Use of the Harp by North American Music Therapists in Oncology/Palliative Care: A Survey Study

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ABSTRACT

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The continuum of oncology/palliative care presents complex bio-psychosocial and spiritual needs of patients that music therapy seeks to address. While the most commonly-reported music therapy interventions for cancer patients use receptive methods, in particular live music presented by the music therapist, the literature is sparse regarding the use of musical instruments in these contexts. Evidence from both music therapy and adjunct music in healing practices indicates that live harp music can be of benefit for specific goals such as pain management, comfort and relaxation, reduction of anxiety, and improvement in quality of life. The purpose of this study was to explore the use of the harp by music therapists in Canada and the United States of America in oncology/palliative care. There were 23 respondents fitting the criteria of using the harp in oncology/palliative care, from a total of 201 credentialed music therapists who answered an English-language online survey consisting of open-ended and close-ended questions. Results showed that the therapists surveyed perceived it to be a useful music therapy instrument in cancer care, particularly using receptive methods to create a healing environment and increase comfort. Acoustic, aesthetic, and archetypal qualities emerged as bearing potential therapeutic impact. Risks and contraindications highlighted the archetypal connection with angels, heaven, and death. Training, study limitations, potential implications for the profession, and future research are discussed.

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"When I play the harp I feel like I can beat the cancer"

- quote from a music therapy client as reported by a respondent

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Chapter 1. Introduction

The main impetus for the following research emerged from my clinical experience as a music therapist whose primary music therapy instrument is a small portable Celtic therapy harp. After using the piano and guitar, traditional music therapy instruments in the first half of my music therapy career, I began to play the harp in 1995, and occasionally used a large 36-string Celtic harp in sessions. In 2008 while studying with the International Harp Therapy Training Program (IHTP), I discovered the existence of fine-quality small portable harps capable of providing the expressive and supportive qualities required of a music therapist's primary instrument. While I continue to appreciate and use the piano and guitar in music therapy, as instruments in their own rights, as well as for vocal accompaniment, I have found the small therapy harp to be very appealing for many types of music therapy applications and populations, in particular in my clinical work with senior clients in long-term care facilities, and with individuals in palliative care. Having witnessed the impact it has upon clients, families, caregivers, and the environmental milieu, I pondered the apparent underutilization of the harp by music therapy professionals. I wondered if, and how many other music therapists use this instrument, and what their experience could be.

A second motivation for this inquiry emerged from my clinical work as a music therapist serving patients in palliative care, many in the advanced stages of cancer. Patients in the oncology/palliative continuum of care experience many bio-psychosocial symptoms, including pain, anxiety, and depression. Music therapy has proven to effectively address many of these complex needs through a variety of interventions developed and researched since Munro and Mount's (1978) groundbreaking work. Hilliard (2004) boldly noted, "studies show the astounding benefits of music therapy for those facing the end of life" (p. 107).

A number of research studies showed that listening to either live or recorded music is the preferred choice for oncology/palliative, care patients (Bruscia, Dileo, Shultis, & Dennery, 2009; Burns, Sledge, Fuller, Daggy, & Monahan, 2005). Other research found the most common music therapy intervention with such patients is the provision by the therapist of live patient-preferred music (Gallagher, Lagman, Walsh, Davis, & LeGrand, 2006; Gallagher & Steele, 2001; Mramor, 2001). In clinical trials,

patients with advanced cancer also preferred receptive listening, relaxing, or visualizing to live music (Domingo et al., 2015; Hilliard, 2003). Studies comparing the effects on hospitalized cancer patients of live music provided by the music therapist versus recorded music of the same material indicated better outcomes with the live music (Bailey, 1983; Clements-Cortes, 2011). Indeed, Gallagher (2011) pointed out that "Music therapists believe in the value of live instead of recorded music" (p. 404). Other studies specifically examined the effects of live music provided by trained music therapists during cancer treatment. Live individualized music therapy reduced mood disturbance in patients undergoing autologous stem cell transplantation (Cassileth, Vickers, & Magill, 2003). Ferrer's (2007) research showed significant improvement with live music therapy for patients undergoing chemotherapy on measures of anxiety, fear, fatique, relaxation, and diastolic blood pressure. Fredenburg and Silverman (2014) revealed significant benefits for affect and pain using live music therapy with patients recovering from bone marrow transplantation. Patients undergoing elective surgical brain procedures had improved quality of life (QOL) indicators with live music therapy (Walworth, Rumana, Nguyen, & Jarred, 2008).

Despite such evidence indicating that live music is an important music therapy intervention in oncology/palliative care, the literature has yielded little specific information in this area concerning instruments used, in particular the harp. For example, a large Randomized Controlled Trial (RCT) study on the effectiveness of music therapy to reduce pain in palliative care patients reported, "the intervention incorporated music therapist-guided autogenic relaxation and live music" (Gutgsell et al., 2013, p.822). The instrument used was later reported in the article as being the harp. This incidental evidence from the music therapy literature and a growing field of therapeutic harp practice reveals that live harp music can be an effective intervention in oncology/palliative care. The door is open to explore how the harp, with its unique aesthetic qualities, might be utilized to augment standard music therapy interventions within the music therapy relationship. Music therapist Mary Ann Froehlich titled a 1987 article, "Music Therapy and the Harp: An Opportunity" (Froehlich, 1987). However, since then the literature revealed little evidence that this opportunity has been developed. Therefore the purpose of this survey study was to investigate Canadian and American

music therapists' use of the harp within the spectrum of oncology/palliative care, providing groundwork for further exploration, and "opportunity" for music therapy.

Research Question

The primary research question that guided the inquiry was:

What is the current practice of Canadian and American music therapists using the harp in the continuum of oncology/palliative care?

Subsidiary questions formulated to support the primary question were:

1. What is the use of the harp by Canadian and American music therapists practicing in oncology/palliative care relative to the use of other primary instruments?

2. How do Canadian and American music therapists use the harp in their practice in oncology/palliative care?

3. How do Canadian and American music therapists who use the harp in their practice in oncology/palliative care view the therapeutic qualities of this instrument?

4. Do Canadian and American music therapists believe it to be beneficial for the harp to be offered in oncology/palliative care music therapy training?

Definitions

The following define key terms for the purpose of this study. The term *harp* refers to Western instruments with strings positioned perpendicularly to the soundboard, and differentiated as: (a) "therapy" harp, a small and levered diatonic "Celtic" harp having up to 29 strings; (b) larger levered diatonic "Celtic" harp with 29 or more strings; or (c) Concert pedal harp. These three types, while sharing essential characteristics, differ in pitch, dynamic range, chromatic capabilities, appearance, cost, size, and portability. Instruments bearing the name of harp, such as the autoharp or "reverie harp" were not included in this research, as they do not fit within the definition of harp adopted for the present study. Also not included were other harp-like instruments such as psalteries or lyres that are often in pentatonic tunings and lack the broader musical capabilities usually required of a music therapist's primary instrument.

Oncology/Palliative Care, as informed by McDougal Miller and O'Callaghan (2010), is defined as a continuum of care for individuals with cancer, whether as a primary or a secondary illness, at any stage including diagnosis, treatment, survivorship, recurrence, palliation, hospice, actively dying, and bereavement of loved ones. O'Callaghan and

McDermott (2004) define *music therapy in cancer care* as "the creative and professionally informed use of music in a therapeutic relationship with people identified as needing physical, psychosocial, or spiritual help, or with people aspiring to experience further self-awareness, enabling increased life satisfaction and quality" (p.152). O'Callaghan (2011) extends this definition to *music therapy in palliative care* (p. 214). In 2016 O'Callaghan and Magill offer, "In oncology, music therapy is the skilled and professionally informed use of music-based interventions within a therapeutic relationship to address bio-psychosocial and/or spiritual concerns to alleviate discomfort, support coping, restore function, and improve life quality" (p. 116). These definitions for music therapy in oncology/palliative care framed this study.

Assumptions and Biases

The researcher has clinical experience in palliative care and worked as an accredited music therapist for over 30 years. She has specialized training and credentials from the International Harp Therapy Program (IHTP) and in Vibroacoustic Harp Therapy (VAHT), which both assume the harp to be of therapeutic benefit to clients in the context of oncology/palliative care. The researcher assumes that there are other music therapists working with this population who employ the harp, and that exploring how they use it will increase understanding of the therapeutic application and potential of this instrument in the field of music therapy, and therefore benefit the profession and the clients it serves.

Delimitations

This study did not examine other musical instruments in oncology/palliative care, or compare the harp with other musical instruments. Nor was it concerned with populations other than oncology/palliative care. The investigation was also only conducted in the English-language and confined to Canada and the United States of America (USA).

Chapter Overview

Chapter 1 introduces the background considerations that situate and compel this research. Relevant literature is reviewed in Chapter 2 in order to provide both a broad and more specific view of topics relevant to the research question. Chapter 3 addresses the survey methodology used in the study, and describes the participants, data collection and data analysis. The survey results are presented in Chapter 4. Chapter 5 provides

interpretations of the data and limitations of the study as well as implications for the profession, clinical development, and future research.

Chapter 2. Literature Review

Chapter 1 discussed how music therapy has been shown to effectively address many of the complex bio-psychosocial symptoms faced by patients in the oncology/palliative continuum of care. Despite evidence that providing live, patient-preferred music represents an important music therapy intervention for these individuals, the literature provided little detail concerning the actual musical instruments used, and more specifically regarding the harp. The current chapter presents an overview of the music therapy literature as it relates to the themes underlying the primary and secondary research questions regarding the use of the harp in oncology/palliative care. Following an overview of oncology/palliative care, music therapy within this continuum of care, including receptive methods and live music interventions, is explored. The use of musical instruments is examined and finally the use and potential of the harp in oncology/palliative care music therapy is presented.

Oncology/Palliative Care

Palliative care is a specialized discipline and philosophy within medical care that developed out of the hospice movement of the late 1960's (Clark, 2007). According to the World Health Organization (WHO)

> Palliative care is an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual (WHO, 2016, fact sheet 402).

These principles are relevant through the progression of any degenerative and life-threatening condition, including cancer. Based on 2006-2008 estimates, cancer will claim the lives of 37% of patients within 5 years of diagnosis, and at 30% of all deaths, is the leading cause of death in Canada (Canadian Cancer Society, 2016).

Music Therapy in Oncology/Palliative Care

In an American survey of complementary therapy services that sampled hospices nationally, 60% of the 169 completed surveys indicated the use of complementary therapies. Of these, massage therapy and music therapy were the most commonly-used

services and viewed by hospice directors as most popular among patients (Demmer, 2004); they were also the most popular complementary therapies reported by hospice administrators in Nevada and Montana (Running, Shreffler-Grant, & Andrews, 2008). Dain, Bradley, Hurzeler, and Aldridge's (2015) national cross-sectional survey findings from 591 American hospice providers showed that of the 29% that provided complementary therapies, 53% employed music therapists. A Canadian survey completed by the managers of 74 English-speaking hospices also showed music therapy and massage therapy as the most commonly-used complementary therapies, with 57% utilizing both of these services (Oneschuk et al., 2007).

In cancer care, music therapy may be implemented from the time of diagnosis, through treatment, including chemotherapy and radiation therapy, survivorship, recurrence, advanced disease, palliation and bereavement (McDougal Miller & O'Callaghan, 2010). Music therapy is practiced in inpatient specialized units, outpatient clinics, chemotherapy suites in hospitals, free standing hospices, in home visits, long term care facilities, and comprehensive cancer centers (Richardson, Babiak-Vazquez, & Frenkel, 2008).

McDougal Miller and O'Callaghan (2010) identify issues, goals, and music therapy interventions for phases and sub-phases along the cancer disease continuum. The eight main phases identified are: (a) diagnosis; (b) treatment, surgery; (c) active treatment curative mode or cancer as a chronic disease; (d) post treatment; (e) survivorship; (f) recurrence or advanced disease; (g) palliative care; and (h) bereavement. Allen (2013) provides an overview of bio-psychosocial and spiritual need areas for adult cancer patients, as well as describing patient strengths and musical characteristics. Clements-Cortes (2013) provides a similar review for adults in palliative care and hospice. Kruse's (2003) research on cancer care that focused on curative treatments and those aimed at prolonging life shows music therapists' primary goals were psychosocial needs, anxiety and pain management. The findings show music therapy as used primarily to promote emotional expression, as a cue for relaxation, to help express spirituality and end-of-life concerns, to promote cognitive functioning, as a social catalyst, and to serve as a distractor. Physical pain, extreme anxiety, relaxation, depression, and extreme restlessness received the most requests out of 18 reasons for music therapy referral within

a palliative care inpatient unit (Gallagher, Huston, Nelson, Walsh & Steele, 2001). In their integrative review, Bowers and Wetsel (2014) report anxiety to be the most common reason for referral to music therapy in palliative care, followed by pain, depression, and quality of life, corroborating medical findings of patient problems in palliative care (Delgado-Guay, Parsons, Li, Palmer, & Bruera, 2009; Radbruch et al., 2003).

Effectiveness of music therapy. Music therapy research in oncology/palliative care uses quantitative, qualitative, and mixed methods to study goals and issues. A Cochrane Review suggests benefits on anxiety, pain, fatigue, QOL, heart rate, respiratory rate and blood pressure for adult and pediatric patients with cancer. This was based on 23 music therapy and 29 music medicine studies that were quasi-randomized or RCTs (Bradt, Dileo, Magill, & Teague, 2016). A meta-analysis of RCTs from 1995 to 2014 investigating the effects of music on pain, reported a significant and moderately-consistent effect for the five music therapy studies that examined chronic/cancer pain (Lee, 2016). Single-session music therapy interventions for hospice or hospitalized palliative care patients appeared to (a) increase pain control, physical comfort, and relaxation (Krout, 2001); (b) show significant benefits for affect and pain (Fredenburg & Silverman, 2014); (c) significantly reduce anxiety, pain, tiredness, drowsiness (Horne-Thompson & Grocke, 2008); (d) show treatment gains for relaxation, pain, anxiety, and nausea (Chaput-McGovern & Silverman, 2012); and (e) lower pain (Gutgsell et al., 2013). Gallagher and Steele (2001) found significant gains for pain, mood, and anxiety while developing a computerized database for music therapy research in palliative medicine. Other research has presented significant results for (a) increased QOL for hospice patients with terminal cancer (Hilliard, 2003); (b) reduced mood disturbance in patients undergoing autologous stem cell transplantation (Cassileth, Vickers, & Magill, 2003); (c) decreased anxiety and depression and stress, and improved QOL for hospice patients receiving group music therapy (Nakayama, Kikuta, & Takeda, 2009); (d) reduced pain, anxiety, depression, and shortness of breath for patients in palliative medicine (Gallagher et al., 2006); (e) perception of meaningful spiritual support and less trouble breathing (Burns, Perkins, Tong, Hilliard, & Cripe, 2015); (f) significantly increased spiritual well-being scores on music therapy days (Wlodarczyk, 2007); (g) positive effects for spirituality with patients on a medical oncology/hematology unit

(Cook & Silverman, 2013); and (h) improved well-being, anxiety and depression, and decreased symptomatology for advanced cancer patients in palliative care (Domingo et al., 2015).

Overarching methods and interventions. In music therapy, four overarching methods are (a) improvisational, the client makes up music; (b) re-creative, the client learns or performs music); (c) compositional, the client creates an original musical product; and (d) receptive, the client listens to live or pre-recorded music (Bruscia, 1998). Allen (2013) reviews how these four methods have been used with cancer patients, while Clements-Cortes (2013) offers a similar overview of these methods for adults in palliative care and hospice. Dileo and Dneaster (2005) outline more specific music therapy interventions for end of life care to address physical, psychosocial, cognitive, and spiritual goals for the client, as well as for the family and caregiver. These can include listening, entrainment through use of the iso principle, song choice, song writing, lyric analysis, vocal and instrumental improvisation, song dedication, music and imagery, life review through music, reminiscence, musical autobiography, environmental music, and legacy work. The authors also distinguish three levels of practice that may follow a trajectory of treatment progression: (a) supportive, (b) communicative/expressive, and (c) transformative. McConnell and Porter (2016) add a social level to these three domains in the theoretical framework they use in their quest to understand the therapeutic and contextual mechanisms that might explain the benefits of music therapy with palliative care patients.

