Music therapy in palliative care

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Initial observations regarding the use of music therapy at one hospital in the palliative care of patients with advanced malignant disease are presented. In the hands of a trained music therapist, music has proven to be a potent tool for improving the quality of life. The diversity of its potential is particularly suited to the diversity of the challenges — physical, psychosocial and spiritual — that these patients present.

On présente des premières observations sur l'usage dans un hôpital de la musique comme traitement palliatif des patients souffrant de maladie maligne avancée. Aux mains d'un musicothérapeute entraîné, la musique s'est avérée un instrument puissant pour l'amélioration de la qualité de la vie. La diversité de son potentiel convient particulièrement à la diversité des défis physique, psychosocial et spirituel que présentent ces patients.

There would be no music and no need for it if it were possible to communicate verbally that which is easily communicated musically.

— E. Thayer Gaston, 1958

The program in music therapy of the Royal Victoria Hospital's palliative care service‡ was begun in September 1977. The aim of this pilot project was to define further the potential of music therapy in meeting the needs of the terminally ill and their families, with a trained music therapist working as a member of a multidisciplinary health care team.

The purpose of this paper is to outline the rationale of using music therapy in palliative care and to offer preliminary observations on the impact of this underused therapeutic tool.

Music therapy

Definition

Music therapy is the controlled use of music, its elements and their influences on the human being to aid in the physiologic, psychologic and emotional integration of the individual during the treatment of an illness or disability.

History

Music and medicine have been closely associated for centuries.[2] For primitive societies music played a significant role in the priest-practitioner's powers. The Greeks' use of music and medicaments in conjunction with oracular utterances was an early foray into the field of psychosomatic medicine. Pythagoras believed that if one used music in daily life in a prescribed manner, it would make a salutary contribution to one's health. This led him to investigate the physics of sound and to develop the fundamentals of today's tonal system. "Psychocatharsis" — purging or purifying the emotions through music — was recognized and used by Aristotle. With the Renaissance came the study of anatomy and an emphasis on observing the cause-and-effect nature of phenomena. First accounts of the influence of music on breathing, blood pressure, muscular activity and digestion came from this period.

While the traditional close association between music and medical practice was largely forgotten in the technologic explosion of the 20th century, the last 2 decades have seen a resurgence in interest and research to evaluate the physiologic and psychologic effects of music.[3,4]

The music therapist

While it has been recognized since the days of David and Saul that any motivated person, irrespective of training, may effectively use music in ministering to the sick, the term "music therapist" refers to a specially trained individual whose intervention is based on a thorough knowledge of all facets of music (historical, theoretic and practical), the behavioural sciences, treatment and educational models, and accepted therapeutic approaches.

Today therapists use music to facilitate specific behavioural changes.

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‡The palliative care service was instituted at the Royal Victoria Hospital, an 850-bed teaching hospital affiliated with McGill University, in January 1975 in an attempt to better meet the needs (physical, psychologic, social and spiritual) of terminally ill patients and their families. The four clinical branches of the service are an inpatient ward (the palliative care unit), a home care program, a bereavement follow-up service and a consultation service. The palliative care service is staffed by a multidisciplinary team that includes physicians, nurses, volunteers, a social worker, a chaplain, a physiotherapist, a psychiatrist, a psychologist and a music therapist, as well as research and administrative staff.[1]

Music therapy is applied in a variety of clinical settings where music therapists are part of the treatment team: the fields include psychiatry (in psychoanalysis and the treatment of drug addiction, alcoholism and personality disorders), special education (in patients with retardation, learning disabilities, emotional disturbance or physical handicaps), rehabilitation, gerontology, speech disorders, kinetics and anesthesiology.[5-13]

Methods

The music therapist in the palliative care service has used a variety of musical instruments (flute, organ, violin, bow harp, tambourine) both in performing for and with the patients, and in having others perform for them. A component mobile stereophonic system for playing records and tapes can be used with groups or individuals. Earphones are available for use with this system or with small tape recorders for the bedside.

A library of taped music is available to provide a wide range of music matching tastes, moods and ethnic backgrounds. Large typed songsheets and hymnals are used at informal get-togethers as well as planned religious services.

