Is the role of music therapy in paediatric burns care changing?

Phases in music therapy treatment of a three-year-old boy with severe burn injury

Aniek Janssen, RMT, Music Therapist at Lady Cilento Children's Hospital, Brisbane

Introduction

Historically, music therapy research in burns has focused on music analgesia, where music therapy interventions and techniques are used to ease the sufferings of the burns patient (Whitehead-Pleaux, 2013). However, in more recent developments, the role of music therapy appears to be changing as clinical procedures such as debridement and dressing changes are conducted under a general anaesthetic.

It is time to explore the changing role of music therapy in paediatric burns care and clinicians are invited to consider modifying and adapting techniques to meet patient needs in an evolving clinical practice area.

Method

When working with a three-year-old boy with severe burn injury the music therapist applied music therapy techniques in different phases of his six-month music therapy program. The patient, 'Jack', was admitted to a large paediatric hospital with severe burns and in his treatment, we can identify different roles music therapy played in in his acute and sub-acute care in an extended length of stay.

We can distinguish six different stages in music therapy treatment for severe burn injury:

Six Roles

1. **Pain management, settling/relaxing, parental engagement**
   During Jack's stay in Paediatric Intensive Care Unit (PICU), music therapy assisted with settling and pain management, especially during and after distressing procedures, and it provided his family with a sense of being included in his cares when he was sedated and intubated.
   Interventions: Gentle humming/singing of familiar songs, fingerpicking guitar in basic chords, recorded music program for settling, introducing music-based imagery for pain management, echoing and reframing pain vocalisations, vocalised breathing.

2. **Weaning sedatives, delirium**
   Following Jack's transfer to the ward, music therapy provided support and assistance for orientating to the here and now while sedation was weaned and Jack emerged from his delirious state.
   Interventions: Singing and humming familiar songs, music-based imagery, vocalised breathing.

3. **Provide Choice and Control**
   Music therapy helped Jack deal with his lengthy admission by having a place to play and be in control of his environment, being able to say 'no' and have a choice in activities.
   Interventions: Introducing active musical play with instruments, choice of songs and games and choice of participation.

4. **Emotional coping, dealing with the trauma**
   Music therapy helped him safely explore the trauma and grief around the loss of a sibling and his severe burn injuries.
   Interventions: Singing of familiar songs to induce memories, music-based imagery, active musical play, recorded music program.

5. **Physical Rehabilitation**
   Music therapy supported in the physical rehabilitation by providing Jack with opportunity to playfully increase moments of purposeful movement to achieve an extended range of motion in his upper limbs and regain fine motor skills.
   Interventions: Singing familiar songs to induce speech, active musical play on different instruments (drums, shakers, keyboard).

6. **Procedural support during minor dressing changes and medical imaging**
   Interventions: Gentle singing and humming, echoing and reframing pain vocalisations, vocalised breathing, music-based imagery, active musical play for refocusing.

Rationale

The method used to shape Jack's music therapy treatment was individual patient-directed music therapy, following the phases in burns care music therapy treatment (acute care, rehabilitation and reconstructive care) described by Neugebauer (2008), using familiar music (children's songs), music-based imagery and improvisational music therapy.

Conclusion and discussion

The role of music therapy in burns care appears to be changing with less focus on the interventions aimed at easing the sufferings of the burns patient during burn wound care.
This case study indicates there still is a role, or multiple roles, for a music therapist in burns care.

Especially in the very early stages of acute care, where music therapy was involved for settling and pain management and assisted Jack with orientating to the here and now while he emerged from his delirious state. This role hasn't been described in literature extensively and could use research.

Music therapy had an important role in laying the groundwork for Jack starting to process his emotions and trauma by inducing memories of the sibling he lost, his family and his house.

References:

1. *Fratianne, R.B., Prensner, J.D., Huston, 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.*
2. *Jinyi Li, Liang Zhou, and Yungui Wang (2017). The effects of music intervention on burn patients during treatment procedures: a systematic review and meta-analysis of randomized controlled trials.*
3. *Lisa L. Arceneaux & Walter J. Meyer (2009). Treatments for common psychiatric conditions among children and adolescents during acute rehabilitation and reintegration phases of burn injury. International Review of Psychiatry, December 2009; 21(6): pages 549–558.*
4. *Mondanaro, J.F. (2013). Surgical and procedural support for children. In Guidelines for Music Therapy Practice in Pediatric Care. Gilsum, NH: Barcelona Publishers, 220-242.*
5. *Neugebauer, C.T. (2008). Pediatric burn recovery: Acute care, rehabilitation, and reconstruction. In D. Hanson-Abromeit & C. Colwell (Eds.), Medical music therapy for pediatrics in hospital setting: Using music to support medical interventions (pp. 195-230). Silver Spring, MD: American Music Therapy Association.*
6. *Protacio, J. (2010). Patient-directed music therapy as an adjunct during burn wound care. Critical Care Nurse, 30(2), 74-6.*
7. *Tan, X., Yowler, C. J., Super, D. M., & Fratianne, R. B. (2010). The efficacy of music therapy protocols for decreasing pain, anxiety, and muscle tension levels during burn dressing changes: a prospective randomized crossover trial. Journal of Burn Care & Research, 31(4), 590-597.*
8. *Whitehead-Pleaux, A. (2013). Burn care for children. In Guidelines for Music Therapy Practice in Pediatric Care. Gilsum, NH: Barcelona Publishers, 252-289.*
9. *Whitehead-Pleaux, A.M., Baryza, M.J., Sheridan, R.L. (2006). The effects of music therapy on pediatric patients' pain and anxiety during donor site dressing change. Journal of Music Therapy, 43(2),136-53.*

Do not cover this area - Do not cover this area - Do not cover this area - Do not cover this area - Do not cover this area - Do not cover this area - Do not cover this area - Do not cover this area - Do not cover this area - Do not cover this area.