Music Therapy as an Intervention for Children with Cancer in Isolation Rooms¹.

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Medical treatment for cancer often involves chemotherapy and radiation. Though beneficial in concept, the side effects are many. Prolonged chemotherapy consequently results in susceptibility to bacterial and viral infection, often necessitating that the child be placed in isolation. Music therapy has recently been shown to be more effective in stimulating verbalization of hospital experiences, resolving anxiety and fear-provoking fantasies, and aiding more positive affect than other therapies. At Hadassah University Hospital in Ein-Kerem, Jerusalem, Israel, music therapy has become a primary intervention for pediatric oncology patients in isolation rooms. Utilizing the Omnichord System Two (a musicomputer of advanced microtechnology) and various song activities, children are offered a means to participate in interpersonal interactions and shared musical experiences. These encounters support the mobilization of ego strengths and coping abilities, as well as provide a vehicle for the much needed expression of emotions. Four case vignettes illustrate these interventions.

The Effects of Hospitalization

Hospitalization is not a pleasant event for any individual at any age, but it can be particularly devastating for children. Several authors (Becker, 1976; Froehlich, 1984; Schwankovsky & Guthrie, 1982) point out that children's reactions to hospitalization often include anxiety, withdrawal, regression, and defiance. Most of all, the hospital is an unfamiliar environment, separating children from home, family, friends, and school, as well as disrupting their routine of daily living.

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Other stressful factors of hospitalization may include frequent restrictions of activity and forced dependence on others. Both of these factors exacerbate feelings of vulnerability, loss of self-control, and various stages of regression. In addition, unanticipated medical treatments, as well as anxiety aroused by diagnostic, radiologic, or other presurgical screening procedures, compounded by physical bondage to high-frequency, sound-producing, computer-like electronic monitoring devices, may give rise to fear-provoking fantasies such as fear of pain, fear of

mutilation, and fear of death (Becker, 1976).

Becker (1976) notes that under the influence of a weakened state of health, the realistic anxiety aroused by hospitalization may induce the resurfacing of emotional difficulties which had their onset at an earlier point in the child's development and which clearly predate the current hospitalization. These pathologies of yesteryear may include disturbances in self-perception, altered body image and awareness, low self-esteem, and faulty reality orientation. Further, Becker suggests that factors which seem to predispose the psychological outcome of hospitalization include age, previous experience with separation, achieved level of ego integration, adequacy of reality appraising abilities, nature of supportive family, general intelligence, sensitivity and temperament, understanding of the illness and its etiology, prehospitalization emotional adjustment to the illness, and concept of death.

One single episode of hospitalization may be more than enough for any youngster to handle. For those with chronic illness or disability, this experience becomes an unfortunate way of life. Denshire and Bennett (1985) illustrate the characteristic stresses and problematic psychosocial development associated with adolescent youngsters who have chronic illness. These authors feel that self-esteem is related to how people look, what they are able to achieve, the degree of control that they have over their lives, and their sense of belonging. Specifically, chronically ill, disabled youngsters are especially vulnerable and at risk for poor selfesteem, distorted body image, sexuality concerns, familial over-protec-

tiveness, and lack of peer-group interactions.

These problems will vary in quantity and quality in accordance with the stage and course of the illness in question. For example, during the course of leukemia (A.L.L.) three major stages are recognized: diagnosis, remission, and terminal stage. Each stage is characterized by its own circumstances, medical procedures, hospitalization, and adjustment on behalf of the child/patient and family. Children suffering from A.L.L. have an 80% to 90% chance of obtaining a remission, and only 50% of those who obtain remission will survive for three years or more. Medical treatment is based on the indication and maintenance of remissions, and prevention of central nervous system involvement. Remission-inducing drugs are used initially to control the disease, after which remissionmaintaining drugs are used. Though each has beneficial assets, the many side effects include loss of hair, constipation, bloody urine, weight gain,

depression, jaw and abdominal pain, and damage to normal bone marrow. In addition to chemotherapy, other preventive measures include radiation treatment. In many cases prolonged chemotherapy consequently results in greater susceptibility to infection, and these children often have to be placed in isolation to prevent bacterial and viral infections (Schwankovsky & Guthrie, 1982).

Owing to frequent hospitalizations, pediatric oncology patients often become familiar with medical procedures used in emergency situations. Fagen (1982) observes that these children may, in fact, express fears about being in a private room because this may represent to them the "final stage." Fagen emphasizes that children with cancer often think about dying. They silently confront the possibility of their own death prematurely at times of diagnosis, relapse, death of another patient, or

during personal medical crisis.

