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Music therapy in palliative medicine

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The Harry R. Horvitz Center for
Palliative Medicine is a World Health
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Abstract A partnership between The Cleveland Clinic Foundation and The Cleveland Music School Settlement has resulted in music therapy becoming a standard part of the care in our palliative medicine inpatient unit. This paper describes a music therapy program and its impact on patients, their families, and staff. A service delivery model is suggested for implementation and integration of music therapy within palliative medicine. Specific music therapy interventions, evaluation and documentation techniques are also mentioned. A description of patient and family responses to music therapy, staff satisfaction, and effectiveness of interventions is presented.

Keywords Music therapy · Palliative medicine · Inpatient · Cancer · Symptoms

Introduction

I despise a world which does not intuitively feel that music is a higher revelation than all wisdom and philosophy. Ludwig van Beethoven

Music therapy uses specifically prescribed music under the supervision of a Board-certified music therapist (MT-BC) to aid in the physiological, psychological, and emotional integration of the individual during treatment [11]. Music therapists are trained in music (histor-

ical, theoretical, and practical), the behavioral sciences, treatment and educational models, and therapeutic approaches [11]. For centuries, many cultures have felt that music affects mankind by generating a physical sensation or mental state significantly comparable to enchantment, while others have utilized music for healing. Music therapy has been considered to have medicinal and emotional benefits since ancient times. More recently, in the mid-1900s, researchers began to develop theories regarding music's neurological and physiological effects. Music therapy may now be found in many clinical settings [1]. Literature describing the

use of music with the terminally ill has increased over the past 10 years. As the number of music therapists in medical settings grows, new developments in services are occurring.

The Cleveland Music School Settlement (CMSS) is a community school of the arts with a commitment to providing education and music therapy services to the public. A contractual agreement between CMSS and the Cleveland Clinic Foundation (CCF) provides professional therapists, supervision, and instruments to The Harry R. Horvitz Center for Palliative Medicine, a 23-bed inpatient unit in the CCF hospital. The partnership has expanded and now includes services in home and long-term care facilities. Music therapists seek to assist patients in achieving and maintaining their maximum physical, emotional, spiritual, and social wellbeing despite the complex limitations they must face as a result of disease [8]. Care of the patient and the family is provided by a multidisciplinary team, which includes two music therapists [8].

The introduction of music therapy into routine medical practice has been challenged by the lack of objective data supporting efficacy. We knew of 7 published articles on this subject. A Medline search of the literature published between 1978 and 1999 was conducted using the keywords music therapy, cancer, terminally ill, hospice, pain, and palliative medicine, which yielded 78 further articles. Only 8 of the total of 85 articles [2, 4, 7, 13, 15–18] included any objective measurement of music therapy protocol effectiveness with cancer patients (e.g. patient self-report, visual analog scales, McGill Pain Questionnaire, Spielberger State-Trait Anxiety Inventory, etc.). We now report the use of specific, defined music therapy interventions. This includes a staff survey of music therapy services, compared over a 2-year period. To our knowledge this is the first time music therapists have reported prospectively collected data from patients, families, and staff during active palliative medicine treatment.

Methods

Patients

Patients were contacted after a music therapy consultation was requested by a physician on a standardized, routine order sheet. Consultations may also be obtained by verbal request directly to the music therapist by team members, patients, or families. Information from a daily interdisciplinary team meeting may further result in a consult. In the first visit the therapist explained that someone on the team thought music would be helpful, shared what the team suggested, and then discussed the potential benefits. The therapist then obtained patient information which would influence the intervention plan and goals: music preference, previous music experience, and receptiveness to music during hospitalization. Predefined interventions were chosen by the therapist, with the patient's assistance (Table 1). To develop rapport,

Table 1 Standard music therapy interventions

| Type of interventions | Description |
|-----------------------|---|
| 1. Listening | Live or recorded music provided by therapist (does not require active participation by patient) |
| 2. Participation | Singing, playing instruments, choosing songs, humming, dancing, clapping, discussing music |
| 3. Life review | Sharing memories elicited by the music |
| 4. Lyric analysis | Discussion of lyrics and their significance |
| 5. Song-writing | Writing songs to express feelings or improve family communication |

sessions often began with an intervention that involved the least patient involvement (e.g., listening). Once engaged, the therapist presented interventions that addressed the goals. In determining goals, the therapist considered the patient's perceived needs and assessment information. The patient was invited to participate in the intervention. Session length depended on the needs of the patient/family. At the end, verbal permission to return on another day was obtained.

