

Program: Stepping Away from the Chemo: Active Music Engagement for Young Children with Cancer

Speaker: Sheri Robb, PhD, MT-BC, Professor, IU School of Nursing

Introduced by: Joyce Mallette

Attendance: 73

Scribe: Don Mink

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The Zoom recording of today's presentation can be found on the Sciencetech Club's website at: www.sciencetechclub.org/zoom/478.mp4

Dr. Robb's research program focuses on the development and testing of music therapy and music-based interventions to manage distress and improve positive health outcomes in children/adolescents with cancer and their caregivers. Dr. Robb is a board-certified music therapist with degrees in music therapy and early childhood special education. In 2009, she completed a postdoctoral fellowship in behavioral oncology and cancer control at Indiana University and in 2011 a career development award through Indiana Clinical and Translational Sciences Institute (CTSI). The Music Therapy Profession is an allied health profession that requires a degree from an accredited college/university and board certification to practice music therapy. The profession was established in 1950 as a result of work done with veterans during World Wars I & II. It is specialized training (music, psychology, health/human development), and there are more than 5,000 music therapists working in the United States. Over the past 5 years, sustained national attention on the importance of music for health has been seen. In 2017, the National Institute of Health, in partnership with the John F. Kennedy Center for the Performing Arts, launched a two day workshop to discuss the current landscape of research on the interaction of music on the brain, and to discuss how music is used as therapy. Just five months later, the NIH/Kennedy Center in association with the NEA hosted *Music and the Mind* presenting the first public initiative for the Sound Health Partnership. Dr. Robb had the privilege of curating the session on music therapy, along with Ben Folds, and an amazing group of panelists who blended the art and science of music through scientific evidence and personal stories told by clinician/client partners.

Worldwide, a child is diagnosed with cancer every two minutes. Cancer is the number one disease killer of children in the U.S., and one in five kids won't survive. Of those, two-thirds will suffer long term effects. Dr. Robb's research looked at how music can be used to create supportive environments. For years she had done clinical work with children who had conditions requiring treatments that were difficult and potentially traumatic. As a music therapist, her job was to help them cope and move through these experiences. Work by Skinner & Wellborn and their Motivational Theory of Coping argues that all humans have a fundamental need to experience competence, exercise their autonomy, and develop meaningful relationships; and that these three drives direct our behavior. Equally important is the environment, because some environments inhibit these drives, while others support them.

Stressful environments tend to be: chaotic – meaning they are unpredictable; coercive – meaning your opportunities for choice and control are constrained or taken away; and they can feel neglectful – due the absence of supportive people to help navigate challenge. Cancer treatment has these stressful characteristics. In contrast, supportive environments tend to be: structured – meaning they are predictable; support autonomy – meaning you have opportunities to make meaningful choices and have some control; and support relationships – meaning you have people to support you.

Music is a primary way that young children cope with difficult life experiences. Disaffection is a natural response to stress, and, for some children this looks like withdrawal from the environment (disengagement). For other children it is a response of anger and an inability to organize their behavior. Prolonged disaffection is not good for coping and adjustment to illness. The therapist uses music play to move young children from a state of disaffection to one of engagement. The music therapist works with young children and their parent(s) during in-patient chemotherapy. Within the session, the music therapist tailors or individualizes music experiences to meet the “in-the-moment” needs of the child and parents. This is where the skill of the therapist becomes essential. It is the therapist’s ability to level the activity based on the child’s energy and distress levels, qualities of the parent-child relationship, and the amount of support required to sustain engagement over time. The therapist is working to “engage” the child and parent in a variety of age appropriate music activities to help normalize the environment, and mitigate stress experienced during hospitalization through increased regulation of attention and mood while also empowering the patient and child with resources that they can use. Engagement can be viewed as interplay between the child/parent, therapist, music, and the environment.

Acute emotional distress affects 75% of parents and 50% of children and impacts how families function and their quality of life. Some experience traumatic stress symptoms after treatment ends. The AME intervention is a theoretically derived intervention that uses music play to manage interrelated parent-child distress using music-based play to neutralize potentially traumatic experiences of cancer treatment while supporting positive family growth. Quotes illustrate the benefits of AME:

“I think just being able to play, being able to not think about cancer for 15, 20 minutes, and just be five.”

“He immediately got up and started dancing. It made him forget where he was and what he was doing...he got to kind of step away from the chemo.” To not remember or engage in huge chunks of your life has implications.” (Caitlin Krater, MM, MT-BC)



Sheri Robb