A large portion of the therapist's time is spent in listening to the patients and in nurturing the discussions arising from the musical interaction. Other means of self-expression, such as making collages, drawing to music, and family and group activities and discussions, further the expression of feelings.

The therapist is an active participant in ward meetings, where therapeutic interventions are planned. She sees patients in the palliative care unit and those receiving home care or consultation services at the request of other team members. At present, criteria for involving the music therapist include extreme anxiety, alarming withdrawal, language barriers, difficulties of interaction and intractable pain.

Meeting the needs of the terminally ill

Saunders[14] has emphasized the need to address psychosocial and spiritual issues in addition to medical needs if excellence in symptom control is to be achieved for the terminally ill. The experience of the palliative care service has corroborated this observation.[15]

The work of Kübler-Ross[16] suggests that in integrating the knowledge of their finiteness, patients and families, and to some extent caregivers, go through a series of emotional stages or mental adjustments. Friedman[17] proposed that these adjustments must be made in each area of man's existence — physical, psychologic, social and spiritual.

The multidimensional qualities of music allow it to touch many levels of consciousness. It can act as a catalyst in mobilizing deep feelings and can assist in both verbal and nonverbal communication.[18,19]

Considering the accepted potential of music therapy and the recognized needs of those requiring palliative care, one can predict a broad variety of uses of music therapy in these patients:

- Physical
  - — promoting muscular relaxation
  - — breaking the vicious circle of chronic pain by relieving anxiety and depression and thus altering the perception of pain
  - — facilitating physical participation in activities to the degree possible
- Psychologic
  - — reinforcing identity and self-concept
  - — altering the patient's mood, including easing anxiety and lessening depression
  - — helping the patient recall past significant events
  - — providing a nonverbal means of expressing a broad range of recognized and unconscious feelings
  - — reinforcing reality
  - — expressing fantasy
  - — as a direct appeal to the emotions
- Social
  - — as a means of socially acceptable self-expression
  - — as a bridge across cultural differences and isolation
  - — as a bond and sense of community with family members and others, past and present, through the mental associations aroused
  - — as a link to the patient's life before the illness
  - — providing an opportunity to participate in a group
  - — as entertainment and diversion
- Spiritual
  - — providing means of expressing spiritual feelings and feeling comforted and reassured
  - — providing an avenue for expressing doubts, anger, fear of punishment, and questions on the ultimate meaning of life.

Case reports

Case 1

A 32-year-old unmarried woman, who had been dynamic and outgoing when well, was admitted to the palliative care unit 6 months after undergoing hysterectomy for carcinoma of the cervix with widespread lymphatic involvement. Postoperative radiation therapy and chemotherapy had had no apparent impact on the rapid progression of the disease.

Problems at the time of admission included severe anasarca, pain incompletely controlled by narcotics taken by mouth, insomnia, constipation, dysphagia, urinary incontinence, dyspnea and, of particular distress to patient, family and staff, intermittent severe anxiety attacks characterized by extreme physical tension and overwhelming panic. During the attacks she would lie rigid for extended periods with clenched fists held a little off the bed, and would show signs of anguish and overall physical discomfort; she could not relax or sleep.

She was aware of and wished to talk about her diagnosis and prognosis, volunteering that she wished she would die quickly. She had an attentive family. Careful positioning of the bed, with elevation of the arms, meticulous mouth and skin care, including regular turning and the massaging of her back and legs, adjustments in the dose of narcotic analgesics, the use of laxatives, urinary tract catheterization, chest physiotherapy and a liquid diet provided symptomatic relief. Verbal reassurance and the physical presence of family and staff did not, however, ease the severity of her anxiety attacks.

Following an assessment interview the music therapist prepared an audiotape with a variety of musical selections aimed at inducing relaxation. Selection criteria for the music included a steady reassuring rhythm, low-frequency tones, soothing orchestral effects and a comforting, serene melody.

The patient's degree and rapidity of response on first hearing the tape were impressive. Within a few minutes her facial expression relaxed and her respirations deepened and became regular; her hands relaxed and lowered to rest on the bed, and she fell into a deep

sleep. The entrance of staff members into the room failed to disturb her, yet as soon as the tape ended she awakened. Her hands moved off the bed once again and signs of distress returned. In the ensuing conversation she acknowledged that she was afraid of sleeping, stating that she was not ready to "let go". This comment opened the way for a discussion of her fears with the therapist. The tape was repeatedly played at her request over the following days. Relaxation and easing of distress was noted on each occasion.

