Music Therapy and Animal Assisted Therapy in End of Life Care:
A Qualitative Case Study

By Sharon Alery, MT-BC

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Abstract

This thesis is a qualitative case study illustrating the experiences of one hospice patient and her family as they received sessions that included both music therapy and animal assisted therapy. Four therapy sessions were video/audio recorded and then transcribed; a family member was interviewed following sessions. An independent observer watched the video and checked transcriptions for accuracy and provided an impression of the patient’s responses to music therapy (MT) and animal assisted therapy (AAT) interventions. The independent observer and this researcher observed that the patient was alert and interactive during music therapy/animal assisted therapy sessions. The patient was unable to reflect on the meaning of MT/AAT and quality of life due to level of her dementia. The patient’s family stated that music and dogs had always been an important part of their mom’s life. One of the patient’s daughters stated that because her mom can still participate and enjoy these things this meant that she has quality of life.
Acknowledgements

This thesis is dedicated to the memory of my sister Debbie Sandstrom who remains my hero and inspiration in life. Also in memory of therapy dogs, Franky and Rosie for their years of service that inspired this thesis.
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Introduction

Hospice is defined by the National Hospice and Palliative Care Organization as, “the model for quality compassionate care for people facing a life limiting illness or injury” (2012, para.1). Alleviating suffering and physical pain are the primary goals of hospice care. Terry and Olson (2004) studied the meaning of suffering for hospice patients and found that relief of pain and relief of suffering were not the same. Hospice patients may experience suffering as physical symptoms, emotional distress, spiritual anguish, or psychosocial concerns. A way to address pain and suffering is to ensure that a hospice patient experiences quality of life at the highest level possible. Hilliard (2005) stated that within hospice care quality of life is a term that means the ability to achieve the best possible life a patient can have until their death. Quality of life may be enhanced with the addition of specific services such as: chaplaincy, music therapy, massage therapy and animal assisted therapy (Lee, Chan, & Mok, 2012; Hilliard, 2005). The two services explored in this paper will be music therapy (MT) and animal assisted therapy (AAT).

Carlson, Morrison, Holford, and Bradley (2007) conducted a survey to determine commonly offered hospice services. These services cover five domains of care and include nursing care, physician care, medication management, psychosocial support, and caregiver support. Of the patients surveyed, only 22% elected to receive services across all domains. Similarly, of the hospice programs surveyed, only 14% offered services across all five domains. Professionals providing services in hospice care include physicians, registered nurses, nursing assistants, social workers, music therapists,
chaplains, bereavement care professionals, massage therapists and persons providing animal assisted therapy (Demmer & Sauer 2002; Hilliard, 2005).

“Music therapy is the clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional who has completed an approved music therapy program” (American Music Therapy Association, 2011, para.1). Music therapists work with a variety of populations including: the elderly, children and adults with developmental disabilities, persons with mental health challenges, those with medical needs and persons in hospice care. Some interventions that may be used in these settings are: pain control, distraction during a medical procedure, relaxation, music discussions to heighten cognitive functioning or heighten self-esteem, and the use of music to teach activities of daily living. Music therapists working in hospice care address quality of life issues (Hilliard, 2005), pain and symptom management (Curtis, 1986; Krout, 2001), and provide spiritual and emotional support for patients and their families (Hilliard, 2005).

The use of animals in healthcare settings is often referred to as *pet therapy*. However, more specific terms exist that better describe these services such as animal assisted activity (AAA) and animal assisted therapy (AAT). The term *animal assisted activity* is the activity involving pets visiting people. An example of AAA is therapy dogs and handlers visiting patients in a nursing home, with no specific therapeutic goals for individual patients. *Animal assisted therapy*, however, is defined as the use of a certified therapy dog and handler team visiting patients for therapeutic outcomes, with
individual goals and objectives integrated into the interdisciplinary plan of care (Bloom, Wijewickrama & Smith, 2005).

A large body of research exists concerning the effect of music therapy on quality of life (Hilliard, 2003, 2005; Curtis, 1986; Dileo & Loewy, 2005). However, few studies exist regarding the benefit of animal assisted therapy visits for terminally ill patients. The existing research indicates the need for further research to show the benefits of animal assisted therapy (Phelps, Mitenberger, Jens, & Wadeson, 2008; Knisely, Baker & Baker, 2012). This researcher was unable to find existing research combining music therapy and animal assisted therapy.

I have noticed in my personal work as a hospice music therapist that MT and AAT combined seem to provide a positive experience for patients and families. However, no research exists investigating the meaning of the experience of a hospice patient receiving combined MT and AAT visits. Through this case study I attempted to gain an understanding of the experiences of a hospice patient who received both music therapy and animal assisted therapy sessions. The patient’s family had an opportunity to provide their perspectives as well.
Review of Literature

Hospice Care and History

Cicely Saunders is the founder of the modern day hospice. Saunders received her training as a nurse, social worker and finally a physician at St. Joseph’s Hospice in the 1950’s and 1960’s (Hilliard, 2005). In 1967, Saunders opened St. Christopher’s Hospice in London. In 1963, Saunders presented her philosophy of hospice care to a group of medical professionals at Yale-New Haven Medical Center in Connecticut. This began a movement toward a patient’s right to decide the preferred treatment approach. Would a patient choose to continue curative treatment or choose non-curative treatment through hospice? In 1974, Cicely Saunders created the first hospice in the United States called Hospice Inc. This hospice employed professionals and served patients in their home environment with an emphasis on palliative care (symptom alleviation) and comfort (Hilliard, 2005). Dr. Elisabeth Kubler-Ross was instrumental in the growth of hospice care across the United States in the 1970’s (Hilliard, 2005). To Kubler-Ross “dying was seen as a rich complex human experience, not simply the end result of a failed medical intervention” (Hill & Shirley, 1992, p. 34).

