

Music Therapy and Integrative Medicine for Cancer using Qualitative Analysis



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Introduction

- Music Therapy is a nonpharmacologic therapy that includes active (singing and playing music instruments) and passive (listening) music-based intervention.
- The Bidirectional Encoder Representations from Transformers (BERT) is a machine learning technique that conducts text analysis and text classification.
- **Objective: This research study will evaluate the ways in which active and passive music therapy is perceived and experienced by patients with cancer through qualitative interviews.**

Methods

- Upon the conclusion of a Music Therapy session, patients were interviewed within the next 24 hours and inquired about their experiences.
- Types of questions asked included reflections about the session, perception of the benefits from the session, in addition to unmet needs or recommendations.
- Interviews were transcribed and de-identified to maintain confidentiality and then categorized in labels as seen on the table to the right.
- A subset of transcripts were double coded to ensure the inter-rater agreement.
- With the labels, analyses were conducted using BERT.

Participants

- Patients were referred from the Memorial Sloan-Kettering Cancer Center and screened to receive music therapy.
- A total of 22 interviews were conducted, transcribed, and categorized.

Results

- As of this current moment, this research project is still in its preliminary stages. All of the necessary and required information has been collected, categorized, and analyzed. However, more time is necessary to run the program and acquire the results to ultimately draw conclusions.

Table 1. Interview Transcript Categories

- Needs and Recommendations
- Significant or Meaningful Song/Role of Music in Life
- Relaxing, lifting spirits, calming, soothing, restful, therapeutic, joyous, stimulating
- Interaction
- Physical Benefit
- Attitudes/Experience with Music Therapy
- Attitudes toward other Non-music Therapy Treatment or Clinical Experience
- Hospital Experience (including general thoughts on integrated medicine)
- Effect of therapy lasts post-visit
- Positive
- Negative
- Active
- Passive
- Comments about therapist/caregiver/musician
- Other comments

Conclusions

- There are inevitable challenges of categorizing qualitative data since its subjective nature, which requires double coding across raters to prevent an individual evaluation bias.
- The application of technology can be applicable and be of significance in a field of research such as music therapy and has the ability to expand further.
- Music therapy should be continued to be used in the clinical setting and further researched to better understand the long lasting positive implications on patients.

References

Lynch, Kathleen A., et al. "Patient Perspectives on Active vs. Passive Music Therapy for Cancer in the Inpatient Setting: A Qualitative Analysis." *Journal of Pain and Symptom Management*, Elsevier, 19 Nov. 2020, www.sciencedirect.com/science/article/abs/pii/S0885392420308836.

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