One day, when the patient was comatose and unresponsive, the therapist, for the first time, sat at her bedside and played several soothing selections on the flute. The patient did not react visibly to the music. However, the following day, after she regained consciousness, she asked the therapist to play the flute for her. When questioned she said she did not remember hearing the music the day before.

Comment: This patient demonstrated clearly the multifactorial character of chronic pain that led Saunders[14] to coin the term "total pain". Physical and psychologic components played major roles in her distress, though social and spiritual issues also required resolution. The music impressively completed the previously inadequate pharmacologic and interpersonal interventions. Her awareness of and subsequent unconscious recall of music played to her when she was clinically unresponsive is an important reminder that unconscious patients should be related to and addressed as if fully alert.

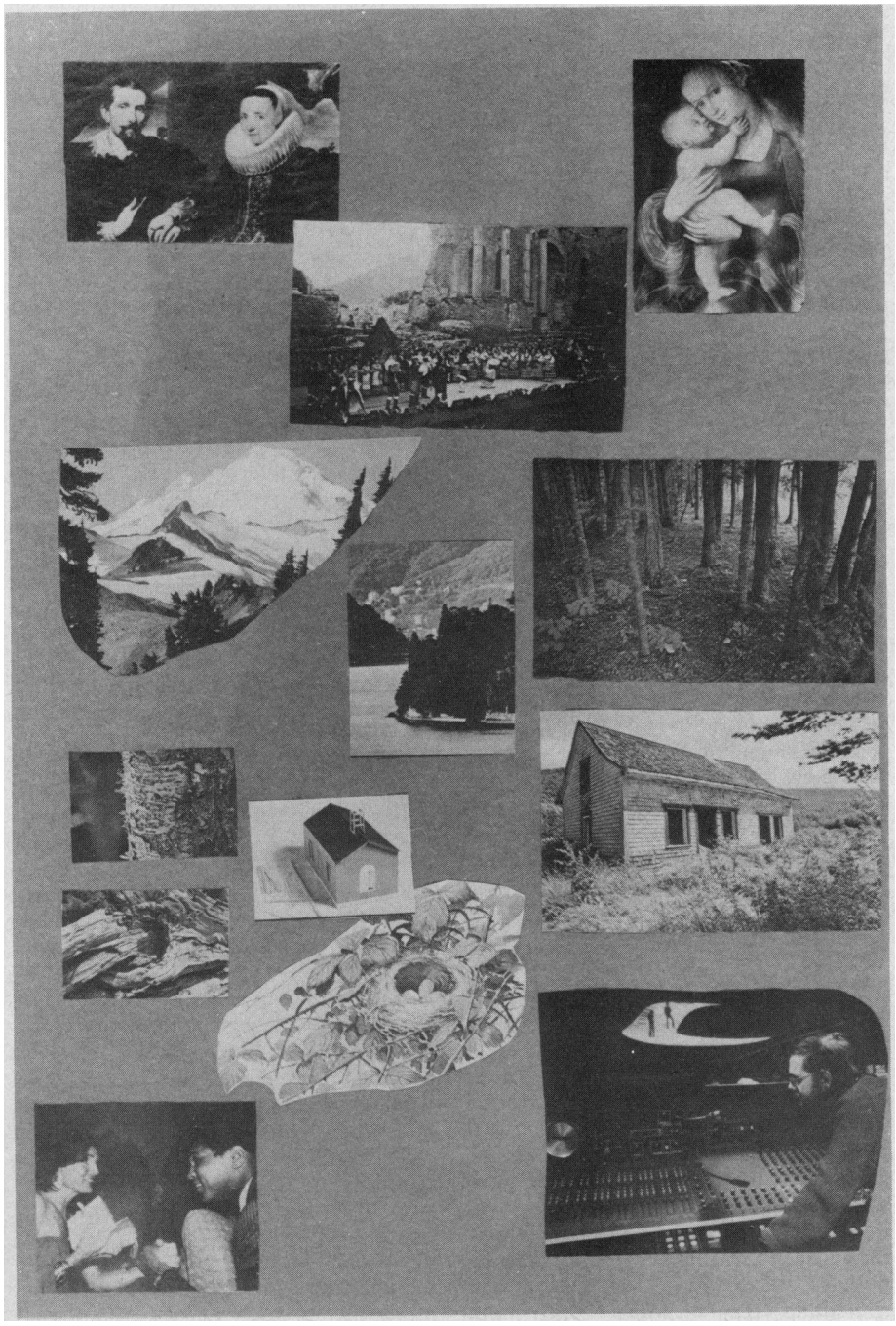

FIG. 1—Collage of personally meaningful photographs created by terminally ill patient listening to music.

Case 2

A woman was transferred to the palliative care unit expecting to be subsequently discharged to home care. Two years earlier she had undergone right mastectomy for breast carcinoma, followed by cyclic chemotherapy. For the 2 months prior to admission she had experienced increasing anorexia and weakness. Multiple skeletal and hepatic metastases were present. Symptom control was easily achieved.

For the 3½ months before she died her continually deteriorating physical status coupled with the absence of adequate support at home prevented discharge. In spite of this disappointment she was always socially pleasant. The nurses described her as "reserved; very English; quiet; knows own mind; doesn't express her feelings very openly". Her relation with the staff, other patients and their families, and even her own family were seen as somewhat distant, although always socially correct.

Recognizing that the patient avoided verbal communication of her feelings yet needed to relate more meaningfully, the therapist took the patient to the quiet lounge frequently used for music therapy, gave her a variety of magazines, and encouraged her to "let the music sink in" while selecting photographs from the magazines that seemed meaningful to her. The music was Schubert's string quartet *Der Tod und Das Mädchen.*