There is increasing recognition that children need to talk about their hospital experiences in order to cope with them. For this reason, many hospitals offer Child Life programs which utilize play activities to encourage verbalization of feelings and experiences, in an attempt to help children develop more adaptive coping mechanisms. Through play, children can gain control over real life situations in which they may feel helpless. Because play can be observed by the therapist, children's perceptions and or misconceptions about the hospital can be viewed and worked through therapeutically. Froehlich (1984) points to two important facts about play: (a) play is an activity which provides continuity between the hospital and the outside world; and (b) with play, pleasant associations with unpleasant circumstances are established. Because the Child Life worker or play therapist is perceived as nonthreatening and is not associated with painful medical procedures, play is also helpful in establishing the relationship of trust that is essential before verbalization can occur.

Music Therapy for Hospitalized Medical and Oncology Patients

Though Child Life programs employing play activities seem to be the accepted practice of intervention, recent research and writings indicate that music therapy is also very effective and serves the needs of hospitalized children well. Froehlich (1984) researched the effects of music therapy in comparison with medical play therapy, specifically regarding the verbalization behavior of pediatric patients. His findings show significant differences in the quantity and quality of verbalization of schoolage children five to twelve years old. Froehlich concludes that, as a mode of activity, music therapy seems to stimulate more verbalization than medical play therapy. Goloff (1981) attempts to assess the attitudinal responses of adult medical patients to music therapy. These patients reported less physical discomfort and more positive affect during and after music therapy sessions. Seventy-four percent of those questioned considered coming to music therapy "very enjoyable" and "definitely looked forward to coming again." In ranking the preferred order of activities within the hospital, they ranked music therapy second to "visitors" but above "performances," "celebrations," and "television." Goloff concludes that "in addition to providing recreational and social diversion from the isolation and monotony of hospitalization, music therapy may play a valuable role in meeting both emotional and physical needs of medical patients" (p. 55). In another study, Marley (1984) describes the effective use of music therapy to decrease the stress-related behaviors exhibited by hospitalized infants and toddlers aged five to thirty-six months.

In general, the goals of music therapy interventions for hospitalized children include: (a) provide a normalized environment promoting self-expression, release of tensions, and relaxation; (b) initiate group interactions providing social involvement with peers in age-appropriate activities; and (c) work through issues related to medical conditions and conception of death (Schwankovsky & Guthrie, 1982). Although these therapeutic goals may be common to other patient populations, no other setting is as unique as that of the hospital. In this connection, Munro

(1984) states that

given the general hospital setting, the music therapist has to face interruptions by laboratory and X-ray technicians, ward nurses, physicians, or visitors, as well as to function in the sound environment of television, telephones, intercoms, and hospital clatter. The creating of an environment conducive to intimate music experiences, therefore, constitutes another challenge." (p. 36)

However, the challenge does not seem to end with the music therapist's originality of intervention. The therapist's abilities to break down the walls of inactivity, to counterbalance the patient's lack of motivation, and to re-initiate the patient's desire to be involved in the creative act are especially challenged with pediatric oncology patients. In addition, the music therapist is challenged to search for the healthy aspects of these very ill children. Fagen (1984) feels that the creative life of the child must not be subordinated in times of medical crisis, but rather must be given equal attention along with other intellectual and physical needs. Each moment deserves to be a meaningful experience of the highest caliber. "Music therapy aims at diminishing the impact of the crisis around terminal illness and death, not resolving them" (Munro, 1984, p. 79).

Music therapy for children with leukemia must address several specific areas, including isolation, the physical consequences resulting from the illness, and the terminal nature of the illness (Schwankovsky & Guthrie, 1982). Anxiety about death may not be verbalized immediately because children may be hesitant to voice these concerns to their favorite

nurse or doctor. But the bond and relationship created through satisfying musical encounters with the music therapist has been found to be an outlet for children to verbalize freely. Fagen (1982) highlights the applicability of music as therapy for children with cancer. The creative act generates creative energy, enriches the quality of life, promotes thought, provides a distraction, and is a statement of reality as well as an escape into fantasy.

Bailey (1984) lists the goals of music therapy with cancer patients as attempting to meet their needs for tension release, control, expression of feelings, instillation of hope, and being heard. Activities must aim at building an environment toward satisfying these needs, as well as developing trust and improving the quality of life (Munro & Mount, 1978). Success-oriented singing and instrument lessons, as well as listening activities, have been outlined. Other specific techniques used to reduce fear, anxiety, and withdrawal include song selection, songwriting, lyric substitution, improvisation, guided imagery, and painting to music (Fagen, 1982; Munro, 1984; Munro & Mount, 1978; Wylie & Blom, 1986).

