Development and Evaluation of a Hospice and Palliative Care Music Therapy Education Program

Eun Jung Kim, Ph.D., Eun Jeong Lee, R.N., Chung-Woo Lee, M.D.* and Youn Seon Choi, M.D., Ph.D.*
Hospice & Palliative Care Center, Korea University Guro Hospital, *Department of Family Medicine, Korea University Guro Hospital, Seoul, Korea

Purpose: This study was conducted to develop a hospice music therapist training program and to evaluate its effects. Methods: The educational program consisted of training on the theory of hospice and the theory and practice of hospice music therapy. The course lasted for 4 weeks, with 8 hours of training per week, and 33 music therapists completed the course. In order to assess the effectiveness of the course, participants’ knowledge and confidence regarding hospice music therapy and readiness for hospice music therapy before and after education were measured. The statistical analysis was done using SPSS version 18.0 and the paired t-test was used to assess the effectiveness of the program. Results: The trainees showed significant improvements in knowledge (P<0.001) and confidence (P<0.001) in all areas of this course, as well as in readiness for hospice music therapy (P<0.001). Participants’ satisfaction with the lectures was assessed using a 5-point Likert scale. The average score for all lecture areas exceeded 4 (yes), and the satisfaction level was mostly high. Students were most satisfied with the lectures on music therapy theory, followed in order by those on music therapy practice and hospice theory. Conclusion: This hospice music therapist training program is considered to be suitable because of its positive educational effects and the high satisfaction of participants with the lectures. In order to provide high-quality music therapy services to patients and their families, this training course should be regularly offered to cultivate competent music therapists, and the content of the education should be standardized and applied in various clinical settings.

Key Words: Music therapy, Hospice care, Palliative care, Education
has not yet been officially recorded, but individual survey data presented at academic conferences have shown that the number of music therapy providers is rising. Furthermore, with the steadily growing number of hospice institutions, it is forecasted that hospice music therapy programs will become more common. Moreover, it is also predicted that the demand for music therapy will increase, as the institutions that already provide music therapy are expanding their services further to include categories such as home care and consultation-based hospice care.

To proactively respond to the growing needs for hospice music therapy and to provide more effective music therapy interventions to patients and families, regular training should be offered for professional hospice music therapists to improve their ability to provide appropriate and effective interventions suitable for individual situations. However, there are currently no specific criteria regarding the qualifications for hospice institutions other than a general music therapy license. More specifically, the problem is that there are no national-level or public occupational qualifications related to music therapy in South Korea, but there are only private qualifications which can be newly created by simple registration process without any proper verification of its validation. A study on the current status of music therapy qualifications in South Korea reported that in 2013, there were 52 qualifications issued by 40 different institutions under 26 different titles, which were registered in the Private Qualification Service section of the Korean Vocational Competency Development Service (4). In particular, after use of the term “therapy” to refer to music therapy was legally forbidden, certification programs through which individuals are trained to become music “psychologists” or “counselors” surged around 2012 (5). Furthermore, even though the titles of these certifications are similar or identical, the rigor of these qualifications varies considerably, from private qualifications that are easily acquired by completing a simple online course to qualifications issued by major music therapy institutions that impose strict requirements, such as a music therapy degree and minimum practicum hours. Therefore, it is not possible for hospices to hire high-quality music therapists based only on official qualifications, and it is challenging to objectively evaluate applicants’ level of competence.

At the same time, hospice music therapists experience difficulties in providing patient-centered approaches reflecting patients’ needs for end-of-life support (6). Hospice patients have distinct characteristics from those of patients with developmental disorders or who require rehabilitation, which are the main focus of general music therapy courses. As a result, even a music therapist with a degree in music therapy and qualifications from a reputable institution may experience difficulties in providing therapy to hospice patients without specialized education and training. In order to improve the quality of service of professional hospice caregivers with official certificates such as doctors, nurses, and social workers, a standard hospice education program (hereinafter referred to as standard education) is already provided. Similarly, in order to improve the quality of service of the hospice music therapists, a systematic educational program is needed that can strengthen music therapists’ professional capabilities and their understanding of hospice.