In her own words, the resulting collage (Fig. 1) reflected "the continuation of life: Europe, the old country, where there is culture, art and architecture. Then people left. They came here and settled, building small houses and 'cardboard' churches that in the end are only empty shells. Well, life goes on and man still thinks he is in control." Pointing to a picture of an abandoned house she said: "This is the most significant picture for me". She did not want to expand on the reasons for this statement. In the following weeks an unhappy family situation was revealed; it included divorce proceedings for both daughters, tensions in her relations with her immature son, who was unemployed, and estrangement from her invalid husband. The patient had expressed nonverbally what she could never admit to verbally.

The powers of association that music may unlock were demonstrated when the patient reflected on her youth and the English countryside while listening to Beethoven's *Pastoral*. When the symphony ended she hummed a brief melodic phrase from something she had sung in a choir as a schoolgirl. She went over it repeatedly but could not recall the title or words. From the remembered phrases the therapist identified the Pilgrims' Chorus from *Tannhäuser* by Wagner. She obtained a recording sung in German and played it for the patient, who was deeply pleased but still could not remember the words. After several hearings she suddenly recalled the lyrics of one line of the entire chorus, the line she had initially hummed: "but pain and death I do not fear". The patient and therapist then reflected together on the many implications of her illness and on her impending death. It was that same chorus that provided great support for the patient later, just before she died.

Comment: The ability of music to assist in verbal and nonverbal communication and to bring to the fore significant past associations renders it a powerful tool in assisting patients in their attempt to come to terms with reality.

Case 3

An 84-year-old woman was admitted to the palliative care unit 3 months after clinical diagnosis of abdominal carcinoma, presumed to be of pancreatic origin. The woman firmly refused all investigations and treatment and was referred to the unit with diarrhea, fecal and urinary incontinence, weakness, anorexia, a coccygeal decubitus ulcer, apparent confusion and distress.

The use of pancreatic enzymes, antidiarrheal agents, physiotherapy for progressive mobilization and assistance in transfer, urinary tract catheterization, skin care and repeated gentle orientation reminders led to a lessening of symptomatic distress. Three overriding considerations remained, however: (a) a stubborn resistance to eating hospital food; (b) an antisocial and withdrawn emotional make-up (she was described by the admitting physician as "very negative and resistant to all contacts"); and (c) a marked language barrier. The patient spoke Russian and apparently only a few words of French.