Music Therapy in Isolation Rooms

As previously stated, children with leukemia occasionally must be isolated because of their susceptibility to infection during the preop/post-op periods of bone-marrow transplant, or as a result of the illness itself and other treatment procedures. In the isolation rooms these children are inevitably subjected to decreased social contacts, lack of stimulation, and fewer physical activities. Their emotional responses to being placed in isolation often include loneliness, depression, rejection, anger, and confusion. During this stage of the illness, the cancer treatment causes changes in the child's physical appearance, such as loss of hair, yellowing or peeling of the skin, lumps, scars, and bruises. These conditions often affect the child's self-concept.

Isolation is specifically the stage in which music therapy can be utilized more effectively than most other modes of intervention. Schwankovsky and Guthrie (1982) emphasize that music therapy can provide activities which can make isolation more tolerable, as well as an outlet for talking about these emotional and physical changes.

Few authors have written about the general use of music therapy with pediatric oncology patients, while even fewer have attempted to document music as a specific intervention inside isolation rooms. However, in this regard Crowe (1985) comments that "music can provide stimulating and novel sensory input without jeopardizing necessary routine procedures or threatening sanitary requirements, while also serving as a welcome distraction from monotonous hospital routines and anxiety provoking noises . . . music is associated with everyday human activity and addresses the wellness of the person rather than emphasizing the

illness" (p. 47). Other authors (Wylie & Blom, 1986) outline the rationale for use of music with the terminally ill and state that as these children experience loss of physical abilities, bed confinement, and preoccupation with pain, music therapy techniques allow them to explore and be creative. Of more importance, however, is that through music therapy the terminally ill can have some measure of control over their thoughts,

images, and feelings.

The music therapist faces three overriding issues when treating terminally ill children. The first concerns the child's level of participation. Especially in cases of a projected or actual deterioration, what contribution can music therapy possibly offer? Munro (1984) points out that often essential and particular to this circumstance is the continued involvement by the music therapist, even after the patient's condition has deteriorated beyond his or her ability to actually participate. As weakness increases and verbal communication diminishes, the nonverbal aspects of music can take on a new and meaningful dimension. Munro gives an example of one patient who, during later stages of her illness, could not continue to participate actively, as in her past sessions. Yet she "continued to live her music through the therapist's playing previously shared melodies. She was able to compensate her loss by taking pleasure in the music, even though she could no long be the active musician" (p. 13).

The second issue that must be considered when treating children with cancer concerns the effectiveness of pre-recorded versus live music. This question is very relevant in light of the sanitary requirements placed on all staff and equipment entering the isolation room. It is considerably more convenient to set aside a tape recorder for exclusive use in each isolation room rather than attempt to chemically cleanse various musical instruments that have come into contact with other children in the hospital prior to each scheduled session. In addition, it has become quite fashionable today for music therapists to utilize commercially available pre-recorded relaxation tapes to facilitate imagery sessions. Munro (1984) emphasizes the benefits of taped music, including the availability day or night, the selection of music according to the patient's choice, privacy through the use of headphones, and control of the tape recorder in a period of time when control of other aspects of life are nonexistent. Given the nature of the hospital setting, she prefers recorded to live music because the sounds of live music immediately attract the attention of others in the room and hallway.

However, as isolation rooms are by their nature exclusive to one child and family, live music will not intrude on other patients' privacy and thus should be considered as beneficial as pre-recorded music. Moreover, Froehlich (1984) observes that background music is not as effective as direct music contact in facilitating the verbalization of feelings. Bailey (1983) documents the use of live music versus tape-recorded music with hospitalized cancer patients. In both cases, singing and guitar accompaniment were used. Patients who participated in the livemusic groups reported significantly less tension and anxiety, and more vigor than patients who participated in tape-recorded music groups. Bailey summarizes that live music features a physical and vocal presence of another human being, which aids in diminishing the patient's feeling of isolation. In addition, live music allows for the subtle communication of thoughts and feelings, as well as a multitude of gestures, acts, and facial expressions. Clearly this indicates that live music contact can be a most effective, positive therapeutic intervention, especially for pediatric oncology patients in isolation.

The third issue that needs careful consideration concerns the particular use of songs and song activities. By their nature, songs are a medium in which the words are expressed by the human voice—a source of nurturing, warmth, and interpersonal contact (Bailey, 1984). Thus, songs have the potential to re-establish human contact and provide a framework for enhanced communication. Froehlich (1984) states that "the framework of song provides structured moments for verbalization that are perceived as play by the patients and facilitate the expression of feelings and hospital experiences" (p. 5). Through songs, patients can communicate their problems, unsatisfied needs or desires, happiness or loneliness. Bailey feels that through singing or listening to songs, children with cancer can learn, teach, experience, and re-experience events or feelings. "They can auditorily touch and be touched" (p. 7).