Data collection

The reason for the music therapy consultation was recorded. Patient responses to the interventions were evaluated by the therapist during the session and documented on the data collection form. At the close of a session, all behavioral, physical, and verbal responses were identified through therapist observation and patient communication. An intervention was considered effective if two or more predefined, positive responses were identified. In addition, at the end of each session the therapist wrote a narrative in the chart, and recorded the responses on the data collection form. Information recorded by the music therapist included: patient background information, reason for referral, referral source, assessment, time spent with patient, goals, interventions used, style of music used, patient's perception, presence of family members, physical and behavioral changes, results (physical, verbal, and behavioral responses), patient's agreement to the therapist's return, and classification of verbal comments from the patient and/or family.

Staff

All palliative medicine inpatient unit staff, including nurses, nursing assistants, social workers, physicians, and physicians' assistants were surveyed with regard to their impression of the music therapy program. Questionnaires were provided to staff regardless of their work shift, since they might have had some exposure to music therapy on the unit, either by observing it or by hearing about it from patients. The first survey was disbursed in February 1995, 5 months after the start of the music therapy program, and the next in 1997, following the policy of CMSS to complete one every other year. In 1995, 48 questionnaires were distributed, and in 1997, 45. The forms were placed in the staff members' mailboxes. Completed forms were anonymously returned to the music therapists' mailbox. Eight of the 11 questions could be answered by a 'yes' or 'no' response, and the other 3 questions by a positive, negative, or noncommittal response. The same survey form was used both years.

Results

Goals

The goals identified with the patients were: (1) minimize stress, provide distraction [3, 9, 12], (2) decrease pain perception [3, 4, 7, 9, 11, 12, 14, 18], (3) reduce anxiety, agitation, restlessness [2, 9, 11, 12, 14], (4) decrease depression [3, 6, 11], (5) provide comfort and solace [3, 11], (6) encourage self-expression [2, 3, 5, 9, 11, 14], (7) stimulate positive communication with family members [3, 5, 11, 14], (8) reduce the perception of nausea [14], (9) increase interaction and participation [3, 5, 9, 11, 14], (10) increase self-esteem [3, 5, 11], and (11) renew interest in playing an instrument [5].

Patients/families

Data were collected during a 6-month period (September 1996 to February 1997) as 120 music therapy sessions were given to 106 patients, with 41 families also participating (Tables 2, 3). There were 52 therapy attempts made which were not completed due to patients' sleeping, being off the unit, or requesting that the therapist not remain or return another day. Patients and family members were referred to music therapy for 18 primary reasons (Table 4). The median

Table 2 Data recorded for 120 sessions (106 patients)

| | No. (N=120 sessions) |
|--|----------------------|
| Agreement to therapist's return | |
| Agreed to therapist's return | 98 |
| Not applicable (e.g., patient being discharged) | 17 |
| Unable to agree (e.g., because asleep) | 5 |
| Classification of verbal comments | No. (N=120 sessions) |
| Positive | 90 |
| Ambivalent | 15 |
| No comment | 15 |
| Referral source | No. (N=106 patients) |
| Therapist | 46 |
| Doctor | 27 |
| Physician's assistant | 14 |
| Social worker | 8 |
| Nurse/nursing assistant | 5 |
| Family | 4 |
| Patient | 2 |
| Active participation (may have more than one response in each session) | Patient/family |
| Chose songs | 54 |
| Sang/hummed | 38 |
| Engaged in life review | 16 |
| Played instrument | 12 |
| Tapped foot/clapped/danced | 11 |
| Participated in lyric analysis/music discussion | 5 |
| Wrote a song | 5 |