Receptive methods: live music interventions. McDougal Miller and O'Callaghan (2010) note that interventions in adult oncology settings are often receptive versus those that involve active music-making. The reasons they detail for this phenomenon are (a) patients' acute and ever-changing physical status, (b) restrictions due to IV tubing or patients' minimal physical energy, (c) the often limited number of music therapy sessions preclude unfamiliar musical experiences, (d) space limitations, (e) patients' reluctance to try unfamiliar experiences when in the midst of health crises, (f) patients may interpret some music-making activities as age-inappropriate, (g) patients not recognizing the relevance of active music-making, (h) a desire to focus on the relaxation response, and (i) active music-making may not be a priority for patients (p.256).

Clements-Cortes (2016) also notes in her analysis of music therapy techniques used in palliative care that receptive methods, usually music listening, are common, given the decreased energy levels for patients who are at end-of-life. Music listening, particularly to live music performed by the therapist, is a frequently used and researched music therapy intervention with hospitalized cancer patients, or with those who are terminally ill, with many studies showing patient preference for this intervention over active music-making choices. A random effectiveness study that examined the effect of music therapy on affect and pain of hospitalized patients recovering from a blood and marrow transplant used patient-preferred live music provided by the music therapist as the intervention (Fredenburg & Silverman, 2014). An examination of hospitalized cancer and cardiac patients' expectations regarding the benefits of music therapy showed both groups to "clearly expect listening to music to have substantial therapeutic benefit, and substantially more benefit than other music activities" (Bruscia et al., 2009, p. 242). Cancer patients on an inpatient palliative care ward chose receptive music therapy nearly twice as often compared to active music therapy (Kordovan, Preissler, Kamphausen, Bokemeyer, & Oechsle, 2016). Cancer patients undergoing chemotherapy indicated interest in receptive music therapy listening interventions over active music making interventions (Burns et al., 2005). In a quantitative trial on the clinical effects of music therapy in palliative medicine, live music played by the music therapist was listed as the most frequently-used music therapy intervention presented to patients (Gallagher et al., 2006). Gallagher & Steele (2001) listed live music listening as the most frequently used music therapy intervention in their study that found significant effects of music therapy on common symptoms of advanced cancer patients. Mramor (2001, Table 1) reported live music provided by the therapist as the most frequent music therapy intervention during all three stages of therapy: (a) the engagement phase at 70% occurrence of all sessions, (b) relationship building stage at 67% occurrence of all sessions, and (c) actively dying at 89% occurrence of all sessions. In a study that examined patient, visitor and staff experiences of music therapy, the researcher reported spending the most time playing requested music from patients' lifetimes (O'Callaghan, 2001). Hilliard (2003) noted in a study examining the effect of music therapy on QOL for hospice patients with terminal

cancer, that live music was the main intervention in music therapy sessions prior to participants' deaths.

Further contributing to an understanding of live music interventions would therefore seem a worthy endeavor for music therapy research in oncology and palliative care. Descriptions of live music in the literature pertaining to this population, particularly regarding receptive methods, often involve the therapist singing songs accompanied by an instrument, usually the guitar (Bailey, 1983; Cook & Silverman, 2013; Ferrer, 2007; Fredenberg & Silverman, 2014), or sometimes the electronic piano (O'Callaghan, 2001). However, unlike descriptions of song-choice, musical instruments are generally given peripheral mention at best, rather than being examined as inherently important variables. For example, the accompaniment instrument was not identified in a study that examined the effect of live music therapy for patients undergoing elective surgical brain procedures (Walworth et al., 2008). Singing, accompanied by classical guitar was the live music intervention for patients undergoing chemotherapy treatment in Ferrer's RCT study (2007). A mixed-methods study used guitar accompaniment for songs to explore the effect of music therapy on spirituality for patients on a medical oncology/hematology unit (Cook & Silverman, 2013). Clements-Cortes (2011) compared live music versus tape recorded music in palliative care, and used guitar as accompaniment to singing. A study by Chaput-McGovern and Silverman (2012) used the steel string acoustic guitar to accompany songs on a post-surgical oncology unit. An RCT study of receptive music therapy with patients' in palliative care provided vocal improvisation using a monochord for accompaniment (Warth, Kessler, Hillecke, & Bardenheuer, 2016).

Musical Instruments in the Music Therapy Literature

Overview. Musical instruments in general, each bearing their unique timbres have not been widely investigated or reported, despite early music therapy pioneers noting that each instrument has unique therapeutic potential (Nordoff & Robbins, 1971). More recent work has begun to redress this issue. Bodner and Gilboa (2006) discussed how different instruments might have unique facilities for communicating and expressing emotions. Krout (2007) reviewed the music therapy literature relating to the use of the guitar over a 40-year period. Gilboa, Zilberberg, and Lavi (2011) systematically explored the "musical personality" of the piano and the implications for music therapy. Loombe, Rodgers,

Tomlinson, and Oldfield (2015) looked at how music therapists use their first study instruments in their clinical work, each chapter devoted to a different orchestral instrument. In their study investigating how music therapy interventions are reported in the literature, Robb, Carpenter, and Burns (2011) concluded that detailed descriptions of interventions, including the type and quality of instruments used are essential to improve replication, transparency, and translation to practice. Burns (2012) furthered this conclusion with the imperative to include the theoretical underpinnings for the selection of music stimuli.

Oncology/palliative care. A few studies provided somewhat more focus on the instruments used for live music therapy interventions in oncology/palliative care. In Nicholson's (2001) article detailing the imagery and music components of relaxation groups at a cancer centre, the instruments are described according to their acoustic properties and ability to create a contemplative atmosphere. S. Schneider (2005) reported extensively about the use of the hammered dulcimer for *environmental music therapy* in oncology intensive care units and end of life medical contexts. Guitar, violin, keyboard, and ocean drum were employed in an environmental music therapy pilot study using only instruments in a chemotherapy infusion suite (Canga, Hahm, Luci, Grossbard, & Loewy, 2012). Another pilot study explored the subjective experience of patients with cancer in end of life care, using the body tambura, a newly-developed instrument for music therapy (Teut, Dietrich, Deutz, Mittring, & Witt, 2014). Domingo et al. (2015) listed five instruments, including a harp, in their controlled trial that used a variety of music therapy interventions for patients with advanced cancer on a palliative care unit. Of interest is their mention of voice "after" these instruments, and that clarinet and saxophone were also used when preferred by patients. Of additional interest, these researchers also referred to *active music listening* rather than simply *listening* as an intervention.

The Use of Live Harp Music in Oncology/Palliative Care: Adjunct Practices and Music Therapy

Adjunct practices. Several programs in the USA offer training in the art of providing individualized live therapeutic harp playing for a variety of clients, particularly those at end of life. Many fall under the standards of practice demanded by the National Standards Board for Therapeutic Musicians (NSBTM). Examples are

- The Music for Healing and Transition Program (MHTP) which graduates Certified Music Practitioners (CMTs);
- Chalice of Repose Project which graduates Music Thanatologists (CM - Ths) who are part of the Music-Thanatology Association International (MTAI)
- International Harp Therapy Program (IHTP) which graduates Certified Harp Therapy Practitioners (CHTP);
- Bedside Harp which graduates Certified Harp Therapists or Certified Masters of Harp Therapy; and
- Vibroacoustic Harp Therapy (VAHT), which graduates VAHT practitioners.

As well, the Harp Therapy Journal, edited and published quarterly by Sarajane Williams, a licensed American psychologist, harpist, and founder of VAHT, is now in its 21st year. This journal is the voice for those who use harp in their healing work and brings together interviews, research, training, and trade information. Many books and manuals are also available in this burgeoning field. In one example, Cox and Roberts (2013) chronicle Roberts' development as a music-thanatologist and therapeutic harp practitioner within hospital settings in Australia. Roberts founded the Australian based Institute of Music in Medicine in order to foster and advocate for these services.

Harp music is also found in the music medicine literature. Dileo (1999, p.4) categorized music medicine interventions as receptive listening to prerecorded music delivered by medical personnel. As the field of music and medicine has evolved, the author has expanded this model, creating the umbrella term "Music Practices by Medical Professionals" to include not only music medicine interventions, but also adding "Music Performance for Patients" (Dileo, 2013, Figure 6). In their paper outlining how music can be used as a goal-directed intervention for oncology nurses, Halstead and Roscoe (2002, Table 1) use principles developed by music therapists to educate nurses on using music to enhance QOL for their patients. These authors characterized harp music as having therapeutic goals of "letting go, relaxation, and spirituality" (p.333). Several nursing studies have used live therapeutic harp music interventions for research on hospitalized patients. Sand-Jecklin and Emerson (2010) employed physiologic measures on medical-surgical patients at West Virginia University Hospital in a pre-post design intervention by a CMT playing the Celtic harp for about 20 minutes. Another study investigated live

Celtic harp music offered to postoperative patients on the Vascular and Thoracic Surgery Unit of the Orlando Regional Medical Center (Aragon, Farris & Byers, 2002). This patient cohort was selected because of their experience of pain, anxiety and physiological alterations, symptoms that are also common in oncology/palliative care. D. M. Schneider et al. (2015) investigated the effect of live therapeutic harp and QOL measures of hospitalized patients. This study also specified not only the make and type of harp, but the type of technique used by the therapeutic harpist.

As can be seen from the host of harp in healing modalities, there is a continuum of practice between its use in music therapy and in music medicine. The American Music Therapy Association (AMTA) provides a comparison between music therapy and two of these, "music-thanatology", and "therapeutic music" (AMTA, 2015). Music therapy interventions are evidence based, implemented by a credentialed music therapist, and tailored to individual needs in the context of therapeutic relationship. Music-thanatology is an emerging professional field within palliative care in which the music-thanatologist uses live harp and voice prescriptively for dying patients at the bedside (Freeman et al., 2006). Therapeutic musicians use "the intrinsic healing elements of live music and sound to provide an environment conducive to the human healing process" (NSBTA, 2017, homepage). Archie, Bruera, and Cohen (2013) differentiate the practice of music therapy from both music medicine and other therapeutic music services mainly by the importance afforded to the therapeutic relationship between a music therapist and client, and a process of assessment, treatment and evaluation. Other research has compared the impact of music therapy versus music medicine on psychological outcomes and pain in cancer patients so that the clinical role of each can be better understood (Bradt et al., 2015).

Music therapy. Given the paucity of information about the instruments used in music therapy in oncology/palliative care, not surprisingly there is little mention in the literature regarding the harp in this setting. In the chapter devoted to the harp (Loombe et al., 2015), Mentzer discussed her work in an American Cancer Center where she used a therapy harp, and stated, "The harp has allowed me to connect with certain patients in a way that traditional music therapy instruments do not invite because of its aesthetics and what it may symbolize" (Gottlieb, Lockett, & Mentzer, 2015, p. 109). Music therapy research in oncology/palliative care yielded only two studies showing live harp music in a

more central role. Popkin et al. (2011) employed live harp and guitar improvisations in a music therapy-centered grief intervention designed for cancer care staff. The instruments were chosen for their timbre, match to the skills of the two music therapists, and familiarity to the staff on the unit. An RCT study of 200 inpatients in palliative care (Gutgsell et al., 2013) found that a single session live music therapy intervention using the harp appeared to lower perception of pain for inpatients in palliative care. The researchers employed a 20-minute standardized protocol which began with a verbal autogenic relaxation procedure, followed briefly by playing of the ocean drum as desired by the participant, and a sequence of five harp pieces chosen for their soothing and peaceful quality by the music therapist-researcher. The pieces were comprised of an improvisation and four compositions. Despite a thorough reporting of the musical elements including key, genre, name of composition, composer, volume and tempo, the type of harp, whether classical, Celtic, or Celtic therapy harp was not indicated. As these instruments are quite different with respect to size, visual appeal, timbre, range of pitch, and chromatic possibilities, this would be practical information. It could also be of service to have included the word harp in the title given its significant role in the study.

Potential of the Harp in Oncology/Palliative Care Music Therapy

It is prudent to explore the potential of the harp as an effective instrument for music therapists in oncology/palliative care as the literature has shown that (a) each instrument offers unique therapeutic potential; (b) music therapists serving patients in oncology/palliative care address a wide spectrum of psychological, social, emotional, and spiritual needs; and (c) live music is a valued intervention in this setting. Not only is it a polyphonic instrument, with strings organized in the same fashion as a keyboard, and therefore ideally suited for both carrying the melody and providing accompaniment, but also its ancient and archetypal qualities are eminently appealing and suitable for this work (Williams, 2000). It can be played with a wide expressive range, for example with rhythmic vitality and covering many genres. Yet its innately intimate, soothing, and aesthetically pleasing tonal palette seems particularly well suited for settings in which suffering from pain, anxiety, and depression are common experiences for patients. The dulcet timbre of the harp may well serve to decrease such distress, and increase relaxation and access to spiritual and aesthetic dimensions.

Summary

Music therapy has made important contributions toward addressing the complex bio-psychosocial and spiritual needs of patients within the oncology/palliative care continuum. While live music interventions by music therapists are a prevalent intervention, the literature review revealed little detailed information about the musical instruments used in such applications. Practice evidence from adjunct disciplines supports the use of the harp in oncology/palliative care. Whereas, with just two studies that provide the harp a somewhat more central role, there is a significant gap in music therapy research on this topic. The present investigation intended to shed light on the use of the harp in oncology/palliative care music therapy practice in Canada and the USA, and lay the groundwork for developing its use to support and augment current interventions in order to offer best clinical service to clients.

Chapter 3. Methodology

Questionnaire-based survey methodology was implemented for this preliminary investigation into the use of the harp in music therapy in oncology/palliative care in Canada and the USA. Surveys can provide a general overview and offer both descriptive and quantitative data that "may be incorporated as one part of the hierarchy of evidence to support intervention criteria" (Wigram, 2005, p. 272). Curtis (2016) points out the increasing use of surveys to identify both common and specific practices in music therapy. Online surveys also provide a cost effective means of reaching a large sample size over a wide geographical distribution, offering a good fit for this query to music therapists across Canada and the USA.

Participants

Credentialed Canadian and American music therapists in good standing with either the Canadian Association of Music Therapists/Association canadienne des musicothérapeutes (CAMT/ACM) and/or the USA-based Certification Board for Music Therapists (CBMT), and working in Canada or the USA were eligible for this study. A second criterion was experience, with length of time unspecified, practicing with people with cancer as either a primary or secondary diagnosis, at any stage of care, from diagnosis to palliation. There were 596 Accredited Music Therapists (MTAs) contacted through the CAMT/ACM. Following approval from the CBMT, the full listing of 6,375 current Board Certified Music Therapists (MT-BCs) practicing in the USA and Canada was purchased and utilized. Filtered lists of MT-BCs did not include a category for oncology, thus making it prudent to use the entire list. As well, the survey was designed to determine if respondents had both credentials. Further details regarding the survey distribution follow in the Procedures section of this chapter.

In total there were 201 respondents. A third criterion within the survey required respondents' use of the harp as a primary instrument in their practice with people with cancer, reducing the number to 23 respondents eligible to complete all of the survey questions.

Materials

The researcher developed an English-language only survey of 22 questions intended to garner information about the scope and use of the harp by music therapists

working with patients in oncology/palliative care in Canada and the USA (see Appendix A). There were five open-ended questions and 17 close-ended questions, which included nine that offered space for additional comments. The thesis supervisor, another adjunct professor, as well as five other music therapists, and two health field researchers reviewed survey drafts. This feedback informed revisions resulting in the final survey.

