



KEY POINT SUMMARY

OBJECTIVES

This study explores the effects of both live interactive and passive pre-recorded music on behavior in apathetic patients with moderate to severe dementia.

Keep music live: Music and the alleviation of apathy in dementia subjects

Holmes, C., Knights, A., Dean, C., Hodkinson, S., Hopkins, V. 2006 | *International Psychogeriatrics*. Volume 18, Issue 4, Pages 623-630

Key Concepts/Context

Over 50% of all people diagnosed with dementia reportedly exhibit apathetic or socially withdrawn behaviors. These behaviors are often problematic for the patients themselves as well as for the individuals tending to the patient's needs. Treatment with antidepressants is common in these situations, but their effectiveness is supported only by weak evidence, and the issue of over-prescription and its subsequent adverse effects has become a major problem in healthcare environments. Musical therapy has been considered as an alternative form of treatment due to its beneficial effects on dementia symptoms, but more methodologically rigorous studies are needed to further investigate the effectiveness of musical therapy.

Methods

32 patients diagnosed with moderate to severe dementia who fulfilled diagnostic criteria for a notable presence of apathy were recruited from residential and nursing homes in England. Patients who were hard of hearing were excluded from the study.

Mean subject age was 84.9, and 28 of the subjects were women. 14 subjects were classified as having moderate dementia while 18 had severe dementia.

Three different activities were arranged: a 30-minute period of silence, a 30-minute period of listening to pre-recorded music, and a 30-minute period of witnessing live music from session musicians. Music played during the live and pre-recorded periods was derived from a mixture of popular songs relevant to the patient age group, including swing music, popular classics, and Scottish dances.

Communal spaces within the respective care facilities were used to hold the all three interventions.



Live musicians all played at a similar volume with their instruments visible, and exhibited similar amounts of physical activity, even while not performing during the silent period.

The order of the interventions was randomized for each subject.

Each subject was filmed once for each of the three musical periods in the same music session of 1.5 hours. All audio was muted during playback of the film for observational purposes. The films were assessed every 3 minutes by an independently trained DCM (Dementia Care Mapping) reader, who evaluated the patient's interactions on a 6-point Likert scale (+5, +3, +1, -1, -3, -5), with +5 indicating a high level of involvement in an expressive activity (exceptional well-being) and -5 indicating extreme apathy, rage, or grief during an expressive activity (exceptional ill-being).

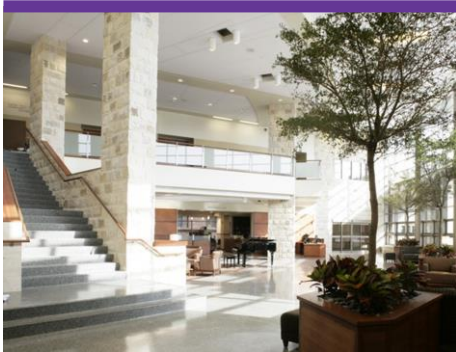
For each patient, 10 DCM scores were determined for each music period, and statistical analyses were performed to determine median DCM scores between the three periods as well as comparisons between patients who scored positively versus those who scored negatively.

Findings

After all 32 subjects participated, none exhibited states of ill-being during the live or pre-recorded music sessions (none scored -1 to -5 on the DCM reading). For all patients, live music was associated with higher levels of positive engagement when compared to the silent periods. However, positive engagement with pre-recorded music was not significantly higher when compared to the silent periods for all patients. Live music was also associated with significantly higher levels of positive engagement with all patients when compared to pre-recorded music. It is clear that the visual experience of witnessing people play instruments has a noticeable qualitative difference for the patients. Thus, stage design as well as the atmosphere of the viewing area could be considered to further enhance patient experience. The median DCM scores of engagement for all patients was +1 during the live music period and 0 during the pre-recorded and silent periods.

Design Implications

In residential or nursing homes where patients are being treated for dementia, an open communal area in which live performances can be viewed may be beneficial. Acoustics in the room should help bolster the quality of the music played, especially since many patients may have varying degrees of hearing loss. Since the visual appearance of performers was an important variable in decreasing patient apathy, the stage area could be well lit to increase visibility. Space for bodily movement such as dancing should be considered since the purpose of the music would be to



The Center for Health Design:
Moving Healthcare Forward

The Center for Health Design advances best practices and empowers healthcare leaders with quality research that demonstrates the value of design to improve health outcomes, patient experience of care, and provider/staff satisfaction and performance.

Learn more at
www.healthdesign.org

decrease patient apathy, thereby encouraging active, positive interaction with the music.

Limitations

A small and homogenous group of subjects was used in this study. The authors intentionally selected music they believed the subjects would enjoy based on their age and geographical location. Author-identified limitations are as follows: DCM raters were unable to evaluate any of the patients’ verbal responses to the musical interventions since video playback was muted. Only the immediate effects of music on dementia patients with symptoms of apathy were evaluated in this study, so no conclusions regarding the long-term effects of music on these symptoms can be made. While attempts were made to minimize the differences between the live music period and the pre-recorded music period, it is obvious that the visual experience of witnessing someone play an instrument has a noticeable qualitative difference for the patients.

The Knowledge Repository is provided with the funding support of:



Additional key point summaries provided by:

