

## 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 involves 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

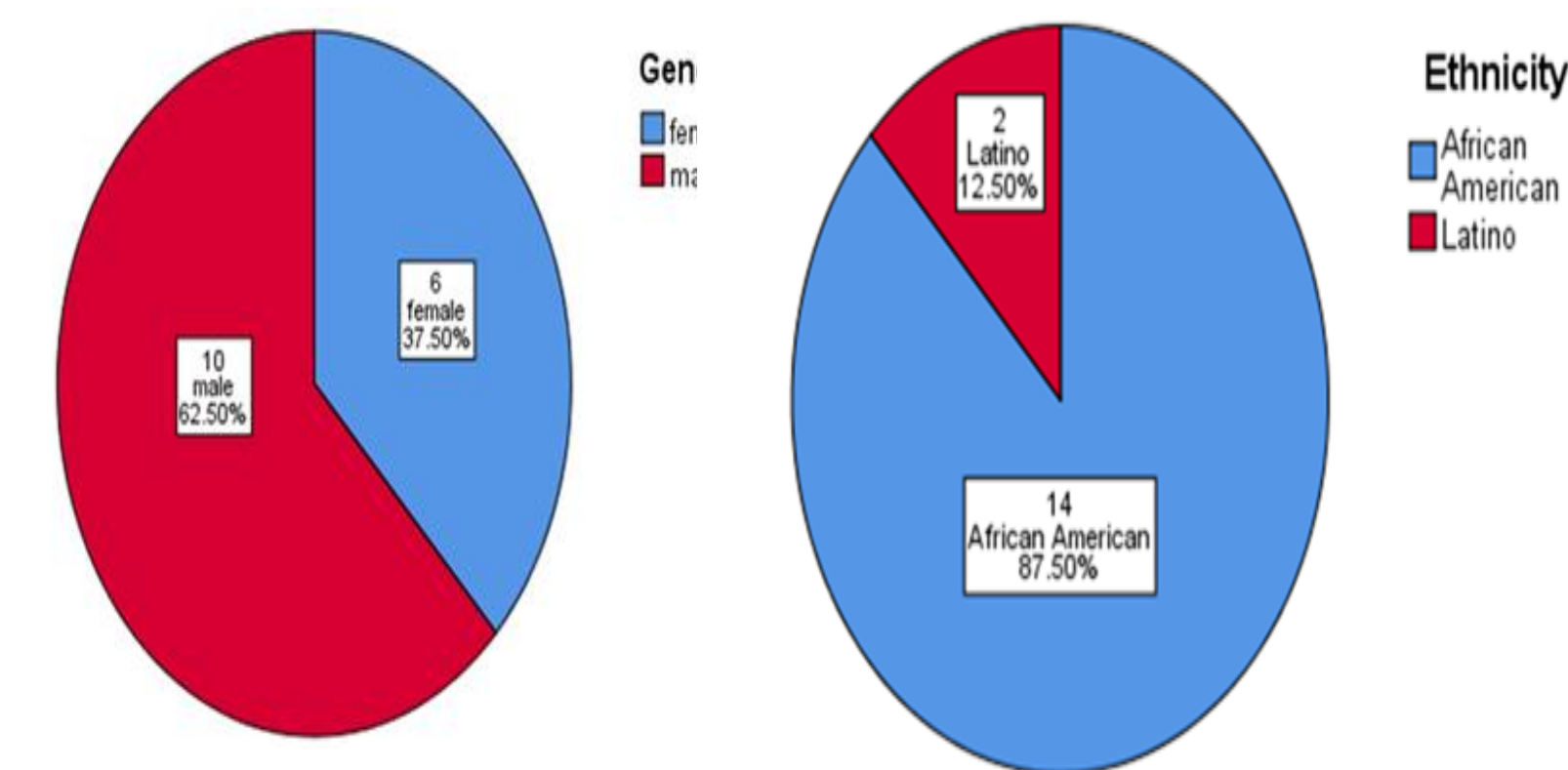
- Number of people in the United States with dementia is estimated at 4.5 billion (Yaari & Corey-Bloom ,2007)
- Number of people with dementia is projected to triple between 2010 and 2050 (Hebert et al., 2013)
- Patients with dementia in long term care display symptoms of wandering
- Negative outcomes :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 increase mortality (Correll, Detraux, De Lepeleire, & De Hert, 2015; Kassew et al., 2019; Reutfors et al., 2016)