The terms palliative care and hospice care are often used interchangeably, yet have differences (Hilliard, 2005). In palliative care a patient may seek life-prolonging therapies (Dileo & Loewy, 2005). In hospice care the focus is not on curative treatments but on achieving and maintaining comfort and elevating quality of life (Hilliard, 2005). Manning (1984) defines hospice as neither hastening death nor prolonging life, and there is an effort made to affirm life until a natural death occurs.
Quality of Life

It is the goal of hospice to assist each patient to experience a good death. Quality of life is a term used in hospice care to describe the best possible life one can have until one dies (Hilliard, 2005). Kubler-Ross stated that there are few nursing homes that create environments to help patients “live until they die” (1978, p. 22). She goes on to state that unless patients receive more than basic services they will never achieve a sense of pride, self-respect, or dignity. Quality of life refers to addressing spiritual and psychosocial distress as well as physical and emotional suffering (Hilliard, 2005).

A tool used to measure quality of life (QOL) is the McGill Quality of Life Questionnaire (Cohen, 1997). The questionnaire is a self-reported tool with a series of questions covering all domains of QOL. Tierney, Horton, Hannan, and Tierney (1998) used this tool along with a symptom assessment while conducting a study to assess the relationship between a patient’s physical and psychological symptoms and quality of life satisfaction during inpatient hospice care. The results showed that satisfaction was more closely associated with the patients’ perceived quality of life than with symptoms.

To increase quality of life, a patient’s suffering must be addressed. Alleviating suffering has been an area of interest for Terry and Olson (2004). This study was conducted to discover when medically-defined suffering matched patients’ perceived suffering. One hundred hospice patients were involved in the study; each patient’s pain scores, reasons for admission, and diagnosis were recorded. In addition, each patient was asked in what ways they were suffering. Results showed a weak correlation
between a patient’s view of suffering and reason for admission. There was also a weak correlation between a patient’s identification of pain as a cause of suffering and recorded pain scales. Out of 100 patients, 25 stated their suffering was due to pain, 30 patients reported physical symptoms as the cause for suffering, 28 identified their suffering as emotional, and seven stated that their suffering was due to a combination of somatic symptoms and emotional pain. This study suggests that for the hospice patient, relief of pain and relief of suffering is not the same thing.

Cohen, Lamont, and Leis (2002) conducted a survey to gather information regarding the primary aspects of QOL for patients with cancer. Twenty patients diagnosed with terminal cancer completed a survey in a qualitative study. The researchers used a content analysis and discovered five domains of determinants of QOL: psychological state, physical and cognitive functioning, quality of palliative care, physical environment, and psychosocial concerns (Cohen et al., 2002).

**Complementary and Alternative Medicine**

Defining complementary and alternative medicine (CAM) is difficult, because the term is very broad and constantly changing. The National Center for Complementary and Alternative Medicine (NCCAM) defines CAM as “a group of diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine” (Complementary and Alternative Medicine, 2013, para.1). Conventional medicine (also called Western or allopathic medicine) is medicine as practiced by holders of medical doctor (M.D.) and doctor of osteopathic medicine (D.O.) degrees and by allied health professionals, such as physical therapists, psychologists,
and registered nurses. The boundaries between CAM and conventional medicine are not absolute, and specific CAM practices may, over time, become widely accepted (Complementary and Alternative Medicine, 2013). Some of the practices considered as CAM include: acupuncture, homeopathy, herbal therapies, chiropractic, massage, exercise/movement, high-dose megavitamins, spiritual healing, lifestyle diet, relaxation, imagery, energy healing, folk remedies, biofeedback, hypnosis, psychotherapy, and art/music therapy (Astin, 1998).

Music Therapy

Although music therapy as a profession began after World War II, music therapists did not work specifically with hospice patients until the 1970’s (Hilliard, 2005). In 1974, Kubler-Ross advocated for music therapists to work in hospice and palliative care after observing an interaction between a music therapist and a patient (Hilliard, 2005).

The effectiveness of music intervention on QOL for older people was explored in a community in Hong Kong (Lee, Chan, & Mok, 2010). The randomized control trial group received a 30 minute rest period while the experimental group received 30 minutes of music. The experimental group receiving music showed a statistically significant increase over the control group in heightened QOL over a four week trial period (Lee, et al., 2010).

Pain management and anxiety.

Pain and anxiety management are primary goals for hospice and may be addressed by music therapists. MT interventions may distract from pain and/or provide
relaxation to reduce muscle tension and minimize pain. A study done by Curtis (1986) investigated the effect of music on perceived pain relief, physical comfort, relaxation and contentment of the terminally ill. Despite the failure to achieve statistically significant results, an analysis of individual responses strongly indicate the value of using music therapy as an intervention for terminally ill patients. Krout (2001) explored self-reported levels of pain control, physical comfort and relaxation of hospice patients after experiencing music therapy interventions. Data were collected from eighty patients by way of behavioral observation and self-reporting prior to and following music therapy interventions. Music therapy interventions varied among patients and were based on the patient and family needs. Results suggested a significant increase in pain control, physical comfort and relaxation for hospice patients tested. The study indicates limitations and recommendations for further studies including isolating types of music therapy interventions and comparing music therapy with other complementary therapies for effect on quality of life (Krout, 2001).

**Emotional and spiritual support.**

Music therapy may also provide emotional and spiritual support. For example, Magill (1984) writes about the use of songs in music therapy with cancer patients. She states that the use of songs provides emotional support and the tools and means for change. O’Callaghan (1997) wrote how music therapy may provide emotional, spiritual and psychosocial support through song writing. Song writing may increase communication between family members, provide expression of feelings, and create a
musical memento (O’Callaghan, 1997). The support provided during music therapy for patient and care giver may increase socialization and maintain or increase quality of life.