However, there are no professional hospice music therapy degree programs or educational programs similar to graduate hospice nursing programs in South Korea. Furthermore, standard educational programs have only been designed for other professional hospice caregivers such as doctors, nurses, and social workers, and music therapists have limited or no opportunities to participate in such programs.

Hospice music therapy should be approached in a way that reflects the physical, psychosocial, and spiritual aspects of the patient (7). Because each patient experiences pain in a unique way, a hospice music therapist should be able to plan and carry out interventions based on a close analysis of individuals’ conditions and needs (8). Other competencies such as counseling skills to elicit patients’ desires and active coping skills to enhance patients’ satisfaction are also required (9). For music therapy interventions to be more effective, music therapists should have a deep understanding of the meaning and characteristics of hospice, and they should be able to involve live instrumental and vocal music performances in therapy sessions (10), reflecting the patient’s musical preferences (11).

Unprepared therapists are at an elevated risk of negatively influencing their patients and diminishing the effects of the therapy. Furthermore, by undermining patients’ expectations and beliefs, it is also possible to threaten the development of hospice music therapy overall (12). To minimize the risk of
such negative effects, interventions should mainly be provided by skilled hospice palliative care professionals, who should receive both theoretical and practical education as part of their training (13). Therefore, in order to systematically train and place professional hospice music therapists in appropriate positions, it is necessary to provide a curriculum that contains transparent competency criteria, which are essential in the clinical setting, and clear guidelines for effective music therapy interventions.

One of the tasks in the First Comprehensive Plan of Hospice and Palliative Care (2009~2023) announced by the Ministry of Health and Welfare is to improve both hospice service expertise and quality. In order to improve the quality of care providers with limited opportunities in specialized hospice education, the Central Hospice Center has conducted a project named the Care Provider Training Course in Hospice Palliative Care. Compared to existing professional mentoring courses, this type of professional development project makes it possible to use a variety of training methods and provides practicum training to a larger number of students (14).

The purpose of this study was to determine the educational effects and satisfaction rates of the curriculum by analyzing the evaluation results of the music therapists who participated in the Professional Hospice Music Therapist Training Program, and to provide basic necessary data for future hospice music therapist educational programs.

The detailed objectives of this study were as follows.
1) To develop an educational program for training professional hospice music therapists.
2) To evaluate participants’ satisfaction and the effects of the developed educational program on knowledge, confidence, and readiness to practice hospice music therapy.

METHODS

1. Study design

This study used a single-group pre–post experiment design to compare the results of surveys conducted before and after the professional hospice music therapist training course.

2. Study subjects and data collection

1) Study subjects

The subjects of this study were music therapists who completed the professional hospice music therapist training course. Eligibility was limited to individuals who currently worked as music therapists in hospice institutions, therapists with past hospice work experience, or those who had completed the standard education with future plans to work as hospice specialists. The program lasted for 4 weeks, with 8 hours of training per week, and 33 music therapists were included in the study.

According to Cohen (15), when the t-test is used to compare mean values between 2 groups, a value of d=0.2 indicates a small effect size, d=0.5 corresponds to a medium effect size, and 0.8 indicates a large effect size. On this basis, the effect size was set to 0.8 in this study. In the G*Power 3.1.9.2 program, the minimum number of samples required was calculated to be 23 with an effect size of 0.8, a significance level (α) of 0.05, and a power of 0.95 when the 2-tailed test t-test was used. Therefore, the sample size in this study was more than adequate.

2) Development of the educational program

The education program for the professional hospice music therapist training course was developed using the ADDIE system for instructional program design, which includes analysis, design, development, implementation, and evaluation phases.

In the analysis phase, the level and content of each institution’s requirements for music therapists during the professional mentoring process were summarized. Moreover, the standard education curriculum used at the Central Hospice Center and the United States training course for qualification in hospice and palliative care music therapy (HPMT) (16) were analyzed (Table 1).