The use of songs in music therapy with children who have cancer, and their families, effectively provides important means for support and tools for change. Indeed, song selection by itself is a medium through which therapy can be anchored. Brodsky and Niedorf (1986) describe the effective use of songs and song selection in music therapy, and delineate the diagnostic and therapeutic potential. In this descriptive study, song lyrics were used by chronically disabled youngsters to convey feelings and emotions that would otherwise not be expressed directly. The content of the songs chosen expressed transferential and defensive issues in focus at the time, and thus could be viewed as a projective technique stimulating both emotional and imaginative responses.

Ridgeway (1983) describes his personal use of songs in the hospital with a family member afflicted with leukemia: "We could relate to the message composers and lyricists had in mind . . . it seemed that some of the songs were written especially for our situation" (p.2). However, this shared response may not always be the case. Indeed, what may have meaning for one person may have none for another. Moreover, two people in the same predicament might not select the same song. Yet, Bailey (1984) documents and lists the nine themes most often represented in the selected songs of children with cancer, and their families, as well as the possible implications:

1. Hope: the instillation of hope and focus on God; a reawakening of self-confidence.

2. Pleasure: the development of coping mechanisms to deal

with stressful events.

3. The World: the feeling of universality through refocus of attention from the self to others.

4. Reminiscence: the refocus of feelings and thoughts toward

previous periods of life.

5. Relationships: the denial of isolation and expressed need for support.

6. Needs And Desires: the validation and legitimization of

needs and desires.

7. Feelings: the seeking of permission to feel; to express what one is feeling.

8. Loss And Death: the alleviation of fear and anxiety; the promotion of inner peace in preparation for death.

9. Peace: the eventual resolution with personal loss and death.

The Clinical Setting

At Hadassah University Hospital in Ein-Kerem, Jerusalem, Israel, the pediatric department serves a varied population. Those hospitalized range in age from one month to seventeen years old, and come from a cross section of backgrounds, including Jewish, Christian, and Moslem, from both religious and secular factions. Thus, at any given time the languages heard in the ward may include English, Arabic, Hebrew, Yiddish, German, and French. Because it is a general pediatric department, children may be hospitalized for wounds or bodily trauma, severe illness, precautionary measures, childhood disease, pre-op/post-op convalescence, as well as for various routine outpatient day hospitalization evaluations.

One rather unique aspect of this department is the fact that there is a pediatric oncology unit housed within the ward. Children with cancer in various states of health may either reside as inpatients or, more frequently, visit the unit on an outpatient basis. These children, fighting cancer and other terminal diseases or conditions, receive priority in at

least one aspect of their treatment—the in-house day school.

In cooperation with Hadassah University Hospital in Ein-Kerem, the Ministry of Education, Special Education Services, maintains an inhouse day school in the pediatrics department. This facility, directed by an art teacher, is staffed by an art therapist, music therapist, and specialeducation teacher (whose mother tongue is Arabic). Numerous volunteers of various ages are involved in this setting, including an English-as-a-second-language teacher. The nature and orientation of this facility is that of a creative arts therapy department within a medical

hospital, offering activities in the visual and plastic arts, music, movement, drama, puppetry, literature, and games. Other functions of this treatment facility are: (a) to be a liaison between the child's educational setting and the hospital; (b) to enhance all national and state holidays with festive celebrations; (c) to provide a playroom environment that is available to all children and their families; (d) to lend library books and toys to bed-ridden children; and (e) to offer nonmedical, supportive treatment interventions in the area of creative arts therapy.

Within this setting, music therapy is offered in group and individual formats. During the past two years, the use of music therapy as a treatment modality in pediatric oncology has received increasing attention. More specifically, music therapy has become a priority intervention for children with cancer in isolation rooms. In part, the reasons for this have been the result of specific effective interventions that have been developed over this two-year period.

In order to facilitate an environment conducive to active participation and cooperative efforts, that will result in success-oriented experiences, the music therapist in this setting needs a variety of musical instruments. The major obstacle that must be overcome is the strict rule regarding the sterilization of these instruments before they can be taken into the isolation rooms. The most effective solution would be a separate set of instruments for each isolation room. However, the number of instruments available at Hadassah University Hospital in Ein-Kerem is rather limited, and this proved to be a problem. In some cases it was possible to disinfect wood percussion instruments with liquid chlorexidine, but in other cases the veneer finish of these instruments tarnished or became damaged. However, when this option was possible, the treatment team observed that, in some cases, percussion instruments lead toward regressive behaviors instead of age-appropriate ones.

