

MUSIC THERAPY AND INTERNAL MEDICINE*

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Abstract: Music therapy is an alternative and supplemental form of treatment used to treat a variety of diseases in the field of internal medicine, including psychosomatic and lifestyle-related diseases, specifically digestive ulcer, NUD (non-ulcer dyspepsia), chronic pancreatitis, hypertension, bronchial asthma, diabetes mellitus, simple obesity, Basedow's disease, terminal cancer, and senile dementia. It has been used in treating patients undergoing chronic dialysis, blood donation activities, in rehabilitation activities for cerebrovascular accidents (CVA), endoscopic examinations, in intensive care units (ICU), and to stabilize blood pressure, promote sleep, and reduce pain. Music therapy has also been applied in diet therapy using background music (BGM) that is played during meals and karaoke is also a form of music therapy that can be effectively utilized in social situations. It is also utilized in physical and exercise therapy, in rehabilitating patients recovering from CVA and in treating the aged, and in promoting the interpersonal relationship between the patient and the therapist. Music therapy is also effective in promoting the health of professional athletes; and the Awa folk dance in Japan is also used as dance therapy. Rhythmical background music has also been effectively applied using the Walkman.

Key words: Music therapy; Lifestyle-related disease; Diet therapy; Exercise therapy

Introduction

Music therapy has been used to treat numerous diseases in the field of internal medicine, including psychosomatic diseases. In this paper, the correlation between lifestyle-related diseases and diet and exercise is presented.

In this age of advanced technology, the science of medicine alone is unable to cure patients. The art of medicine, as advocated by Hippocrates, effectively utilized music in curing the mind and body of patients. Presently, music therapy is utilized in the fields of medicine, health care, music, education, and social welfare; and its cultural and artistic merits are equally important.

Music therapy allows patients to become directly involved and the benefits of utilizing this method in patience guidance activities is presented in this paper.

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Human Beings and Rhythm

Human beings have an inborn love of music and a sense of rhythm. The fetus develops listening to the heartbeat and voice of the mother and infants will change from crying, smiling, to speaking in conjunction with the voice of the mother and other family members and the sounds emanating from the environment. A mother's voice, that is filled with love and affection, is in the alto region and infants are comforted when they are cradled and talked to for about one second in the arms of a mother whose voice is in the alto region.

Human beings maintain their health and live in harmony with melody and rhythm throughout their childhood, adulthood, and the twilight years of their lives. Health is lost when this harmonious balance is destroyed. The human body maintains a pulse, body temperature, respiration, and other vital signs as well as a metabolism and blood flow that functions according to an inherent rhythm. Our behavioral patterns such as eating and sleeping are also based on a consistent rhythm and work activities are synchronized accordingly. The bodily organs are the instruments and the heart is the conductor. The integrated role or function of these instruments are integrated to produce an orchestral performance.

Application and Treatment

Music therapy is widely applied in many areas of health care. However, it is commonly utilized in internal medicine to treat digestive ulcer, NUD (non-ulcer dyspepsia), chronic pancreatitis, hypertension,¹⁾ bronchial asthma, diabetes mellitus, simple obesity, Basedow's disease, terminal cancer,²⁾ and senile dementia.³⁾ It has been used in treating patients undergoing chronic dialysis, blood donation activities, in rehabilitation activities for CVA, during endoscopic examinations,⁴⁾ in intensive care units (ICU), cardiac care unit (CCU), to stabilise blood pressure, promote sleep,⁵⁾ and reduce pain. There are two categories of music therapy—the active form of singing and playing an instrument and the passive form of listening to music. Body sonics, pillows with stereo music, or BGM are the most common forms of the latter category of music therapy.

Music therapy also has supplementary benefits, in addition to being an effective means of treating diseases. Its effectiveness as a form of treatment must be investigated objectively.⁵⁾ It helps rehabilitation activities to be performed more easily and lessens the apprehension of patients undergoing dialysis and other forms of treatment.

In the clinical setting, many hospitals and nursing homes utilize music therapy in their rehabilitation activities for patients recovering from CVA. Blood pressure is lowered and stabilized in patients suffering from hypertension; and orthostatic hypotension is also stabilized with the use of music therapy. In addition, patient compliance has been favorable when music therapy is used in long-term treatment and rehabilitation activities in the aftermath of acute myocardial infarction.⁶⁾

Life-style Related Diseases

The term, lifestyle-related diseases, was initially used and discussed in Japan in 1978 by Dr. Shigeaki Hinohara, President of the Japan Biomusic Association. Recently, the Ministry of Health and Welfare has begun to utilize this term in lieu of the commonly known term, adult diseases.

The fundamental factor to maintaining good health is a balanced diet, moderate exercise, and mental rest. The key to sustaining good health is to maintain an established pattern of activity in our lifestyles. Maintaining a 24-hour daily cyclical rhythm produces a 1/f fluctuation, which induces the feeling of being comfortable. This is because some irregularity exists within lifestyles with an established pattern of activity.

Diet and Music

The most important meal of the day is breakfast, but an increasing number of the younger generation has begun to skip breakfast in recent years and this has become a health issue in Japan. The general intake proportion of meals in Japan is 20 percent for breakfast, 30 percent for lunch, and 50 percent for dinner, in contrast to the ideal proportion of 40 percent for breakfast, 35 percent for lunch, and 25 percent for dinner. Simple obesity and lifestyle related diseases can be prevented if the ideal proportion of food intake is followed. Case examples that may prove useful in explanations to patients regarding the importance of incorporating music in their daily lives have been given below.