In the design phase, it was determined that the objective of the education program would be to foster a better understanding of hospice care and to train professional hospice music therapists with proper interventional skills. To achieve this objective, the course program was then developed with reference to the standard educational program and the HPMT certification program from the United States, which were ana-
lyzed in the previous phase. Then, a hospice music therapy protocol with proven effectiveness was added to the course development process (8).

In the development phase, the education plan was developed considering the available budget, project period, scope of the education, and target number of students. Drafts of the content, the syllabus, and teaching methods were revised and reviewed by a group of experts composed of hospice professionals including doctors, nurses, and social workers. The training course administration team then established a management plan, including evaluation procedures and a detailed support schedule. The curriculum was then finalized after review by the Central Hospice Center (Table 2).

In the implementation phase, education on technical theories was provided and practicum sessions were guided by professional instructors including medical doctors, nurses, music therapists, and spiritual caregivers with at least a master’s degree and more than 10 years of clinical experience, as well as professors in the fields of music therapy and psychological counseling with at least 7 years of teaching experience. Lectures on the management of therapy sessions and case studies were given by professionals such as social workers and music therapists with at least 2 years of work experience. The course included 19 lectures that lasted for a total of 32 hours, was administered in a 4-week period (8 hours a week), and was completed by 33 music therapists.

In the evaluation phase, the evaluation tool from the standard education curriculum and those from previous studies were used to assess the effectiveness of the program. The results showed that the education provided was well-received and had a positive impact on the students.

### Table 1. The Major Subjects of Hospice and Palliative Care Music Therapy Certificate Program.

| Category                                      | Content                                                                                                                                 |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Hospice & palliative care music therapy (34 hrs) | Philosophical and historical perspectives on hospice & palliative care  
Ethics in hospice & palliative care  
Clinical needs of persons with advanced illness  
Music therapy in hospice care evolution and growth  
Pediatric palliative care music therapy  
Referrals & assessments  
Music therapy to meet clinical care plans  
Hospice music therapy song swap  
Music therapy to prevent hospice interdisciplinary team compassion fatigue  
The business of hospice music therapy  
Macro-assessments: business planning: funding issues |
| Counseling skills for music therapists (26 hrs) | Communicating with patients and families: setting the scene  
Getting in the door: Introduction of music therapy to hospice patients/ families  
Models of counseling: an overview  
Vent–validation–problem solving  
More counseling techniques  
Suicide risk assessment  
Music in counseling  
Processing role plays/music therapy clinical supervision |
| Adult and seniors grief & loss music therapy (25 hrs) | Philosophical approaches to counseling grief & loss  
Review skills needed to work in bereavement  
Needs of grieving adults and seniors  
Music therapy–based group curriculum for adult and senior bereavement groups: special populations  
Multi-generational experiences |
| Child and adolescent grief & loss music therapy (23 hrs) | Dyads: personal childhood death experiences and songwriting  
Child and adolescent grief: developmental stages, approaches to treatment, assessments, and research overview  
Child and adolescent bereavement curriculum and treatment interventions  
Developing session plans for role–playing  
Sharing interventions for overcoming guilt and shame |
were referred to create an evaluation tool for the program. Evaluation surveys were conducted before and after the course to assess how completing the course affected the professional development of the music therapists. Satisfaction surveys were also administered to measure participants’ level of satisfaction with each lecture.

3) Data collection
To measure the effects of participating in the education program, the pre-post surveys contained the same questions regarding knowledge, confidence, and readiness, and were administered before and after the course. Satisfaction surveys were administered after each of the 19 lectures. Consequently, the participants in the training course completed the pre-test questionnaire before the first lecture in the first week and the post-test questionnaire after the last lecture in the fourth week. Responses from all 33 participants were collected for the pre-post surveys, but the number of respondents for each of the satisfaction surveys varied due to differences in the attendance rate.

