Using music therapy to help a client with Alzheimer's disease adapt to long-term care

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Abstract

The purpose of this case study is to illustrate how music therapy can be used to help the elderly successfully adjust to living in a long-term care (LTC) facility. LTC residents, particularly those with Alzheimer's disease or related dementia, may exhibit behaviors such as depression, withdrawal, anxiety, emotional liability, confusion, and memory difficulties, frequently related to the disorder, but often exacerbated by difficulty in adjustment to the change in lifestyle. The subject of this case study demonstrated these symptoms. Music therapy helped him adjust to life in a LTC setting by improving his quality of life and enhancing his relationships with those around him. As chronicled in this study, music therapy may facilitate a resident's adjustment to life in a LTC facility.

N.B. Names and identifying information have been changed to protect privacy.

Key words: Alzheimer's disease, dementia patients, long-term care, music therapy

Introduction

The Canadian Association for Music therapy defines music therapy as "... the skillful use of music and musical elements by an accredited music therapist to promote, maintain, and restore mental, physical, emotional, and spiritual health. Music has nonverbal, creative, structural, and emotional qualities. These are used in the therapeutic relationship to facilitate contact, interaction, self-awareness, learning, self-expression, communication, and personal development."[1] Possible music therapy goals when working with the elderly, particularly those with some form of dementia, include increased self-esteem, temporary alleviation of depression and anxiety, increased attention span, decreased wandering, increased socialization, increased communication, enhanced mental functioning, maintenance of or increased motor skills and coordination, distraction from pain, and increased opportunity for creativity and expression of emotions. Music can facilitate reminiscence, reality orientation, life review, and validation. Music therapy activities might include singing both familiar and new songs, movement or exercise to music, playing percussion instruments, controlled listening to music, improvising with voice or instruments, composing music, and engaging in discussion and trivia related to themes and music . Before embarking on a music therapy program, clients are assessed by a music therapist to identify skills, needs, interests, preferences, goals, and objectives, and then assigned to a treatment environment (*e.g.*, individual, large or small group participation). The music therapist collects data, which are documented after each session. Music therapy programs are evaluated regularly and changes are made as needed.

Alzheimer's disease (AD) and related dementias seem to be household words these days. At present, there are an estimated 300,000 to 500,000 Canadians (117,600 in Ontario)[2] and four million Americans[3] suffering from AD and related dementias. Over half of all residents in long-term care (LTC) facilities are victims of these disorders,[4] and exhibit a greater severity of dementia than those living in the community.[5] Symptoms of AD include gradual onset and progressive decline of memory, judgement, or reasoning, and impairment in ability to perform well known tasks.[6] Other behavioral characteristics of the disease include anxiety, restlessness, depression, withdrawal, disorientation, and rapid mood changes.

A period of transition generally accompanies a move into a nursing home. This adjustment time usually stems from loss of independence, the patient's denial of the need for increased support, and loss of familiar surroundings and people. Many new residents may begin to feel helpless or unable to make choices or decisions for

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themselves. If they are denied the opportunity to exercise choice, their motivation to respond in situations is diminished. The longer the resident does not use his or her ability to make decisions and choices, the harder it becomes to "function normally."[7] Wilson[8] demonstrated that many residents pass through three phases during transition: feeling overwhelmed, adjustment, and initial acceptance. Those who had a planned admission to the nursing home passed through these phases at a faster pace than those without planned admissions did. Many experience grief from this change in lifestyle, becoming depressed, angry, or reclusive, choosing to stay in their rooms for most of the day. They may also appear to be apathetic and bored, since most of their day is spent waiting: waiting for meals, waiting for assistance with personal care, waiting for someone to talk to them. The initial encounter with LTC can be critical in setting the tone for overall prognosis. Whatever resources that can facilitate the transition process must be maximized. Music therapy not only helps residents deal with the issues arising from dementia, but also assists in the transition into LTC settings by providing perhaps one of the only familiar things that a person with AD or related dementia experiences in a day: meaningful music. Music therapy provides opportunities for the resident to exercise the ability to make decisions and choices and to use other existing skills. Both are crucial to successful adjustment to LTC.