The refusal to eat was overcome following consultation with the family, who supplied a continual diet of baked or boiled potatoes (mashed were refused) and black bread.

Following an initial interview with the patient, the music therapist recorded: "She seems to be extremely difficult to handle; language barrier; hostility; paranoia; apparent confusion making positive interaction with her almost impossible."

The therapist then obtained a recording of music sung by a Russian choir. While playing it she handed the patient the record cover, with its printed Russian and English text. As the first strains of the initial chorus swelled to fill the room the patient's facial expression changed to an alert, proud look and she seemed to grow in stature. With dignity and secure intonation she read the Russian text aloud, her diction perfect. A pause followed, then the patient, in adequate French, told the story of her childhood as a member of an aristocratic Russian family, where music, dance, literature and art were of great importance. She went on to speak of her bitterness at the loss of prestige, homeland, beauty and, eventually, health. In the ensuing days music was frequently the bridge to otherwise impossible communication.

Comment: Music opened channels of communication that enabled the staff to encounter the positive aspects of the patient's personality within the negative shell presented on initial interaction. We have observed that patients often return to the music and language of their childhood in the last stage of their illness, even when they have not spoken that language for years. Many feel extremely embarrassed about this "regression" and need reassurance about the feared "loss of face". Songs of childhood within many cultures reflect secure relationships (lullabies and love songs), spontaneous activity and learning (action songs), dreams and fantasies of children, and reflections on deeply rooted folk traditions. Their use permits a return to childhood without loss of face. For the dying it is often extremely difficult to express feelings about the impending separation from loved ones. Songs stating these themes in their first-learned language give patients an important stimulus to help them express such sentiments.

Case 4

A 70-year-old man was transferred to the palliative care unit 1 month after radiologic diagnosis of lung carcinoma with multiple bony metastases and associated pneumonitis. He had a resolving cutaneous pemphigoid eruption and weakness of his legs on admission.

While both patient and family were aware of his diagnosis and prognosis, the patient tended not to discuss either. When seen by the music therapist he quipped, "Let's hear Nat King Cole; something jazzy — none of this quiet stuff!"

The "nursing care plan" notes observed: "Doesn't discuss illness or prognosis with family." Over the following days, however, the presence of a supportive therapeutic milieu appeared to facilitate discussions with staff members once he got to know them. Nursing staff found that discussions that were initially superficial and flippant frequently evolved to a point that allowed more accurate expression of feelings.

During the week following admission the patient witnessed the death of a patient in the same room. When he next met the music therapist he asked to be taken "to a quiet place to listen to music". From a selection of records he chose *Cello Pieces,* played by Pablo Casals, and Beethoven's *Pathétique*. At their completion he talked lightly about superficial matters, then, in progression, discussed illness in general, his own illness and impending death, and finally, his feelings about the death of his fellow patient.

Comment: Music chosen by a patient may reflect mood or be a defence mechanism. A shift in musical taste may reflect an alteration in mood; conversely, the therapist can induce such a shift in the selections used, to effect a gradual change in the patient's mood.

Case 5

A 53-year-old man was transferred to the palliative care unit 9 months after diagnosis of an anaplastic carcinoma of the sphenoid sinus. The patient had undergone transphenoidal resection and, following demonstration of local extension through the sella turcica, radiation therapy. Cyclic chemotherapy was subsequently instituted. Paraplegia and weakness in his arms due to metastases involving cervical vertebrae had developed 3 months before transfer.

The patient, of central European origin, was a very private individual who described himself as a perfectionist. Rarely one to express feelings, he had always found it easiest to relate to others through his work (accounting) and through the highly demanding standards he set for himself. He and his wife had two teenaged children.

At the time of admission to the unit the patient was emaciated, had a sacrococcygeal decubitus ulcer and was anorexic, as well as intermittently somewhat disoriented. He also had diplopia and pain in the neck and right shoulder. While he did raise questions relating to prognosis, he frequently showed florid denial regarding the severity of his disease. He was clearly depressed and anxious, was highly demanding of family and staff, and demonstrated a great need to retain control of his environment.