3. Research tool
There are currently no validated tools for measuring the competency of hospice music therapists. Therefore, in order to assess the educational effects of the course, the features that needed to be measured were first identified, and then a measurement tool was developed along with the educational program. First, appropriate existing tools for measuring the effects of education and the competency of music therapists were collected. From these tools, the components that were suitable for the training course were extracted and then revised to develop a draft of the measurement tool. The draft was then reviewed twice by a multidisciplinary team consisting of a doctor, nurse, social worker, and music therapist to produce the final measurement tool. Details on the finalized measurement tool and its credibility are presented below.
1) Knowledge and confidence regarding hospice music therapy

Knowledge and confidence regarding hospice music therapy was measured using revised versions of questionnaires on knowledge of hospice and palliative care and confidence in hospice and palliative care practice, which are used in standard hospice education (17). The subsections of ‘domains of education’ and ‘domains of technology’ in the questionnaires were replaced with an ‘education’ section reflecting the material covered in this training course, and the knowledge and confidence sections both had 15 questions. Participants rated items on a scale of 1 (‘I don’t know at all’) to 5 (‘I know it very well’) in the knowledge section, and on a scale of 1 (‘not at all confident’) to 5 (‘I am very confident’) in the confidence section. Additionally, to encourage the students to write freely about changes in their knowledge and self-confidence after the course, an open-ended question was included in each section. In an analysis of the reliability of the tool, Cronbach’s alpha ranged from 0.67 to 0.93 in the knowledge section (hospice theory, 0.86; music therapy theory, 0.93; music therapy practice, 0.67) and from 0.84 to 0.96 in the confidence section (hospice theory, 0.93; music therapy theory, 0.96; music therapy practice, 0.84).

2) Readiness for hospice music therapy

Based on the section of the standard education questionnaire on preparation for hospice palliative care practice, the measurement of readiness for hospice music therapy was segmented into 5 sections and 33 components. The 5 sections were: ‘understanding hospice’, ‘self-analysis’, ‘patient analysis and intervention planning’, ‘intervention delivery’, and ‘self-improvement’. Of these sections, ‘understanding hospice’, ‘self-analysis’, and ‘self-improvement’ were selected and developed into 18 components regarding music therapy procedures and competency of the therapist, referring to a previous study (18). The other 2 sections, ‘patient analysis and intervention planning’ and ‘intervention delivery’, were developed after establishing 15 activities for music therapists. These activities were developed as components of the music therapy protocol analysis tools entitled ‘Analyzing the Condition of Patients’ and ‘Application Plan of Music Therapy’ (8). Participants responded to the items on the measurement tool using a scale of 1 (‘not at all’) to 5 (‘very much’). The tool showed good reliability, with Cronbach’s alpha values of 0.74~0.93 (understanding hospice, 0.93; self-analysis, 0.86; patient analysis and intervention planning, 0.91; intervention delivery, 0.76; self-improvement, 0.74).

3) Evaluation of satisfaction with the course

In the satisfaction surveys for each of the 19 lectures, the 11 components of the course evaluation form from the standard hospice education were used unaltered, but the original 4-point scale was modified to a 5-point scale. In the reliability analysis, Cronbach’s $\alpha$ was 0.96~0.97 (hospice theory, 0.97; music therapy theory, 0.97; music therapy practice, 0.96), indicating that the tool had excellent reliability.

4. Data analysis

In order to evaluate the effects of the hospice professional music therapist training course and participants’ satisfaction with the course, the items on the education section of the pre-post survey and the satisfaction survey for the 19 lectures were classified into the categories of ‘understanding hospice’, ‘hospice music therapy theory’, and ‘hospice music therapy practice’. The results were then calculated by adding the outcomes from each category.

Including the various sub-sections, all indicators analyzed in this study were verified, with skewness of no more than ±3 and kurtosis of no more than ±10. Additionally, the Shapiro–Wilk test yielded a P-value>0.05, confirming normality. Therefore, this study used parametric statistical tests for the analysis.

The program used for data processing was SPSS version 18.0 (SPSS Inc., Chicago, IL, USA). The general characteristics of the participants were analyzed using descriptive statistics. The paired t-test was utilized to examine the educational effects of the training course, and P-values<0.05 were considered to indicate statistical significance.