**Music therapy within the interdisciplinary team.**

Kelly and Koffman (2007) studied the role of music therapy within the palliative care inter-disciplinary team. The researchers interviewed twenty interdisciplinary team members regarding their views on music therapy, perceived scope of practice and integration within palliative care. The study concluded that team members viewed music therapy to be an appropriate and therapeutic intervention with palliative care patients (Kelly & Koffman, 2007).

Another complementary therapy rapidly growing in popularity among hospice organizations is animal assisted therapy (Demmer & Sauer, 2002). Demmer and Sauer surveyed hospice programs regarding complementary therapy services offered. Music therapy services were offered in 50% of hospice programs surveyed and 48% of programs offered animal assisted activity and/or animal assisted therapy.

**Animal Assisted Therapy**

Therapy dogs are certified through one of two organizations: Delta Society (Pet Partners) or Therapy Dogs International (Kraus, G. personal communication, October 15, 2012). Therapy dogs and their handlers must be trained and tested in order to provide animal assisted therapy.” Therapy dog training consists of: obedience classes for at least sixteen weeks; exposure to medical equipment, noise, and touch; a physical exam; and exposure to various populations and environments.
AAT includes animal visits designed for specific patients for specific treatment goals including an assessment, goals and objectives with progress charting for a prescribed duration of time (Personal communication, Krause, G., October 26, 2012). Therapy Dogs International (2012) describes treatment goals of therapy dog visits with hospice patients to enrich quality of life for hospice patients and their families. The physical contact provides comfort to patients whose lives have included dogs, and their presence may give a sense of normalcy to patient and family at the end of life (Therapy Dogs International, 2012).

A study conducted by Johnson, Meadows, Haubner, and Sevedge (2008) explored the effects of three interventions on mood, fatigue, self-perceived health and sense of coherence in cancer patients. Thirty patients undergoing non-palliative radiation received all three interventions including; twelve dog visits, twelve human visits, and twelve quiet reading periods. Pre- and post-testing was conducted, and subjects reported on the differences of each intervention and all interventions as a whole. No statistical differences were found between the three interventions; however, patients did express that they felt their health had improved with the utilization of the interventions and that they felt all three interventions were beneficial. It should be noted that the study utilized dogs and volunteers, which is different than the animal assisted therapy goal-oriented interventions conducted by a certified therapy dog and handler team.

Five elderly nursing home patients were the subjects of a study designed to explore the effects of dog visits on patients’ mood and social interaction (Phelps,
Mitenberger, Jens, & Wadeson, 2008). The dogs for these visits had passed obedience training and therapy dog class, but did not have their certification as therapy dogs. The study showed no improvement in mood/depression or social interaction when using observation and paper and pencil measurements of mood/depression and social interactions. The authors concluded that dog visits do not always have therapeutic effects and suggest the need for further research (Phelps, et al., 2008).

A study was conducted to isolate the value of visits made to nursing home patients comparing pet facilitated therapy with visits by volunteers without dogs. The author’s described pet facilitated therapy to be consistent with AAT as used in the preceding paragraphs. Measurements used during this study were the Geriatric Depression Scale (GDS) and Profile of Mood Disorders (POMS). One group of residents received visits from a volunteer and certified therapy dog team; the other group of residents received visits from a human volunteer three times a week for six months. Pre and post tests were conducted, and data analysis showed no significant difference in GDS scores; however, researchers found a significant difference in POMS scores between the experimental and control groups (Lutwack-Bloom, Wijewickrama, & Smith, 2005). The study showed a significant difference in POMS and elevated mood in the experimental group receiving visits from a volunteer with a therapy dog.

AAT was paired with mental health counseling in a study done by Minatrea and Wesley in 2008. Each participant completed a pet attitude scale prior to the study to ensure that persons afraid or allergic to dogs would not be in the control group. AAT was then paired with choice theory or reality therapy to enhance the effects of the
counseling techniques. Results of the study found that AAT was beneficial for patients undergoing chemical dependency treatment.

Motomura, Yagi, and Ohyama (2004) conducted a study assessing the benefits of animal assisted therapy with patients with dementia. Eight patients participated in the study; measurements used were mini mental (orientation level), apathy scale and irritability scale, geriatric depression scale and physical self-maintenance scale. The experimental group received dog visits for one hour for five consecutive days. The study results showed no significant difference between experimental and control groups in regard to irritability scale, depression scale, activities of daily living and mini mental scale. Results did show a significant increase in apathy scale, patients showed increased response and affect change during AAT visits. Patients also displayed a significant increase in social behavior and interaction during AAT interventions for the experimental group.

An article written by Knisely, Barker, and Barker (2012) discussed the need for AAA and AAT for adults in nonmilitary settings. Research done in military settings has consisted of effects of AAT and service dogs on reintegration of soldiers to civilian life, emotional support, injured veterans and post-traumatic stress syndrome. Some of the civilian populations studied have been patients with heart disease, cancer, stoke, dementia and psychiatric disorders. Evidence has been found in the literature that indicates improvements in civilian populations in anxiety, fear, depression and loneliness after receiving AAT.
In summary, research has been conducted to determine the effects of music therapy in end of life care. Researchers have stated that music therapy has an impact on pain reduction, increased comfort, decreased suffering, heightened mood and quality of life. The studies presented have not examined the meaning of patients’ and families’ responses and perceived QOL. In addition, the body of research examining the efficacy of animal assisted therapy is limited. Little research has been conducted on the impact of animal assisted therapy in end of life care. Researchers of these studies have indicated a need for continued research including animal assisted therapy in general as well as with hospice patients. The purpose of this research was to understand the experiences of a hospice patient and their family member receiving sessions including both music therapy and animal assisted therapy.
Methods

Research Design

A qualitative case study of a hospice patient receiving four combined music therapy and animal assisted therapy sessions was conducted. The responses of a hospice patient and her daughter to these experiences were documented. The researcher facilitated MT sessions with a person centered approach and focused on creating a therapeutic relationship through acceptance, empathy and genuineness (Sato, 2011).