## 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 hearing loss
  - Free from medical conditions such as stroke or inability to walk
  - Approved by family member or legal representatives
- thirty-minutes per session twice a week for a period of six weeks
  - Active music therapy
  - Singing, clapping hands
- Music therapy session
  - Pre-session : set up the electronic devices
  - Session : participants will join the group music therapy session
  - Post-session: Soft reflection on music therapy session
- The Cohen-Mansfield Agitation Inventory (CMAI) short form
  - To assess agitation: before the music therapy session
  - Every two weeks during the music therapy session
  - And after the music therapy session.
- Approval from Rutgers School of Nursing IRB
- Recruitment process one week

## Results

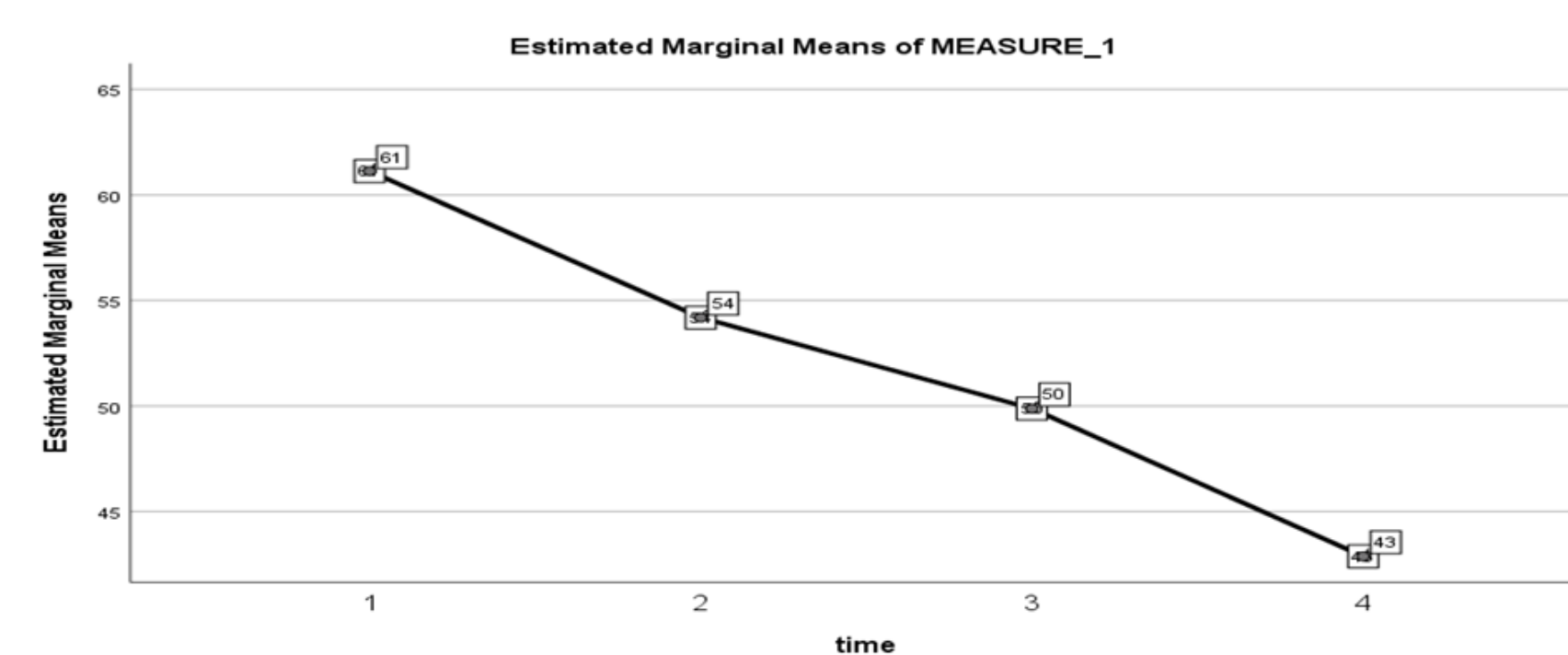
- Efficacy of music therapy as a tool:  
To decrease the incidence of aggressive behaviors  
After the completion of the twelve sessions of music therapy:
- IBM SPSS software was used to:  
Convert the scores for each patient with dementia into a percentage for data analysis  
A one-way repeated measured 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 per



- 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

	Mean	Std. Deviation	N
PRETEST	61.12	2.094	16
DURING TEST1	54.19	1.974	16
DURING TEST2	49.88	1.708	16
POSTTEST	42.88	1.893	16

- 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
- Caregivers, family, healthcare staffs want to practice 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:  
Rody Dalberis, RN-BSN  
Tel: 862-888-1530  
Email: Roodalber@hotmail.com

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