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Barriers to Music Therapy in the Care of Those With Alzheimer's/ Dementia

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ABSTRACT

This pilot study examines the barriers caregivers encounter when implementing music therapy in the care of those with Alzheimer's/dementia. An 8-question survey was distributed at two long-term care facilities and an Alzheimer's support group to understand how often and in what ways music therapy is utilized, as well as what barriers caregivers face when using the therapy. Results indicated that, although the majority of caregivers report using music therapy, it is not implemented as frequently as it could or should be. Caregivers report a knowledge deficit as the main reason for not implementing music therapy. The data suggests that an educational resource is needed to promote awareness and increase the use of music therapy in the care of those with Alzheimer's/dementia.

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Alzheimer's Disease is a chronic, degenerative disease of the brain. Over 5 million people currently suffer from the disease in the United States, and estimates are that the disease will increase in prevalence in the coming years (Gould & Dyer, 2011, p. 522; Lewis, Dirksen, Heitkemper, & Bucher, 2014, p. 22). The disease is characterized by memory loss, difficulty communicating, and progressive inability to perform Activities of Daily Living. It is ultimately fatal (Lewis et al., 2014, p. 23).

The economic impact of Alzheimer's Disease is massive. Harry Johns, President and CEO of the Alzheimer's Association, estimates that the United States spends over $200 billion in care for these patients every year. In his Testimony of the 2014 Fiscal Year, he gave this quote: "Caring for people with Alzheimer's will cost all payers – Medicare, Medicaid, individuals, private insurance and HMOs [Health Maintenance Organizations] – $20 trillion over the next 40 years, enough to pay off the national debt and still send a $10,000 check to every man, woman, and child in America" (2013). Clearly, this disease has an enormous effect not only on Americans' physical and mental health, but also on their financial well-being. It is essential that steps are taken to care for these patients in the best way possible.

There is no cure for Alzheimer's Disease. Traditional care for those with the disease focuses on symptom management and family support. Some medications can be administered to aid in slowing the progression of symptoms and dealing with anxiety or depression. Other methods of care involve reorienting the person, providing assistance with Activities of Daily Living, and keeping the person safe and comfortable. When the disease progresses to the point of needing increased or total care, families may choose to place their loved one in an adult daycare or long-term care facility to provide respite.

Educational and support groups are available to help those with Alzheimer's and their families manage the progression and demands of the disease.

Music therapy is one way nurses can help Alzheimer's patients cope with the disease. It is inexpensive, takes little or no special equipment, and can be implemented in a variety of ways.

Purpose and Description

The purpose of this Capstone Project was to discover how often and in what ways music therapy is being implemented with Alzheimer's patients in the home and long-term care settings. Barriers to implementing music therapy were examined.

After analyzing the responses to the initial question, the need for further education and promotion of music therapy was evaluated. The purpose of this segment of the study was so that a teaching resource could be created if needed. Eventually, the resource could be distributed to caregivers in the home and long-term care settings to educate and promote the use of music therapy in the care of those with Alzheimer's/dementia.

Research Question and Hypothesis

This study examines the question, 'What barriers do caregivers in the home and long-term care settings experience when implementing music therapy in the care of those with Alzheimer's/dementia?'.

It was hypothesized that music therapy is not often implemented in the care of those with Alzheimer's/dementia especially in the long-term care setting. Caregivers and nurses may lack knowledge about how to incorporate music into their daily routines. Some may feel that they do not have time to utilize another intervention.

Significance of Study

Nurses and caregivers can benefit from this study by considering alternative methods of care, specifically music therapy, that could benefit those with Alzheimer's/dementia. Upon completion of this study, caregivers will have an increased awareness of the barriers they experience when implementing music therapy, as well as ideas of what they can do to overcome such barriers. Additionally, those with Alzheimer's/dementia may benefit by an eventual increased use of music therapy in their care.

Review of Literature

Music therapy is a broad topic, with a variety of applications. Much research exists about the general topic, but more is needed to investigate specific questions and inquiries. During an extensive literature review, the research was divided into two categories: the benefits of music therapy and how it acts on the brain, and the application of music therapy to other nursing interventions, such as exercise and nutrition.

While researching music therapy as a whole, an interesting study was discovered by Fukui and Toyoshima (2008). They proposed that music actually enables brain cells to regenerate and repair themselves. Interestingly, steroid hormones such as testosterone, cortisol, and estrogen have been shown to be effective in improving cognition and memory function in Alzheimer's patients. Music can raise the levels of these hormones in the body. The researchers recommended that, rather than giving Alzheimer's patients hormone replacement drugs, we encourage the use of music therapy instead. By lowering the dose of the drug needed, or eliminating it all together, we can avoid the side effects and drug interactions that may occur when giving a patient medication.