Aldridge (2005) highlights the importance of case study in research design. He states that the field of music therapy needs an approach to research which “stays close to the practice of the individual clinician” (p. 10). Case study designs are a part of “the whole spectrum of research methods applied to the investigation of individual change in clinical practice” (p. 25). These designs have the flexibility to meet the needs of the patient. Aldridge states these designs can inform the development of research hypotheses and that the strength in qualitative design is that it “concerns itself with the interpretation of events as they occur in natural settings” (p. 35). This researcher used a single qualitative case study design and therapeutic narrative analysis to generate an understanding of what happens during the process of a combined music therapy and animal assisted therapy session (Aldridge, 2005).

Participant

The participant in this case study was a patient admitted to the hospice program in which this researcher works; the patient selected both music therapy and animal
assisted therapy services. The patient chosen for this case study was selected as she was the first patient admitted to hospice who met the following criteria: a) the participant and family agreed to participate in this study and signed consent forms, b) the patient had a family member or patient care giver (PCG) who was willing to be present during at least two sessions and to participate in interviews after each session, and c) the patient was responsive and able to participate in both therapy services. The patient’s hospice chart was reviewed prior to initial therapy visit. Therapy visits for this study were conducted in the patient’s room. Pictures and objects in patient’s room provided information and tools for music therapist to use as stimuli to initiate life review during combined MT/AAT sessions (Sato, 2011).

**Procedure**

The hospice patient and family member received two introductory visits with initial music therapy and animal assisted therapy assessments, an explanation of the study and informed consent. An additional introductory visit was made in order to obtain signed consent forms. Following the signing of the consent forms the patient then received four combined MT and AAT visits (with family present during two of the four sessions) for purpose of this study. The four sessions occurred over a six week period. Following each session the patient, as able, and family member were interviewed regarding the perceived benefit of the therapeutic visits and effect on quality of life.

Music Therapy sessions utilized Dileo and Dneaster’s (Dileo & Loewy, 2005) model of music therapy for Palliative care. In this model, at the supportive level MT is
used to palliate symptoms of end of life. At the communicative and expressive level MT is used for reflection and conveying feelings. Finally at the transformative level MT is used to give insight into end of life (Clements-Cortes, 2011). In the case study presented in this thesis, MT sessions included both patient and family in accordance to the hospice organization’s philosophy and policy. Specific interventions utilized were determined by patient/family need and preference, ability to participate and patient’s cognitive level at time of visit. MT interventions used included music assisted relaxation, music reminiscing and singing. Genres of music used during sessions were old standards from the 1920’s, 1930’s, 1940’s and 1950’s, Broadway and Jazz (more detail provided in Results section). The researcher sang lyrics and played the guitar during music therapy interventions. Animal assisted therapy interventions utilized included: presence, animal assisted reminiscing, and physical interaction with therapy dog (TD). All interventions were conducted with the TD in close proximity to the patient. All MT and AAT interventions were conducted simultaneously without interruption with consideration of patient’s needs and current focus of interest. A brief overview of sessions is provided below; more details follow in the Results chapter.

**Session One**

The patient was in bed with several family members gathered at bedside. The therapy dog was positioned on the bed on the patient’s right side. The researcher played songs requested by family from old standards of the 1920’s, 1930’s and 1940’s that were significant to their family. The researcher played the guitar and sang as well
as encouraged family members and the patient to reminisce and sing along. The therapy dog initiated interaction with the patient and family and responded to their interaction by moving closer, rolling over and nudging the patient or family.

**Session Two**

The patient was sitting up in her wheelchair throughout this session, and the therapy dog was positioned on the patient’s bed beside the wheelchair. The researcher played the guitar and sang music chosen by the family during the previous session. The patient’s family was not present during this session. The therapy dog interacted with the patient and initiated contact with patient throughout session.

**Session Three**

The patient was in bed with the therapy dog positioned on the bed beside her. The researcher played the guitar and sang old standard songs from the 1920’s -1940’s. The patient’s family was not present for this session.

**Session Four**

The patient was up in her wheelchair during this session. The patient’s daughter was present and participated in the session by selecting songs, reminiscing, singing and interacting with the therapy dog. The therapy dog was positioned on the patient’s bed beside the patient and the patient’s daughter. The therapy dog interacted with the patient and her daughter by nudging and moving toward them and looking into the patient’s eyes.
Instruments

Data was collected from patient and family member in a variety of forms including: written reports, videos, and verbal interviews (Aldridge, 2005). A Dell laptop was used to videotape MT/AAT sessions. The patient and family member present were asked questions concerning QOL. Examples of questions asked included: What did it mean to you to have music therapy today? What did it mean to you to have AAT today? Can you describe your (or family member’s) response to these therapies or effect on quality of life? The music therapist used a nylon six string, Fender guitar and voice for music therapy sessions. A certified therapy dog, named Bella, was also present. Bella is a black Labrador mix with four years of experience as a hospice therapy dog. The researcher wrote observations following each session in the patient’s hospice chart. A video recording was taken for later review by the researcher and clinical director of the hospice program (independent observer) who collected data related to general meaning of music therapy and animal assisted therapy as well as to check transcriptions for accuracy. Music therapy interventions and animal assisted therapy interventions and TD behaviors/responses were recorded and sequenced with patient and PCG responses (See Appendix D).

