Music Therapy for the Treatment of Agitation in Patients with Dementia

Roody Dalberis, RN-BSN
Chair: Gerti E. Heider, PhD, MSN, GNP-BC, ANP
Team member: Mary Digilio, DNP, APN, FA, ANP

Introduction
- This project studied the effects of music therapy in treating agitation in patients with dementia.
- Dementia is a broad term used for a syndrome involving a slowly progressive cognitive decline, referred to as chronic confusion (Centers for Disease Control and Prevention, 2018).
- There are more than 100 diseases that can cause dementia (Dementia Australia Association, 2018).
- With dementia of all types, general deterioration of intellectual function is chronic and progressive (Smits et al., 2015).

Background & Significance
- Number of people in the United States with dementia is estimated at 4.5 billion (Yaari & Corey-Bloom, 2007).
- Number of people with dementia is projected to triple between 2010 and 2050 (Hebert et al., 2013).
- Patients with dementia in long term care display symptoms of wandering.
- Negative outcomes - falls, injuries, possibly death (Beattie, Song, & Lagore, 2005).
- Drugs use & side effects.
- Sedation, increased confusion, urinary retention, constipation, tardive dyskinesia, gait disturbances falls, extrapyramidal symptoms, orthostatic hypotension, QT interval prolongation, cerebrovascular accidents, and increased mortality (Correll, Detryns, De Lepeleire, & De Hert, 2015; Kaszew et al., 2019; Reutfors, 2015).

Methodology
- Convenience sample
- Six weeks of music therapy took place in a long-term care facility.
- Newark, 24 hours/7 days of supervision to prevent wandering, elopement, and fall.
- Criteria of inclusion:
  - Adults English speaking male and female
  - Diagnosis of dementia with no concurrent psychiatric disorders
  - No history of wandering, elopement, and fall
  - Free from medical conditions such as stroke or inability to walk
  - Discharged from hospital or nursing home
  - Able to implement the study
  - Free from medical conditions such as stroke or inability to walk
  - Discharged from hospital or nursing home
  - Able to implement the study

Results
- Efficacy of music therapy as a tool:
  To decrease the incidence of aggressive behaviors

- With the completion of the twelve sessions of music therapy:
  IBM SPSS software was used:
  Convert the scores for each patient with dementia into a percentage for data analysis.
  One-way repeated measured analysis of variance (ANOVA) was conducted.
  Participants:
  Males (10) with a percentage of 62.50% - Females (6) with a percentage of 37.50% (Chart 1)
  Black (14) with a percentage of 87.50% - Latino (2) with a percentage of 12.50% (Chart 2)

- Descriptive statistic by comparing the means pretest, during test, posttest:
  Mean of 61.12 before implementation
  Mean of 54.19 two weeks of implementation
  Mean of 49.88 four weeks of implementation
  Mean of 42.88 post implementation

- Profile plot displayed a negative correlation
  The rate of aggressive behaviors went from 61.12 to 42.88.

- Results of the ANOVA indicated a significant time effect Wilks’ Lambda = .03, F (3,13) = 169.6, p < .01, n² = .98
  Thus, there was significant evidence to reject the null hypothesis

Discussion
- Perception of the benefit of music therapy for patients with dementia:
  Knowledge on music therapy
  On low cost of music therapy for patients with dementia
- Become more aware of the importance of music therapy to decrease agitation for patients with dementia
- Positive impacts when adhere to change

Recommendations
- Available for public awareness in the form of articles, journals
- Present the findings and recommendations in speeches and presentations to:
  - Healthcare agencies
  - Organizations
  - Hospitals
  - Long term care
  - Assisted living facilities.

Implications on Practice
- Clinical practice
- Healthcare policy
- Quality & safety
- Education
- Economics

Limitations
- Small sample size increased the risk of type II error
- Lack of pluri-ethnicity from the study
- Most of the participants were Black with a percentage of 87.50%.

Contact Information
For more info contact:
Roody Dalberis, RN-BSN
Tel: 862-888-1530
Email: RoolysDalber@hotmail.com

Reference List