Literature review

Music therapy has been demonstrated to help the elderly in the following ways: relieve anxiety and promote relaxation,[9-13] provide opportunity for reality orientation[14,15] and access to memory,[16-18] provide cognitive stimulation,[19,20] increase attention span,[21,22] increase socialization[23] and social skills,[24,25] and improve quality of life.[26-28] Kumar *et al.*[29] discovered that levels of melatonin—a hormone that helps regulate physiological functions and behaviors including circadian rhythms, sleep, and mood—increased significantly in patients with AD after daily music therapy sessions, and further increased after a six-week follow-up. The sessions included active singing, drumming, and instrumental improvisation by the participants. Melatonin levels decrease with age, and the aging effects related to this decrease are exaggerated in those with AD. Kumar *et al.* conclude that the increased melatonin related to music therapy sessions may have contributed to patients' relaxed and calm mood. Other research[30] indicates that when music was played, residents showed a decrease in verbalization and unrelated interactions, indicating that they were focused, but an increase in interactions with each other when the music stopped. Tabloski *et al.*[31] also found reduced agitation and more socially acceptable behaviors in cognitively impaired residents, both during and after music therapy intervention.

Orientation to reality (*i.e.*, time, place, person) is often impaired in persons suffering from dementia. Music intervention can help reorient residents, at least temporarily, as discovered by Millard and Smith[32] and Smith-Marchese.[33] This reorientation is often achieved by including information about day, time, and season in the selected music, and encouraging interaction with other group members during the music program (*i.e.*, promoting awareness of present environment). Some researchers have found that music can provide access to long-term memory, which is often still intact although difficult to reach. Sambandham and Schirm[34] found that residents with the most severe cognitive impairment exhibited the most improvement in memory and reminiscence abilities, compared to those with less severe impairment. Carruth[35] tested residents' ability to name familiar staff members when shown photos after a singing activity and found that music therapy is a good way to improve the recognition and naming abilities of some nursing home residents who suffer from memory loss, due to increased cognition during the music therapy treatment. In relation to memory and cognition, Kovach and Henschel[36] found that dementia patients were able to verbalize coherent thoughts related to a topic more often during exercise and music therapy programs than in art therapy and cognitive activities. The patients also spent more time actively participating in these activities (*i.e.*, attention span increased), and song lyric recall was much better than recollection of other cognitive information. Butterfield-Whitcomb[37] explains that these abilities are carried out through the right cerebral hemisphere and subcortical areas of the brain, which are affected in later stages of the disease. These abilities include, but are not limited to, recognition of and functional ability in music and rhythmic movement, some social skills, nonverbal communication, idioms, proverbs, and humor. The ability to remember lyrics of familiar songs (*i.e.*, long-term memory), as well as these other skills, increases self-esteem and helps maintain the dignity of those suffering from dementia.

Music therapy also helps to encourage and increase socialization in withdrawn dementia patients. Smith-Marchese[38] found an increase in sociability of Alzheimer's residents after music therapy intervention, consisting of eye contact, facial expression, and body language. Sambandham and Schirm[39] stated in their findings that socially acceptable behavior and behavior suggesting that residents were mentally stimulated were exhibited after music therapy sessions as well. Another study[40]

found an increase in social behaviors of Alzheimer's patients after music therapy sessions as well as a decrease in nonsocial behaviors (*e.g.*, attention to other things in the room rather than the session at hand, sleeping, talking to self, etc.). Some subjects even assumed leadership roles in the music therapy sessions.

Music therapy promotes the elements necessary for quality living: relaxation, reality orientation, and socialization. Therefore, music therapy can help with the transition to life in an LTC setting and improve the quality of life for residents. In addition, the familiar nature of the appropriate music may be very comforting for a person suffering from dementia, which can, in itself, aid in transition.

In deciding on a research methodology, the author needed to acknowledge the idiosyncratic nature of adaptation. Each person's way of orienting himself or herself to life in an LTC facility may be very different: different behaviors, different coping mechanisms, and different reactions to music therapy and other interventions. Therefore, a case study seemed more appropriate than a traditional quantitative approach. A case study allows for a more in-depth study, leading to general music therapy techniques that could be used with this population. To the author's knowledge, there is no existing study in the literature about the use of music therapy to aid in the critical transition to the LTC setting. In response to this lack of information, this case study examines the effects of music therapy intervention on the transition to life in an LTC setting of a resident diagnosed with Alzheimer's disease and exhibiting depression, agitation, reclusiveness, and emotional liability.