RESULTS

1. Educational effects of the professional hospice music therapist training course

An analysis of the pre-post responses showed significant
score improvements in knowledge, self-confidence, and readiness for hospice music therapy practice (Table 3).

1) Knowledge of hospice music therapy
An analysis of the responses regarding hospice music therapy knowledge showed significant improvements in hospice theory (t=-6.048, P<0.001), music therapy theory (t=-7.793, P<0.001), and music therapy practice (t=-6.634, P<0.001). Representative responses to the open-ended question on changes in participants’ knowledge of hospice music therapy are presented below.

I believe that more systematic sessions can be promoted through education on appropriate protocols.
I had general music therapy knowledge, but a limited specific understanding of hospice patients. Through this course, I was able to improve my theoretical knowledge of hospice music therapy.
I learned that we need to plan, develop, and evaluate the sessions according to a protocol. Now I am trying to modify my sessions accordingly.
My overall understanding of hospice palliative care has increased, and the education on appropriate protocols has been particularly beneficial. I am now able to assess patients’ needs well and to direct the sessions as appropriate given each patient’s treatment goals, and also realized that the range of music therapy in hospice can be expanded.
Apart from music therapy, it was also helpful to learn about other topics, such as hospice palliative care and spiritual care.
I found out that there are more systematic and professional approaches. Additionally, I have learned that rather than approaching patients as groups, it is possible to approach them as individuals and to identify a variety of individual-level issues and needs.

2) Confidence in performing hospice music therapy
Based on an analysis of participants’ confidence in performing hospice music therapy, hospice theory (t=-6.057, P<0.001), music therapy theory (t=-6.741, P<0.001), and music therapy practice (t=-5.512, P<0.001) showed significant improvements.

Representative responses to the open-ended questions asking for specific explanations regarding changes in participants’ confidence in hospice music therapy practice are presented below.

I had good responses from patients when I applied what I have learned through this educational program, and most of all, I felt happy when I was providing the therapy.
After acquiring background knowledge on hospice care and
how to apply that knowledge according to individuals’ characteristics, I felt more confident in my clinical practice. Also, I could build the frame of my music therapy sessions using the protocol.

Using the protocols covered in this course, I have been able to approach music therapy professionally and systematically, and at my current workplace, my colleagues have learned the significance of the music therapy at our institution.

I think I have established the proper framework for my hospice music therapy, and I think I can provide interventions according to individuals’ needs. The sample cases were helpful and I think they can be modified or applied directly to my therapy sessions.

It was a valuable experience, as I received useful feedback after performing practice sessions according to the protocol in front of my fellow students.

3) Readiness for music therapy practice

An analysis of the responses on readiness for music therapy practice showed significant improvements in understanding hospice (t=-4.615, P<0.001), self-analysis (t=-6.024, P<0.001), patient analysis and intervention planning (t=-5.452, P<0.001), intervention delivery (t=-3.761, P<0.01) and self-improvement (t=-2.365, P<0.05).

2. Satisfaction level with the professional hospice music therapist training course

Overall, a score of 4.28 points (±0.70) was assigned for hospice theory, 4.63 points (±0.53) for music therapy theory and 4.61 points (±0.50) for music therapy practice. The average score for all the lectures exceeded 4 points (‘positive’), indicating favorable results for satisfaction upon completing the course. The highest level of satisfaction was found for music therapy theory, followed in order by music therapy practice and hospice theory (Table 4).

| Variables                      | N  | M±SD       |
|--------------------------------|----|------------|
| Hospice theory                 | 154| 4.28±0.70  |
| Hospice music therapy theory   | 303| 4.63±0.53  |
| Hospice music therapy practice | 137| 4.61±0.50  |

DISCUSSION

To prepare basic data for future reference in hospice music therapist training, this study evaluated participants’ experiences in a professional hospice music therapist training course. The training course was one of the projects conducted by the Central Hospice Center in 2018, under the category of hospice care provider training courses.

