression, distraction, and relaxation. The areas that are the most pertinent to a situation will depend upon each individual's specific experience and therapeutic needs, and it is the role of the music therapist to address these goals as they are relevant to each cancer patient and their family.

Pain and Symptom Management

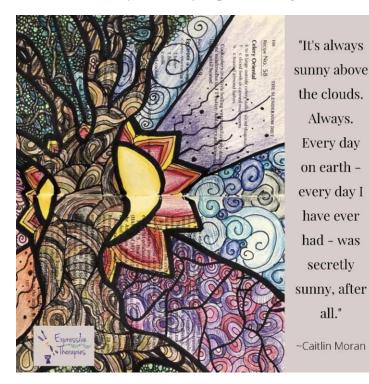
Pain management is a major area of concern for patients in chemotherapy, radiation, and pediatrics. It may also be important for some patients during or post-surgery. Music provides relief from pain through the release of endorphins and promotion of a relaxation response. When people listen to music that they perceive as enjoyable, the brain's reward system is stimulated, which leads to the release of the neurotransmitter dopamine, the chemical responsible for experiencing pleasure. Further, enjoyable music experiences can inhibit the central nervous system's structures that signal anxiety and pain, leading to decreased pain perception. In the cancer setting, music therapy can be extremely valuable for this reason, as music experiences can specifically target the body's ability to perceive pain and experience pleasure.

Physiological Responses

Some of the physiological responses that may be an area of concern for cancer patients include rapid heart rate, rapid breathing, and high blood pressure. Whether these have a physical basis or are physiological indication of high stress and anxiety, music therapy has been clinically shown to influence these responses. With intentional choices and implementation of relaxation strategies by a music therapist, music can help to regulate a patient's breathing and heart rate through active (playing instruments, singing) and receptive (listening) methods. Music therapy has also been shown to have an impact on lowering blood pressure.

Stress Management, Relaxation, and Coping Strategies

Cancer treatment can be a very stressful setting and experience for patients, so a major goal area for music therapy is healthy coping and management of the stress, anxiety, and/or depression that patients may be struggling with. Music therapy can help reduce some of the physiological responses of patients experiencing high stress and anxiety, and thus help improve relaxation and stress management. This can be accomplished through music-assisted relaxation, in which the music therapist uses music to entrain and gradually reduce the patients elevated physiological responses. Music therapists can also support patients with mood vectoring techniques, either live or through curated-playlists, which assist patients in shifting their emotional state from one feeling to another. This is an excellent tool for supporting stress reduction, and enables patients to practice and use music any time they experience high stress/anxiety.



Procedural Support

Procedural support is a goal area that may be very beneficial for patients and can address pain management, physiological responses, and/or stress reduction needs. As discussed above, music therapy can provide relief from pain through the release of chemicals that enhance pleasure and decrease pain perception. This means that music therapy supports decreased need for sedation or pain medication during a procedure, improved outcomes and healing, as well as decreased stress and anxiety that a patient may be experiencing about a procedure.

Emotional Expression and Self- Expression

Every patient's experience with cancer and cancer treatment will be unique to them, so one important goal area for music therapy is providing opportunities for self-expression. Music provides an outlet for the

difficult emotions and experiences relating to cancer, has significant impacts on emotional and physiological states, and can be individualized for every patient. Some of the emotional struggles that cancer patients may be facing include grief and loss, sense of self-identity, self-confidence, and post-traumatic stress. Individuals in cancer treatment may feel a loss of agency or control or grieve for past experiences and an identity prior to being diagnosed. This makes music a very powerful means for self-expression and healthy processing of complex emotions and experiences. By providing individually tailored music experiences and opportunities, music therapists can help support the psychological health and well-being of cancer patients.

Communication and Connection

Music is not just an individual experience and outlet for self-expression—it is also a social experience that can bring people together and enhance social connections. Music therapy can help to improve communication and connection among patients and their families, as well as provide a meaningful and memorable experience for everyone involved that does not focus solely on the cancer diagnosis. By extension, music therapy can promote quality of life and wellness.