Case study

Background

Sunnyside Home is a nonprofit, long-term care facility, owned and operated by the Regional Municipality of Waterloo in Kitchener, Ontario. There are 263 beds in this facility, which also offers specialized care and services for those with Alzheimer's disease, psychogeriatric conditions, and physical disabilities. In addition, the home provides respite care, including an Alzheimer's Weekend Program, and a short-stay program for individuals discharged from the hospital who need assistance while recovering before returning to their own homes. Sunnyside houses the Alzheimer Day Away Program, extends dining programs for other seniors in the community, and provides educational placements for students and interns in the fields of music therapy, recreation therapy, health care, chaplaincy, and social work.

Sunnyside Home hired a full-time music therapist in March 1999, the first full-time employment opportunity for a music therapist in the area (other than music therapy educators at Wilfrid Laurier University).

Environment for sessions

Music therapy group sessions at Sunnyside Home take place in the general lounge areas of each section of the home, usually near the piano. Individual sessions may also take place in these areas if the piano is needed; otherwise, a more private location, such as a bedroom or the chapel, is used. When sessions take place in the lounge area, the specified resident or residents are seated near the therapist. Other residents may also be seated in the vicinity and are invited to listen.

Social history

Phil was born in 1913 and grew up in a little town north of Toronto. Phil's father was a farmer as well as a carpenter, and Phil helped out on the farm. During the Great Depression, when Phil was 19 years old, he was "riding the rails" while looking for work. He fell off the train, traumatically amputating his left leg. Phil had an artificial leg, which he wore for many years. He now chooses not to wear it and uses a wheelchair for mobility. Phil met his wife, Mary, while teaching at an aircraft school in Ontario. At this trade school, Phil helped to develop skilled workers for the factories needed for the war effort during World War II. When the war was over, these trade schools were closed and Phil sought work as a welder at a steel company in Ontario. Phil proudly states that he retired from this company after working for 30 years and one month. Phil and Mary had two sons who live nearby. Upon admission to the home, Phil was described by his family as a hard worker and one who likes to drink beer and smoke cigarettes or a pipe.

A skilled carpenter, Phil built two boats and a few houses, including one in which he raised his family. Phil also constructed steel toys, which he sold all over Canada.

Phil is very musical and will proudly talk about his mother teaching him to play the mandolin and to read music. He also plays the banjo. He played in a square dancing band and his son says that Phil was an extremely talented musician. Phil tells the story of a friend who also played the banjo, but, after hearing Phil play a particularly difficult song, the friend said he was going home to destroy his own banjo because he would never play as well as Phil.

Phil's family chose to have him moved from a nearby town to Sunnyside Home in their hometown, so that Phil would be closer to them. Phil had been diagnosed with probable Alzheimer's disease, but, upon admission to Sunnyside, he also appeared quite depressed and reclusive. He seemed angry with his family, presumably because he did not want to be placed in the home and

blamed them for this decision. The recreation therapist said that Phil preferred to remain in his room most of the day, only coming out for mealtimes. Phil would not go on outings with the other residents and rarely talked to other people. Phil was described by staff as being "grumpy" and his family did not visit often. His antisocial behavior continued for six months. Around this time, the music therapist (MT) began offering music therapy sessions in the section of the home where Phil lived. Phil overheard a music therapy session one morning and asked the recreation therapist (RT): "What's going on over there?" The RT explained and asked Phil if he would like to join the group, thus commencing the role music therapy would play in Phil's adjustment to living at Sunnyside Home.