Symptom control was sought through

various medications, including narcotics, dexamethasone, prochlorperazine, diazepam and laxatives. Nursing care included repeated gentle orientation cueing, frequent turning, mouth care and attention to the decubitus ulcer. An attempt was made to include the patient in decisions regarding daily routines, and nursing care was scheduled according to his wishes.

Counselling was provided for the patient's wife and children in view of the wife's anxiety and difficulty in making decisions and the children's feelings of guilt. The wife exhibited a great need to deny the severity of her husband's illness. Carefully planned supportive interactions with staff included, over many weeks, meetings and discussions with nurses, physicians, phychiatrist, chaplain, social worker and volunteers.

The music therapist played an important role in meeting the highly complex needs of this patient and his family. The patient's mask of intellectualization and control quickly fell when he requested and sang, in a strong baritone, some of his favourite songs. Tears flowed easily as he listened to: "I hear the gentle voices calling, old black Joe" (Stephen Foster). His choice and interpretation of songs revealed a very sensitive person struggling for understanding and acceptance of his condition. He clearly welcomed the opportunity to choose the music and express his feelings in this manner. Music had formed an important part of his life when well, and its availability during the last few weeks of his life proved to be very meaningful to him. When he sustained a pathologic fracture of the right humerus, his love for music was used to distract him from the discomfort during painful repositioning. The resultant decrease in muscle spasm and enhanced cooperation led to a substantial decrease in the time spent on the physical care of this patient and supported staff–patient relations.

The use of liturgical music helped the whole family express the strong religious faith that supported them.

A further contribution of the music therapist became possible just before the patient's death, when, after gentle encouragement and assistance by the therapist, the patient planned and prepared a tape of his favourite songs for "my wife on our last anniversary".

Comment: This patient was able to express emotions that otherwise remained repressed, both through singing and through selecting recorded music. Music relieved physical pain and was a source of spiritual comfort. It also was a vehicle for the expression of important feelings between family members.

Case 6

A 19-year-old man had undergone resection of a poorly differentiated diffuse lymphocytic lymphoma causing stage II disease a year before the palliative care service was consulted. Palliative abdominal irradiation and chemotherapy were used with varying effect as the months passed. At the time of his last admission to hospital he had severe back pain and intermittent colicky abdominal pain. Chemotherapy produced no measurable response. His symptoms worsened, with intractable nausea, vomiting and pain, and extreme emotional stress for patient, family and medical staff. A progress note by the intern observed: "Pain in back, crampy pain in bowels, patient expresses anguish over his possible death, expresses wish to die rather than suffer more pain. . . . Assessment: Tumour unresponsive to chemotherapy, anxiety *in extremis.*"

At this point the patient was seen in consultation by the palliative care service. A program of relaxation and music therapy had extremely good results in relieving his pain and anxiety. During the last week of his life he continued to have intractable vomiting of large amounts of gastric secretions owing to complete gastric outlet obstruction. He was unable to take allopurinol orally, and hyperuricemia with subsequent renal failure developed.

The intervention used with such striking benefit in this very receptive patient consisted of two elements: (a) the use of a simple form of guided imagery,* which was easily taught to family and medical staff; and (b) the playing of taped music selected by the therapist. The selections included were by Bach *(Air on the G-String,* excerpts from *The Little Suite,* a cello version of *Komm Susser Tod* and *Jesu, Joy of Man's Desiring),* Schubert *(Ave Maria),* Saint Saens *(Swan)* and Mozart (the *laudate dominum* from *The Vespers).*

During previous admissions the patient had insisted on listening only to an FM radio station playing "rock" music. As his pain and agitation increased he became intolerant to "his" music. The music therapist's notes following the first use of the tape read: "The patient was frantic to get more medication but was also tense and afraid that he couldn't relax at all anymore. The music and relaxation techniques helped to calm him in approximately 10 minutes *without extra medication.*"

In the last days of his life the patient repeatedly requested that the tape be played. Analgesics were discontinued and the patient was managed with relaxation techniques and music therapy only. He was quite comfortable, not anxious, and able to talk with his family and many visitors. The nursing notes in his chart reflect the impressive effect this had on the patient, his family and the staff.

