

Chair of Community Health Care, Department of Integrated Medical Care,
Department of Community Nursing, Medical University of Lublin

KATARZYNA MUZYCZKA, HANNA KACHANIUK,
ANDRZEJ STANISŁAWEK

*Music therapy as a factor supporting the treatment of children
with cardiological diseases*

Terapia muzyką jako czynnik wspomagający leczenie dzieci z chorobami serca

The patients of the cardiological ward of CCH constituted quite a stable study group, which increased the reliability of the observed therapeutical results. When it comes to the issue of music therapy as a method supporting the treatment of only the so called somatic diseases (or regarded as a generally relaxing method), unfortunately, it must be stated that until recently this subject matter was considerably underrated. In practice, it was in the scope of interest of enthusiasts and “medical eccentrics”. Thus the literature concerning the subject is not too voluminous and it comprises descriptions of the activity of trained music therapists, i.e. descriptions of a particular activity (without recommendations regarding the standards). In this situation, the monographic method seems to be the most adequate attitude to the issue of music therapy, as it is neutral to the analysed phenomenon (the object or the process). Therefore, the article presents the results of the authors’ own study where, apart from objective observation and descriptions, there are analytical elements relating to the theoretical justification of the possibilities of music therapy itself as a paramedical method of treatment as well as a discussion of its psychotherapeutical sense. The possibilities of a positive (though indirect) influence of the method on somatic processes have also been mentioned.

STRESS CONNECTED WITH A CHILD’S STAY IN HOSPITAL

It is widely known that a sick child experiences a lot of stress due to the admission to the hospital. It is connected with the disease and its symptoms, but especially with a radical change of the family environment into a new one, unknown to the child, which additionally causes anxiety states [3]. Unpleasant diagnostic examinations, invasive medical treatment, uncertain diagnosis constitute (mainly in relation to older children) an additional factor for the occurrence and development of even pathological forms of anxiety. The experience of pain during the examinations and separation from the family in the case of younger children can even cause mental disorders. Older children, in turn, often visualise the negative effects of their disease in the future, which can also increase their stress and anxiety [4].

Therefore, attempts should be made in order to effectively eliminate this kind of experiences in the case of children, or at least to minimise these experiences together with their effects. One of

the methods of the positive influence in this field is music therapy. „Music therapy is a branch of psychotherapy which makes use of music in a directed, multifunctional, complex and systematic way in order to support the instrumental, pharmacological treatment, rehabilitation and special pedagogy” [1].

Music therapy is thus a method of treatment employing musical means. A properly selected music can alleviate mental tension, soothe or activate a person. According to specialists, music therapy combined with other therapeutical methods considerably increases their effectiveness [5]. The interest in the effects which music has on health was a reason for focusing on seeking a successful method of controlling pain [2]. Some types of music, i.e. meditative or slow classical music, leads to the decrease of the production of neurohormonal transmitters of stress [11].

A comparison of just passive listening with active participation in music therapy (especially in the case of children) shows greater therapeutical advantages of the latter [11]. Due to the plasticity, variety of movements and reactions to music, the method can support any prophylactic or treatment action. Relaxing music encourages smooth moves, unrestrained breathing and eases the tension. It also increases the sensitivity to the stimuli from the environment and is a nice background for everyday activities. Activating music, in turn, encourages movement (e.g. dancing), integrates and coordinates moves, causes the release of tension and enhances pulsatile movements. In this kind of mobile musical recreation different kinds of music are used. The importance of musicianship is also emphasizes here, being the result of subsequent contacts with the program music. The first contact is based on the respect for the primary musical sensitivity of a patient. Later on classical music is gradually introduced [7].

According to Galińska, music can play six functions in psychotherapy, which are the following: 1) *releasing and imaginative*, activating emotions; 2) *training*, where the focus is on teaching the patient how to remove psychophysical tension; 3) *relaxing*, consisting in using sets of recordings with a soothing and relaxing effect on patients with various psychosomatic disorders; 4) *communicative*, connected with teaching social communication, i.e. making contacts with other people; 5) *creative*, expressed by various improvisations (e.g. instrumental, vocal or movement improvisation) in accordance with the Orff method; 6) *psychedelic*, in the form of various ecstatic, esthetising and contemplative phenomena. It happens that the musical program causes very intense experience of beauty, e.g. feelings of sublime while listening to organ music [8]. In the case of children and adolescents, the most efficient activity method is using musical games (singing, playing instruments, etc.) It is important that the issues discussed during sessions and the recommended exercises meet the assumed therapeutical goals [9].

A therapist's work thus necessitates including a broad perspective of looking at the patient and at the group. This requires competence in the scope of the following: music, visual art and literature as well as personal culture and a lot of good will so that the treatment could bring the expected results. Therefore, the person conducting the activities in music therapy should be informed about each newly admitted patient, his/her health condition and medical recommendations [9]. The person conducting activities in music therapy makes decisions independently (or after consulting the team treating the patient) in respect of the music treatment of a new patient, which should most of all take into account the patient's emotional states and needs [10]. A properly selected music can have a positive influence also on the mental condition of the parents or guardians of the sick child, i.e. the persons accompanying him/her during the treatment [8].