The first three questions qualified respondents to continue the survey using criteria regarding professional music therapy status, practice within oncology/palliative care, and usage of the harp as a primary instrument within this practice. Question 4 concerned workplace geographic demographics. Questions 5 and 6 asked about years of practice in oncology/palliative care and of playing the harp. Numbers 7 and 8 pertained to the setting and types of sessions in which clients were seen. Questions 9 and 10 inquired about respondents' relative use of the harp with respect to using other primary instruments, and the type of harp used. Numbers 11 through 13 delved into the type of harp used if more than one type was indicated in Question 10. Questions 14 and 15 were matrix questions of 5-point Likert-type scales with a not applicable option, and optional comment boxes. These explored how respondents use the harp in their oncology/palliative care practice. Number 16 requested respondents' opinions as to the unique therapeutic properties of the harp. Questions 17 and 18 related to perceived risks and contraindications of using the harp. Numbers 19 to 21 concerned background and training on the harp. A final question invited additional thoughts. Questions 1 to 10, 14 to 16, and 19 to 21 required answers. Questions 1 to 6, 9, and 10 were multiple choice. Numbers 7, 8, 12 to 15, and 19 to 21, were multiple choice or Likert-scale questions with comment boxes allowing for further thoughts. Questions 11, 16 to 18, and 22 were open-ended inviting free responses. The full survey is found in Appendix A.

Procedures

Approval was granted from Concordia University's Human Research Ethics Committee (UHREC) before the recruitment of participants and data collection. The researcher purchased the online services of the company Survey Monkey to format the survey, collect responses, and provide preliminary data analysis. Settings were enabled to allow for complete anonymity of survey responses. As well, participants were asked to withhold identifying information in their responses.

Data Collection

The CAMT/AMC office distributed by email "The Invitation to Participate" (Appendix B) and "Informed Consent" (Appendix C) documents to the MTA list, using the e-mail heading "Seeking Participants for a Research Study (Pearce)". These documents outlined the study's purpose, criteria for participation, details regarding informed consent and instructions for accessing the web survey. The same materials were delivered by the researcher through Survey Monkey to the MT-BC list purchased from the CBMT, with the e-mail heading "Invitation to Survey Study – Use of Harp in Oncology/Palliative Care Music Therapy". By completing the survey, individuals confirmed their voluntary participation and informed consent. Reminder emails were sent during the second week, and the survey was closed 3 weeks after the initial distribution. Responses were saved anonymously on Survey Monkey's secure and password protected database as well as downloaded into an Excel document on the researcher's password protected computer and two external hard drives kept in a locked cabinet at the researcher's premises.

Data Analysis

Survey Monkey was used to create basic descriptive statistics for each question. The researcher employed thematic content analysis using axial and selective coding as outlined by Neuman (2006). The present research was also informed by O'Callaghan and McDermott's study (2004) that used a similar paradigm to distill themes from answers to qualitative open-ended questions regarding the relevance of music therapy in a cancer hospital. The data was analyzed with the assistance of a statistical consultant.

The next chapter presents the results from the survey that was distributed in late June 2016 and closed in mid July 2016.

Chapter 4. Results

Response Rate

Of the 6,375 invitations sent to credentialed CBMT members, 2,517 were opened, and 182 were returned, for a response rate of 7.23% from this collector. As it was impossible to have a similar benchmark of *opened* invitations for the CAMT list, the MTA response rate of 3.19% was calculated on the return of 19 surveys from 596 broadcasted emails. A total of 201 credentialed music therapists returned surveys from the combined American (2,517) and Canadian (596) invitations, for an overall response rate of 6.4%. Curtis (2016) notes that while some research has indicated a response rate of 30% as average for questionnaire based online surveys, there is no universal standard in the professional literature, and acceptable response rates depend on the parameters of the research. According to the American Association for Public Opinion Research (AAPOR) there is no consensus on factors linking survey quality and response rate (AAPOR, 2016). As the invitation and consent to participate documents (see Appendices C and D) clearly stated that eligibility required experience of an unspecified length of time practicing music therapy with people with cancer, this low response rate might indicate the self-selection of participants. The study's topic regarding the use of harp, though not a condition of participation may also have reduced responses. In light of these considerations the researcher chose to proceed with the analysis and presentation of the results. After Question 3 regarding use of harp, 23 eligible responses remained. One of these exited the survey after Question 8, and two exited after Question 15, leaving a total of 20 fully-completed surveys.

Responses to Qualifying Questions

Results from the first three questions that qualified participants to continue with the survey are summarized in Table 1. All respondents (N=201) were credentialed music therapists, with the majority from the USA. Five of these were credentialed in both Canada and the USA, while 177 held MT-BC designation and 19 the MTA designation. 158 respondents or 78.6% of the total met the requirement for practicing in oncology/palliative care. 23 respondents or 14.6% of music therapists practicing in oncology/palliative care indicated using the harp as a primary instrument in oncology/palliative care. Of note, Question 4 showed 100% of these as practicing in the

USA and none in Canada, even though 12% of those who practiced in oncology/palliative care held Canadian MTA or dual credentials.

Table 1

Responses to Qualifying Questions

Variable	*n*	*f*	%
Professional Credentials	201		
MTA		19	(9.5)
MT-BC		177	(88.1)
Both MTA and MT-BC		5	(2.5)
Provide Music Therapy in Oncology/Palliative Care	201		
Yes		158	(78.6)
No		43	(21.4)
Harp Primary Instrument in Oncology/Palliative Care	158		
Yes		23	(14.6)
No		135	(85.4)

Note. n is the number of responses to each of the qualifying questions. *f* is the frequency of responses for each category. % is based on *f* to *n* for each category.

Use of the Harp

Experience with the harp. Questions 6, 9, and 10 regarding respondent use of the harp are summarized in Table 2. One respondent exited the survey following Question 8, reducing the number of respondents to 22. This missing data was included as "no response" in quantitative analyses for the remainder of the study. To maintain internal consistency, a manual adjustment was made to the responses for Question 10, since Question 12 provided further information as to the types of harps used by respondents. This amounted to two more entries for both the small and large Celtic harp. Results show about one half of respondents had played the harp for more than 10 years, and one half for less than10 years. Forty-three and one-half percent of respondents indicated using the harp as their primary instrument 25% or less of the time, while the same number indicated using it more than 50% of the time. Almost 9% used the harp between 26% and 50% of the time. Nearly half (48%) of respondents indicated playing more than one style of harp, with the two sizes of Celtic harp being used almost equally. Two respondents played the concert pedal harp: one who chose this as the most used instrument (though an added comment indicated it was seldom used, implying the

question may have been misinterpreted); the other, the only one who played all three harps, ranking it as least used.

Table 2

Description of Respondents' History and Use of the Harp in Oncology/Palliative Care

Variable	*n*	*f*	%
Years Playing Harp	23		
Less than 5 years		7	(30.4)
5 to 10 years		5	(21.7)
More than 10 years		11	(47.8)
Percentage Harp Used Compared to Other Primary Instrument	23		
1% - 25%		10	(43.5)
26% - 50%		2	(8.7)
51% - 75%		4	(17.4)
76% - 100%		6	(26.1)
No response provided		1	(4.3)
Type of Harp Used (could be more than one)	23		
Small levered Celtic therapy harp up to 29 strings		15	(65.2)
Large levered Celtic harp with 29 or more strings		17	(73.9)
Concert pedal harp		2	(8.7)
No response provided		1	(4.3)

Note. *n is the sample of qualified respondents for these required questions. f is the frequency of responses in each category. % is based on f over n.*

Experience in oncology/palliative care and scope of practice. The results of Questions 5, 7, and 8 concerning respondents' years of music therapy experience and general scope of practice in oncology/palliative care are provided in Table 3. There is an almost even split between over and under 5 years of practice in oncology/palliative care. The majority of respondents (69.6%) practiced within a hospital inpatient unit, while roughly half indicated practicing in a long-term care facility, in-home visits, or a free standing hospice. One respondent cited practicing in multi-bed or multi-chair open clinical units providing environmental music therapy, and another cited a dementia unit in a skilled-care facility. All respondents indicated working with individuals, roughly half with groups of clients (47.8%), and 82.6% also included loved ones and visitors in sessions.

Table 3

Respondents' Music Therapy Experience and Scope of Oncology/Palliative Care Practice

Variable	*n*	*f*	%
Years Practiced Music Therapy in Oncology/Palliative Care	23		
Less than 5 years		11	(47.8)
5 to 10 years		5	(21.7)
More than 10 years		7	(30.4)
Setting(s) in Which Harp Used	23		
Hospital inpatient unit		16	(69.6)
Outpatient or ambulatory service		4	(17.4)
Cancer care centre		6	(26.1)
Long term care facility		13	(56.5)
Free standing hospice		10	(43.5)
In-home visits		13	(56.5)
Other (specify)		2	(8.7)
Type of Session(s)	23		
Individual client session		23	(100.0)
Groups of clients		11	(47.8)
Client sessions which include loved ones and/or visitors		19	(82.6)
Other (specify)		1	(4.4)

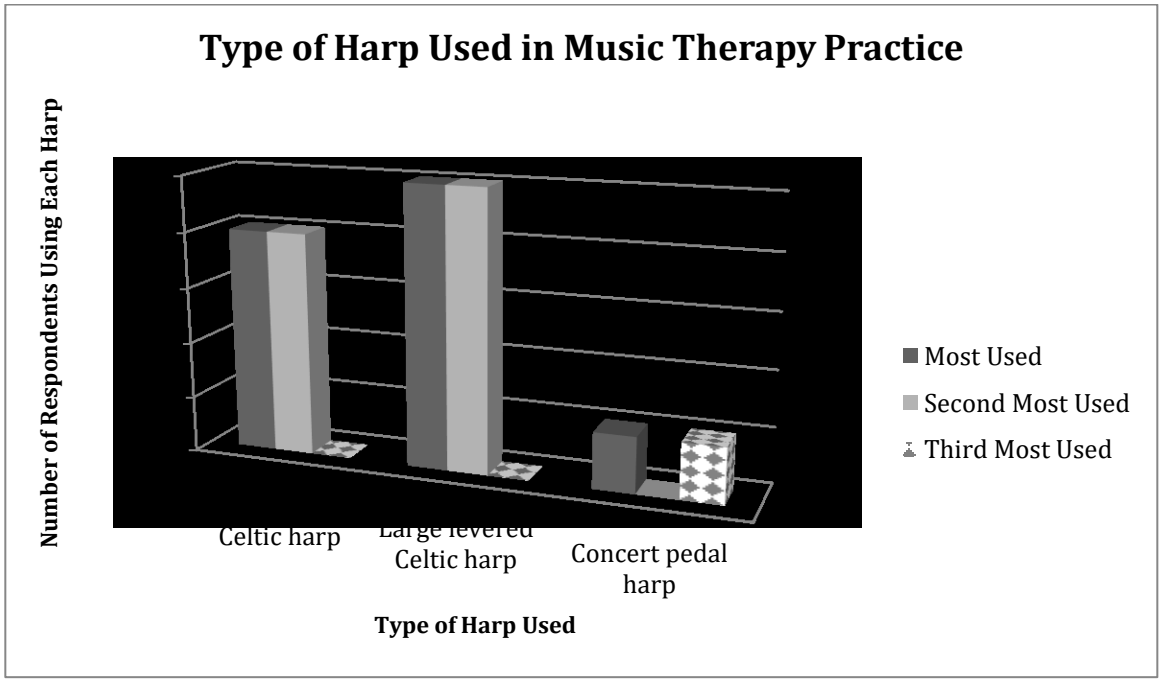
Note. *n is the sample of qualified respondents for these required questions. f is the frequency of responses in each category. % is based on f over n.*

Choice of harp. Questions 11 to 13 examined respondents' choice of harp if they used more than one. Nearly half (48%) of respondents indicated playing more than one style of harp. Figure 1 displays Question 12's ranking of respondents' use of different harps (n = 11). As with Question 10, in order to maintain internal consistency, a manual adjustment was made to the responses for Question 12. Since this question required at least two choices from each respondent, responses showed that three respondents had completed only one choice. It was possible to make these answers complete by either reading the associated comments, or by referring to the individual's answer to Question 10. Five people mainly used the small Celtic harp and five people mainly used the large Celtic harp. Five people rated the small Celtic harp as second most used, and six rated the large Celtic harp as second most used. Only one respondent showed their main harp to be the concert harp. One respondent indicated using all three types of harps in order from small Celtic to concert harp. One respondent clarified that *"it is the feeling and way one plays…not the harp itself…I have found that the best harps did not make the difference, the energy of the player is more important."* Another person noted mostly using a double

strung lever harp having 44 strings, which is albeit a small Celtic harp. One respondent favoured the larger Celtic harp as more suited to his or her repertoire, while another respondent cited the larger Celtic harp as most used because he or she had owned it much longer than the smaller Celtic harp.

Figure 1

Respondents' Frequency Ranking of Different Harps Used in Oncology/Palliative Care Practice (*n* = 11)



The qualitative analysis for the open-ended question 11 (*n* = 10) regarding how respondents chose which harp to use in their practice is summarized in Appendix D. Eight themes that emerged from 29 open coding categories and listed in order of frequency were (a) portability, (b) environmental considerations, (c) individual patient considerations, (d) resonance, (e) population served, (f) musical and expressive capabilities, (g) intrinsic qualities of each harp, and (h) storage considerations. Issues of practicality and ease of moving the instrument were prevalent, with the smaller and lighter harp used for frequent moving and the larger harp for staying in one location. The smaller Celtic harp was viewed as being easier on the back and requiring less muscle tension to play and hold than the larger harp. The smaller harp was indicated as being

more suitable for bedside use and positioning close to patients, while the larger Celtic harp was for use in one area. One person selected the harp based on mellowness and warmth of sound depending on individual patient needs. Another respondent used the small Celtic harp with children in a pediatric cancer setting, and reserved the large Celtic harp for adults, finding *"the low bass notes and full lever options allow for diverse and interesting playing – which has proven to be meaningful for the adult* populations *I serve"*. Another respondent provided a detailed description of the small double strung harp. Though a small Celtic harp by size, the two sets of strings, totaling 44, *"opens the possibility for creating a limitless emotional container … to manipulate complex musical elements when needed/appropriate".* The double strung harp was also seen to elicit a curiosity and engagement with the instrument by patients and families as compared to the sometimes self-deprecating remarks about their relationship with music prompted by the larger Celtic harp.

Question 13 delved further into respondents' choice of harp for patient needs and venues. Seven of the 10 respondents said that they found different harps more suitable for certain patient needs or venues, while two indicated no difference, and one had no opinion. Appendix E summarizes the qualitative analysis of the eight additional comments to this question. Sound quality, suitability to space and number of people, bedside use, therapeutic work, and general impact emerged as themes. The larger Celtic harp was generally considered to have more warmth, resonance, and vibration and perhaps be more effective for relaxation. Two answers mentioned the richness of the bass notes on the larger harp. One comment suggested that both were quality instruments and effective with patients. The pedal harp was used for groups and one person mentioned mostly using the larger Celtic harp for memorials or company-wide rituals because of its archetypal meaning of celebration and powerful angel wings. The small harp was described as intimate, more suitable for a bed bound patient to play and feel the vibrations, and having less of a performance feeling.

