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Music therapy in palliative medicine

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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 (historical, 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, 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.

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

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 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 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

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

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

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 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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