Table 3 Style of music used^a

| Style of music | No. (N=106) |
|---------------------------|-------------|
| Big Band | 24 |
| Gospel | 24 |
| Musicals | 10 |
| Christmas | 9 |
| Classical | 8 |
| Various | 8 |
| Popular (1980s and 1990s) | 6 |
| Country | 4 |
| Polka | 4 |
| Jazz | 3 |
| Irish | 2 |
| Rock (1950s) | 2 |
| Waltz | 2 |
| Blues | 1 |
| Folk | 1 |
| Instrumental | 1 |
| March | 1 |

^a May have used more than one style

Table 4 Reasons for music therapy referral^a

| Reason | No. of patients (N=106) |
|---|-------------------------|
| Physical | |
| Physical pain | 30 |
| Extreme restlessness or respiratory difficulties | 12 |
| Sleep disorders | 2 |
| Nausea | 1 |
| Psychosocial | |
| Extreme anxiety | 19 |
| Relaxation | 14 |
| Depression | 13 |
| Distraction | 10 |
| Enjoyment | 10 |
| Agitation | 7 |
| Family stress | 6 |
| Need for self-expression or expression of feelings to family | 6 |
| Complex psychological problems | 4 |
| Isolation (due to danger of infection, language barriers, social withdrawal or absence of family support) | 4 |
| Musician | 4 |
| Emotional pain | 3 |
| Dealing with loss issues | 2 |
| Dealing with end-of-life issues | 1 |

^a May have more than one reason for referral

session duration was 25 min (range 10–70). Successful interventions were identified for the patients and the family (Tables 5, 6). The most frequent responses for patients were verbally expressed interest, positive verbal response, and relaxed / changed affect (Table 6). The most frequent responses for families were verbally expressed interest, positive verbal response, active participation, and relaxed/changed affect.

Table 5 Effectiveness of standard interventions

| Goals | Interventions used ^a | Total number of applications ^b | Positive response ^c (N=120 sessions) |
|--|---------------------------------|---|---|
| Patient | | | |
| Decrease stress/ provide distraction | 1, 2, 3 | 76 | 73 |
| Provide opportunity for self-expression | 1, 3, 4, 5 | 22 | 22 |
| Decrease perception of pain | 1, 2, 4 | 14 | 14 |
| Provide comfort/solace | 1, 2, 3 | 12 | 11 |
| Decrease depression | 1, 3 | 8 | 8 |
| Decrease anxiety/ agitation/restlessness | 1, 2 | 8 | 7 |
| Family | | | |
| Decrease stress | 1, 2 | 31 | 31 |
| Increase positive family interaction | 1, 2 | 9 | 9 |
| Increase self-expression | 1, 3 | 4 | 4 |
| Provide opportunity to address bereavement | 3 | 2 | 2 |
| Decrease depression | 3 | 1 | 1 |

^a 1 Listening, 2 Participation, 3 Life review, 4 Lyric analysis, 5 Song-writing; for more detail see Table 1

^b More than one intervention may have been used per session; total number therefore will not be equal to 120

^c Positive patient/family response determined by two or more positive responses as noted in Table 2

Table 6 Positive patient and family responses^a

| Type of response | No. of patients (N=106) | No. of families (N=41) |
|---------------------------------|-------------------------|------------------------|
| Behavioral | | |
| Active participation | 26 | 15 |
| Physical | | |
| Relaxed/changed affect | 60 | 15 |
| Less physical tension | 17 | 5 |
| Deeper breathing | 16 | NA |
| Sleep | 16 | NA |
| Less physical movements | 8 | NA |
| Decreased perception of pain | 4 | NA |
| Verbal | | |
| Verbally expressed interest | 78 | 25 |
| Positive verbal response | 65 | 24 |
| Expressed feelings and thoughts | 44 | 13 |
| Fewer verbal complaints | 2 | NA |

^a May have more than one response

Staff

In 1995, 23 questionnaires were returned (48% return rate) and in 1997, 17 were returned (38%). It is impossible to determine the cause of the low rate of return, although it is common for such surveys. However, those who worked evenings, nights, and weekends may not have felt able to respond to the questions accurately owing to their lack of exposure to music therapy. Positive and yes responses to the 11 questions were tallied (Table 7). The staff's perception of greatest effectiveness in 1995 (after the 1st year of music therapy services) were (in decreasing order): (1) patient satisfaction, (2) stress reduction, (3) anxiety reduction, and (4) patient receptiveness. Lower ratings were found in: (1) comfort and solace, (2) self-expression, (3) patient