Music Therapy Methods and Use of the Harp

Question 14 (see Table 4) used a 5-point Likert-type scale, plus a not applicable option requiring respondents to rate the frequency that they used the harp within the four main music therapy methods (Bruscia, 1998). One respondent who had exited the survey before completing this question was included as a no response for purposes of the statistical analysis. Nearly 87% of respondents reported that they frequently or almost always used their harp for receptive techniques where the client listens to the therapist play music, and 4.3% reported almost never using the harp for this way. The second most used method was improvisational, where the client makes up the music. Thirty-nine percent of respondents indicated using this method sometimes, frequently, or almost always, while 43.4% reported using this method infrequently or almost never. Both compositional and re-creative techniques were reported as being infrequently or almost never used. Seven people added comments for this question. One respondent expressed that the receptive choice was misleading: *"I would not say the client only listens. Often the client may sing with, intentionally breathe along with, or pray or mediate with the harp".* Three respondents mentioned that they themselves often or mostly improvised on the harp, one adding that sometimes this includes the client improvising along in song as part of the therapeutic process.

Table 4

Respondents' Use of Harp within 4 Main Music Therapy Methods (Bruscia, 1998)

Variable	*n*	*f*	%
Improvisational (client makes up music)	23		
Almost Never		5	(21.7)
Infrequently		5	(21.7)
Sometimes		3	(13.0)
Frequently		3	(13.0)
Almost Always		3	(13.0)
N/A		3	(13.0)
No Response		1	(4.3)
Re-creative (client learns or performs music)	23		
Almost Never		9	(39.1)
Infrequently		9	(39.1)
Sometimes		1	(4.3)
Frequently		0	(0.0)
Almost Always		0	(0.0)
N/A		3	(13.0)
No Response		1	(4.3)
Compositional (client creates a musical product)	23		
Almost Never		10	(43.5)
Infrequently		4	(17.4)
Sometimes		4	(17.4)
Frequently		0	(0.0)
Almost Always		1	(4.3)
N/A		3	(13.0)
No Response		1	(4.3)
Receptive (client listens to therapist play music)	23		
Almost Never		1	(4.3)
Infrequently		0	(0.0)
Sometimes		0	(0.0)
Frequently		3	(13.0)
Almost Always		17	(73.9)
N/A		1	(4.3)
No Response		1	(4.3)

Note. *n is the sample of qualified respondents for these required questions. f is the frequency of responses in each category. % is based on f over n.*

Use of the Harp for Bio-psychosocial Music Therapy Goals

Question 15 (see Table 5) required respondents to rate their frequency of using the harp for 16 bio-psychosocial goals for music therapy in oncology/palliative care, using a 5-point Likert-type scale, plus a not applicable option. One respondent who had exited the survey before completing this question was included as a no response for purposes of the statistical analysis.

Almost 70% of respondents reported using the harp almost always to create a healing environment and to increase comfort. This same rating was applied by 56.5% of respondents for providing emotional and spiritual support and increasing QOL. Respondents indicated that 52.2% of the time they almost always use the harp to decrease anxiety and 47.8% of the time to increase relaxation and sleep, and increase positive mood. When the ratings categories of frequently and almost always are combined the percentages are as follows: (a) 87% to increase comfort, create a healing environment, decrease anxiety; (b) 82.6% to increase positive mood, provide emotional and spiritual support; (c) 78.2% to increase relaxation and sleep, increase QOL; (d) 73.9% decrease isolation; (e) 69.5% to increase coping and stress management; (f) 69.6% to decrease sense of depression and helplessness; (g) 65.2% to decrease pain; (h) 56.5% to provide support to family members and caregivers; (i) 47.8% to increase emotional expression; and (j) 39.1% to decrease shortness of breath, increase communication. When responses for the categories of sometimes, frequently, and almost always are combined the ratings are: (a) 87% to decrease anxiety, increase positive mood, increase coping and stress management, provide emotional and spiritual support, decrease isolation, increase comfort, increase QOL, create a healing environment; (b) 82.5% to decrease pain, increase relaxation and sleep, decrease sense of depression and helplessness; (c) 73.9% to decrease shortness of breath, provide support to family members and caregivers; (d) 65.2% to increase emotional expression; (e) 60.8% to increase communication; and (f) 56.5% to decrease nausea. Additional comments included (a) increasing coping skills through the use of music; (b) providing a physiological effect on the body such as raising blood oxygen levels, allowing for regular breathing patterns; and (c) providing opportunity for choice and control.

Table 5

Respondents' Use of Harp for Bio-psychosocial Music Therapy Goals in Oncology/Palliative Care (n = 23)

Rating	Almost Never		Infrequently		Sometimes		Frequently		Almost Always		N/A		No Response	
Variable	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Decrease Pain	1	(4.3)	0	(0.0)	4	(17.4)	9	(39.1)	6	(26.1)	2	(8.7)	1	(4.3)
Decrease Nausea	4	(17.4)	2	(8.7)	8	(34.8)	3	(13.0)	2	(8.7)	3	(13.0)	1	(4.3)
Decrease Shortness of Breath	1	(4.3)	0	(0.0)	8	(34.8)	7	(30.4)	2	(8.7)	4	(17.4)	1	(4.3)
Support Patient Through Medical Procedures	1	(4.3)	7	(30.4)	4	(17.4)	3	(13.0)	2	(8.7)	5	(21.7)	1	(4.3)
Increase Relaxation and Sleep	0	(0.0)	1	(4.3)	1	(4.3)	7	(30.4)	11	(47.8)	2	(8.7)	1	(4.3)
Decrease Anxiety	0	(0.0)	0	(0.0)	0	(0.0)	8	(34.8)	12	(52.2)	2	(8.7)	1	(4.3)
Decrease Sense of Depression and Helplessness	0	(0.0)	1	(4.3)	3	(13.0)	8	(34.8)	8	(34.8)	2	(8.7)	1	(4.3)
Increase Emotional Expression	0	(0.0)	5	(21.7)	4	(17.4)	5	(21.7)	6	(26.1)	2	(8.7)	1	(4.3)
Increase Communication	0	(0.0)	5	(21.7)	5	(21.7)	3	(13.0)	6	(26.1)	3	(13.0)	1	(4.3)
Increase Positive Mood	0	(0.0)	0	(0.0)	1	(4.3)	8	(34.8)	11	(47.8)	2	(8.7)	1	(4.3)
Increase Coping and Stress Management	0	(0.0)	0	(0.0)	4	(17.4)	7	(30.4)	9	(39.1)	2	(8.7)	1	(4.3)
Provide Emotional and Spiritual Support	0	(0.0)	0	(0.0)	1	(4.3)	6	(26.1)	13	(56.5)	2	(8.7)	1	(4.3)
Decrease Isolation	0	(0.0)	0	(0.0)	3	(13.0)	8	(34.8)	9	(39.1)	2	(8.7)	1	(4.3)
Provide Support to Family Members and Caregivers	0	(0.0)	3	(13.0)	4	(17.4)	6	(26.1)	7	(30.4)	2	(8.7)	1	(4.3)
Increase Comfort	0	(0.0)	0	(0.0)	0	(0.0)	4	(17.4)	16	(69.6)	2	(8.7)	1	(4.3)
Increase Quality of Life	0	(0.0)	0	(0.0)	2	(8.7)	5	(21.7)	13	(56.5)	2	(8.7)	1	(4.3)
Create a Healing Environment	0	(0.0)	0	(0.0)	0	(0.0)	4	(17.4)	16	(69.6)	2	(8.7)	1	(4.3)
Other (comment)	1	(4.3)	1	(4.3)	0	(0.0)	1	(4.3)	3	(13.0)	16	(69.6)	1	(4.3)

Note. f is the frequency of responses per rating category for each variable. *n is the total number of responses for each variable.* % is based on number of responses per rating category for each variable over the total number of responses for each variable.

Unique Qualities of the Harp for Therapeutic Impact

Appendix F summarizes the qualitative analysis from the open-ended and required Question16 regarding respondents' thoughts on the unique qualities of the harp that may have therapeutic impact. The majority of comments related to the sound and acoustic properties, and emotional and physical impact. Most respondents provided detailed responses. Nine themes emerged from 66 coding categories. The following is a summary of these and includes any category that could fit multiple themes only once:

1. Sound and acoustic properties: rich resonance; overtones and vibration allows recipient to physically feel and hear; pitch effects such as warm penetrating tones of lower register to pace breathing and glassy, bell like high notes to increase energy and bring joy; large pitch range; full round mellow tone can be relaxing and soothing; gentle sustained sounds create a sense of openness and space; and mellow tone suited better to certain personalities
2. Emotional and physical impact: can create a healing, quiet and relaxing, exciting, or hopeful atmosphere; useful for pain management; associated with feelings of serenity and peacefulness; soothing, beautiful, comforting, gentle; and less common instrument may encourage verbal processing of emotions related to disease process
3. Visual and tactile appeal: visually beautiful and appealing; clients find watching it relaxing, mesmerizing or entrancing; rich tactile experience if patient plays, both from touching the strings and feeling vibration in heart/chest area; and easy for patients to play with one hand
4. Spiritual and archetypal associations: association with angels, heaven, the afterlife, and dying may lead patients to accept or reject the music; association to spirituality and other-worldliness can provide a therapeutic bridge to these aspects; angelic cultural property can be comforting; Christian association with heaven, angels, resurrection expresses spiritual beliefs and values; and Jewish and Christian association of David soothing King Saul and seeing themselves soothed
5. Instrumental characteristics: can provide melody and harmony, easily accompanies vocals; used for many kinds of music including improvisation; fluid and flowing arpeggio style creates rich auditory and visual stimulation; accessible,

easy and success based for clients to play; coloured strings provide structure and grounding; and can control scale and mode

6. Unique aesthetic appeal: its ancient quality, and unique presence is intriguing
7. Therapeutic use: association with other-worldliness can provide a therapeutic bridge to address these aspects of clients' lives and care; unique sound and live harp can open up the therapeutic possibility of a special and sacred experience; accessibility allows for expression, autonomy and physical experience of creating music and feeling the vibration of the instrument; easy for clients to have immediate success playing; excellent for relaxation techniques; and good background for verbal processing
8. Ease of use for patients: patients being able to manipulate harp independently while lying in bed with little physical effort; and
9. Creates a healing environment.

Risks and Contraindications of Using the Harp

The open-ended and optional Questions 17 and 18 respectively address the risks and contraindications of using the harp in oncology/palliative care and are summarized in Appendices G and H. Qualitative analysis of the 17 responses about the risks revealed seven themes of (a) precaution with physical properties, (b) no risk, (c) association with death/heaven – emotionally overwhelming catalyst, (d) suitability to space, (e) heavy for therapist to move, (f) therapeutic concerns, and (g) personal preference. Several respondents mentioned physical precautions concerning properly cleaning and disinfecting the instrument as well as the possibility of a larger harp tangling with equipment or tipping over. One comment mentioned *"some people like music with more hardness to it."* While many felt there was no risk, three cautioned that because of the strong association with death and heaven to the harp, patients and families who are not ready to face this might have a difficult or even traumatic response to the instrument.

Regarding contraindications for using the harp, over half of the 14 respondents contributed comments reflecting the themes *"Associations, memories and responses to harp may be emotionally overwhelming"* and *"Patient/Family not ready to process feelings about death"*. An example illustrating such a response is:

> *The music therapist must assess for patient/client associations and responses to the harp, and provide or adjust intervention accordingly. For some individuals, the harp brings up strong associations or memories related to funerals or wedding ceremonies. The trained music therapist will be sensitive to these associations, either by navigating them appropriately within the therapeutic space or avoiding/adjusting the use of the harp if use may do emotional/psychological harm (for example: recognizing that using the harp could overwhelm or upset a patient who is not yet ready to process their feelings about death or nearing the end of life). Whenever possible, the patient/client should be given the opportunity to state preferences related to instrument choice.*

Appendix H outlines the qualitative analysis for this question including the three other themes of personal preference regarding sound and acoustic qualities, no contraindications, and physical concerns. Two respondents stated that a few patients might not like the sound of the harp. One commented that it might be too relaxing for the breathing and heartbeat for certain patients while another recommended use of caution for patients with nausea or extreme agitation.

Specialized Training on the Harp in Oncology/Palliative Care Music Therapy

Questions 19 to 21 addressed the question of training on the harp in oncology/palliative care music therapy. Responses to Question 19 were fairly evenly divided between the 11 who had learned to play the harp specifically for music therapy and the 9 who had played it since childhood, or learned it for other purposes such as for a personal spiritual practice, or for prayer services. One respondent mentioned being inspired by his or her internship supervisor integrating new harp skills into her therapeutic practice, and added that it had been the best addition to the hands-on musical aspect of his or her practice. Another noted that it was easy to learn and had since been using it in his or her practice for many years.

For Question 20, nine of 23 respondents indicated that offering the harp in music therapy in oncology/palliative care requires special training, while seven felt that this is not required, four were not sure or had no opinion, and three were no response. In the comments, three respondents noted that a credentialed music therapist has the skill,

knowledge, sensitivity and professional competency required without additional training. Two felt that further training could be desirable or beneficial but not be required while another strongly stated that music therapists should have exposure to specialty methods within their training programs rather than having to pursue them separately. Another two comments related that there should be enough lessons to provide basic technique in order to create a good sound or avoid injury, while another stated that there could be benefit from the training of harp practitioners. One respondent elaborated a big *"YES!!!"* to further training. This related however to this respondent's appreciation for *"the vital education about evaluating emotional needs and manipulating musical elements to provide emotional safety and support"* that he or she received from adjunct music therapy training.

Regarding Question 21, three of the 23 respondents indicated having taken special training in harp therapy. These included private training from a credentialed music thanatologist, the IHTP program, and workshops at harp practitioner conferences. One answer indicated that music therapy is sufficient and grounded in therapeutic process whereas another training he or she had considered, seemed *"New Age-y"* and not really sound music therapy.

One respondent offered this perspective in responding to the invitation for additional thoughts in Question 22:

> *Harp Therapy, Music Thanatology, or Clinical Musicianship training, or some other training in therapeutic harp would be beneficial. This is because the harp has unique qualities that can be effectively utilized in a therapeutic setting that aren't taught in most Bachelor and Master degree programs for Music Therapy. Most therapeutic harp programs have spent years researching, adapting, and creating genius techniques and approaches. Some of these approaches and techniques may not be (and maybe shouldn't be) considered 'Music Therapy'. However, they can still be profoundly effective and important to have in the toolbox of a music therapist, especially one who uses the harp.*

A further free response to the final question stated the harp to be an excellent music therapy instrument and hoped music therapy schools could be encouraged to consider the use of the harp. Another final comment was

> *I encourage it as much as I can. I think it is most effective. But I feel one should have a certain level of skill before using it in a session, so that the instrument does not get in the way of the interaction/relationship. A real freedom on the harp will bring great peace and help to patients.*

Respondents' Final Thoughts

Twelve respondents contributed to the final open-ended Question 22 that invited additional thoughts about the use of the harp in oncology/palliative care. The nine themes that emerged from the qualitative analysis are summarized in Appendix I. These were

1. Training with therapeutic harp programs or in music therapy schools would develop therapeutic skills with harp and benefit for clients
2. The harp is a powerful and excellent music therapy instrument and it is worthwhile informing non-harp players about the clinical uses
3. Appreciation expressed for this research about the harp
4. Sensitivity, versatility, maturity, and awareness of associations and meanings regarding the harp are required of the music therapist in order to best serve the emotional needs of clients
5. Quotes about the therapeutic value of harp from a patient and from a pioneer in the field of harp therapy
6. A wish to communicate with researcher
7. Interest in light-weight accessible harps for patients to easily explore
8. A privilege to play for patients at end of life; and
9. Limited everyday use because of transport and storage issues (see Appendix I).

One respondent expressed relief for this survey: "I am confident that music therapists need know [sic] a great deal about the meaning that people make when they see/hear a harp as well as what the emotional needs are and how to play it so that it addresses those needs effectively." Another person indicated wanting to do a clinical presentation on the use of the harp. A final comment from a respondent shared a quote from a patient: "When I play the harp I feel like I can beat the cancer."