Assessment

Phil was first assessed in the music therapy group in which he had shown an interest. Weekly themes were chosen and the MT used music to stimulate reminiscence, exercise or movement, and socialization, and to offer opportunities for cognitive stimulation. Phil was invited to attend the group and usually needed no prompting to get out of bed and wheel himself down to the lounge area. Phil demonstrated reluctance to participate in some aspects of the session, such as playing percussion instruments, acknowledging others, and singing. He had favorite songs for which he would repeatedly ask, regardless of the weekly theme on which the sessions were based. Sometimes, the MT would accommodate his requests, but Phil was often impatient and would leave the session. After two such sessions, the MT decided to offer individual sessions for a period of time with the intention of giving Phil some individual attention and making a recording for him of his favorite music. This accomplished, Phil could listen to the recording of his favorite music before the group session, and perhaps not feel the need to ask repeatedly for these songs during the session.

Treatment

Phil began attending individual music therapy sessions once a week for half an hour. It took a few weeks before he would stay for the full session, 20 minutes being his attention span. The sessions consisted mostly of allowing Phil to choose songs that he would like to hear. The MT would sing and play the piano, encouraging Phil to sing along and sometimes play instruments (*e.g.*, tambourine, drum). Phil seemed to enjoy the individual sessions and participated more frequently than he had during the group sessions. Reluctance to play instruments is common in individuals like Phil, who were once proficient musicians. They seem to feel that if they cannot play an instrument or sing perfectly, they do not want to try at all. For the first two months, Phil attended individual sessions, but he would also come out of his room and join the regular music therapy group when he could hear the piano. Phil was always welcomed, but the MT needed to remind him that his favorite songs could not always be played. Instead, the MT would come and see him privately the next day. This seemed to satisfy Phil, and so he was added once again to the regular group while continuing with individual work.

Other staff noted that Phil had a more positive affect since beginning music therapy. On the weekends, he would often ask when the "piano lady" was coming in again. One day, Phil wheeled himself halfway across the building into the auditorium, looking for the music therapist (the MT occasionally played piano there in the afternoon). This was quite a positive change in behavior for a man who at one time only came out of his room for meals.

At this point, Phil seemed increasingly able to function appropriately in the group. Phil seemed to become more aware of his environment and the people around him, acknowledging others through eye contact, discussion, and attention while they talked. His mood seemed to change, and he joked around with staff and residents both before and during the sessions. While he still asked for his favorite songs, Phil was more willing to suggest music that was related to the weekly theme. Phil even demonstrated evidence of improved memory, recalling names and countries from which some residents had come. In individual sessions, Phil continued to propose songs that he enjoyed hearing, particularly those which he had played on the banjo in the square dancing band.

The MT had brought in a banjo for Phil to try, but it was much smaller than the one he had played. The MT contacted Phil's son who offered to bring Phil's old banjo as well as some sheet music and a favorite recording of square dance music. In the meantime, Phil told stories about his past that were called to mind by the music he suggested. Phil seemed proud of his job as a welder, and so the MT decided that it might be beneficial to write a song with Phil about his experience. In preparation, the MT played "All the Nice Girls Love a Sailor" with the intent of changing the words to suit the job of a welder. Phil caught onto this very quickly and initiated the word changes. In a short time and with very little assistance from the MT, this song was composed:

> *All the nice girls love a welder, all the nice girls love his money.*
>
> *For there's something about a welder, well you can call me honey.*
>
> *Hot and sweaty, brown and dirty, he's a ladies' pride and joy*

Fell in love with Mary Mercer, then he's off to weld again.

Watch out! Get outta the road!

The MT recorded herself playing the piano and singing the songs that Phil had requested in the previous five months, including "All the Nice Girls Love a Welder." The MT arranged for a tape player to be put in Phil's room and showed him how to operate it. In the meantime, Phil's son, Peter, brought in Phil's old banjo. Phil seemed pleased to see it, but was reluctant to play. With some gentle coaxing, he agreed to try it, and played "Yankee Doodle" with some difficulty. The next week, he tried again and played the song perfectly several times. Phil said that he always played the melody because it was cheating if one only played the chords. Each week, despite his resistance and saying that he "couldn't play anymore," Phil's banjo playing improved.

Phil's participation in the group setting also continued to improve. He became increasingly able to suggest songs that were related to the theme, and if Phil wanted to hear a song that was not related, he would try to make that song "fit." For example, during one particular session around Halloween, Phil wanted the MT to play "The Old Red Barn" (a song he asked for almost every week). Phil said, "We tore down the old red barn on Halloween night. So why don't you play that?" He initiated discussion more often in the group setting and began to tell jokes to the other residents. During one particular session when the group was participating in a movement and exercise task, they were asked to "shake a leg." Phil asked, "Which leg do you want? Because if you want me to shake my left one, I'll have to get my wooden leg out of my room!"

