

Music Therapy for the Elderly — Practical Examples at Care Port Sunayama

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Introduction

Care Port Sunayama is a health institution for the care needing elderly established in April 1998 with 100 in-house and 25 out patients requiring rehabilitation. This institution provides various services in medicine, health and welfare by operating the attached medical clinic, dental clinic, and helper service for the elderly in residence and visiting nurse station. The first floor accommodates 42 people and the second, which serves dementia patients, accommodates 58. The average age of current patients is 83.6 years and the average care level needed is 2.9.

This institution has incorporated music therapy from the beginning, towards the activation of mental performance, recovery of physical func-

tion and improvement of QOL. In this paper, we shall introduce some successful case studies and the effectiveness of music therapy for the elderly and discuss the possibilities for the future.

(a) Music Therapy Program and Staff

This author was involved in music therapy as a leader from the opening of the institute. The subjects are in-house patients and outpatients requiring rehabilitation. The music therapy program and staff are shown in Table 1.

(b) Time, Term and Frequency

Practice time for the first floor activities is from 2 p.m. and for the second floor from 10 a.m. and 2 p.m. The length of practice is 40 to 60 minutes. At the beginning, the practice was car-

	Activities	Staff
1st year	Singing / Instrument playing / Appreciation / Deep breathing / Finger exercise, / Exercise conversation, / Question and answer	MT, OT, PT, nurse, care staff volunteers (8 months, 1 - 2)
2nd year	Same as the above. Sign language exercise, together with haiku / Requested time (October -)	Same as the above, volunteers (3 - 6)
3rd year	Same as the above. Improvisational / Swallowing exercises / Individual, group sessions start.	Same as the above, ST, music therapy trainees.
4th year	Same as the above. High level individual session / Use of Shamisen for accompaniment. / Singing with sign language.	Same as the above
5th year	Same as the above. Start of Taisho-koto Club / Care for those with hearing handicaps: Use of hearing aids	Same as the above.

MT : music therapist OT : Occupational therapist PT : Physical therapist ST : Speech therapist

Table 1. Music Therapy Program and Staff

1. I hate a bath very much
 I hate a bath very much
 I hate a man even more I hate
 I hate I hate I hate a bath

clap hand music repeat "hate"

clap hand music repeat "hate"

2. But I feel good in a bath
 Bright and clean feels good
 I take a bath, no choice
 Let's take a bath, let's take a bath
- hand clap hand, music repeat "feel good"

Text 1 Survey by questionnaire on effects of hearing aids

(April 1998 — March 2002)

Academic year	Frequency	Total participants	Average Ratio of Participation
1st year	105	3,571	79.4%
2nd year	122	5,904	84.2%
3rd year	142	7,543	86.8%
4th year	128	7,055	86.1%

Table 2. History of the Niigata Music Therapy Society

ried out jointly in the general ward and dementia ward but due to an increase in numbers, these were separated after four months. The frequency of practice was daily at the beginning, but in relation to other rehabilitation and recreation programs, once every week for each floor is the current schedule. For the 2nd floor, due to requests from participants and staff, the practice was started once a week at the requested time one and a half years after its establishment.

There is no special room on either the first or second floors for this purpose; thus some living spaces (dining hall, function training space and

hall) are used for such practice.

(c) Number of Practices, Total Participants and Average Percentage of Participation

Table 3. shows the number of practices performed, total number of participants and average participation rate from April 1998 to March 2002. The high participation rate in music therapy comes from the fact that it is possible to participate actively or passively and that it is so rich in variety that we could accept all kinds of patients. Even at care level five, some can play musical instruments with help and such examples suggest the future possibility and effectiveness as a therapy for the elderly with various difficulties (1).

I. Emphasized Performance

(a) Handling of Problematical Behavior of the Elderly with Dementia — Music Therapy for Patients Refusing to Bathe

Some problematical behavior of patients with dementia, such as refusing to accept care, has often perplexed staff. The approach through music has been made to reduce such problems. The fol-

	Prior to Music Therapy	Following Music Therapy
1 To undressing room		
Self	0	3
Lead	4	30
Holding	60	0
Impossible	11	4
2 Taking off clothes		
Self	0	4
Lead	3	26
Refusal	61	3
3 Bathing		
Expected number taking bath	75	37
Both	64	31
Refusal	11	6

Table 3

lowing is an example of a successful case.

[Case] Ms. A: 86 years old. Admitted on October 16, 1998. Diagnosis: Dementia and Hyperlipidemia. Degree of independence of the elderly in daily life (Based on the criteria of daily living for the elderly with dementia): Semi-bedridden rank A. IIIa. Revised simple intelligence evaluation by Hasegawa: scale 5. Needed care: 3. Observation: stubborn rejection of bathing, incontinence, occasional screaming resistance to care.