Summary

There were 201 survey respondents who were Canadian or American music therapists. Of these, 158 respondents provided service to people in oncology/palliative care, and only 23, all from the USA used the harp and therefore qualified to complete the entire questionnaire. While three of these respondents exited the survey prior to completing all the questions, both quantitative and qualitative free response data yielded a rich overview of the types of harps being used, settings and types of sessions, and methods and goals. Participants' views about the unique qualities of the harp for therapeutic impact, risks and contraindications of using this instrument, and thoughts about training were also presented. The next chapter will discuss the results and offer implications for music therapy practice, training, and research in oncology/palliative care.

Chapter 5. Discussion

The purpose of this final chapter is to examine the results in relation to the primary and subsidiary research questions regarding the current practice of Canadian and American music therapists' use of the harp in the continuum of oncology/palliative care. The results indicate that few Canadian music therapists use the harp as their primary instrument with this population, reflecting perhaps a general lack of use within the profession. Implications for using the harp in the context of oncology/palliative care music therapy practice and training, and the potential for further research will also be addressed. This discussion is delimited to the use of the harp within the context of oncology/palliative care. Limitations of the study will also be presented.

Response Rate

As noted in Chapter 4, the overall response rate of 6.4% is low. The researcher decided to close the survey after only 3 weeks, since a reminder email during the second week yielded only eight new responses. The limitations in scope of an MA thesis precluded an extensive waiting period for more responses. The completed responses appeared to offer valuable information and represent a good beginning to this research. Further, without access and comparison to current statistics of music therapists working in oncology/palliative in the USA and Canada, it is difficult to assess how many potential respondents there may have been. Kruse's (2003) survey research, received 99 responses from 164 American music therapists who identified as working in cancer care, though not including those working exclusively in hospice. Respondents in the present study showed that 139 of 177 credentialed American therapists (78.5%), 16 of 19 credentialed Canadian (84.12%), and three of five holding both credentials (60.0%), worked in oncology/palliative care. While about a decade spans these two studies, and the present research may have included therapists working only in hospice, the number of responses fitting the criterion of working in oncology/palliative care in the present study seems roughly analogous to Kruse's number.

USA and Canada Comparison

Overall, a small portion (14.6%) of respondents providing music therapy in oncology/palliative care used the harp as a primary instrument in their practice. And, while the percentage of responding music therapists who practiced in oncology/palliative

care would seem to be fairly equal for both countries, all 23 responses relating to the use of the harp showed respondents as practicing in the USA. This finding would suggest that both in general, and specifically in oncology/palliative care, few American and even fewer Canadian music therapists use the harp as their primary instrument. This is consistent with the studies reported in Chapter 2 indicating that music therapists in oncology/palliative care most commonly use the guitar or piano, and typically in accompaniment roles (Clements-Cortes, (2011); Cook & Silverman, 2013; Ferrer, 2007). The professional competencies of the AMTA (2013) mandate functional music therapy skills on voice, piano, guitar, and percussion. Thus, the harp would only be used by music therapists for whom the harp is a first instrument such as described by Gottlieb et al. (2015), or through personal interest, conference presentations, or the influence of mentors and harp therapy type programs. Research and education about using the harp in oncology/palliative care music therapy might have much potential for development in both countries, and in particular Canada.

Use of the Harp in Oncology/Palliative Care Music Therapy

Respondents' experience in oncology/palliative care and with the harp. As respondents were split nearly evenly between more than and less than 5 years of practice in oncology/palliative care, the sample represented a cross section of music therapy experience with this population. The 30% of respondents who had played the harp for less than 5 years may not have had the facility of more advanced players to offer a full range of musical experiences with the instrument as illustrated by free response data throughout the survey. Several remarks indicated respondents being able to only improvise or to show patients how to express themselves on the harp, rather than being able to play "for" them or to "perform". The reasons offered for this inability to play pre-composed music lay in a lack of experience, being self-taught, or having only a few lessons. One comment stated that a colleague played pre-composed classical pieces that were greatly appreciated by patients. Such remarks suggest that the harp could be a useful improvisation instrument for therapy even without lengthy training. Another respondent easily incorporated the harp into his or her long-standing music therapy practice, saying it was easy to learn, and since taking it up had been using it for 9 years. As with any instrument, therapists' musical proficiency on the harp would impact the musical choices

available for their clients, the expressive impact of their playing, and their ability to respond to different situations and requests. This might suggest the usefulness of developing education opportunities for music therapists who are either beginners on the harp or even contemplating using it in their oncology/palliative care practice.

Use of the harp as primary instrument. Results indicate that the harp is capable of the many requirements of a music therapist's primary instrument in oncology/palliative care. The majority (60%) of respondents who had played the harp for more than 5 years indicated that they used it more than half the time as their primary instrument, while those who had played it for less than 5 years used it only about 15% of the time. It makes sense that as music therapists increase their versatility and skill on the instrument, they are more able and more likely to use the harp for the broader demands of a primary instrument. One respondent made noteworthy mention of the double strung Celtic harp. This type had not been included in the present study mainly because it was less familiar to the researcher. However, the respondent correctly included it as a small Celtic harp, even though it has 44 strings. This respondent offered further comments about this harp throughout the survey, describing a dexterous instrument that combines the chromatic and harmonic expressive possibilities of the concert pedal harp with the portability of the small harp, making it an ideal primary instrument. The double strung harp would therefore seem worthy of further investigation.

Choice of harp. Notwithstanding one observation that the energy and feeling of the player and the way the harp was played was more important than the instrument, the Celtic harp was the main harp employed, being almost evenly divided between the smaller versus the larger version. The concert pedal harp was the outlier with only two respondents who indicated using it. While the three styles of harp have basic structural similarities, each one offers unique qualities, advantages, and disadvantages, and it is not surprising to find that music therapists exploit these for different facets of their work if they can offer more than one type. As well, the majority of the participants who played more than one type of harp had been playing the instrument for more than 10 years, making it more likely that they owned or had facility on different types. The data indicated in general that small Celtic harps were characterized as having the benefit of being practical and portable, making it easier for therapists to move and maneuver both at

the macro level from setting to setting, and at the more micro level within small rooms and spaces with medical equipment. They were also described as being intimate, with less of a *"performance vibe"*: appropriate for bedside use or even on the bed for patients both to use and to feel vibrations. Chapter 2 detailed the importance of live music interventions by the therapist, and the small Celtic harp would thus seem an ideal fit for this requirement. Larger Celtic harps were commended for their warmth, resonance, and vibration, with access to rich sounding low bass notes that could be more relaxing and penetrating. This harp may be more dexterous for the goals of increased pain control and relaxation as mentioned in the literature review for oncology/palliative care. However, as noted in one comment, the larger Celtic harp can elicit self-deprecating remarks about a negative or shamed relationship with music from patients and families. Perhaps the small Celtic harp may better serve as an introductory or gateway instrument. The larger instrument may be better suited following initial sessions, or if it had been requested or had been part of a patient's experience, as noted in a free response. Another comment touched on the important mechanical function of levers to govern the mode or key on both small and large Celtic harps. Celtic harps vary in this feature due to cost and thus also vary in their ability to accommodate all modes or keys, a potentially limiting factor both musically and for therapeutic possibilities.

As only one comment referenced the pedal harp, namely as to its use in groups, the present researcher offers the following considerations based on personal experience. Pedal harps are: (a) much larger, more unwieldy to move and transport, and far more costly than Celtic harps; (b) physically intriguing, even beautiful; (c) imposing or perhaps awe inspiring in size; (d) lush and rich or perhaps sometimes overwhelming in sound and vibration; (e) well known because of their association to the modern orchestra, although unusual to view in close proximity; and (f) completely chromatic, allowing the possibility of harmonically lush glissandi, and intricate repertoire and arrangements. They would also be suitable for events such as memorial services and agency-wide rituals, situations mentioned by one respondent as fitting the capacity of large Celtic harps to invoke archetypal feelings of celebration and powerful angels. In some respects, the pedal harp resembles the large Celtic harp on steroids, thus allowing for some extrapolation from comments about the large Celtic harp. Further, the pedal harp is the preferred instrument

for VAHT, a specialized method that could be incorporated into a music therapy practice utilizing the harp.

Settings. Consistent with the literature findings (Richardson et al., 2008), the survey showed the harp as broaching many settings in oncology/palliative care music therapy. Given the medical needs of people in oncology/palliative care, it is congruent that nearly 70% of respondents used the harp in hospital inpatient units. Over half of the answers indicated the harp being used in long-term care facilities or for in-home visits, while a little less than half the answers indicated the harp being used in free standing hospices. The harp was also used in cancer care centres, outpatient or ambulatory care service, a multi-bed or multi-chair open clinical unit, and a dementia unit in a skilled-care facility. The least chosen option was the outpatient or ambulatory service. Perhaps this service could also be part of a cancer centre and therefore responses might have been made in that category instead. This could also indicate an opportunity for using the harp for outpatient services such as chemotherapy suites or cancer support groups. Of note, many respondents (65.2%) practiced in three or more settings, with two respondents practicing in five different settings. This explains one observation about restricted use of the harp due to travel constraints, as leaving it in the car while serving clients preferring other instruments, could jeopardize the harp's maintenance and safety. This issue is relevant for many music therapists and solutions are worth considering in making the harp accessible to appropriate clients.

Type of sessions. As noted in Table 3, all respondents provided music therapy to individual clients and 82.6% to clients and families. This is not surprising given the fact that many provided service in hospital inpatient units as well as in free standing hospices and in-home visits, settings where families are often present. Nearly half of the participants indicated providing service to groups of clients. The survey did not inquire as to the nature of groups served but feasibly this could include support groups, or even groups in long term care facilities that included clients within the spectrum of oncology/palliative care. Of interest was the one response indicating the harp being used for environmental music therapy on a multi-bed or multi-chair open clinical unit. As will be discussed later in this chapter, the therapist must be sensitive to all clients' associations and responses to the harp, especially in situations where the therapist has

limited purview to individual needs, and where it may be difficult for a client to block the visual and auditory stimuli of the harp.

Music therapy methods. A high proportion, nearly 87% of respondents used receptive methods as their main intervention with the harp. While this data pertains only to these therapists' use of the *harp*, and may or may not reflect the methods used with their other primary instruments, these results are clearly in line with the research presented in Chapter 2 concerning the high frequency of receptive methods used in oncology/palliative care (Bruscia et al., 2009; e et al., 2005; Clements-Cortes, 2016; Fredenburg & Silverman, 2014; Gallagher et al., 2006; Gallagher & Steele, 2001; Hilliard, 2003; Kordovan et al., 2016; McDougal Miller & O'Callaghan, 2010; Mramor, 2001; O'Callaghan, 2001). However, the prevalence of this method for the harp, testifies to its inherent qualities that lend it to be effective for goals such as relaxation, anxiety reduction, comfort, and emotional and spiritual support. As one commenter succinctly wrote, *"Patients/visitors really loved to listen to the harp. This is what they wanted"*. An important issue emerged with the free response mentioned in Chapter 4 regarding the term receptive as being misleading: *"I would not say the client only listens. Often the client may sing with, intentionally breathe along with, or pray or mediate with the harp"*. This reflection invites a brief foray into the nature of receptive listening as an experience within music therapy. Though classified by Bruscia (1998) as a receptive method, receptive listening encompasses a range of techniques in which the client could be considered actively involved. These might include song or music choice, relaxation techniques, or guided imagery. Black's (2013) research with music therapy in palliative care took this further and relabeled listening as "inter-active listening", in order to include both verbal and non-verbal interactions that create an intersubjective space on which to base further interventions. Other researchers have coined the term "active music listening" as an intervention in their work (Domingo et al., 2015). While studying patient experiences in symptom management in cancer care, Potvin, Bradt, and Kesslick (2015) examined the similarly nuanced word *relaxation* as a term at risk of being characterized in "as only" terms by other professionals while not considering the meaningful intrapsychic and interpersonal processes inherent within the music therapy experience (p.158). These processes differentiate music therapy from music medicine and may

account for the preference of 77.4% of cancer patients for music therapy over music medicine interventions in Bradt et al.'s research (2015). Further, the topic of listening to music, though not part of the present research, is indeed salient given that much of the time the harp was used in receptive techniques. Adjunct practices developed specifically for using the harp in medical and other settings may appear similar to music therapy. But the important issue contained in the respondent's comment about listening is the fact that the scope of music therapy demands an awareness and the skill set to use the harp with a range of receptive techniques and beyond: to respond to and develop the experiences that unfold as a therapeutic process.

The second most used method was improvisational, where the client makes up the music. Several points gathered from answers to survey Question 16 that concerned the unique therapeutic qualities of the harp would help to explain the suitability of this method. First, the visual and tactile appeal of the instrument may compel some patients to want to try playing it. In the present researcher's experience, many people in general want to touch the harp, and discover what it feels like to make a sound. It was also described as easy to play with one hand, easy for clients "*to manipulate independently while lying in bed with little physical effort"*, able to have certain modes or scales preset, providing structure with colour coded strings, and very success based. Tangentially, three additional comments to Question 14 mentioned that the respondents themselves often or mostly improvised on the harp.

Finally, the third most used method was compositional, with 17.4% of respondents using this method sometimes, and a surprising 4.3% almost always. This indicates the viability of the harp for clients to create instrumental pieces or to use as accompaniment for composed songs. Perhaps the ease of improvising on this instrument lends itself to the creative impetus and possibilities for self-expression through composition. It may also be an instrument that a patient has previously played and feels comfortable using, or prefers the music therapist to use while facilitating patient composed music.

Bio-psychosocial goals. Of importance within oncology/palliative care, this survey showed that most respondents (nearly 70%) used the harp almost always to increase comfort and create a healing environment, a finding that fits with the inherent

soothing nature of the harp. The title of a manual for harp therapy, *A Cradle of Sound* (Tourin, 2006) captures this instrument's capacity to create a calm and peaceful atmosphere by virtue of the tonal quality of the strings. Other results indicate that most respondents (nearly 70%) used the harp much of their time (frequently or almost always) to decrease anxiety, increase positive mood, provide emotional and spiritual support, increase relaxation and sleep, increase QOL, decrease isolation, increase coping and stress management, and decrease a sense of helplessness and depression. This data is consistent with primary goals and reasons for referral in oncology/palliative care as revealed in the literature (Bowers & Wetsel, 2014; Gallagher et al., 2001). When the category of *sometimes* is added, this list includes goals to decrease pain, decrease shortness of breath, and provide support to family members and caregivers. It makes sense that these last three goals are rated as used less frequently than the others, given that family members and caregivers may not always be present in sessions, and that not all patients in oncology/palliative care are in pain or have shortness of breath. The least used goals, but still chosen by over half of respondents as sometimes or more in frequency, were to increase emotional expression, to increase communication, and to decrease nausea. As it would appear that the harp fits well with goals such as relaxation and comfort, perhaps outward verbal communication and emotional expression might take a more secondary place. The goal of supporting patients through medical procedures is least used, but this may be an area with fewer referrals or opportunities, and in fact almost 22% of respondents indicated it was not applicable.

Unique Qualities of the Harp for Therapeutic Impact

Chapter 4 detailed the rich qualitative responses regarding the unique qualities contributing to the therapeutic possibilities and impact of the harp. These results, coupled with the discussion of how respondents choose the type of harp for venue and patient needs, reveal the instrument's capacity to affect clients and environments in multidimensional ways. Acoustically, the sound is described as sustained, warm, richly resonant and vibratory, gentle, mellow, full and round, varied, ancient, penetrating, fluid, and wide in pitch. These qualities may be emotionally soothing, relaxing, and entrancing, and may create a sense of openness and space, serenity and peace, comfort, hope, and even joy: qualities which would well serve many patients in oncology/palliative care.