In the clinical setting, music therapy can effect behavior and cognition of those with Alzheimer's/dementia. A review of eleven studies by Witzke, Rhone, Backhaus, and Shaver (2008) examined the use of music therapy on agitation and aggression. They found that ten out of the eleven studies resulted in positive effects on the patient and subsequently reduced agitation and aggression. Although the eleventh study did not produce many benefits for the patient, there were no negative effects noted with using music therapy on Alzheimer's patients. This finding led the researchers to conclude that, overall, music is a "low-cost, simple alternative to traditional methods of management, with minimal risk to the client" (p. 45). A similar study done by Ozdemir and Akdemir (2009) observed the effects of music combined with painting and time-person-place orientation on the Alzheimer's patients' cognitive abilities, depression levels, and anxiety. They found that the interventions led to improved cognitive ability, reduced depression, and lowered anxiety for up to three weeks.

Music therapy is also valuable when combined with other nursing interventions. It is widely known that exercise is extremely beneficial, even in Alzheimer's patients (Winchester et al., 2013). Ziv and Lidor (2011) aimed to find out if adding music to an exercise program could improve the therapeutic benefit for these patients. They examined twenty studies testing their hypothesis. They were able to conclude that music can lengthen the duration of the exercise session, improve balance, increase walking speed, and increase motivation to exercise. In one of the studies examined, music was used regularly during exercise sessions. When it was eliminated for three sessions, attendance dropped to 41%. When it was reinstated, attendance increased back up to 68% (Mathews et al., 2001, as cited in Ziv & Lidor, 2011).

Nutrition is another important aspect in the care of Alzheimer's patients. McHugh, Gardstrom, Hiller, Brewer, and Diestelkamp (2012) created a pilot study in which they tested the effects of a re-creative vocal music therapy group on nutritional intake. The study was the first of its kind. During the study, participants (who were all at risk for malnutrition) sang along to familiar songs immediately before lunch. Their dietary intake was measured for twelve weeks and compared to baseline measurements. Although the results were inconclusive – the Certified Nursing Assistants measuring dietary intake frequently forgot to record the data – the premise of the study was promising. More research is needed to fully understand the link between music therapy and nutrition.

While reading the literature, it was noted that few researchers addressed the barriers of music therapy. Most all of the research findings pointed to clear benefits for the patient, yet music therapy is not being implemented in care settings as standard practice. This study aims to discover these barriers, as well as evaluate the need for an educational resource on music therapy.

Operational Definition of Concepts

In order to fully comprehend this study and its results, one must understand the terms used. Important terms to know include music therapy, caregivers, and barriers to music therapy implementation.

For the purpose of this study, music therapy is defined as any musical intervention used in the care of those with Alzheimer's/dementia. Examples include, but are not limited to, singing a song, listening to the radio, using an iPod or other music player, going to a concert, playing a musical instrument, or engaging with a music therapist.

A caregiver is any person involved in the care of those with Alzheimer's/dementia. This person may be a Registered Nurse (RN), Licensed Practical Nurse (LPN), unlicensed assistive personnel, or a family or friend caring for a loved one, among others.

Barriers to music therapy implementation include any number of factors that prevent a caregiver from using music therapy in the care of those with Alzheimer's/dementia. Barriers may include a knowledge deficit, lack of resources, insufficient funds for training or equipment, or lack of time. Other barriers may also be present.

Methods

To better understand these barriers and evaluate the need for an educational resource, a survey was distributed at two long-term care facilities and one caregiver support group in Statesboro, Georgia. The study was explained to participants before the survey distribution. All participants were required to be at least 18 years of age and currently involved in the care of those with Alzheimer's/dementia.

Data was collected from November 2014 to January 2015. After collection, the data was analyzed using SPSS software. Data was kept secured and anonymous.

Instrument Description

The survey was a simple eight-item questionnaire. Seven of the questions were multiple choice and one was free response.

The survey began by asking participants about their title, years of experience, and hours worked per week. It then asked whether or not participants utilized music therapy in the care of those with Alzheimer's/dementia, and if so, how often and what type. The

survey asked what sort of barriers participants encountered when trying to implement music therapy. Finally, participants were asked to rate their knowledge of music therapy in the care of those with Alzheimer's/dementia on a scale of one to ten (one being no knowledge, ten being extremely knowledgeable) and to state whether or not they felt they needed more education related to music therapy. If they answered yes, participants were asked which type of educational resource (pamphlet, online resource, DVD, group informational session, or something else) would be most beneficial.

Data Analysis & Results

Data was collected from 18 participants. One was an RN, one was an LPN, six were unlicensed assistive personnel, seven were caregivers of a loved one, and three marked the 'other' choice on their surveys. These 'others' included an Alzheimer's support group facilitator, a long-term care facility activities director, and a volunteer for the Silver Lining Club, which group that meets weekly to provide activities and socialization for those with Alzheimer's/dementia. The participants' averaged ten years of experience, with a range from 1 to 38.