Data Analysis

Each session was video and audio recorded on a laptop placed on a dresser to the side of the patient. Following each session the researcher viewed the video of the session, completed hospice documentation and transcribed the taped session. Transcriptions included the patient’s verbal and physical responses, and the family
member’s verbal and physical responses to music therapy interventions and animal assisted therapy interventions as they happened in time (see appendix D). Included in transcriptions were verbal, non-verbal and paralinguistic communication (Clements-Cortes, 2011). The videos were watched at least four times by the researcher to “gain a sense of the whole in order to provide a framework for the emergence of themes and units of meaning” (Clements-Cortes, p. 33). Data collected was subjected to a therapeutic narrative analysis (Aldridge, 2005). The first phase included reading and listening several times to data gathered. The second phase included looking at the narrative in context and as a whole. The next phase included identifying categories of episodes/events, patterns of meaning in the data collected. During the fourth phase, the episodes were analyzed in terms of “overarching categories” (Aldridge, p. 45). In the fifth phase, the narrative was constructed based upon the categories gleaned during the analysis and general meanings were assigned to the experiences of the patient and family during combined music therapy and pet therapy sessions (Aldridge, 2005).

The researcher then wrote a narrative of each session based on events related to music therapy and animal assisted therapy interventions and themes that arose in each session. The researcher then coded the transcripts and researcher’s observations by creating codes out of words or phrases found in these documents in accordance with the researchers understanding of MT/AAT and that of available research studies. After transcriptions were completed, the clinical director of the hospice agency where the researcher is employed (independent observer) viewed videos of MT/AAT sessions checking transcriptions for accuracy and recorded overall impressions and themes. The
researcher then organized codes of events to create overall themes that pointed to global themes (Clements-Cortes, 2011; Aldridge, 2005), such as quality of life.

**Analysis of Transcriptions**

The first step in analyzing the transcriptions from each session involved reading through the transcriptions and notes from the independent observer and researcher, two to three times. Transcriptions included a separate line for each person, therapy dog, and intervention. For example, there was a line for patient’s comments and behaviors, a line for music therapy interventions, participation on the part of the family, therapy dog interactions, researchers and independent observer comments. Then, the researcher began to identify the points in the session when the patient responded either to the MT or AAT interventions. Key words or statements made by the patient and/or family were noted as well as physical participation and interaction with the therapy dog. The timing of statements compared to interventions was noted (see appendix D) and subjects and direct quotes were extracted from the transcriptions to create themes. Interviews with family members were included in creation of themes and general meaning of MT and AAT interventions to the family and patient.

**Ethical Precautions**

Prior to beginning this case study, the researcher completed an IRB (Institutional Review Board) application and submitted it to the Saint Mary-of-the-Woods College IRB committee, as well as the hospice organization for which the researcher is employed. The applications were approved after revisions were made. After IRB approval the recruitment process began.
Patient and family members participating in this case study were asked to sign an informed consent form along with a photo and video release form. Data was stored on a DVD which is locked in a file cabinet at the researcher’s residence and will be kept for two years after completion of the study and then destroyed. Only the researcher will have access to the data. The names of patient and family members were changed for their privacy. The researcher notified patient and family that results would be used for completion of a master’s thesis, as well as possible conference presentations and a journal article.

The researcher identified episodes that were crucial for analysis, and gleaned meaning according to patient/family responses noted in documentation and transcripts of videos. Documentation and videos were then submitted to the independent observer for validation of accuracy of transcriptions and general meaning of sessions (Aldridge, 2005). The patient and family continued to receive music therapy and animal assisted therapy visits following the conclusion of this study as indicated by patient’s needs.
Results

In describing the results of this case study of a hospice patient and family member receiving combined music therapy and animal assisted therapy sessions, a brief background of the patient will be given.

Assessment

Joy (patient and family names have been changed) is a 91 year old female living in a nursing home and admitted to the hospice program with a diagnosis of end stage dementia. She has four daughters; the youngest is deceased. Joy is oriented to self and her daughters.

Joy is Lutheran; she loves to sing hymns and used to play the piano. Due to a decline in cognition, Joy has not played the piano for the past year. The patient loves dogs and music; her daughter, Jean stated, “We always had animals and music in the house when we were growing up.” Joy has a history of being very social and has a good sense of humor. Music preferences are spiritual music and music from 1920-1940.

Introductory Session (Part One)

The introductory session occurred with the patient and daughter, Jean present. This visit occurred for the purpose of introduction to hospice services and describing possible involvement in a case study. The patient’s daughter provided her mother’s music history, spiritual orientation, music preferences, history with dogs, family history and present condition. The researcher completed a music therapy and animal assisted therapy assessments during this introductory session.
MT/AAT interventions used during this visit were: reminiscing, singing old standards and encouraging patient and family to sing along, movement to live music produced during session and interaction with therapy dog. The patient responded with increased positive facial affect, and intermittently interacted with therapy dog Bella. The patient moved hands and arms to conduct music as the patient’s daughter sang along. The researcher discussed the possibility of the patient and patient’s daughter taking part in a thesis case study. The patient’s daughter was given the consent forms to look over and sign and the next session of the study was scheduled for the following week.

**Introductory Session (Part Two)**

The consent form was not signed at the Introductory session (part one), so an additional meeting time (Introductory Session, part two) was held with patient and her daughter. The MT/AAT interventions used during this visit were: reminiscing, singing old standards, encouraging patient and family members to sing along with researcher and patient/family interaction with therapy dog. A return visit and session one of study was scheduled for the following week.