Clients physically experience the vibrations and benefit in its application for pain management. For these reasons, it is not surprising that Gutgsell et al. (2013) found that a single session live music therapy intervention using the harp appeared to lower pain perception for inpatients in palliative care. Its physical beauty and uniqueness, ancient aspect, and tactile appeal can offer an aesthetically uplifting experience. The harp's archetypal association with angels, heaven, timelessness, and other-worldliness can be comforting; provide a therapeutic bridge to spiritual issues and values; and allow the possibility of a special or sacred experience that transcends disease, medical limitations, and institutional spaces. Instrumentally, the results of this survey showed that it is a capable primary instrument for a music therapist. It provides the harmonic and melodic scope of a keyboard or piano, while the small Celtic harp allows close proximity to clients in a manner similar to the guitar. It is relatively easy to learn, particularly for improvisation, and similarly lends itself as approachable for clients to use with success even when bed-bound. The present researcher was surprised that no respondents mentioned the *glissando,* a special and sonically appealing effect strongly associated with the harp. Often people will imitate the motion when they see a harp and enjoy the simplicity and satisfaction of doing this themselves.

Risks and Contraindications of Using the Harp.

Respondents' important concerns as to the risks and contraindications of using the harp in oncology/palliative care were summarized in chapter 4. This population is very vulnerable, and the environments in which clients are served can be stressful for patients, families, and staff. It is important that music therapy interventions not add to this. One comment captured this well: *"Sensitivity, versatility, maturity, and awareness of associations and meanings regarding the harp are required of the music therapist in order to best serve the emotional needs of clients in oncology/palliative care".* For similar reasons, another respondent expressed relief that the topic of using the harp in oncology/palliative was being examined. The harp's evocative and associative capacity can make it difficult for those who need to "not" cry, who have a bad memory from a past experience, or who are not ready to face the topic of death, dying, or impending loss. These would seem to be the most critical points that emerged from these two questions. As noted in two comments, it is important to offer choices of other instruments, or no

instrument, or to provide verbal psychotherapeutic support. One respondent relayed how a patient awaiting major surgery in a hospital's pre-operation area cancelled the necessary procedure on hearing a professional harpist play, taking it to be a sign that he or she would die. No psychotherapeutic support offered, and the hospital staff was furious. This invites a closer look at the use of the harp in open spaces such as chemo suites or in environmental music therapy, or in wards having the only useable public space beside patient rooms. Schneider (2005, p.223) recommended that *environmental music therapists* be able to read an environment in the moment, choose music that is appropriate in order to therapeutically alter the environment, to manipulate the musical elements for greatest effectiveness, and to develop relationships with staff, family members, and patients appropriate to the setting and goals. Along with these guidelines, music therapists using the harp must be particularly alert to emotional reactions, and accommodate the space with skill, care and sensitivity. With this consideration, the present researcher also recommends being proactive by having a backup instrument such as a guitar, and checking with listeners before "plucking" in public spaces.

Training on the Harp in Oncology/Palliative Care Music Therapy

In Chapter 1 the present researcher mentioned being introduced to fine quality small Celtic harps through studies with an American harp therapy program. Given the lack of music therapists in Canada using the harp, it was invaluable to learn from the expertise of a pioneer in harp therapy who had developed foundational methods and techniques to potentiate this instrument for people in need. It was also important to have a sense of support and shared experience with others who used the instrument in their therapeutic work. For this reason, questions concerning training were included in the survey.

The results, though constrained by the small sample size, indicate the harp to be very underutilized in oncology/palliative care, especially in Canada. The lack of adjunct harp therapy programs in Canada that might stimulate and encourage the use of the harp as a music therapy tool may be a factor, although good portions of the material for these programs are now available online. Perhaps such programs may be largely redundant for music therapists or may even run counter to music therapy principles. There is considerable difference between music therapy and harp therapy in factors such as the

requirements of admission (college admission plus high proficiency on primary instrument versus basic understanding of music and an interview process), training (undergraduate degree or higher in music therapy with a minimum 1,200 hours of clinical training versus a non-degree program with from 100 to 300 clinical hours), and theoretical frameworks (cognitive, humanistic, behavioral, psychodynamic versus transpersonal and spiritual traditions) (AMTA, 2015). As one respondent noted, these adjunct trainings can slant towards New-Age type content and not reflect sound music therapy. Conversely, adjunct programs may also be informed by music therapy experience and expertise. For example, an MT-BC music therapist developed the IHTP program, and a recognized music therapy professor provided the curriculum's music therapy content. It is feasible that there may be valuable learning from the various harp therapy trainings that could expand the toolkit and therapeutic breadth of a music therapist employing the harp. Given that it is not practical or necessary to pursue any of these adjunct trainings in their entirety, it may be pragmatic for future research to examine the curriculum of these programs and glean those aspects that might enrich and inform music therapists who are interested in using the harp.

As presented in Chapter 4, a small majority of respondents indicated that using the harp in oncology/palliative care required special training, with three having taken at least some special training in harp therapy. Besides learning the basics of the instrument in order to produce a quality tone and avoid injury, several comments related to understanding the emotional impact of the instrument. Therefore, training should underscore the sensitivity and skill to provide emotional safety and support to patients. In summary, many respondents as well as this author would recommend at least some exposure to the harp in music therapy schools, particularly in reference to working in oncology/palliative care. Its virtues as a primary instrument deem it worthy to come from behind the wings and be introduced to upcoming professionals in the field.

Limitations

The main limitation of this research was the low sample size that might imply that the survey population is not truly representative of Canadian and American music therapists as a whole. Generalizations from the results and conclusions must therefore be considered with caution. However, despite the low number of respondents, the research

proceeded since (a) the reminder email resulted in few new responses, (b) the eligibility requirement of working in oncology/palliative care likely greatly reduced the number of participants, (c) the mention of harp in the invitation may have led some potential respondents to self-disqualify, (d) the limitation in scope of a Masters thesis, and (e) the information received from those who did respond was a valuable beginning to this research. Although the survey was sent to all Canadian music therapists, there may have been some French Canadian music therapists who were either unable or chose not to participate since the text was only in the English-language. A further limitation could be that all qualitative analysis of added comments and open-ended questions was performed by only the present researcher, and could therefore be subject to researcher bias. At the recommendation of the statistical consultant, data for the 10.3% of respondents who exited the survey before completion was included in a category of *no response*. This may have somewhat altered the statistics for an already small sample. Finally, as the survey did not specify whether it pertained to adults or children, this dimension was not addressed.

Implications for the Profession

The results of the survey show that a small portion of music therapists practicing in oncology/palliative care in the USA uses the harp as a primary instrument. There were no respondents from Canada who used the harp with this population within the context of this study. Quantitative and qualitative results from the survey reveal the multiple strengths of the harp as a primary instrument in this area. Since the advent of high quality small Celtic therapy harps within the last decade, a very effective music therapy instrument is readily available, creating the opportunity for music therapists in both countries to expand their interventions to alleviate suffering and improve QOL for people in oncology/palliative care. Factors such as lack of familiarity with the instrument or its high cost relative to the mainstream guitar may contribute to its apparent underuse. However, perhaps the findings from this study may be a step towards providing the information and incentive for music therapists to explore the possibilities this instrument has to offer. Three respondents commended this research in their comments. Three respondents also expressed a desire to discuss the research further with the author, indicating that this topic might warrant further interest and support within the profession.

Implications for Future Research

To the knowledge of the present researcher, this is the first study to specifically examine the use of the harp in oncology/palliative care music therapy, or indeed any other area of music therapy. This opens the door to further explore other aspects of the harp in music therapy such as its use with other client populations, specific interventions and intervention research, case study research, or program development. The present study could be replicated to include the French-language and also to discover how the use of the harp may have changed with time. As the literature in oncology/palliative care revealed a multitude of studies examining the effectiveness of music therapy on a variety of goals within different settings and client sub-groups, future research might investigate best practice for the harp and effectiveness within these different contexts. As mentioned in the discussion on training, future research on harp therapy trainings could focus on aspects that might enrich the use of the harp by music therapists.

Final Remarks

This research explored how the harp is used in Canada and the USA in oncology/palliative care. Twenty-three respondents, all Americans, provided a rich field of quantitative and qualitative data, creating a view of an instrument that is well suited to the needs of patients in this population. Though the harp appears to be underutilized, this research hopefully paves the way for its further development, and open opportunities for music therapists to provide best service to patients and families within the oncology/palliative spectrum of care.

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Appendix A

Survey

1. Please indicate which music therapy credential you hold. (answer required)
    a. MTA
    b. MT-BC
    c. Both MT-BC and MTA
    d. Neither
    * (If d. is chosen, the respondent will view the message "You do not meet the criteria for inclusion in this study at this time. Thank you". The survey will then close.)

2. Do you provide, or have you provided music therapy services in any setting for patients within the oncology/palliative continuum of care, in Canada or the USA? This can include all stages of disease progression from diagnosis to palliative care. (answer required)
    a. Yes
    b. No
    * (If b. is chosen, the respondent will view the message "You do not meet the criteria for inclusion in this study at this time. Thank you". The survey will then close.)

Text Box:

IMPORTANT DEFINITIONS:

FOR THE REMAINDER OF THE SURVEY, THE TERM HARP REFERS TO WESTERN STYLE ACOUSTIC INSTRUMENTS WITH STRINGS POSITIONED PERPENDICULARLY TO THE SOUNDBOARD. INCLUDED ARE THE CONCERT PEDAL HARP, THE SMALL PORTABLE LEVERED CELTIC THERAPY HARP, OR THE LARGE LEVERED CELTIC HARP. FOR THE PURPOSE OF THIS STUDY, THE TERM HARP DOES NOT INCLUDE THE AUTOHARP, REVERIE, PENTATONIC, LYRE, OR ZITHER TYPE INSTRUMENTS.

THE SURVEY ALSO REFERS TO THE USE OF THE HARP AS A PRIMARY HARMONIC INSTRUMENT USED BY THE THERAPIST FOR SUPPORTING HIS OR HER CLINICAL WORK, IN A ROLE SIMILAR TO USING THE GUITAR OR PIANO.

3. Do you use, or have you used the harp in your music therapy practice in oncology/palliative care? (answer required)
    a. Yes
    b. No
*(If a. is chosen, the survey will skip to question 4. If b is chosen, the respondent will view the message, "The survey is now complete. Thank you for your time and participation.")

4. Please indicate the country in which you practise or have practised music therapy in oncology/palliative care. (answer required)

a. Canada
b. The USA
c. Both Canada and the USA

5. How many years have you practised music therapy in oncology/palliative care? (answer required)

a. Less than 5 years
b. 5 to 10 years
c. More than 10 years

6. How many years have you played the harp? (answer required)

a. Less than 5 years
b. 5 to 10 years
c. More than 10 years

7. Please indicate the setting in which you use or have used the harp in oncology/palliative care. (You may choose more than one.) (answer required)

a. Hospital inpatient unit
b. Outpatient or ambulatory service
c. Cancer care centre
d. Long term care facility
e. Free standing hospice
f. In-home visits
g. Other (please specify in box below) – a comment box is provided

8. Please indicate for whom you offer or have offered music therapy in oncology/palliative care. (You may choose more than one.) (answer required)

a. Individual client sessions
b. Groups of clients
c. Client sessions which include loved ones and/or visitors
d. Other (please specify in box below) – a comment box is provided

9. What percentage most accurately represents the time you use or have used the harp in your music therapy practice in oncology/palliative care as compared to the use of your other primary instruments such as piano or guitar? (answer required)

a. 1% - 25%
b. 26% - 50%
c. 51% - 75%
d. 76% - 100%

10. Please indicate the kind of harp you use or have used in your music therapy practice in oncology/palliative care. (You may choose more than one.) (answer required)

a. Small portable levered "therapy" Celtic harp with up to 29 strings
b. Large levered Celtic harp with 29 or more strings

c. Concert pedal harp

11. If you use or have used more than one type of harp in your music therapy practice in oncology/palliative care, how do you choose which to use?

A comment box is provided.

12. If you use or have used more than one type of harp in your music therapy practice in oncology/palliative care, please rank your usage of each type. Only answer this question if you play more than one style of harp and rank only the ones you use or have used.

	Most	Second Most	Third Most
Small levered "therapy" Celtic harp With up to 29 strings			
Large levered Celtic harp with 29 or more strings			
Concert pedal harp			

A comment box is provided.

13. If you use or have used more than one type of harp in your music therapy practice in oncology/palliative care, do you find different types of harps more suitable for certain patient needs or venues?

a. Yes
b. No
c. Not sure
d. No Opinion

A comment box is provided with the caption "How?".

14. As outlined below, Bruscia (1998) identifies 4 main music therapy methods or musical experiences. Please rate your present or past frequency of use of the harp in your music therapy practice in oncology/palliative care for each method. (answer required)

	Almost Never	Infrequently	Sometimes	Frequently	Almost Always	N/A
a. Improvisational (client makes up music)						
b. Re-creative (client learns or performs music)						
c. Compositional (client creates a musical product)						
d. Receptive (client listens to therapist play music)						

A comment box is provided.

15. The following are some bio-psychosocial music therapy goals in oncology/palliative care as adapted from McDougal Miller and O'Callaghan (2010). Please choose the option that best describes how much you use the harp to help reach each of these goals. (answer required)

	Almost Never	Infrequently	Some-times	Frequently	Almost Always	N/A
Decrease pain						
Decrease nausea						
Decrease shortness of breath						
Support patient through medical procedures						
Increase relaxation and sleep						
Decrease anxiety						
Decrease sense of depression and helplessness						
Increase emotional expression						
Increase communication						
Increase positive mood						
Increase coping and stress management						
Provide emotional and spiritua support						
Decrease isolation						
Provide support to family members and caregivers						
Increase comfort						
Increase quality of life						
Create a healing environme						
Other (please specify below						

A comment box is provided with the caption “Other music therapy goal(s)”.

16. All instruments used in music therapy have unique acoustic, physical, cultural, and other properties that may have therapeutic impact. What do you think are the unique qualities of the harp that may have therapeutic impact? (answer required)

A comment box is provided.

17. What are the risks, if any, that you perceive of using the harp in music therapy in oncology/palliative care?

A comment box is provided.

18. What are the contraindications, if any, that you perceive of using the harp in music therapy in oncology/palliative care?

A comment box is provided.

19. I learned to play the harp specifically for music therapy. (answer required)

a. Yes
b. No

A comment box is provided.

20. In your opinion, does offering the harp in music therapy in oncology/palliative care require special training? (answer required)

a. Yes
b. No
c. Not sure
d. No opinion

A comment box is provided.

21. Have you taken special training in harp therapy? (answer required)

a. Yes (please specify which one below)
b. No

A comment box is provided with the caption “Name of harp therapy Training”.

22. Please share additional thoughts about the use of the harp in music therapy practice oncology/palliative care.

A comment box is provided.

The respondent will now view the message, “The survey is now complete. Thank you for your time and participation”

Appendix B

Invitation to Participate in a Music Therapy Research Study

Dear Colleague,

My name is Janice Pearce, and I am both an accredited music therapist (MTA) with the Canadian Association for Music Therapy (CAMT), and a graduate music therapy student of Concordia University, Montreal, Quebec, Canada.

You are being invited to complete an online survey as part of the MA thesis research study that I am conducting under the supervision of Dr. Guylaine Vaillancourt of the Department of Creative Arts Therapies, Concordia University. The Certification of Ethical Acceptability for Research Involving Human Subjects is # 30003993.

You are being contacted to participate because you are an MTA member of CAMT and/or a Board Certified Music Therapist (MT-BC) of the Certification Board for Music Therapists (CBMT). You are eligible to participate in this survey if you have experience as a practicing music therapist working with people with cancer (either primary or secondary diagnosis) at any stage of care, from diagnosis to palliation. Your place of work must also be in Canada or the USA.