Phil also agreed to play his banjo for the rest of the group on several occasions and seemed pleased by the applause of the other residents. He would then proceed to tell everyone about his banjo, what he had paid for it, and what it would be worth today. Another event worth noting was when Phil demonstrated his improved memory skills. The week after composing "All the Nice Girls Love a Welder," Phil asked for this song by name during the group session and asked for it again several times throughout the following months. Note that the bulk of these observations occurred within an eight-month span, but the group sessions have continued up to and including the time of writing this case study. These are all quite remarkable occurrences when one considers that Phil was recently depressed and reclusive with a diagnosis of degenerative Alzheimer's disease.

Results

The MT decided that the goal for the individual sessions had been met, and Phil was discharged from these sessions and continued to attend the group sessions. The RT and other staff commented about how the music therapy sessions had helped Phil adjust to living at Sunnyside Home. Phil comes out of his room much more frequently, even just to sit in the lounge area and watch television or talk to others. Phil regularly wheels himself halfway across the home in the afternoon to have a drink. Phil attends other special functions and outings, which he refused to do before music therapy intervention. Phil is much more pleasant and social, and staff members say that his family visits more often because of this. Phil seems less confused, perhaps because he is no longer depressed (depression sometimes contributes to dementia). Phil seems happier and says that he is looking forward to more things.

Conclusion

Music can be a very powerful tool in the hands of a trained music therapist. The author has seen many lives affected by the potency of music therapy. This case study demonstrates the important role music therapy plays in the often difficult transition from independent home life to living in an LTC facility, particularly for elderly individuals with dementia. Individual music therapy sessions can help a resident acquire the skills necessary to participate in group sessions, which may expand into new recreation programs as well. Increased participation will help improve the quality of life of residents and give meaning to their days. For the depressed and reclusive resident described in this study, music therapy helped to bring him out of his bedroom and into the numerous social and recreational opportunities available to him. Music therapy helped to make the other staff members' jobs more enjoyable while working with Phil, and facilitated the relationship between Phil and his sons. This author recommends that music therapy be made available for residents of all nursing homes. Music is familiar, drug-free, and can be a comforting and stimulating agent for almost everyone.

When using music for the purpose of aiding in transition into the LTC setting, the music therapist must discover the musical preferences of the resident. This can be acquired through an interview with the resident or family, or through observation if the aforementioned methods are not feasible. If music does not interest the resident, music therapy will probably not help. By observation of Phil and other elderly residents, it is apparent that focusing on the resident's skills that are still intact (*i.e.*, singing, playing instruments, answering trivia, dancing, speaking, choice-making) is important for successful treatment. If the resident feels like a failure, he or she may refuse therapy, and the therapist will lose all chance of helping him or her.

Encouragement and verbal praise are very important, but should not be used excessively; it is important that the praise is genuine. Try to make the environment failure-free and integrate the resident's contributions as much as possible, even if they are not related to the present situation. Flexibility and creativity are the keys. These techniques will help the resident adjust to his or her new home by creating an enjoyable environment, and they will help him or her feel comfortable and offer something familiar in the new surroundings. This approach will also help to maintain dignity and decrease feelings of dependency and uselessness, increasing his or her self-esteem and providing something to which he or she can look forward.

An idea for future research might be to study the average length of time needed for successful integration into life in an LTC setting, comparing a group of residents who receive music therapy intervention for this purpose with those who do not. Care would need to be taken to observe individual ways of adaptation (*i.e.*, individual behaviors to indicate that this person has in fact successfully achieved integration into the LTC setting). If music therapy can help relieve depression, anxiety, and other behavioral consequences of this transition, perhaps the need for medication can be reduced, thus eliminating undesirable side-effects, secondary problems, and unnecessary cost. In this author's opinion, music therapy should be a right, not a privilege, so that all institutionalized elderly may reap its benefits as they face the difficult task of adjusting to life in an LTC facility.

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