Of the 33 music therapists who participated in the course, 14 had previous experience in hospice music therapy training. However, 12 of them had only taken a hospice music therapy course as part of their standard education coursework, and 2 had received hospice music therapy lectures that were included in the general music therapy curriculum. Therefore, among the participants, there were arguably no music therapists who had been comprehensively trained in hospice music therapy or had previously participated in such a course.

The pre-post evaluation of the training course demonstrated significant improvements in all sections of knowledge and confidence. Although training may not result in significant improvements in participants with similar previous educational experiences (19), the majority of the study participants had only a general introductory level of education on this topic, without prior professional hospice training or hospice music therapy courses. Hence, it is reasonable that a broad range of significant improvements could be observed.

When the open-ended questions were analyzed, it was found that the course led to an improved understanding of hospice and recognition of the characteristics of hospice music therapy compared to general music therapy. This result is consistent with a study by Choi and Kwon (20) regarding the positive effect of hospice palliative care programs on participants’ understanding of hospice and attitudes towards providing care for end-of-life-patients. In particular, many music therapists indicated that hospice music therapy protocols can be used to assess patients’ needs and to apply music therapy in an analytical and systematic manner. This appears to be due to the protocol training, which solved many difficulties that had previously been resolved through trial and error when performing music therapy without any standard guidance.

The course evaluation showed significant effects and high
levels of satisfaction with the lectures. Several characteristics of
the curriculum are believed to be responsible for this result.

First, in terms of content, the course provided inclusive edu-
cation, encompassing both the theory and practice of hospice
music therapy. In order to improve the quality of education
and to enhance practical performance and confidence, it is
necessary to have both a theory–based curriculum and practi-
cal training (13).

Second, multiple educational modalities were used in the
course, including lectures, discussions, role–playing, practice,
and supervision. There is a limited extent to which clinical
practice can be incorporated into theory–based courses, and
for these purposes, practice–focused, case–based, and debate–
based education is more efficient than lecture–based training
(21).

Third, the lecturers included professionals from various fields,
such as doctors, nurses, social workers, spiritual caregivers,
psychological counselors, and music therapists. The diversity
of the perspectives presented by these professionals likely con-
tributed to the students’ improved understanding of the multi-
disciplinary approach.

Fourth, all the students were currently working as music
therapists in hospice or intended to work in the field. The deep
understanding and cohesion created by the course helped to
foster high levels of participation and active mutual feedback
in elements of the curriculum such as discussion and role–
playing.

Despite the positive effects of the course and the high satis-
faction levels of the participants, this study has the following
limitations.

First, the duration of the training was insufficient compared
to the intended curriculum range. The course covered hospice
and music therapy training in only 32 hours, including ori-
entation and completion, corresponding to only one–third of
the 96–hour HPMT curriculum in the United States and half
of the 60–hour standard hospice course. This curriculum is
believed to be suitable for beginner music therapists with 2 to
3 years of hospice music therapy experience. To train hospice
music therapists in interventional skills that can address the
medical, psychological, emotional, spiritual, and social needs
of patients and their families using music therapy (22), a more
in–depth training course is required.

Second, the evaluation of the course was only based on self–
assessments. The ultimate objective of this course was to train
professional hospice music therapists with a deep understand–
ing of hospice care and music therapy intervention skills. The
interventional skills of hospice music therapists need to be
assessed from the external perspective of the patient and in–
stitutions. To translate our results into clinical practice, the
curriculum needs to be regularly developed and improved to
reflect the results of ongoing evaluations.

To improve the quality of hospice service, workforce with
professional knowledge and skills are needed (23). In addition,
in order to successfully implement this educational program,
it is necessary to maintain initial training sessions for future
instructors (19). To promote professional hospice music therapeu-
tics who are capable of assessing the needs of patients and
their family and to address those needs through music therapy
interventions based on an understanding of the patient, specific
objectives and plans should be established in addition to con–
 tinuing education.

SUPPLEMENTARY MATERIALS

Supplementary materials can be found via https://doi.
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