On the first bathing, her abdominal lines were covered with dirt. According to her social worker, she may have taken a bath one-week before admission but she had probably never taken one within the last year. At bath time, she refused it, saying, "I take a bath at home. I never take a bath during the day time", refused to leave her chair and responded by shouting and screaming. The staff carried her to the bath and took care of her bathing. However, after it was over she was happy saying, "It was a good bath".

Ms. A participated in every music therapy and she looked good. She had good communication with me and her response was fine. Setting our goal as easing her refusal to bathe, we asked her

to sing the song "I hate bathing" (score 1) with me during music therapy from August 4 to December 31, 1999. On the day of her bath, we guided her to the bath by saying, "It is the time for cleaning, please move away from here".

Ms. A sang songs almost every day even outside of music therapy. In the beginning, she listened only, but two months later; she started singing by herself. She was expected to take a bath 75 times but took one only 64 times during the earlier period. Among those 60 times she was forced to go to the bath by the staff because her refusal was strong (Table 3). As the therapy proceeded, no forcing was needed and she took her bath willingly or with the staff's encouragement 30 times in 31 trials. As singing increased, her refusal diminished and occasionally she took her bath by herself.

(b) Music and Haiku — Aiming for the fusion of music therapy and traditional culture —

It is said that musical stimulation functions as a catalyst for the expression of thoughts and feelings, which are found in art and literature (2). We have actively chosen music containing words about the seasons in order to motivate them to make haiku and participate in the haiku meetings, during music therapy. We used the style shown in Table 4 for haiku meetings, because of the different abilities shown among the participants. The first meeting without music had 32 people and nine made 12 haiku but, in the second meeting with music, the participants increased to 41 and 29 haiku were made by 22 people. The atmosphere of the meeting was enjoyable with much laughter and participants listened to comments from the leader. The comments from the participants, who did not make haiku, were also full of joy and happiness (3). When we saw this result, we organized haiku meetings in relation to music. We classified the number of participants, those who wrote haiku and the number of haiku by dividing all participants according to the Hasegawa intelligence evaluation scale; those with 20

or less were defined as suffering from dementia and those with 21 and more as normal. Taking into account 24 haiku meetings with music held between October 1999 and October 2001, the average number of participants was 41.5 and the rate of participation 39.0%. There was no change in the number of normal group participants and of haiku presented, with an average participation rate of 15.6 while the haiku presenters numbered from 11 to 19 (Fig. 1). The number of haiku made increased remarkably from 18 to 137. Some people made 30 haiku. It is possible to say that haiku making increased an interest in haiku and expanded their imagination. The participants with dementia were 26, showing some tendency to decrease (Fig. 2). The number of haiku presenters has gradually decreased from a maximum of

19 at the second meeting and is now only three to five. However, the number of haiku made has not decreased and two people continued it for two years. Moreover, most participants who continuously made haiku showed no reduction in GDS-R, regardless of whether they were normal or suffered from dementia. Thus it is conceivable that music and haiku have a considerable effect. Changes were noticed in the increased quality of haiku, milder facial expressions and regained self-confidence. Three typical examples are shown in Fig. 3. The same numbers indicate those by the same person.

(c) Care for Persons with Hearing Difficulty During Hearing Test

We have noticed an increase in the number of people who say that it is hard to hear and those

Style of Meeting
Monthly, at first floor hall for one hour in the afternoon. Unlimited presentation of haiku, participation only is welcome. Leader reads haiku, and comments. Appreciation Selection of the best and announcement of "Kigo = season word" Write the best one of each person on "Tanzaku = card"
Interaction to Music Therapy
1F (Mostly normal) once a week at hour of music therapy 2F (Mostly dementia) twice a week, select the music related to "Kigo", appreciation, singing and playing of instrument are carried out.