The purpose of this research is to investigate the use of the harp by music therapists who practice in the continuum of oncology/palliative care in Canada and the USA. This survey, delivered by the online company SurveyMonkey, contains 22 questions, and should take about 20 to 25 minutes to complete.

You are free to choose to not participate in this study and you can withdraw from the study at any time while completing the survey without consequences. However, once survey data is submitted it cannot be removed from the study, as there is no means to differentiate individual participant responses, since these will be completely anonymous.

The results of this study may be used in reports, publications, or presentations.

If you have any questions about this study, please do not hesitate to contact the researcher or research advisor:

Principal Investigator:
Janice Pearce, MTA
jpearce@avalonharp.com
403-241-5661

Faculty Advisor:
Dr. Guylaine Vaillancourt, PhD, MTA
g.vaillancourt@concordia.ca
514-848-2424 ext.5670

If you have any questions about your rights as a research participant, please contact the Research Ethics and Compliance Advisor, Concordia University, 514-848-2424 ext.7481, ethics@alcor.concordia.ca.

If you wish to participate, please read the attached "Informed Consent" document. The survey can be accessed through a link at the bottom of that document. Accessing and completing the survey will confirm your voluntary consent to participate.

Thank you for your time and consideration,

Appendix C

CONSENT TO PARTICIPATE IN THE SURVEY RESEARCH STUDY: "USE OF THE HARP BY ENGLISH CANADIAN AND AMERICAN MUSIC THERAPISTS IN ONCOLOGY/PALLIATIVE CARE"

I understand that I have been asked to participate in a research study being conducted by Janice Pearce, of the Department of Creative Arts Therapies of Concordia University (403) 241-5661, jpearce@avalonharp.com, under the supervision of Dr. Guylaine Vaillancourt, Concordia University, Department of Creative Arts Therapies, (514) 848.2424 ext.5670, g.vaillancourt@concordia.ca.

A. PURPOSE

I have been informed that the purpose of the research is to investigate the use of the harp by music therapists who practice in the continuum of oncology/palliative care in Canada and the USA.

B. PROCEDURE

- I understand that I am being asked to complete a web-based survey containing a combination of 22 open-ended and close-ended questions that will take approximately 20-25 minutes to complete.
- I understand that I am not to include any identifying information in any of my responses.
- I understand that the survey is focused on credentialed music therapists currently practicing or who have practiced in oncology/palliative care. I understand that all but 4 questions will require an answer.
- I understand that my participation will be completely anonymous and that my email address and IP information will not be stored with my responses. I understand that the data from the survey responses will be stored in a secure location with the online company SurveyMonkey, in the researcher's password protected computer, or in a secure locked cabinet for five years after the study's completion, after which they will be destroyed.
- I understand that the researcher, research supervisor, and potential statistics consultant will have access to the survey data, but will not be able to track respondents' identities.

C. RISKS AND BENEFITS

- I understand that there are no known negative consequences related to participation in this survey. I understand that the survey is administered by SurveyMonkey and would have minimal risks that are similar to those associated with secure online internet sites.

- I understand that the results of this research may prove of benefit by increasing the understanding of music therapy practice in the area of oncology/palliative care, and contributing to knowledge towards further helpful interventions.

D. CONDITIONS OF PARTICIPATION

- I understand that my participation is completely voluntary and confidential. I understand that I may withdraw at any time while completing the survey without negative consequences, but understand that once the data has been submitted, it cannot be removed from the study, as it is impossible to track a specific individual's responses.
- I understand that this study will be published in a master's thesis and stored electronically on the open-access internet database "Spectrum" (http://spectrum.library@concordia.ca/).
- I understand that following completion of the thesis, the results of this study may be used in presentations or submitted for publication.

If at any time you have questions about the research, please contact the study's principal investigator or faculty research advisor.

Principal Investigator: Janice Pearce, MTA, MA student, Department of Creative Arts Therapies, Concordia University, 403-241-5661, jpearce@avalonharp.com

Faculty Advisor: Dr. Guylaine Vaillancourt, PhD, MTA, Associate Professor in Music Therapy, Department of Creative Arts Therapies, Concordia University, 514-848-2424 ext.5670, g.vaillancourt@concordia.ca

If at any time you have questions about your rights as a research participant, please contact the Research Ethics and Compliance Advisor, Concordia University, 514-848-2424 ext.7481, ethics@alcor.concordia.ca.

BY CLICKING THE LINK PROVIDED BELOW, I INDICATE THAT I HAVE CAREFULLY READ THE ABOVE AND FREELY CONSENT AND VOLUNTARILY AGREE TO PARTICIPATE IN THIS STUDY.

Thank you,
Janice Pearce, MTA, MA in progress

Link: https://www.surveymonkey.com/r/Harp_in_OncologyPalliativeCare_MTstudy

Appendix D

Themes, Categories and Respondents' Comments About What Informed Their Choice of Harp (n = 10)

Anonymous Comments (examples)	Open Coding/Categories	Axial Coding/Themes
Whichever one is more practical to carry and use. Usually the lighter one is best for me to carry. Mostly use the harp that is easily portable. How much other equipment I need to bring, and how much space there is in my car for my travels. Small double strung…light and easy transported. Easy to put on a cart with a bungee cord. Larger Celtic for mainly one area. Much easier on my back than a large harp…It creates less muscle tension to play and hold than the large Celtic harp.	A1. Practicality. A2. Lighter is usually best. A3. Ease of portability. A4. Depends on amount of equipment required for the day. A5. Smaller when moving a lot. A6. Larger Celtic for one location. A7. Physically easier to play.	A. Portability (*f* = 6)
Setting determines which I use, mostly levered! Larger Celtic if in one area. If I need to be creative with positioning to meet the needs of a bed bound pt or need to angle the harp so pts can strum string up and down not left to right, I will use the smaller harp. Small double strung…easy to sit with at the bedside…allows to be closer to the patient as is needed/appropriate, to squeeze into small spaces and to move around the room as needed.	B8. Setting determines, mostly levered. B9. Larger Celtic for one area. B10. Smaller for positioning at bedside or for patient use in bed. B11. Small Celtic for small spaces and maneuverability.	B. Environmental considerations (*f* = 4)

Usually I use the small therapy harp. When larger one is requested… …or the person I'm playing for owns/owned larger harp, I play that one… I evaluate the needs of the patient. One harp is more mellow and sounds warmer than the other. Small double string can be put into the bed next to/on top of the patient easily.	C12. Small is usual. C13. Larger by request C14. Larger if patient has/had a larger harp. C15. Evaluate patient needs regarding sound quality of harp. C16. Smaller for positioning with bed bound patient.	C. Individual patient considerations (*f* = 4)
Low bass notes… One harp is more mellow and sounds warmer than the other. All other times I use the 32 string as it has better resonance.	D17. Larger Celtic has low bass notes. D18. Mellower and warmer [harp unspecified]. D19. Larger has better resonance.	D. Resonance (*f* = 3)
Usually I use the small therapy harp with children in a pediatric cancer care setting. I use a 34 stringed harp with the adults I work with in oncology. …34 stringed harp…proven meaningful for the adult population.	E20. Therapy harp with children in pediatric setting. E21. Larger Celtic with adults in oncology. E22. Larger Celtic diverse and meaningful for adults.	E. Population served (*f* = *2*)
…full lever options allows for diverse and interesting playing – which has proven to be meaningful for the adult populations I serve. Double strings opens the possibility for creating a limitless emotional container due to having two sets of strings with which to manipulate complex musical elements when needed/appropriate.	F23. Larger Celtic full levers allow for diverse, interesting, more meaningful playing. F24. Double strung small Celtic opens limitless emotional container capable of complex musical elements.	F. Musical and expressive capabilities (*f* = 2)

The small double string harp elicits a natural curiosity and engagement with the instrument and music therapy techniques…	G25. Double small double strung harp elicits natural curiosity and engagement.	G. Intrinsic qualities of each harp that elicit personal reactions (*f* = 2)
…compared to large levered harp which causes patients and families to naturally respond with self-deprecating remarks about their negative/shamed relationship with music.	G26. Larger Celtic may lead to self-deprecating remarks regarding relationship to music.	
Double strung small harp opens the possibility for creating a limitless emotional container due to having two sets of strings with which to manipulate complex musical elements when needed/appropriate.	G27. Small double strung harp offers limitless emotional container because mechanics of instrument allow access to complex musical elements.	
Low bass notes and full lever options allow for diverse and interesting playing…more meaningful for adults	G28. Larger Celtic more meaningful for adults.	
Can it be stored so, we here safe?	H29. Safe storage considerations.	H. Storage considerations (*f* = 1)

Note. n denotes the number of respondents who provided additional comments. *f* denotes the frequency of respondents contributing a comment to each theme. Extended comments from a respondent can be assigned to more than one category.

Appendix E

Themes, Categories and Respondents' Comments About What Informed Their Choice of Harp for Patient Needs or Venues (n = 8)

Anonymous Comments (examples)	Open Coding/Categories	Axial Coding/Themes
I prefer low bass notes and full levers. I feel the sound is so much better on the larger harp, and more effective with patients. I love the richness of the lowest notes (larger Celtic harp) which I can't get on a small double string. I think the greater warmth and vibrations of the larger harp are perhaps more relaxing and "penetrating" to patients, but the small harp is effective as well as both are quality instruments.	A1. Richness of the low bass notes. A2. Larger harp has better sound and resonance. A3. Larger harp has more warmth and vibration, more relaxing and penetrating. A4. Both sizes effective if quality instruments.	A. Sound quality (*f* = 5)
Bigger harps can be too much of a production to be brought in the room. Smaller is more intimate and less of a performance vibe.	B5. Bigger harps awkward in room. B6. Bigger more suitable for groups. B7. Pedal harp seldom used and more for larger groups. B8. Smaller harp more intimate and less of a performance feeling. B9. Large size matches the large number of people.	B. Suitability to space and number of people (*f* = 2)
Some of my patients like me to place my harp next to them on the bed and feel the vibration close to them at their request. I use the smaller harp for this purpose.	C10. Smaller harp on bed for vibrations.	C. Bedside use (*f* = 2)
I find that lever harps work best for therapeutic work.	D11. Lever harps work best. D12. Needs of bed bound patient to play.	D. Therapeutic work (*f* = 2)

I prefer playing a large Celtic levered harp at events like memorial services and company-wide rituals. This large size matches the large number of people and gives an archetypal meaning for many of celebration and powerful angels/angel wings.	E 13. Smaller harp more intimate and less of a performance feeling. E14. Larger Celtic harp at events such as memorials and company-wide rituals elicits archetypal meaning of celebration and powerful angels.	E. General impact (*f* = 2)

Note. n denotes the number of respondents who provided additional comments. *f* denotes the frequency of respondents contributing a comment to each theme. Extended comments from a respondent can be assigned to more than one category.

Appendix F

Themes, Categories and Respondents' Comments About the Unique Therapeutic Qualities of Harp (n = 20)

Anonymous Comments (examples)	Open Coding/Categories	Axial Coding/Themes
Incredible vibration which allows recipient to feel and hear.	A1. Rich resonance and vibration allows recipient to feel and hear.	A. Sound and acoustic properties (*f* =14)
	A2. Many overtones provide access for patients with significant hearing loss to listen to live harp music.	
Can produce both warm tones (lower register) and glassy tones (higher register)	A3. Different pitch effects, warm penetrating tones of lower register for pacing breathing, glassy, bell like higher register may increase energy and bring joy.	
	A4. Large pitch range compared to guitar.	
The acoustic qualities – particularly useful for relaxation and pain management.	A5. Full, round, mellow tone can be very relaxing.	
	A6. Ancient sounds of the strings.	
	A7. Fluid arpeggios create a rich auditory experience.	
	A8. The sounds are soothing.	
The instrument can easily be played softly and is often described as "soothing" and having a beautiful sound.	A9. Gentle, sustained sounds create a sense of openness and space.	
Mellow tone quality better suited to certain individual personalities.	A10. Mellow tone quality better suited to certain personalities	

Can help create an aesthetically pleasing atmosphere that can be healing, or exciting, or hopeful just in itself.	B11. Can create a healing, exciting, or hopeful atmosphere.	B. Emotional and physical impact (*f* = 13)
The ability to create a quiet atmosphere and relaxation.	B12. Upper range can increase energy and bring joy.	
…particularly useful for relaxation and pain management.	B13. Can be very relaxing and useful for pain management.	
Clients often find watching the harp being played to be a relaxing, mesmerizing or entrancing experience.	B14. Relaxing, mesmerizing, entrancing.	
Often associated with feelings of serenity, peacefulness.	B15. Associated with feelings of serenity and peacefulness.	
Can easily be played softly and is often described as "soothing" and having a "beautiful" sound.	B16. When played softly described as soothing and beautiful.	
…create a sense of openness and space which can help to create a healing environment.	B17. Creates a sense of openness and space.	
	B18. Can be comforting, gentle.	
	B19. Vibration can be physically felt.	
So many overtones are present and patients with significant hearing loss have been observed listening to live harp music.	B20. Overtones invite people even with hearing loss to listen to live harp music	
	B21. Patients feel the vibration in heart/chest region if they play the harp.	
Less common instrument may encourage Pt/family to be more comfortable processing/verbalizing uncommon/personalized emotions/feelings related to illness and/or disease process	B22. Less common instrument may encourage verbal processing of emotions related to disease process	

Physically beautiful to most eyes Patients often are interested in watching my hands play the strings. Rich tactile experience if client plays, both in terms of touching the strings and feeling the vibration from the instrument with the hand or in the heart/chest region.	C23. Physically beautiful. C24. Visual as well as acoustic appeal C25. Patients interested in watching it being played C26. Clients find watching it relaxing, mesmerizing or entrancing C27. Rich tactile experience if client plays, both touching the strings and feeling the vibration in heart/chest region. C28. Soundboard rests on collarbone allowing patient to play with one hand.	C. Visual and tactile appeal (f = 9)
Patients have a variety of associations with the harp due to its historical background and common use. Angels and heaven can also be associated with spirituality and other-worldliness to clients, and this can provide a therapeutic bridge to address these aspects of the client's lives and care. Angelic cultural property can also be comforting for some individuals. Patients have a variety of associations with the harp due to its historical background and common use. The instrument has a spiritual connection and timelessness to many. It also has unique associations with spirituality and the afterlife for some people. For Christians, the harp has archetypal meaning of heaven, angels, resurrection which expresses their spiritual beliefs and values. Jews relate to the story of David soothing King Saul and see themselves being soothed as well. …the uniqueness of the sound and experience of hearing a live harp, it can open up the therapeutic impact	D29. Association with angels, heaven and therefore dying may lead to either reject or accept the music. D30. Association with other-worldliness can provide a therapeutic bridge. D31. Angelic cultural property can be comforting. D32. Historical background and common use invites a variety of associations. D33. Spiritual connection and a sense of timelessness. D34. Unique associations with spirituality and the afterlife. D35. Christian association of harp with heaven, angels, resurrection expresses spiritual beliefs and values. D36. Jewish association with David soothing King Saul, see themselves to be soothed as well. D37. Can allow the therapeutic possibility of having a special and sacred experience.	D. Spiritual and archetypal associations and experiences (f=6)

of having a special and sacred experience.		