Table 7 Responses of palliative medicine staff

| Staff impression | 1995 (N=24) | 1997 (N=17) |
|---|-------------|-------------|
| I feel patients have been satisfied with music therapy services | 21 | 14 |
| Music therapy helps decrease patient stress | 20 | 16 |
| Music therapy helps decrease anxiety | 20 | 16 |
| I have had a positive response to music therapy | 20 | 16 |
| Music therapy helps provide comfort and solace | 19 | 15 |
| Music therapy provides opportunities for self-expression | 19 | 14 |
| Based on my observations patients have had a positive response to music therapy | 17 | 14 |
| Music therapy helps decrease perception of pain | 16 | 13 |
| Music therapy helps decrease depression | 16 | 12 |
| Based on my observations families have had a positive response to music therapy | 16 | 15 |
| Music therapy provides a more relaxing atmosphere and helps decrease staff stress | 15 | 13 |

positive response, (4) pain perception, (5) ameliorating depression, (6) family positive response, and (7) stress reduction. In 1997, as compared with 1995, higher ratings were given in all areas except patient satisfaction.

Discussion

Since 1994, our inpatient Palliative Medicine unit has developed a service delivery model for music therapy with a positive impact on individual patients, family members, and the multidisciplinary team. The goals (Table 5), listed in the order of frequency they were

most commonly addressed, were originally determined by reviewing published research and by therapist experience. During therapy sessions, specific goals were implemented based on this knowledge, the reason for referral, and observed and stated patient or family need. The staff's survey responses improved from 1995 to 1997. This may be due to familiarity with the service, as well as education initiatives taken by the therapists.

There are limitations in the data reported. Patient response needs a more objective definition, and interventions need to ensure consistency between therapists. Our data were not controlled for a possible practice effect. Determination of intervention effectiveness has since been revised to include both observation and patient evaluation with standardized tools. A computer database for long-term tracking of interventions has been developed to enhance tracking and evaluate performance.

Some natural difficulties occur in work in advanced disease. The most obvious of these derive from the fact that the severity of the illness and the medications used to address symptoms may leave patients sedated and less able to participate than they might otherwise have been. Another issue is the manner in which the therapist is introduced to the patient. This establishes the relationship and is the deciding factor as to whether or not the patient accepts music therapy. Owing to the acute, short-stay nature of the unit, patients may only be seen once. Some, however, are on the unit longer or seen again during return hospitalizations. Those seen over several sessions may become familiar with the interventions and more likely to respond. Multiple therapist interactions also support a personal relationship, perhaps increasing response. Evaluation of interventions with family was low because family members were not always present when the therapists were available; primary attention was given to those who lacked family support. Future plans include having therapists

on the unit during hours when family members are visiting. Other difficulties include the unavailability of patients when the therapist is on the unit and the challenge of working with an unresponsive patient. Family members are usually very helpful and supportive, but they can interfere with the provision of services. There are instances where they may disagree with "their" patient's desire to participate in music therapy. Although these are rare, they can be problematic.

For any unit beginning a music therapy program, we recommend that all staff participate in a music therapy inservice, which should be repeated as part of orientation for all new staff. This should include information on music therapy (general and specific to palliative medicine), goals, interventions, and reasons for referral. It is also suggested that the therapist should observe rounds and receive orientation about the unit and its policies and procedures. It is important for the music therapist to function as a team member. Good communication between the therapists is essential both for optimum patient care and for accuracy in evaluating patient responses.

In summary, the music therapy program on the Horvitz Center for Palliative Medicine has been beneficial. Interventions were identified, and impact on patient care evaluated. Patients and families exhibited positive verbal responses and displayed relaxed/changed affects. Staff surveys were also positive, further supporting the data collected by the therapists. Based on our experience, we recommend that music therapy be included as an integral part of palliative medicine practice.

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