**Session One**

The first session of this case study was conducted while the patient was in bed, with family members present (patient’s three daughters, son-in-law and granddaughter along with roommate and her company in the background). After family members got settled and the therapy dog was positioned beside patient on the bed, the session began.
The music therapist began with the song “Five Foot Two, Eyes of Blue” (Lewis, Young, & Henderson, 1925) and “I Want a Girl” (Tilzer & Dillon, 1911) while family sang along. The patient responded to singing with the comment “That was a good one.” Joy closed her eyes and listened to several songs as her family reminisced and sang along. Joy nodded her head in time to the music and conducted to the beat during “Red, Red Robin” (Woods, 1926). The music therapist then shared the song “How Much is that Doggie in the Window” (Merrill, 1952). Joy physically interacted with the therapy dog, in response to the therapy dog nudging her arm and moving closer while lying beside her. The patient also expressed positive comments toward TD such as “You good dog, you” and “You sweetheart.” Joy’s family interacted with therapy dog Bella throughout visit and sang along and participated in reminiscing.

An interview was conducted with the family regarding the effects of MT and AAT interventions on patient’s quality of life and patient’s general responses to both therapies. The family stated that the patient’s responses and alertness vary so much from day to day and that it would be hard to say if the therapies are affecting patient’s alertness and responsiveness or quality of life. Joy was unable to participate in discussion regarding the effects of MT and AAT due to her cognitive level and level of expressive communication. Joy continued to smile and interact with family members and the therapy dog during interview.

**Session Two**

The second session took place with patient sitting up in her wheelchair, therapy dog positioned beside patient on her bed (family not present). Joy looked at therapy
dog while moving her head to the beat of the music when researcher sang and played guitar to “How Much is that Doggie in the Window” (Merrill, 1952). The patient spoke nonsensically through most of “Roll out the Barrel” (Vejvoda, 1934). Joy sang along briefly to “I’ve Been Working on the Railroad” (Unknown, 1894) and moved her head and hands to the beat of the music. During the MT/AAT session, the researcher asked Joy if dogs were one of her favorite things, patient responded “Well-yes”, and then the patient was asked if music was one of her favorite things, patient nodded yes then said “Yeah” and moved her fingers as if playing the piano. The researcher prompted patient in reminiscing about playing the piano most of her life, Joy continued to move her fingers as if playing the piano and answered, “Yeah.” Then Joy conducted and moved to “My Bonnie Lies Over the Ocean” (Scottish folk song, n.d.). Comments made by patient regarding therapy dog during session were “She is sweet,” “He’s kind of a nice dog when you think about it.”

**Session Three**

The third session began with Joy sitting in her wheelchair with the therapy dog lying on the bed beside her. The researcher asked patient if she saw Bella lying beside her, Joy replied “Yeah, she’s been loving me up”. Joy appeared more lethargic this visit as compared to previous visits, as evidenced by longer periods of time with eyes closed and less frequent verbalizations and physical movements. The researcher played the guitar and sang “You are my Sunshine” (Davis & Mitchell, 1939) while Joy closed her eyes. Comments made in response to the therapy dog’s interaction with Joy were “And the baby’s here,” “She’s a honey dog,” “She is sweet,” “Oh we’d better have something
for you sweetheart.” Joy swayed her head and tapped fingers to “Bye, Bye Blackbird” (Henderson & Dixon, 1926). Joy was looking at and petting therapy dog on her head while “How Much is that Doggie in the Window” (Merrill, 1952) was sung by the researcher. The patient was able to answer direct questions regarding enjoyment in music and therapy dog visit during a brief interview. Toward conclusion of visit the researcher asked patient if she liked dogs coming to see her she replied “Yeah, I sure do,” and then patient was asked how she liked the music. Joy replied, “The music is pretty good—considering.” The session ended with Joy smiling and saying “Thank you, thank me” and while interacting with therapy dog the patient said “What do you think about that honey, you little sweetheart, little love bug.”

**Session Four**

The fourth session included the music therapist, therapy dog, patient and patient’s daughter Jean. The session opened with patient and her daughter petting and interacting with the therapy dog. The patient’s daughter requested “Bye, Bye Blackbird” (Henderson & Dixon, 1926) and sang along with researcher as patient moved her head and hands to the music. The patient and her daughter held hands and moved to the music as researcher sang and played “Five Foot Two, Eyes of Blue” (Lewis, Young, & Henderson, 1925). Later, the patient and her daughter joined together in singing the Albert Lea fight song. Joy remained active moving to the music, with increased positive facial affect throughout the session. Prior to the conclusion of the session, the researcher asked the patient’s daughter if she thought her mom benefited from the combined music therapy and animal assisted therapy sessions and if they contributed to
her mom’s quality of life. The patient’s daughter stated that “She loves music and dogs, they have been a big part of her life.” “She is very social and is doing well; I think she has quality of life because she can enjoy these things.” Joy’s speech was unrelated and confused when asked questions regarding quality of life and meaning of receiving music therapy and animal assisted therapy combined visits, therefore no interview was obtained from the patient.
**Table 1: Patient Responses**

<table>
<thead>
<tr>
<th></th>
<th>Session #1</th>
<th>Session #2</th>
<th>Session #3</th>
<th>Session #4</th>
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</thead>
<tbody>
<tr>
<td><strong>Pt/Music responses -</strong></td>
<td>singing, positive affect, positive</td>
<td>heightened eye contact with MT</td>
<td>pt more sleepy this session</td>
<td>positive affect, moving head and arms to music.</td>
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<tr>
<td></td>
<td>comments, conducting to music</td>
<td>moving head and feet to music</td>
<td>swaying head to music, tapping foot, arms to music.</td>
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<tr>
<td></td>
<td></td>
<td>tapping hand to beat</td>
<td>tapping finger to beat, verbal comments</td>
<td></td>
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<td></td>
<td></td>
<td>positive affect &quot; that's pretty&quot;</td>
<td>regarding music, conducting music with arms, &quot;the music is pretty, considering..&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>singing. Conducting music</td>
<td></td>
<td></td>
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<tr>
<td><strong>pt/ Family interaction -</strong></td>
<td>Family not present</td>
<td>Family not present</td>
<td>Daughter present</td>
<td></td>
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<tr>
<td></td>
<td>Family interaction with pt, pt talking about her love and engaging with Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>positive affect and verbal comments</td>
<td>to music. Positive affect</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>pt/TD - responses -</strong></td>
<td>physical interaction with TD</td>
<td>positive affect and positive comments</td>
<td>physical interaction with TD</td>
<td></td>
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<tr>
<td></td>
<td>eye contact with TD</td>
<td>&quot;he's kind of a nice dog, when you think about it&quot;</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>positive affect and verbal comments - &quot;you good dog you&quot; &quot;you sweetheart&quot;</td>
<td>what do you think about that honey?</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>You, little sweetie, little love bug&quot;</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Physical interaction.</td>
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</table>

