The Individualized Music Program for the people living with Dementia: a feasibility study for Indian population

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Introduction

- Music-based non-pharmacological interventions has demonstrated positive effects on the overall quality of life in persons living with dementia.

- MUSIC & MEMORY® is a USA based organization that helps individuals with cognitive and physical conditions to deal with their impairment through the use of personalized music playlist.

- The idea behind this intervention that emotional connections associated with music will aid the recall of memories that were formed before the dementia set in.

- Within the USA, the program has helped a large number of individuals (>1000) to reduce their dipress related to dementia through the individualized music program. (www.musicandmemory.org)

- The objective of this study is to demonstrate the feasibility of an adapted version of the individualized music program for the people living with dementia in India.

Rationale for the Study

- To show evidence for the positive effect of Music-based non-pharmacological interventions for the Indian population living with dementia

- Adapt the Individualized music based intervention for persons with Dementia in India.

Aim of the Study

- Demonstrate the feasibility of an adapted version of the individualized music program for the people living with dementia in India.

Method

- Adapted the Music Assessment Questionnaires and Playlist Impact Assessment Questionnaire from MUSIC & MEMORY®

- Modified the questionnaires for the Indian version

- Recruited clinically diagnosed dementia patients from Dept. of Neurology, NIMHANS, India (n=14)

- Assessed cognitive domains through the Addenbrooke's Cognitive Examination (ACE)-III, Clinical Dementia Rating (CDR) scale

- Assessed depression through the Cornell Scale of Depression in Dementia (CSDD), and the Geriatric Depression Scale (GDS)

- Prepared personalized playlists for individual patients based on the Music Assessment Questionnaire

- Weekly telephonic follow-up to monitor the progress

- Final 3 month follow-up along with Playlist Impact Assessment Questionnaire and re-assessment of ACE-III, CDR, CSDD, GDS to understand the effect of the Individual Music Intervention (n=7)
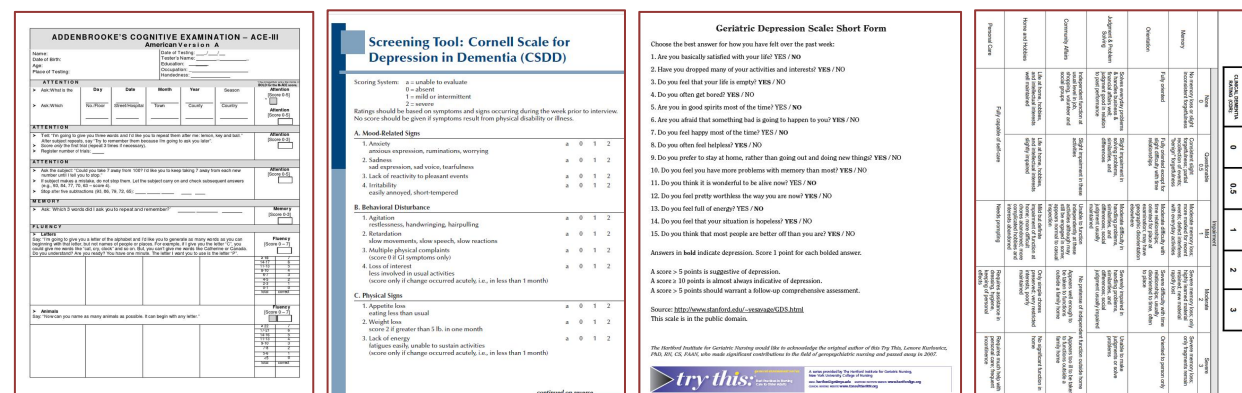

Fig.1 Cognitive Assessments Questionnaires

Fig. 2 Music Assessment Questionnaires

Results

- There was a significant difference in pre and post depression scores after the intervention: CSDD, p=0.010, and GDS, p=0.047

- The patients spend a good part of their leisure time listening to the suggested playlists.

- The majority of the patients showed a reduction in agitation and restlessness while listening to the music.