Another option is for the music therapist to perform exclusively on the guitar in order to limit physical and bacterial contact from the child, but it has been observed by treatment staff members that when the therapist keeps all the active playing to him- or herself, the youngsters develop increased feelings of being isolated and diseased.

One alternative to wood percussion instruments and the guitar is an electronic keyboard. The Casio PT-50 proved to be very effective at Hadassah. The Casio is equipped with ROM-pack, record and playback memory, drum settings, instrument sonorities, and various chords. Small and portable, this instrument is well suited for work at the bedside. More important is the fact that it can be played inside a plastic bag—a unique quality of electronic instruments—and thereby adhere to all the sanitary requirements of isolation. Most other instruments cannot be performed while covered in plastic: stringed instruments will not vibrate freely; xylophones, woodblocks, and tambourines have no resonance; and drums become deadened. With the electronic keyboard in a plastic bag, the child can have a hands-on experience, either experimenting with

the pre-recorded melodies and sounds or actively creating his or her own. For leisure, distraction, expression, and stimulation, the electronic keyboard seems to answer most of the children's needs in music therapy

in the pediatric oncology setting.

The only observed drawback with the electronic keyboard was with some children who did not have any music background or skills. At times they felt frustrated because they could not perform age-appropriate, recognizable tunes. When this happened, the child lost interest in contact with the music therapist after the honeymoon effect or

novelty of the instrument had worn off.

To rectify this acknowledged problem, an other-than-keyboard electronic instrument was searched for. It had to be flexible enough to be played by any child regardless of age or previous music background and skill, and attractive enough to promote a hands-on experience involving active music-making and accompaniment of popular age-appropriate songs. The instrument found adhering to all these specifications, and used throughout the past two years at Hadassah, is the

Omnichord System Two Model OM-84.2

The Omnichord is a musicomputer of advanced microtechnology. Resembling an autoharp, it incorporates some of the features found in electronic keyboards, such as record and playback memory, drum settings, and chords. Both single melody line and song accompaniment can be performed live or programmed in advance. It is possible to utilize individual sonorities or combinations of chord organ, rhythmic piano, synchronized bass line, drum patterns, and four-octave sonic string harp. Like the Casio PT-50, an important feature of the Omnichord is its size. It is small enough to be used at bedside, and, like the autoharp, large enough to be placed on two adjoining laps. Sharing the instrument in this manner can alter the physical distance between the participants into an intimate proximity, if it is desired. The Omnichord further enhances a cooperative effort of sharing the active music encounter because both the therapist and the patient can share the responsibility of programming and performing. The patient can rhythmically "strum" while the music therapist depresses the chord buttons.

The Omnichord has brought a high quality of effective music therapy interventions into the rooms of many children at Hadassah without threat to the sterile conditions of isolation. Music therapy activities, including singing, song selection, songwriting, lyric substitution, relaxation, imagery, and improvisation, have all been facilitated with the Omnichord. The music-sharing has in many cases contributed to build-

²The Omnichord System Two Model OM-84 is produced by Suzuki Musical Instrument Manufacture Company Ltd., Hamamatsu, Japan. It can be purchased in most music stores and costs approximately \$250.00 (U.S.), not including accessories.

ing a positive therapeutic relationship based on mutuality, security, trust, independence, and success. The music-sharing in most cases has included interpersonal sharing as well, and has often led to verbalization of feelings and emotions. This is where the "therapeutic" ends, and the "therapy" begins.

Case Vignettes

No. 1: ALEF

"Alef," a 10-year-old boy of Russian background, ill with leukemia and suffering from prolonged hospitalization, was referred to music therapy for much-needed relief from daily treatments and for self-expression. From the window of his isolation room, Alef peered attentively at a group music activity in the day room. As previously arranged, we met after this group. His room was well equipped with television, video, double cassette player, and stereo radio. The walls were covered with his art work consisting mostly of battle scenes, traffic accidents, and moon-bound rocket ships. In between these were photographs of Alef prior to losing his hair.

From the outset of therapy, Alef was active and expressive. In the second session he attempted lyric substitution to a popular song, "I Watch from the Window":

VERSE 1: (adaptation)

I watch from the window and it makes me guite sad Because I'm alone in the room, mommy went to town Children are there playing with some very nice toys Oh, Why am I alone? Alone in this room.

CHORUS: (original) It will become better, better for sure Just sometimes I break down. But yet today, but yet today, Today I feel so strong.

This activity enabled Alef to verbalize his thoughts and feelings about his hospitalization and illness, and immediately two issues surfaced. His lyrics reflected his conviction that his state of seclusion was simply a result of his mother going to town. Alef coped with his isolation by utilizing denial as a defense mechanism. The second issue was reflected in the words "Just sometimes I break down." With each repetition of this line, Alef laughed.

