Impact of Music Therapy on Agitation and Cognitive Impairment in People with Dementia
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Introduction
According to the World Alzheimer’s Report, the people living with Alzheimer’s-type dementia in 2010 was estimated at 27-36 million people worldwide (Alzheimer’s Disease International, 2010). Unfortunately, this disease has no cure, and has minimal effective treatment. However, music has been shown to have an impact in connecting with the person with dementia and improving quality and enjoyment of life. There are many different theories and hypotheses surrounding music therapy and its function in the clinical setting. Many claim that this intervention has the capacity to decrease agitation and anxiety as well as increasing cognitive function. This literature review seeks to determine what the evidence suggests about music therapy as a treatment course to improve the quality of life in patients with dementia.

A systematic search of the electronic databases was conducted in Spring 2013, which included: CINAHL, Web of Science, PsycINFO, and Medline. Key words used included: (Dementia /Alzheimer / Cognit* Impair*)^ Music.

Methods
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Following a systematic search for research on the impact of music on the quality of life of people with dementia 20 studies were evaluated for this literature review. 17 studies included reduction in aggression and difficult behaviors as a primary or secondary outcome of the music therapy. Eleven of the studies focused the outward expressions of aggression and agitation in patients with dementia. Acts of aggression and manifestations of anxiety are common in patients with dementia, and many researchers in the studies used wanted to determine if these symptoms could be decreased through the use of music and music therapy. In one study, the music had no statistically significant impact on agitation, and in another the music therapy intervention used increased the agitation in the dementia patients that were studied. Three studies focused exclusively on cognitive improvement and had mixed results.

Measurement issues, inconsistent definitions of music and music therapy, a lack of standardization in music used, and intervention fidelity limited all studies. There was a broad range in the mental capacity for the patients who participated in these studies. While some studies used all patients diagnosed with dementia, others focused specifically on patients with mild-moderate dementia, while others still focused on patients with moderate-severe dementia. There was also a lot of variation in how the researchers approached “music therapy,” as some brought in trained music therapists, while others used self-invented musical interventions. An interesting point to acknowledge is the hearing capability of the patients; while some studies did this into consideration, most did not.

Results
Anecdotaly, people have found music therapy very useful, but the research lacks the rigor to support or refute these claims. As the population of patients with dementia increases, it is important to research potential treatment options and care measures that may improve the quality of life for these patients. As a practice, there is a positive correlation and little indication of negative side effects, therefore the research appears to support this as an effective compliment to any medical treatment the person may be receiving.

### Articles Excluded:
- Uncited n=647
- Systematic Review n=61
- Editorials/Commentaries n=22

### After duplicates removed n=20

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Conclusion
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REDEFINING WHO MATTERS MOST

Anecdotaly, people have found music therapy very useful, but the research lacks the rigor to support or refute these claims. As the population of patients with dementia increases, it is important to research potential treatment options and care measures that may improve the quality of life for these patients. As a practice, there is a positive correlation and little indication of negative side effects, therefore the research appears to support this as an effective compliment to any medical treatment the person may be receiving.

### References