- In addition, the patients have self-reported that they feel less sad or bored overall.

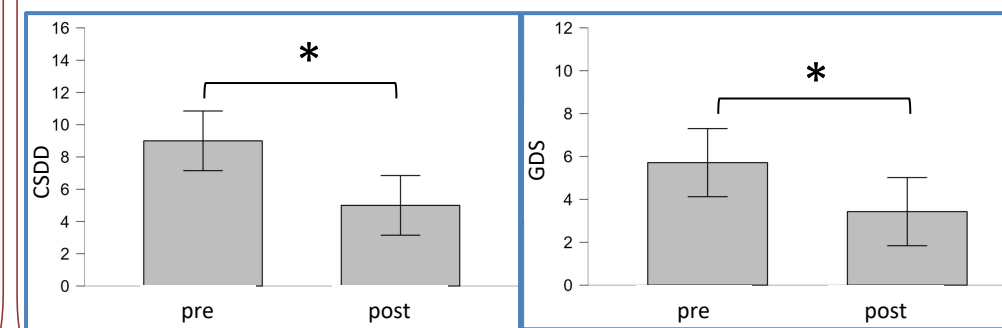- One (out of 7) reported that they felt simply more relaxed during listening times.

Fig.3 Comparison of pre & post intervention scores (3 months) on the CSDD & GDS
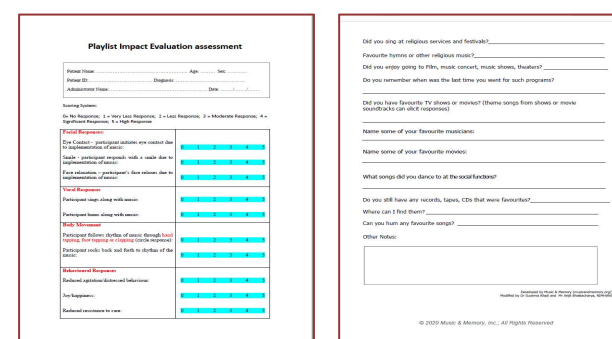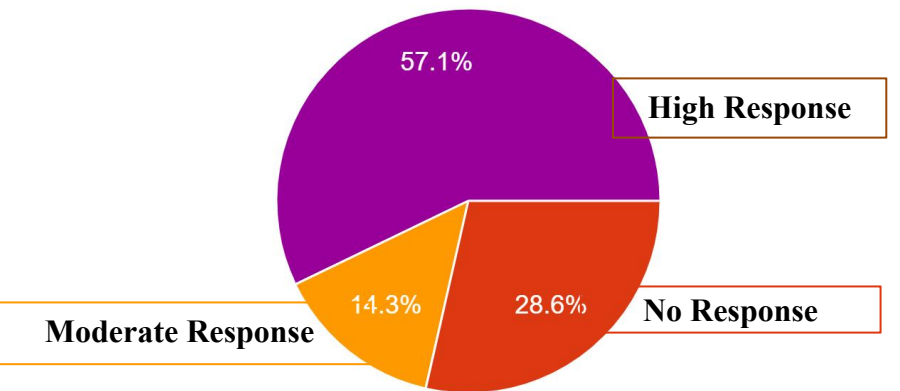

Fig.4 Playlist Impact Assessment Questionnaire: Responses for the degree to which patients recall early childhood, school & college age memories while listening to songs from that time in their individual playlists.
(Scoring: 0-1, No Response; 2-3, Moderate Response; 4-5, High Response)

Discussion

- Music and Memory program has showed a positive impact on the patients' life as well as caregivers'.
- There is a significant decline is depression level after the personalized music intervention.
- Patient remembering their Teenage, School Life and College Life memories.
- Patients' agitation and restlessness has reduced, which has supported the previous research work on Music and Memory at the USA population.
- Whilst the study is still on-going, the findings so far clearly demonstrate that the individualized music program is feasible and useful in Indian populations with dementia and thus likely cross-culturally in the wider sense.

Acknowledgement