In the discussion that followed his creation of these lyrics, Alef echoed his parents' attitude that it is an embarrassment to break down: One must be strong. This philosophy was so embedded in Alef that he was afraid to verbalize his true feelings of emotional sadness and pain. When he did express these through this song and discussion, he felt much guilt and ambivalence in contradicting his parents' "wishes." Deep down he wanted to express himself, but yet he felt loyal to his parents who

advocated emotional constraint.

In subsequent sessions Alef was introduced to various popular Israeli songs reflecting depression, lack of hope, and emotional breakdown. The central themes of the discussions that followed in these sessions were the positive and negative aspects of life, optimism, instillation of hope, and universality. Alef seemed interested in hearing about other people's misfortunes. But suddenly during one session, he interrupted saying, "It's better to be happy and sing happy songs," and he began to sing a folk song "David, King of Israel." Though this song has a happy mood and content, Alef exhibited flat affect and sang with a monotone quality.

Utilizing role-play reversal, I asked Alef to become the therapist/doctor. Suggesting that he ask me (as the patient) why I looked sad, I replied

smiling, "I'm not, I'm happy." (frown)

'Dr.' Alef said, "You don't look happy."

I replied smiling, "Sure I am, I even sing happy songs: 'David, King

of Israel/Live, live, everlasting'." (frown)

After a few moments of thought, 'Dr.' Alef began to lecture: "There are other people who are sad ... it's not wrong for you to be sad."

Upon conclusion of this role-playing, I asked Alef if he enjoyed posing as a doctor. He replied, "No, I'd rather be a policeman." Then he asked if we could sing a funny song, and sang: "David, Flag of Israel/Live, live, until death."

"Is that a funny song?" I asked.

Alef replied "Oh yes . . . flags can't die, only people can."

Alef finally broke through the firmly built walls of his silence. Music became the medium of expression for his fear of isolation and death, and for his fear of the punishment that would be the consequence if he expressed fear at all. With songs he was able to explore and learn about others, to understand that he was not alone in suffering. The remainder of time in music therapy was spent singing songs on the themes of God, instillation of hope, and rejuvenation.

No. 2: BET

At age five, "Bet" needed some distraction from the various treatment procedures that he was undergoing and the immense pain they caused. He was very cautious about strangers in general, and fearful of those entering the isolation room. During my initial visit, I simply began playing kindergarten songs on the Omnichord. Bet sat and listened but did not join my singing. He would not verbalize his hospital experiences, nor was he willing to draw or dramatize them. However, his mother revealed that after our initial meeting, Bet requested continued music sessions. After five individual music therapy sessions, Bet began to make up words to some of the familiar preschool songs that I had previously sung to him. One of these songs depicted a clown who spent his day happily dancing and eating his time away. Bet's version was: "We are little sick clowns/very ill indeed/all day long we lie in bed/that's why

we're very tired."

After a few more sessions it became apparent that Bet was depicting his hospital experiences in diary-like form through his lyrics. His daily encounters became fused with the fantastic animated characters found in the lyrics. Bet was no longer alone, his experiences were the same as those of all his "friends." Through these recapitulations in song, Bet may have been attempting to work through, by repetition, all that was unfamiliar to him. In another song, "The Little Rabbit," Bet attempted to summarize the chronological order of his illness, including etiology, hospitalization, remission, relapse, re-hospitalization in isolation, and submission to treatment. The last lines of his song exhibit his anger over these latter procedures:

"The little, little rabbit, forgot to close the front door. Poor little fellow, he caught a frightful cold. He went to the hospital, there he met many doctors. They said: 'Stay in bed, wash your hands,3 And eat your food.'

The little, little rabbit, went one day on a trip outside. He played on a seesaw, and was very happy. But, he returned to the hospital, played guitar, and sang songs. He did break all the bowls, 3 so they bought him new ones."

No. 3: GIMEL

"Gimel" was seen in group and individual music therapy during two short periods of temporary remission. Though he was only four years old, he did not seem to be anxiety-ridden about the hospitalization, possibly due to previous exposure to this environment because his father worked at a hospital. In the final stages of leukemia, Gimel was in severe pain and could not sleep for days. Music therapy was prescribed as a distraction from the pain, for release of tension, and as a sedative to help induce a sleep-like state. Gimel screamed that he did not want to sing or even hear music because his headaches were too severe. However, at his

Washing hands in a sanitary bowl with chlorexidine is a part of the precautionary measures of isolation.

father's request, I stayed. We sang soft hymns, paraliturgy, kindergarten songs, and lullabies.

I had a sense that Gimel's father needed support in order to nurture his son and provide him with inner peace. In between our songs, Gimel

fell asleep. I was notified that he died the following morning.

