The Effect of Music Therapy on Behavioral Disturbances Seen with Dementia

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PICO Question

In older adults with dementia, does a music therapy program, compared with no music therapy program, reduce the frequency of behavioral disturbances?

Background

Dementia is progressive and degenerative, as it affects a person's memory, behavior, emotion, and personality. Music therapy has drawn attention as a potential non-pharmacological approach to improving the quality of life for persons with dementia. Music therapy may be effective in reducing the behavioral disturbances such as depression, anxiety, psychosis, agitation, aggression, and disinhibition in persons with dementia, and potentially reduce the use of medication.²

Problem

Older adults with dementia may experience behavioral disturbances. Behaviors include:

- Agitation, psychosis, wandering, depression and will often resist care from providers.8
- Current treatments for behavioral disturbances include antipsychotics and benzodiazepines.
- . Side effect risk increase with older age.
- Non-pharmacological treatment methods are not always implemented.

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	Level	Number of Studies	Summary of Evidence	Quality
	I True Experimental	3	 Music group displayed a moderate decline of agitation and dysphoria, while displayed only minimal decrease in behaviors. Both groups showed linear decreases and increases in aberrant motor behavior throughout the study period, respectively.² Those who received standard care and no music intervention saw an increase in psychotropic medication (p=0.02) use compared to music group.⁷ A significant main effect of time (F(3, 56) = 6.87, p= .001, ηp 2 = .27) indicated that CMAI (Cohen-Mansfield Agitation Inventory) scores decreased significantly across the course of the study for all participants.⁸ 	
	II Quasi- Experimental	5	 Music interventions can improve depression and behavioral issues. However, both groups experienced cognitive decline due to the nature of the disease process. ¹¹ Two week music therapy improved symptoms of depression and agitation. Improvement was evident two weeks post-treatment (p score < .001).⁶ Positive improvement in behavioral and psychological symptoms in dementia overall. (NPI global p score < .001 and a score of 28% in the music therapy group).⁵ After music exposure CMAI (Cohen-Mansfield Agitation Inventory) score dropped from 61.2 (SD=16.3) to 51.2 (SD=16.1). Meaning a less score in agitation of dementia patients.⁴ Positive OERS (pleasure and general alertness) had higher occurrences during the CMT sessions (days 2 and 3; mean = 3.12) compared to before and after CMT (mean = 0.68, Z = 3.188, p = 0.01).¹ 	
	III Non- Experimental	2	 Participants enrolled in a music program displayed a reduction in behavioral issues as well as the need for medications intervention compared to counterparts (5.9% improvement of behavior).¹⁰ Caregivers shared positive remarks on beliefs how music will bring to the work environment and for the clients.³ 	A (1) B (1)

Conclusions

- Studies show that music therapy is an effective alternative treatment for patients with dementia in reducing the frequency of behavioral disturbances/ symptoms.^{1,2,3,4,6,7,8,9,10,11}
- Studies found that music therapy moderately reduces the need for pharmacological interventions.¹⁰
- Music therapy reduces, but does not completely eliminate, the rate of cognitive decline.¹¹
- Video reflection on music therapy sessions improves care staff mood, as well as attitudes on future training opportunities.³
- Music therapy was not found to have an effect on the dementia symptom of wandering.⁶

Recommendations

- Long-term memory care facilities should consider implementing playing a variety of music genres throughout speakers kept around the facility.
- Educational programs regarding music as a complementary therapy for individuals with dementia should be available to healthcare providers and caregivers to individuals with dementia.
- Music therapy can be implemented in a group setting through classes or on an individualized basis by selecting an individual's favorite genres.
- Music therapy may be used in replace of or in adjunct with medications prior to tasks which may exacerbate dementia-related behavioral disturbances (bathing, hygiene, etc.).

Methodology

Databases	CINAHL, psychARTICLES, Health Source: Nursing/Academic edition, PubMed	
Keywords	Music Therapy, Dementia, Music, Behavior, Behavioral Disturbances, Alzheimer's, Music Intervention	
Inclusion Criteria	Full text; references included; peer-reviewed journal articles; published from 2015 to present; level I, II, III evidence	