Able to be face to face with client when playing can be used as an accompanying instrument and is easy to add vocal can be used for many different kinds of music can be used improvisationally. Fluid, flowing arpeggio style creates rich auditory and visual stimulation. It is easy for clients to have immediate success with playing it. Pt can play with only one hand. Can control scale/mode...Very success-based. Color coded string provide excellent structure and grounding. Good background sound for improvisation during verbal processing.	E38. Can face client when playing. E39. Can provide both harmony and melody. E40. Easily accompanies vocals. E41. Suited to melodic lines. E42. Used for many kinds of music. E43. Can be used improvisationally. E44. Fluid, flowing arpeggio style creates rich auditory and visual stimulation. E45. Easy for clients to have immediate success playing harp. E46. Can control scale and mode. E47. Colour coded strings provide excellent structure. E48. Good background during verbal processing.	E. Instrumental characteristics (*f* = 5)
Physically beautiful to most eyes – this can help create an aesthetically pleasing atmosphere that can be healing, or exciting, or hopeful just in itself. The ancient sounds of the strings being played. The presence and uniqueness is also intriguing.	F49. Can help create an aesthetically pleasing atmosphere healing, exciting, or hopeful in itself. F50. Ancient quality. F51. Unique presence is intriguing.	F. Unique aesthetic appeal (*f* = 4)

Angels and heaven can also be associated with spirituality and other-worldliness to clients, and this can provide a therapeutic bridge to address these aspects of the client's lives and care. Because of the uniqueness of the sound and experience of hearing a live harp, it can open up the therapeutic impact of having a special and sacred experience. This accessibility allows for expression, autonomy and the physical experience of creating music and feeling the vibration of the instrument. Very success-based. Colour coded string provide excellent structure and grounding. Less common instrument may encourage Pt/family to be more comfortable processing/verbalizing uncommon/personalized emotions/feelings related to illness and/or disease process. Excellent for relaxation techniques due to ability to accompany vocals and easily transition to instrument-only.	G52. Association with other-worldliness can provide a therapeutic bridge to address these aspects of the client's lives and care. G53. Unique sound and live harp can open up the therapeutic impact of having a special and sacred experience. G54. Accessibility allows for expression, autonomy and physical experience of creating music and feeling the vibration of the instrument. G55. Easy for clients to have immediate success playing. G56. Provides structure and grounding. Able to be face to face with client when playing. G57. Less common instrument may encourage verbal processing of emotions related to disease process. G58. Excellent for relaxation techniques due to ability to accompany vocals and easily transition to instrument only.	G. Therapeutic use ($f = 4$)
Good background sound for improvisation during verbal processing.	G59. Good background during verbal processing.	
Pts are able to manipulate the harp independently while lying in bed with little physical effort. This accessibility allows for expression, autonomy and the physical experience of creating music and feeling the vibration of the instrument. Patient can play with only one hand. Very success-based. Color coded string provide excellent structure.	H60. Patients able to manipulate harp independently while lying in bed with little physical effort. H61. Easy for clients to have immediate success playing. H62. Patient can play with only one hand. H63. Very success based. H64. Colour coded strings provide. Excellent structure and grounding.	H. Ease of use for patients ($f = 3$)

The acoustical properties of gentle, sustained sounds seem to create a sense of openness and space which can help to create a healing environment.	I65. Helps to create a healing environment with a sense of openness and space.	I. Creates a healing environment (f = 2)
Ability to create a quiet atmosphere and relaxation	I66. Can create a quiet relaxing atmosphere.	

Note. n denotes the number of respondents who provided comments to this required open-ended question. *f* denotes the frequency of respondents contributing a comment to each theme. Extended comments from a respondent can be assigned to more than one category.

Appendix G

Themes, Categories and Respondents' Comments About the Perceived Risks of Using the Harp (*n* = 17)

Anonymous Comments (examples)	Open Coding/Categories	Axial Coding/Themes
Cleaning/disinfecting the harp can be challenging depending on shape and size, but comparable to cleaning the guitar. Difficult to make sure it is clean, as can't use strong solutions on it – could spread infection. Larger instrument = more surface area to collect germs. It sticks out in front of the player, which could be a problem bumping into the client or staff. Strings can poke people. A string breaking could be startling. Larger instrument is easier to tip over, potentially on the patient, though that has never happened.	A1. Cleaning/disinfecting can be challenging but comparable to cleaning a guitar. A2. Difficulty cleaning as can't use strong solutions on it – could spread infection A3. Larger instrument has more surface area to collect germs. A4. Sticks out in front of player so could bump into someone. A5. Strings can poke people. A6. A breaking string could be startling. A7. Larger instrument easier to tip over, potentially on the patient.	A. Precaution with physical properties (*f* = 8)
I do not see a risk using the harp in music therapy in oncology/palliative care. I don't perceive any risk to the patient. I can't think of anything harmful that would result from the use of the harp. No perceived risks if harp-based intervention is provided by trained professional. Cannot think of any physical or environmental risks.	B8. No risk or harm. B9. No perceived risk to patient. B10. No perceived risks if harp-based intervention is provided by trained professional. B11. No physical or environmental risks.	B. No risk (*f* = 6)

Some people think that the harp represents heaven…and they are not ready for heaven yet. Patients may relate harp music to death/dying. While for some this is beneficial, others have a difficult time listening to harp music as they are not ready to face the topic of death/dying. Many patients/families have told me not to play the harp because (1) given their circumstances the need to NOT cry. They know intuitively that hearing a harp would elicit strong emotions. (2) the harp itself elicits highly emotional imagery and reminders of death/heaven. Some patients/families are not able to face the impending loss. Therefore, seeing/hearing a harp causes a traumatic response.	C12. They are not ready for heaven yet. C13. Not ready to face the topic of death/dying. C14. Hearing a harp can elicit strong emotions. C15. Association of harp to death/heaven can cause a traumatic response for those not able to face impending loss.	C. Association with death/heaven can be emotionally overwhelming ($f = 3$)
Depending on the size of the instrument and space in a room, Pts or family may feel overwhelmed when a larger instrument is brought into the space. It is large, you must be careful putting it in small spaces, not to get tangled up with tubing, cords and equipment in the room.	D16. Larger harp in a small space could be overwhelming. D17. Larger harp needs caution not to tangle with cords and equipment.	D. Suitability to space ($f = 2$)
I have to be careful not to injure my back when transporting the harp from one place to another (lifting it in and out of the car several times each day). Carrying the equipment.	E18. Risk of back injury to therapist from transporting and lifting it. E19. Carrying the equipment is a risk.	E. Heavy for therapist to move ($f = 2$)
Harp is not as easily portable (as guitar or smaller stringed instruments) and may increase feeling of physical barrier between Pt/therapist. Less common instrument may cause Pts/family to view session more as performance and less therapeutically.	F20. Larger harp may increase feeling of physical barrier between patient and therapist. F21. Less common instrument may cause patients and families to view session as more performance and less therapeutically.	F. Therapeutic concerns ($f = 1$)

Or if people like music that has more hardness to it. The harp is basically a soft sounding instrument.	G22. Some people like music that has more hardness to it.	G. Personal preference (*f* = 1)

Note. n denotes the number of respondents who provided comments to this optional open-ended question. *f* denotes the frequency of respondents contributing a comment to each theme. Extended comments from a respondent can be assigned to more than one category.

Appendix H

Themes, Categories and Respondents' Comments About Perceived Contraindications of Using the Harp (*n* = 14)

Anonymous Comments (examples)	Open Coding/Categories	Axial Coding/Themes
Or if someone has a bad memory or connotation to the harp from past experience.	A1. Patient has bad memory or connotation from past experience.	A. Associations, memories and responses to harp may be emotionally overwhelming. (*f* = 7)
There may be a small percentage of patients who react negatively to a cultural perception of the harp representing an after-life scenario.	A2. Negative reaction to cultural perception of harp and the after-life.	
The music therapist must assess for patient/client associations and responses to the harp, and provide or adjust intervention accordingly. For some individuals, the harp brings up strong associations with religion, afterlife (heaven/angels), or death. The harp may also conjure associations or memories related to funerals or wedding ceremonies. The trained music therapist will be sensitive to these associations, either by navigating them appropriately within the therapeutic space or avoiding/adjusting the use of the harp if use may do emotional/psychological harm (for example: recognizing that using a harp could overwhelm or upset a patient who is not yet ready to process their feelings about death or nearing the end of life). Whenever possible, the patient/client should be given the opportunity to state preferences related to instrument choice.	A3. Music therapist must assess patient associations, memories and responses to the harp in order to avoid emotional or psychological harm.	
The sound can be so evocative of emotions that patients are defended against. Some people know they cannot hear it because they are trying to hold themselves together emotionally for themselves and or their loved ones. Ultimately I take	A4. Traumatic reaction to sound of harp.	

my cue from the patient and always offer guitar as an option. (1) given their circumstances they need to NOT cry. They know intuitively that hearing a harp would elicit strong emotions. It's vital to offer choices of other instruments or no instrument, or to provide verbal psychotherapeutic support. (2) the harp itself elicits highly emotional imagery and reminders of death/heaven. Some patients/families are not able to face the impending loss, one's demise, unresolved issues, etc. Therefore, seeing/hearing a harp can cause a traumatic response. (3) If there are traumatizing memories associated with the harp, the harp should not be played. … a man who was in the preop area of a hospital waiting for open heart surgery. When a professional harpist began to play music, he had a panic attack and believed that the harp was a sign that he would die in surgery. He cancelled his surgery. He received no psychotherapeutic support, the surgeon and CEO were furious, and the hospital lost tens of thousands of dollars...Clearly illustrates the trauma that a harp can cause due to a number of reasons.	A5. Sound can be evocative of emotions that patient/family are defended against. They need NOT to cry. A6. Vital to offer choice of instrument or no instrument.	
Thinking it represents heaven…and a quicker route there. There may be a small percentage of patients who react negatively to a cultural perception of the harp representing an after-life scenario. For some individuals, the harp brings up strong associations with religion, afterlife (heaven/angels), or death. The harp may also conjure associations or memories related to funerals or wedding ceremonies. The trained music therapist will be sensitive to these associations, either by navigating them appropriately within the	B7. Harp represents a quicker route to heaven. B8. Negative reaction to cultural perception of harp and the after-life. B9. Music therapist must assess patient associations, memories and responses to the harp in order to avoid emotional or psychological harm.	B. Patient/family not ready to process feelings about death. ($f = 7$)

therapeutic space or avoiding/adjusting the use of the harp if use may do emotional/psychological harm… the harp itself elicits highly emotional imagery and reminders of death/heaven. Some patients/families are not able to face the impending loss, one's demise, unresolved issues, etc. Sometimes it may cause people to be sad, as harps are associated with the afterlife. If someone is not facing this yet, it could be very difficult for them to have it played and visually present to them.	B10. Not ready to face feelings about death.	
High strings on the harp could be too piercing of a sound for certain patients. Some particular patients may not like the sound of a harp. I have had 2 patients tell me this. Some patients just may not prefer the harp music.	C11. High strings could be too piercing for some patients. C12. Small number of patients may not like the sound of a harp. C13. Some patients may not prefer harp music.	C. Personal preference regarding sound and acoustic qualities, (*f* = 4)
None really.	D14. None	D. No Contraindication (*f* = 3)
I believe that caution should be used when attempting to use the harp to address nausea or extreme agitation. I find that often times the client will decline a visit with the harp during these two scenarios. Too relaxing for the breathing and heartbeat for certain patients.	E15. Caution with nausea or extreme agitation. E16. Too relaxing for breathing and heartbeat of certain patients.	E. Physical concerns (*f* = 2)

Note. n denotes the number of respondents who provided comments to this optional open-ended question. *f* denotes the frequency of respondents contributing a comment to each theme. Extended comments from a respondent can be assigned to more than one category.

Appendix I

Themes, Categories and Respondents' Final Comments on Use of Harp in Oncology/Palliative Care (*n* = 12)

Anonymous Comments (examples)	Open Coding/Categories	Axial Coding/Themes
Musicianship training, or some other training in therapeutic harp would be beneficial. This is because the harp has unique qualities that can be effectively utilized in a therapeutic setting that aren't taught in most Bachelor and Master degree programs for Music Therapy. Most therapeutic harp programs have spent years researching, adapting, and creating genius techniques and approaches. Some of these approaches and techniques may not be (and maybe shouldn't be) considered "Music Therapy". However, they can still be profoundly effective and important to have in the toolbox of a music therapist, especially one who uses the harp.	A1. Harp therapy, music thanatology, clinical musicianship training would benefit since harp has unique qualities not taught in music therapy programs. Therapeutic harp programs have spent years researching and developing techniques and approaches that could be useful in music therapy.	A. Training with therapeutic harp programs or in music therapy schools would develop therapeutic skills with harp and benefit for clients. (*f* = 3)
Harp Therapy, Music Thanatology, or Clinical I encourage it as much as I can. I think it is most effective. But I feel one should have a certain level of skill before using it in a session, so that the instrument does not get in the way of the interaction/relationship. A real freedom on the harp will bring great peace and help to patients.	A2. Skill level should be at a certain level to use effectively in session. Freedom on harp brings great peace and help to patients.	
I hope the MT schools can be encouraged to consider the use of the harp.	A3. I hope the MT schools can be encouraged to consider the use of the harp.	
I couldn't recommend it more. I have wanted to do a presentation on the clinical uses of harp for "non-harp" players for many years!	B4. High recommendation of harp and interest in presenting the clinical uses of harp for non-harp players.	B. The harp is a powerful and excellent music therapy instrument and worth informing non-harp players about the clinical uses. (*f* = 3)
Harp is a powerful instrument acoustically but evokes many responses even when it is not being played but is just seen.	B5. The harp is a powerful instrument both acoustically and visually.	
An excellent music therapy instrument.	B6. An excellent music therapy instrument.	
Thank you for the survey! And good luck! A deep bow to you and your research.	C7. Appreciation from respondents for this research on the harp.	C. Appreciation expressed for this research about the harp. (*f* = 3)

It is deeply a sensitive use of music therapy and relating with patients. Versatility is important and having lots of varied kinds of music making is good. Don't keep to one way of playing the harp…add new tunes and ways of expressing on the harp for the variety of people one may meet. There is a certain maturity that is necessary to relate well in these circumstances that takes a special type of person. I am really relieved to know that you are examining this topic, as I am confident that music therapists need to know a great deal about the meaning that people make when they see/hear a harp as well as what the emotional needs are and how to play it so that it addresses those needs effectively.	D8. A deeply sensitive use of music therapy. D9. Versatility and varied music making are suggested. D10. Maturity is necessary using the harp with this client group. D11. Music therapists need to understand the meaning people make they when see/hear a harp and use it to address emotional needs effectively.	D. Sensitivity, versatility, maturity, and awareness of associations and meanings regarding the harp are required of the music therapist in order to best serve the emotional needs of clients. (*f* = 2)
Christina Tourin "The harp provides a cradle of sound for the patients". A patient: "When I play the harp I feel like I can beat the cancer"	E12. Quote about the harp from a pioneer in the harp therapy field. E13. Quote from a patient about the positive value of the harp in relation with his or her cancer journey.	E. Quotes about the therapeutic value of harp from a patient and from a pioneer in the field of harp therapy. (*f* = 2)
Would be interested in talking more. Thank you. Feel free to contact me if you'd like more info/thoughts.	F14. Interest in further communication about the harp in music therapy.	F. Wish to communicate with researcher. (*f* = 2)
I am interested in light-weight, accessible harps which patients can easily explore.	G15. Interest in light-weight accessible harps for patients to easily explore	G. Interest in light-weight accessible harps for patients to easily explore. (*f* = 1)
I felt really privileged to play for my patients in their final months/days/hours/minutes of life. For many I was the difference between dying alone or not.	H16. Privileged to play for patients at end of life. Being present for some patients who otherwise would have been alone.	H. Privilege to play for patients at end of life. (*f* = 1)
I unfortunately do not get to use harp as often as I like due to the cumbersome transportation and extreme temperatures in my state…I travel a lot, so while harp might be appropriate for one patient, might not be for another, but leaving it in the car causes temperature/humidity issues as well as risk for it being stolen.	I17. Difficult to include the harp in daily music therapy travels because of transportation and storage concerns.	I. Limited everyday use because of transport and storage concerns. (*f* = 1)

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