Gimel's father had attended his son during his illness and hospitalizations from the beginning. He was realistic and anticipated Gimel's death. He even accepted death as a welcome alternative to Gimel's condition and failing pain management. However, he needed some format through which he could depart from Gimel spiritually and emotionally. Music therapy provided this effective intervention with as much sensitivity as humanely possible.

No. 4: DALED

"Daled," a 10-year-old boy suffering from aplastic anemia, required bone-marrow treatment. He was first seen in a group music therapy session prior to placement in an isolation room. One of the songs sung in this group was a popular tune called "We'll never stop singing." Once in the isolation room Daled refused further contacts with the music therapist until he saw the Omnichord. At his bedside we sang a few songs, and he strummed along on the sonic strings, playfully adjusting the volume/tempo controls. Daled suggested the song "We'll never stop singing." "This shall be our goodbye song," he said. Daled would not schedule the next session, simply reiterating, "T'll see you if I'll be here." 4

In the second session we spent time selecting Israeli popular songs that were familiar to both of us and performing them together. Daled insisted that we end this session with the song "We'll never stop singing." This song seemed to evoke a fantasy and an unconscious wish. He related to the hopeful feelings of this song. At the end of this song, Daled simply said, "See you next week."

Prior to our third session I was briefed about Daled's bone-marrow transplant and his severe depressive state. When I entered the room he requested that we play the Omnichord together. I suggested the song "On our journey":

VERSE 1:

Once again we leave for our journey Hand in hand on our journey . . .

VERSE 2:

... and even if the way is long and never ending Our strength will come from endurance We'll get through it together.

⁴Author's Note: Daled did not expect to be in isolation for more than a few days.

The song conveyed the message that Daled was not alone, that there were parents, doctors, and health care staff who would always be there to support him. During this session we also investigated songs depicting depression, isolation, and breakdown. We talked about universality. The session ended with songs that instilled hope. A song that was especially meaningful to him was "Today, today":

VERSE 1:

Today, on this very day, I'm not sad as before I'm not as sad as before, I know it, today. Today, perhaps it's just a feeling, I suddenly love to live. Perhaps it's just a feeling, Can you hear it? Today!

CHORUS:

Give us a chance to live a brand new life Give us a brand new life from start to end And then you'll see just how my life goes on, Nice and easy like the rest [of healthy people] And goes on, and goes on, and goes on.

This song became Daled's obsessional prayer. He attempted to sing the song with Omnichord accompaniment by himself. He attempted to master the chord changes, strum patterns, and memorize the lyrics. This third session ended with the song "We'll never stop singing."

As I entered the room for our next to last session, Daled's parents woke him up from a nap. I noticed that his intravenous had been removed, and he was proud of this turn of events because they symbolized an approaching state of remission and exit from isolation. Daled set up the Omnichord and began to improvise freely with the chords and drum settings. I offered him a songbook of Sabbath and holiday songs as a therapeutic move toward strengthening the instillation of hope and belief in God. We played a few hymns.

I requested that Daled pick his favorite holiday so we could sing the repertoire related to it from the songbook. He immediately picked Purim, a holiday that had been celebrated over a month previously. While we sang these songs with the Omnichord, I could not help but wonder, "Why Purim?", when another holiday was about to commence shortly—Passover. In the conversation that followed it came out that Daled's diagnosis and subsequent hospitalization occurred prior to Purim. Indeed he had not had the chance to celebrate this holiday or sing these songs until now.

The phenomenon of being lost in the calendar year, or being stuck at one particular place in time, has often been observed by the treatment staff at Hadassah and seems to be characteristic of hospitalized children, especially children with cancer in isolation rooms. By choosing and

singing these Purim songs, Daled may have been attempting to bring himself more up to date with the calendar. He was setting the stage for the next holiday by getting himself in synchrony with the appropriate repertoire. We ended this session, as always, with the song "We'll never

Our final session resembled a social gathering. We played songs on stop singing." the Omnichord together, made lots of jokes, and laughed together for a long time. It seemed as if we were acting like "pals, "chums," and "buddies." Though I had reminded Daled the previous week that this session was to be our last, he denied that we had even had a session the week before. He spoke of past times and TV shows that he had seen recently. They all seemed to be filled with various figures about to be killed, all of whom managed to escape death by a small margin. The characters included oriental Ninja fighters and motorcycle daredevils. It seemed that Daled was thinking about his own death and his own chances for survival.