Self-Reflection and Exploration

A cancer diagnosis is a significant change in someone's life, and for some cancer patients, specific music therapy interventions can provide opportunities for more in-depth exploration. Guided Imagery and Music (GIM), Focused Music and Imagery (FMI), and music psychotherapy are each different music therapy techniques, requiring additional training, that can support cancer patients with self-reflection and exploration. GIM, FMI, and music psychotherapy allows cancer patients to explore their life experiences more in-depth, and even support them in making major (or minor) life changes following their diagnosis and treatment.

Patient Responses to Music Therapy



- R was referred to music therapy services for concerns related to mood and coping. When the music therapist arrived, R said, "You know, I think you got here at the right time for me." She stated that she was depressed about being here. R had several instances of laughing and smiling during the session. She was also able to vent some frustration regarding her increasing lack of independence and strained relationships with family members. At the end of the session, R stated "I was sitting here feeling so sorry for myself, and you came in here and brought me some joy."
- A was referred to music therapy for pain and anxiety, and her chart also indicated an Alzheimers diagnosis. A and her 3 daughters engaged in active music making for 30 minutes, using A's preferred music. The daughters laughed and cried at times, and one stated, "This was really soothing. It helped us not think about mom being sick."
- G was initially referred to music therapy for anxiety and coping concerns. He engaged in active music making for a 45-minute session, during which he sang, his affect brightened, and he closed his eyes and tapped his toes to the music. After, he stated, "The music relaxes me so much. You really made my day." During G's next music therapy session, about an hour or so prior to his operation, he and his family members participated in active music making, and G stated "The music really helps. It helps with the nerves." Post-op, G expressed a "fair amount" of pain, but also stated, "That helped me so much. I feel so much better" after the first post-op music therapy session.

"THIS WILL BE HARD TO BELIEVE, BUT THE MUSIC AND SINGING MADE ME LOOK FORWARD TO GETTING MY TREATMENTS. WISH WE WERE STILL ABLE TO DO THEM."

-Patient D, when music therapy services were unavailable during COVID

Sources:

Bartlett, D., Kaufman, D., & Smeltekop, R. (1993). The effects of music listening and perceived sensory experiences on the immune system as measured by interleukin-1 and cortisol. *Journal of Music Therapy*, 30(4), 194-209.

Blood, A. J., & Zatorre, R. J. (2001). Intensely pleasurable responses to music correlate with activity in brain regions implicated in reward and emotion. *Proceedings of the National Academy of Sciences*, *98*(20), 11818-11823.

Dileo, C., Bradt, J., Grocke, D., & Magill, L. (2008). Music interventions for improving psychological and physical outcomes in cancer patients. *Cochrane Database of Systematic Reviews*, (1).

Hole, J., Hirsch, M., Ball, E., and Meads, C. (2015). Music as an aid for postoperative recovery in adults: a systematic review and meta-analysis. *The Lancet*, 386(10004). https://doi.org/10.1016/S0140-6736(15)60169-6

Karagozoglu, S., Tekyasar, F., & Yilmaz, F. A. (2013). Effects of music therapy and guided visual imagery on chemotherapy-induced anxiety and nausea–vomiting. *Journal of Clinical Nursing*, *22*(1-2), 39-50.

THANK YOU FOR READING OUR NEWSLETTER!

We appreciate connecting with the community by sharing the specifics of music therapy, art therapy, and dance/movement therapy. If you have further inquiries, we highly recommend you visit our website at www.expressivetherapies.net, our Facebook page (Expressive Therapies), the American Music Therapy Association at www.musictherapy.org, the American Art Therapy Association at https://artherapy.org/, the American Dance Therapy Association at www.adta.org, or email us at info@expressivetherapies.net.

Take care and be well!