*Note: Abbreviations in table include: PT = patient, TD = therapy dog, MT = music therapist.*
Discussion

The purpose of this study was to answer the following question: What does it mean to a hospice patient and family who received both music therapy and animal assisted therapy? Based on the data collected, positive responses were expressed toward both MT/AAT interventions by the patient and her family. The daughter explained that MT/AAT visits are meaningful for the patient and the family because patient shows enjoyment in these therapies. The patient’s family stated that the patient had always loved dogs and music. The patient’s daughter stated that she thinks her Mom has quality of life because she can still enjoy the things she has always loved, such as music and dogs. The patient was unable to answer interview questions; however, when asked if she enjoyed the music or therapy dog visit, the patient responded with a positive verbalization and a smile. Verbal responses from patient regarding therapy dog consisted of “Well yes I love dogs,” and “She is a sweet honey dog.” Verbal responses from the patient to music therapy interventions consisted of singing, and short replies (e.g., when asked if she likes the music the patient stated “Well yes”).

Themes that emerged during analysis of the four sessions were love for family and the therapy dog, importance of music in the patient and family’s history, and gratitude. The patient and her family shared memories during music therapy sessions, such as the importance of music in their home through the patient’s life. The patient’s daughter expressed fond memories of the patient sharing music as she and her sister grew up and the gratitude for the happy memories and love shared as a result of the
music. The patient’s daughter shared how those happy memories were revisited during these music therapy sessions. Gratitude was shared between the patient and her daughters during sessions in the form of words of appreciation such as “I love you” and “Thank you”. Interaction with the therapy dog brought back memories of pets the family owned in the past. Family acknowledged the role that music therapy and animal assisted therapy visits had played in heightening the patient’s quality of life.

The independent observer commented on how calm the patient looked throughout all MT and AAT sessions as well as how the patient and family positively engaged in music therapy and animal assisted therapy interventions. The family had commented on how the patient was trying to climb out of bed prior to the first MT/AAT session of this study, however during MT/AAT sessions patient was calm and interactive. The independent observer also commented on the ability of the patient to verbalize sensibly and respond during MT/AAT interventions throughout sessions.

Research considerations for further study of this kind may include types of recording devices for sessions. The researcher had difficulty with recording the sessions to see the whole family, to keep the video device out of the way so as to not distract family and patient as well as challenges with getting sessions recorded. Reflections and reactions after viewing the videotaped combined therapy sessions conveyed that the patient expressed positive verbal comments and positive facial affect throughout each session. When the family was present the patient actively engaged with family, music and the therapy dog. This patient was observed and videotaped for one minute prior to each session. During these periods, the patient was resting with her eyes closed three
out of four sessions. Prior to the first session the patient was trying to climb out of bed. The patient became more alert and responsive with the stimulation of the combined interventions as evidenced by increased coherent verbalizations and participation in interventions. The patient’s family reported that music and animals are two of patient’s favorite things and the fact that she can still enjoy these things is meaningful to her overall quality of life.

My reflections on this case study have been consistent with my prior work combining music therapy and animal assisted therapy interventions while working with hospice patients and their families. I have seen a positive response during combined therapy sessions by both patients and families who have had previous, positive experiences with music and dogs. The involvement of a hospice patient and their family in music therapy and animal assisted therapy combined sessions, in my opinion, does result in positive responses and heightened quality of life in end of life care.

Writing this case study was a small sample of the kind of work the researcher has done with hospice patients using music therapy and animal assisted therapy together for the past twenty years. Responses vary from patient to patient, but the results, as expressed by the patients, are consistently positive.

The patient selected in this present study was not able to reflect on the meaning of receiving the two therapies. Consideration of selection of subjects for future related studies may include patients who are cognitively able to reflect on the meaning of the therapies. This may provide increased understanding of the meaning of receiving combined music therapy and animal assisted therapy sessions.
In conclusion, a case study was done with a hospice patient and her family, who received combined music therapy and animal assisted therapy visits. The combined visits were viewed by the family as a positive addition to the hospice care received. The patient responded with positive facial affect, movement to music, singing, positive verbalizations regarding music and the therapy dog as well as physical interactions with family and the therapy dog. The patient’s daughter stated that the patient has always loved dogs and music and because she can still enjoy these things, she has quality of life.
References


Davis, J., & Mitchell, C. (1939). You are my sunshine (recorded by Davis)


Krout, R. E. (2001). The effects of single-session music therapy interventions on the observed and self-reported levels of pain control, physical comfort and relaxation of hospice patients. *American Journal of Hospice and Palliative Care, 18*(6), 383-38.


Appendix A

CONSENT TO PARTICIPATE IN RESEARCH

Music Therapy and Animal Assisted Therapy in End of Life Care

You are being asked to participate in a research study conducted by Sharon Alery, employee of Hospice of the Twin Cities and master’s student at St Mary-of-the-Woods (and Tracy Richardson, Ph.D., MT-BC, faculty sponsor) from the department of Music Therapy. This research is being conducted as part of a thesis. Your participation in this study is entirely voluntary. Please read the information below and ask questions about anything you do not understand before deciding whether or not to participate.