1. Rising early in the morning is recommended and late risers should use an alarm clock with a loud buzzer or digital alarm. For those who can get up easily, it may be a good idea to set the time switch on the radio to allow baroque or other kinds of music to play in the morning. This will help such people to wake up quietly and comfortably.

2. After rising, drinking milk or other liquids is recommended, followed by a short walk or light exercise. The added time spent after rising and before breakfast helps to increase the appetite. In addition, fructose derived from fruits that are consumed at breakfast are converted quickly into energy without insulin secretion from the pancreas. Hence, it is said in Japan that fruits which are consumed at breakfast are comparable to gold, fruits eaten at lunch are comparable to silver, and fruits eaten at dinner are comparable to copper.

3. Many people rush through their breakfast, urged on by the time that appears on their television screens. Listening to rhythmical BGM is recommended in the morning. On holidays, it is recommended that the gurgling of small streams, singing birds, and other environmental sounds or refreshing BGM are played during breakfast.

4. Light exercise that induces perspiration, followed by a bath and dinner, is recommended in the evenings. Bathing after an evening meal is not beneficial in terms of blood circulation; and meals consumed late at night increase the onset of lifestyle-related disease, such as hyperlipemia. Therefore, they should be eaten early in the evening. If BGM is played in the evenings, easy listening music that

soothes the mind and body is recommended rather than rock music.

5. Karaoke is the best form of music therapy that Japan can be proud of having developed. It is the optimum form of therapy for relieving stress and for its reinvigorating effects. Aristotle promoted the principle of same quality that promulgates the idea that human beings listen to cheerful music when they are in a happy state of mind and listen to soothing, consoling music when they are sad. The author recommends listening or singing firstly to soulful music, secondly love ballads and lastly rhythmical and cheerful music in the case of karaoke, as the most effective means of alleviating the daily emotional stress.

The above are merely some suggestions and the general rule is to allow the clients or patients to select their favorite music.

Exercise and Music

A good relationship is established between the patient and the therapist when music therapy is utilized during rehabilitation activities for patients recovering from CVA or for the elderly. Generally, 2-beat or 4-beat music is easier for patients to grasp the rhythm and three-beat or rhythmical waltzes can be introduced after patients have become accustomed to the 2-beat music.

The author has arranged and published a music book with CD, entitled "Japanese Songs of the Four Seasons", which include 12 famous Japanese folk songs such as "Haruno Ogawa" (Spring Brook Melody), "Natsuno Omoide" (Summer Memories), "Akatonbo" (Red Dragonfly), and others. The book and CD have been published with the hope that it can be utilized as both an active and passive form of music therapy in hospitals and nursing homes in Japan (Fig. 1).

The author's hometown, Tokushima, is famous for its Awa Dance Festival which is held in the summer. However, the Awa dance can also be enjoyed throughout the year and tourists who visit the town are also able to participate in this dance. In clinical studies of sports medicine, it was discovered that the Awa dance was an ideal type of continuous aerobic exercise that did not strain the heart and lungs.⁷⁾ Dancing is a continuous form of exercise and it is also useful as a form of music therapy that can be adjusted according to the condition of the patients.

In recent years, an increasing number of people in all age groups have joined fitness clubs and taken up aerobic exercises. These sessions provide continuous and effective exercises for 30 to 75 minute periods. When the participants' pulse rate rises to higher than 180 per minute, precautions against overexertion are taken and they are encouraged to rest. In the past, aerobic exercises were mainly high impact exercises with a lot of jumping that placed stress on the knees and ankles. As a result, ankle sprains and foot fractures were often reported. The author has been apprehensive of the burden placed on the knees of middle-aged and overweight people.

Recently, low impact aerobic exercise programs, that utilize a 10 to 24 cm high platform where one foot is always kept on the floor, has become popular. This type of exercise reduces the impact to the knees, ankles, and joints. All aerobic programs utilize music and music is an indispensable factor during the cooling down phase of the program as well. The use of soothing music in a darkened room



Fig. 1 "Japanese Songs of the Four Seasons" with CD, edited by Shigeaki Hinohara, M.D., arranged by Hiroshi Bando (Published by Ongakuno Tomosha, Tokyo, Japan, January 1998)

heightens the sense of comfort and accomplishment.

Music is also effectively employed in the training programs of athletes. The use of the Walkman when bicycling, walking or running on the treadmill alleviates the monotony of the exercise and helps athletes to continue the training program. The author is a speed skater and an athlete representing Tokushima Prefecture in the Japan National Sports Festival that is held in the winter. The sliding board is used during indoor training activities as part of the training program and the use of the author's own pre-selected music program has been effective for image training exercises.

Conclusion

In this paper, the author has attempted to discuss the importance of maintaining a daily rhythm of diet and exercise and the usage of music therapy in daily life.

In future, the author would like to explore the issue of using music therapy as an effective means of treating diabetic patients in conjunction with diet and exercise. Hopefully, music therapy will be recognized as a means of sustaining a healthy mind and body and as an effective tool in disease prevention.

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