Comment: The profound impact of selected music by Bach, Schubert and other composers on a youth previously unreceptive to classical music suggests that music may be highly effective in relieving the anguish of "total pain" even when the listener has not previously been conditioned to that music. The use of simple guided imagery as an adjunct to music therapy was highly effective in this case.

*The patient is verbally encouraged to think of a particular image that matches the music — for example, ocean surf, wind in the woods or a positive past experience.

Discussion and conclusions

Music therapy has made a significant contribution to a wide variety of palliative care problems. The presence of music in the hospital has been well received by patients and their families. It is often able to comfort when words are inadequate or inappropriate. It may provide a means of positive interaction and expression of feelings.

Music has, however, a very personal and intimate meaning for each individual, a fact that demands a great deal of respect. It is important to stress the need for careful assessment in the introduction and application of music with each patient. Man has little defence against the influence of music. Its impact often has far-reaching emotional and psychologic effects that need to be observed and channelled appropriately.

The occasion, setting, choice of music, choice between recorded or live music, volume and quality of sound all need to be considered.

Throughout the ages philosophers, priests, physicians, scientists, educationalists, psychologists and musicians have observed, and sometimes used, the healing power of music. The term "music therapy" has often provoked irrational enthusiasm or unjustified skepticism. Between these extremes lies the fact that music therapy has, within the last 20 years, emerged as a rational discipline. Our experience in palliative care suggests that the diversity of its potential is particularly suited to the diversity of the challenges these patients present.

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Self-recording of blood pressure in the management of hypertension

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The efficacy of self-recording of blood pressure in the management of hypertension was assessed in a randomized clinical trial involving 140 persons who had been receiving antihypertensive therapy for a year or more, but whose diastolic blood pressure had remained at 95 mm Hg or higher. To control for the increased attention implicit in self-recording, which might affect blood pressure, the patients were assigned at random to one of four groups: self-recording and monthly home visits, self-recording only, monthly home visits only, and neither self-recording nor monthly home visits. This design also permitted assessment of the effect of home visits. During the 6-month experiment no significant differences were apparent between the groups in either compliance or diastolic blood pressure. However, both self-recording and monthly home visits produced a reduction in blood pressure among patients who admitted to difficulty remembering to take their pills; a reduction was not seen among patients who said they had no such difficulty. This confirmed an earlier observation suggesting that this easily identified group of patients may be the most responsive to intervention programs.

L'efficacité de l'autoenregistrement de la tension artérielle au cours du traitement de l'hypertension a été évaluée dans une étude clinique randomisée impliquant 140 personnes qui avaient reçu un traitement antihypertenseur pendant un an ou plus, mais dont la tension diastolique était demeurée à 95 mm de Hg ou plus. Pour tenir compte de l'augmentation de l'attention du patient occasionnée par l'autoenregistrement, augmentation susceptible d'affecter la tension artérielle, les patients ont été assignés au hasard à un de quatre groupes: l'autoenregistrement et des visites mensuelles à domicile, seulement l'autoenregistrement, seulement des visites mensuelles à domicile, ou ni l'autoenregistrement ni des visites mensuelles à domicile. Ce dispositif expérimental permettait également l'évaluation de l'effet des visites à domicile. Au cours des 6 mois qu'a duré l'expérience aucune différence significative n'a été observée entre les groupes en ce qui a trait à la fidélité au traitement ou à la tension diastolique. Toutefois, l'autoenregistrement de la tension artérielle et les visites mensuelles à domicile produisirent une baisse de la tension artérielle chez les patients qui admettaient avoir de la difficulté à se rappeler de prendre leurs comprimés; une diminution semblable n'a pas été observée chez les patients qui disaient ne pas avoir une telle difficulté. Ceci confirme une observation antérieure suggérant que ce groupe de patients facilement identifiable puisse-t-être le plus apte à répondre aux programmes d'intervention.

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Self-recording of blood pressure has been suggested from time to time as an aid to reducing blood pressure and maintaining the reduction among persons with hypertension,[1-3] and recently there has been increased commercial promotion of devices for this purpose. Although any measure that might lead to better control of blood pressure deserves careful evaluation, only two studies designed to test the usefulness of self-recording of blood pressure have been reported. In the first,[4] significant benefit for systolic but not for diastolic blood pressure