You have been asked to participate because you have selected both Music Therapy and Animal Assisted Therapy upon admission to the hospice program. You will continue to receive the same care from the dedicated staff at Hospice of the Twin Cities whether you choose to participate in this study or not.

Purpose of Study

The purpose of this study is to understand the general meaning of what it is like for a patient and family to receive the combined therapies of music and animal assisted therapy.

Procedures

If you volunteer to participate you will be asked to do the following things:

- Patient to participate in four Music Therapy/Animal Assisted Therapy sessions within a four week time period
• A family member or patient care giver will be asked to be present during at least two of these therapy sessions

• Music Therapy and Animal Assisted Therapy interventions will be chosen according to patient and family request and/or need.

• Patient and family member will be interviewed following each therapy visit regarding their responses, feelings, thoughts and general meaning of therapy session.

• This study is expected to last about four weeks

**Potential Risks or Discomforts**

The study involves no more than minimal risk. If you feel uncomfortable at any time you may withdraw from the study and continue to receive hospice music therapy/animal assisted therapy services as well as any other hospice services you wish to receive.

**Potential Benefits**

There are no anticipated benefits to you for participation in this research project. However you may gain benefit from participating and receiving music therapy and Animal assisted therapy sessions. These benefits may include: relaxation, increased physical and/or emotional comfort.

**Confidentiality**

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by changing names
within the data. All data and video will be kept in a locked cabinet for four years and then destroyed.

Overall results from the study will be used for completing this researcher’s master’s thesis, and for publication and educational presentations.

**Participation and Withdraw**

You may choose whether or not to be in this study. If you volunteer to be in this study you may withdraw at any time without consequences of any kind or loss of benefits to which you are otherwise entitled. You may also refuse to answer questions you do not want to answer.

**Alternatives to Participation**

You may choose to continue to have Music Therapy and Animal Assisted Therapy services without participating in this study. Participation in the research study is voluntary.

**Identification of Investigators**

If you have any questions or concerns about this research, please contact:

Sharon Alery MT-BC Hospice of the Twin Cities, Minneapolis, MN

763-286-3884

**Principal Investigator:**  
Tracy Richardson, Ph.D., MT-BC

**Director of Music Therapy:**

Saint Mary-of-the-Woods College

**IRB Chair:**

Jennie L. Mitchel, PH.D.

Professor Business & CIS

Saint Mary-of-the-Woods College
<table>
<thead>
<tr>
<th>Patient</th>
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<tr>
<th>Family Member</th>
<th>Date</th>
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Appendix B

Consent for video and photo release

Thesis research study Music Therapy and Animal assisted therapy in end of life care. Thank you for your participation in this research project. As part of this project, you may choose to be photographed, videotaped, and/or audiotaped. Please indicate below the use of the media to which you are willing to consent by placing your initials in the blank in front of the item. Initial the item that best suits your level of comfort. There will be no negative consequences for refusing to be photographed, videotaped, and/or audiotaped. The results of this study may be presented in educational settings, scientific journals, popular press or newspapers, professional conferences, or the media. The researcher agrees to only use the materials in ways to which you agree. If you give full approval, your name could accompany any viewing or hearing of the materials.

_____ I give full approval for my name to appear at any time the material (photograph, videotape, or audiotape) is played/shown. Please sign below.

_____ I give approval for my image to appear any time the videotape/photograph is shown, but please do not show my name. Please sign below.

_____ I give approval for my voice to be heard any time the audiotape is heard, but please do not use my name. Please sign below.
_____ I do not want to be photographed, videotaped, or audiotaped and I want all of
the information I disclose to be presented to others anonymously. Please sign
below.

I have read the above and give my consent for the use of the
photograph/videotape/audiotape as indicated. I certify that I am eighteen (18) years of
age or older and that I have been given a copy of this form for my own records. Video
will be locked in storage for four years at which time it will be destroyed.

Patient                                                     Date

________________________________________________________________________

Family Member                                               Date

________________________________________________________________________
Appendix C

Questions for patient and family member after receiving Music Therapy and Animal Assisted Therapy

Family

1. What did it mean for you and your loved one to receive combined music therapy and animal assisted therapy today?

2. What changes did you see in your loved one during this combined therapy session?

3. Do you feel that receiving Music Therapy and Animal Assisted Therapy today affected the quality of life for your loved one?
Appendix D

Example of Transcription

Patient  alert, directing music with both hands, .......................................................... smiled and pet TD

MT  How much is that doggie in the window, the one with the waggly tail, How much is that doggie in the window I do hope that

MT smiling and looking at patient ............................................. then TD....................................................

Therapy Dog(TD)  Therapy dog lying beside patient/family......................................................Therapy dog nudged patient

Family  Daughter sitting edge of bed, smiling, looking at patient while singing lyrics to the

song......................................................

Patient  continued to pet TD........tapping fingers to beat, fingers on TD......................................................

MT  That doggies for sale. I don’t want a bunny or a kitty I don’t want a patriot that talks I don’t want a bowl of little fishes

TD  continued laying at pt’s side eyes closed........................................................................................................

Family  continued singing and smiling eye contact with patient, hand on TD......................................................

Patient  pt smiling pt, giggled...... pt put hand on therapy dog “you good dog you, you sweetheart”

MT  Cause you can’t take a fish for a walk. How much is that doggie in the window the one with the waggly tail. How much

TD  TD looking at patient laying on her back belly up, ..................................................... looking at pt head upside down

Family  singing lyrics......................................................hand on therapy dog, smiling at pt/TD interactions....................................................