Table 4. Haiku Meeting and Music Therapy

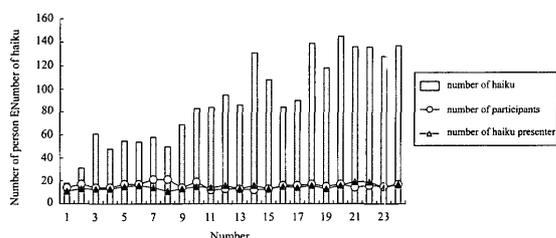


Fig. 1 Number of participants and haiku-dementia

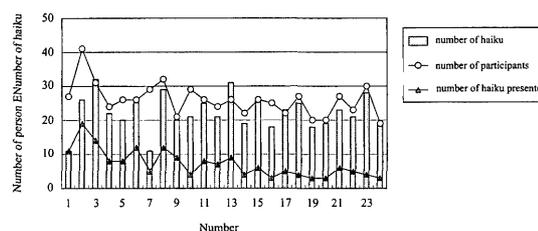


Fig. 2 Number of participants and haiku-dementia

October, 1999 words ... nuts, moon ① window seeing full moon beautiful ② children sad by separation nuts ③ walking street, joy even dog, moon light October, 2000 words: red dragonfly, newly harvested rice ① red dragonflies, sweet talk, first love ② alive, joy, new karvested rice, chew well ③ field of water melon, removed, pile driving Oct. 2001 words: singing of iusects, japanese bladder cherry ① autum wind, field of japanese bladder cherry sound of wave ② name unknown, chorus of insect-singing, pleasure and joy ③ walking, warm hearted, fallen leaves
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Fig. 3 words to express seasons

who show a delayed reaction to music. It is important to ascertain the hearing ability of participants in order to improve music therapy. With cooperation from Niigata Rion Co., a pure sound air conduction hearing test was carried out using the audiometer A67N and audio-insulator cups made by Rion Co., in May 2002. Among all 96 patients in the institution; 48 participants (average age 84.6, average care needed scale 2.3 including 10 ear-nose-throat patients and 5 hearing aid users.) The number of people using hearing aids due to their hearing difficulty (level 50 - 70dB) in both ears was 16 including six who used the box type hearing aid HA27DXRIONET. The effect of the hearing aid was surveyed by asking questions and the results were scored 3, 2, 1 and 0 for hearing well, almost well, a little and none, respectively, on the piano, clavino, singing, CD and conversation (Table 5).

Humans can hear sound with a frequency of 16 - 20,000Hz and 0 - 200dB strength but 300 - 3,000Hz and 20 - 70dB ranges are important for normal conversation. The music hearing range is rather wide, from 60 - 8,000Hz, and 20 - 100dB(4) and so people with difficulty in hearing conversation can hear music. Actual surveys found many who answered; "I can hear it, if it is music". Thus, we feel there is a possibility for music therapy to help the hearing impaired. Six

	Without Hearing Aid	With Hearing Aid
Piano	1.8	2.6
Clavinova	1.1	2.6
Singing	1.3	2.9
CD	0.7	1.9
Conversation (with microphone)	0.9	2.0
Conversation (without microphone)	1.4	2.8

Table 5. Survey by Questionnaire on the Effects of Hearing Aids

people with middle level hearing difficulty were asked to use hearing aids during music therapy. Among them four indicated better results with hearing aids and a few said, "Now I feel like I am using my own ears". After the hearing test, hearing aids were made available for music therapy together with written signs showing what to do or sing next while carrying out fulfilling activities such as singing and physical exercise by using sign language. It has become clear that piano sounds are better heard and that piano playing occupies an important role. Such work showed a harmonious increase in the levels of participation, enthusiasm and interaction with others.

II. Usefulness and Potential Regarding Music Therapy

The medical and scientific evaluation of music therapy has just started in Japan (5). According to our practical experience, there are obvious effects concerning independence, facial expression and the everyday behavior of patients. As mentioned above, we noticed the effects on dementia patients with abnormal behavior. For example, patients sang the old song "Sen-you" meaning "partners" on the battlefield" to the end with tears. Patients who thanked us with bows saying "there was no time in my life better than now", and we witnessed many scenes that were deeply moving. We were surprised by a case in which a person with dementia who used violent language and behavior became calm as soon as the music started, followed by him closing his eyes and clapping his hands. Comments from their families and volunteer staff such as, "their face became brighter", "participants in music therapy have much brighter eyes and they are lively" and "music puts me in an emotional state" are appreciated. A survey of the patients indicated that 97% were looking forward to music therapy and 94% were willing to participate in the next session (3). The elderly enjoy music therapy and look forward it. It is possible to communicate

with those who cannot carry out communication because of dementia, if we use music. Music therapy is the best form of treatment for dementia.

Music therapy at Care Port Sunayama is entering its fifth year and we are now confident that it has great possibilities in itself, based on the experience of its usefulness and care effects. We have emphasized the care of elderly with problematic behavior due to dementia through the composition of new melodies, trying the fusion with traditional culture, and care of the hearing impaired.

I have organized and operated regularly scheduled concerts, haiku meetings, tea ceremonies and flower arrangements, based on the idea that Care Port Sunayama is a source of regional culture and information which is open for regional service. We intend to create more art therapy that is acceptable to Japanese feelings using our customs, habits and culture.

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