Two thirds of the participants (67%) reported using music therapy in their care of those with Alzheimer's/dementia. Of those 67%, types of music therapy used over the course of a year were varied: 30% used singing, 23% used the radio, 20% used live music, 10% used a music therapist, 10% used a musical instrument, and 7% used an iPod or other music-playing device. The frequency that these types of music therapy were used was also varied: singing and listening to the radio were used most frequently (67% of participants used singing either daily or weekly, and 50% listened to the radio daily or weekly). Other types were used less frequently or never.

Of the 33% who reported never using music therapy, four were caregivers of a loved one, one was an unlicensed assistive person, and one was support group facilitator. The majority of these participants stated they "do not know what music therapy is; lack knowledge". Other reasons given were that their loved one "is just not into music" or "prefers to watch TV".

Participants rated their knowledge and awareness of music therapy as an average of 7.4 out of 10, meaning that they felt they were very knowledgeable. When asked to name which aspects of care music therapy can affect, however, many participants did not select all of the correct answers: 72% said it affects memory, cooperativeness, and mood; 44% said it affects sleep and anger/aggression; 28% said it affects exercise, and no participants thought music therapy can affect nutrition. Literature has shown that music therapy can have a positive effect on all of these aspects, so this data indicates a knowledge deficit (Witzke, 2008; Ozdemir & Akdemir, 2009; Winchester et al., 2013; Ziv & Lidor, 2011; McHugh, 2012).

94% of participants stated that they would like more education and information on music therapy. Participants were split about which educational resource they would prefer: 31% would like a group informational session, 27% requested an informational DVD, 23% would prefer an online resource, 12% desire a pamphlet, and 8% would like a different educational resource.

Discussion

The data supported the hypothesis, and showed an overwhelming need for more education on music therapy and the benefits it can offer for those with Alzheimer's/dementia.

Although two thirds of participants utilized music therapy, many used it infrequently. The majority of participants who used music therapy used only singing or listening to the radio as their methods of choice. Increased awareness and education could diversify those methods, as well as increase the frequency of music therapy use.

Data also indicated a need for education about which aspects of care music therapy can affect. None of the participants were able to correctly identify all of the listed aspects that music therapy affects, and none recognized that music therapy can impact nutrition in the Alzheimer's population. Additionally, less than half of all participants knew that sleep, exercise, and anger/aggression can be affected by music therapy. This data suggests a large knowledge deficit.

All but one of the participants stated a desire for more education and information. Since there was no clear choice on which educational method is preferred (participants were fairly evenly split between a group information session, an informational DVD, and an online resource), perhaps the creation and distribution of several methods would be most effective.

Strengths & Limitations

A major strength in this study was the fact that it examines a new area of research. Previous studies have spent minimal time discussing the barriers caregivers encounter when implementing music therapy in the care of those with Alzheimer's/dementia, if they address it at all. It is hoped that this study will inspire further research, as well as promote awareness and education among caregivers for music therapy.

Another strength was that the researcher was able to visit two caregiver support group meetings. In addition to the data the survey collected, the support group meetings

added a different perspective to the research. Participants in the support group meetings were able to vocally expand on their survey responses, as well as share stories about how music therapy has impacted those they care for.

Unfortunately, this study had a small sample size. Due to time and transportation constrictions, the research was limited to Bulloch County, Georgia. Three long-term care facilities and two caregiver support groups in the county were reached out to for survey distribution, and only two facilities and one group responded. Alzheimer's long-term care facilities are generally small, as was the case in these two places, so only a handful of staff members were available to take the survey.

Implications of Findings

Findings from this study indicate that caregivers need education about music therapy. Nurses should aim to increase the total time therapy is implemented by encouraging musical activities use whenever possible, promoting alternative music therapy methods, and brainstorming ideas to overcome barriers to implementation.

Additionally, findings showed that an educational resource should be created and distributed to long-term care facilities and caregiver support groups. Such a resource could be a group information session, an informational DVD, or an online resource; or some combination of the three. Follow-up research should be done after distribution of an educational resource to determine its effectiveness.

Recommendations

Future research should be conducted with a larger sample size in a greater geographical area. Ideally, research findings could be applied to the United States as a

whole, rather than just one county. Researchers should consider examining the hospice and hospital settings as well, to see how they utilize music therapy.

After the creation and distribution of an educational resource, a long-term study should be designed to evaluate its success in increasing the use of music therapy. This study was essentially a pilot study, so there are many opportunities for future inquiries about the barriers of implementing music therapy.

Conclusion

The findings of this study concluded that music therapy is not implemented as often as it could or should be. The main barrier to this lack of implementation is a knowledge deficit – caregivers lack the awareness and information necessary to successfully implement music therapy. Results suggest that an educational resource is wanted and needed to bridge the knowledge gap. Finally, further research should be done in order to fully understand the barriers caregivers face when implementing music therapy in the care of those with Alzheimer's/dementia.

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