Daled sabotaged my attempts to sing any "meaningful" song, and he refused the songwriting exercise I had planned for closure. He only wanted to sing "We'll never stop singing" as many times as possible. He arranged the volume, tempo, and accompaniment of the Omnichord. With each repetition, the song accelerated in speed and increased in volume. The last version, a climactic scream, was so loud and quick that only the eerie silence in the aftermath was noticeable. Daled broke the silence, saying: "See you around."

Music therapy proved effective for Daled in dealing with his adjustment to the hospital, illness, and isolation. The Omnichord provided him with a means for cognitive stimulation and emotional expression. Through the therapeutic relationship, Daled was able to explore his own

feelings about death and put hope in the proper perspective.

Conclusion

The general needs of health-impaired children in the hospital are many, and include: (a) adaptation to the illness and its consequences; (b) adjustment by the patient and his or her family; (c) acquisition of ways to deal with the hospital; (d) mastery of age-appropriate defense mechanisms; (e) resolution of fear-provoking fantasies, including death and dying; (f) need for a normalized environment and physical activity; (g) continuation of school and social development; and (h) prevention and remediation of developmental delays (Schwankovsky & Guthrie,

Schwankovsky and Guthrie (1982) also list four major target areas to which nonmedical staff in the hospital must focus their attention: (a) preparation and education of the family and child/patient; (b) maintenance of a normalized environment; (c) provision of ways in which the child can establish mastery over the illness and environment; and (d)

consideration of the child's age and developmental stages. One cannot help but notice the similarities found in both the *needs* of hospitalized children and the identified intervention areas of the nonmedical staff on the ward. As part of the nonmedical augmentative treatment staff, "the music therapist has to be a facilitator who provides opportunities where music . . . can be accessible to a [child] patient at whatever level and in whatever mode most significant to the individual" (Munro, 1984, p. 89). This accessibility must be afforded to all children in the hospital, no matter where they are placed for treatment, but it is especially critical in isolation rooms.

However, more than the music itself, the shared musical experience is one of reciprocity between people. The music is a catalyst for releasing energy, a channel for which individual efforts can be collective and shared. Pavlicevic (1985) points out that this reciprocity happens at several levels between people, in the sense that they affect one another and are affected by the musical event, and this in turn affects the quality of the musical event itself. "The essence of the therapeutic musical relationship is its quality: the more trusting, reciprocal and creatively free it is, the more stress and change it will have to undergo, and the more profound the healing will be" (p. 157).

REFERENCES

Bailey, L.M. (1983). The effects of live music versus tape-recorded music on hospitalized cancer patients. Music Therapy, 3 (1), 17-28.

Bailey, L.M. (1984). The use of songs in music therapy with cancer patients and their families. Music Therapy, 4 (1), 5-17.

Becker, R.D. (1976). Children in the hospital. Israel Annals of Psychiatry and Related Disciplines, 14 (3), 240-265.

Brodsky, W. & Niedorf, H. (1986). "Songs from the heart!": New paths to greater maturity. Arts in Psychotherapy, 13 (4), 331-341.

Crowe, B.J. (1985). Music therapy and physical medicine: Expanding opportunities for employment. Music Therapy, 5 (1), 44-51.

Denshire, S. & Bennett, D.L. (1985). Have a say: Networking with teenagers in a hospital for children. International Journal of Adolescent Medicine and Health, 1 (1-2), 217-224.

Fagen, T.S. (1982). Music therapy in the treatment of anxiety and fear in terminal pediatric patients. Music Therapy, 2 (1), 13-23.

Froehlich, M.A.R. (1984). A comparison of the effect of music therapy and medical play therapy on the verbalization behavior of pediatric patients. Journal of Music Therapy, 21 (1), 2-15.

Goloff, M.S. (1981). The responses of hospitalized medical patients to music therapy. Music Therapy, 1 (1), 51-56.

Marley, L.S. (1984). The use of music with hospitalized infants and toddlers: A descriptive study. Journal of Music Therapy, 21 (3), 126-132.

Munro, S. (1984). Music therapy in palliative hospice care. St. Louis, MO: MMB Music, Inc.

Munro, S. & Mount, B. (1978) Music therapy in palliative care. Canadian Medical Association Journal, 119, 1029-1034.

Pavlicevic, M. (1985). Music as therapy: Towards an integrated experience. British Journal of Music Education, 2 (2), 153-158.

Ridgeway, R.A. (1983). Another perspective: A story and a question. Music Therapy *Perspectives*, 1 (2), 2-3.

Schwankovsky, L.M. & Guthrie, P.T. (1982). Music therapy for handicapped children: Other health impaired. NAMT Monograph Series. Washington, DC: National Association for Music Therapy.

Wylie, M.E. & Blom, R.C. (1986). Guided imagery and music with hospice patients. Music

Therapy Perspectives, 3 (1), 25-29.

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