KINDS OF MUSIC USED IN MUSIC THERAPY

A proper kind of music selected with respect to the patient's age has a considerable therapeutical significance. In clinics and wards for very small children (e.g. newborns and infants) music therapy mostly consists in passive participation. Small children (together with their mothers or guardians) have an opportunity to listen to calming and soothing sounds of relaxing music or hits of the 60s. On the basis of the author's own research it has been found that this kind of music very positively influences not only the little patients but also the persons accompanying them. The children get calmer (they stop crying or their crying is less intensive and loud than before turning on the properly selected soothing music). Thus, positive effects of the use of music can be observed. In the cardiological ward, in turn, where older children (from several year olds to adolescents) are treated, apart from the passive participation in music therapy, also the activating form of the therapy is used. Thus, the music therapy activities conducted in this ward are aimed at correcting body posture, improving general trim and respiratory efficiency. They can also cause an increase in mental efficiency as well as musical, artistic and esthetical sensitivity in a group of children and young people. Such activities bring pleasure to a young patient. The excess of energy, which is typical of children in the adolescent age (despite the illness), enhances their active and easy participation in music activities. An increase in self-esteem among the children in the group can be observed. Music therapy activities conducted in the cardiological ward should include an ordered set of exercises which are related to the biological rhythm of a human being, such as slow and calm breathing, steady heart action as well as everyday behaviour (yawning, stretching, clapping one's hands or marching step) [8].

Moreover, it can be noticed that music positively influences the emotional condition of a child by soothing or stimulating him/her (depending on the current needs). On the basis of the authors' own research it has been stated that the music whose rhythm is much faster than heartbeat has a stimulating effect. Such music can be applied to apathic and inactive children. Its tempo should be very fast, i.e. it should be equal to 100–120 pulse beats per minute and be of stimulating character. Such tempo is faster than heartbeat and can be found in folk music or modern popular music. The rhythm of natural heartbeat amounts to approx. seventy beats per minute, which corresponds to the rhythm of reggae, blues and the music of the 60s. Rhythm slower than seventy beats per minute can be found in various types of lullabies as well as religious songs, etc. This music (apart from the classical music) usually causes the child to relieve stress and relax [8].

An important place in music therapy is occupied by stimulating music. This kind of music includes: compositions from the epoch of the Renaissance, Baroque, the classical and romantic epoch, with the domination of the works by Bach, Beethoven, Brahms, Dvorak, Grieg, Haydn, Josquin des Pres, Mozart, Brecht, Rachmaninov, Vivaldi and Willaert [6].

THE MACIEJ KIERYŁ MUSIC THERAPY METHOD

During activating music therapy sessions with cardiological patients the project of Maciej Kierył was applied. The sessions consisted of the following: releasing stress (O), rhythmising (Z), raising sensitivity (U), relaxation (R) and activation (A), i.e. the so called OZURA. The effects of these activities were influenced by many factors, e.g. the time of the day, participation in examinations and procedures, etc. The children who were directly after diagnostic procedures did not usually take part in the activities, unless their health condition and mood allowed for it. The children reacted differently to the everyday stress connected with hospitalisation. Sometimes they were calm and

silent, not wishing to take part in any motor activity, while on other occasions they were excited and full of energy. Yet, each of the children required individual attitude, which was particularly visible during the exercises. They were, however, selected taking into consideration the health condition of a given child. The form of the activities was thus mainly demonstrative and educational. The younger the child, the easier the exercises recommended to him/her during the sessions. If the child was older (or participating in the activities for another time), the required exercises were more varied and more demanding [8].

During the classes some rules were established, such as punctuality since opening and closing doors by those who were late distracts other participants' attention. The small patients were usually lead to the day-room for the time of sessions. Talking during the music therapy sessions was sensibly restricted. However, verbal and non-verbal communication between the child and the person leading the session concerning giving instructions relating to the way of doing a given exercise or encouragement to participate in them was desirable [8].

The children with mental disorders (in this case with the Down syndrome) were also a part of the therapy group. The patients varied in terms of age and development. This created the possibility of compensating the difficulties in terms of communication between the person conducting the session with the group. Usually, in such a group there were patients who were mature in terms of age and who properly understood the provided instructions (or encouragement) and completed tasks appropriately. These patients were role models for the rest of the group, which also gave good therapeutical effects. It turned out that, depending on what results are intended, music therapy is a method useful for activation, i.e. increasing the patients' mobility or for lowering their level of aggression caused by the experienced stress [8].

CONCLUSIONS

As a general remark, it should be stated that, unfortunately, music therapy activities in most hospitals constitute a rather exclusive phenomenon (even in terms of the whole country).

Activities conducted in the children's cardiology ward truly included all the elements of music therapy, i.e.: singing, games, rhythmical gymnastics, listening to music and even composing it. In the light of the observations and analyses carried out, it became evident that • music therapy applied to children (especially the older ones) caused not only healing but also educational effects. The children's interest in music and sensitivity related to its reception increased and the general degree of esthetical sensitivity extended • in terms of pragmatics, there is an important observation that children aged 6–12 participate in music therapy activities most willingly. Children at this age turned out to be the most rewarding participants of such activities. Older children, in turn, often reacted with a total lack of interest, irony or even disdain (especially boys) • a negative phenomenon has also been observed in young patients concerning the lack of general preparation in the scope of music and musical culture (often there was the lack of an appropriate reception of music), especially in the case of older children and adolescents, which undoubtedly is caused by a bad condition of the culture of listening to music in the family environment.

To sum up, the validity of the sense (not only theoretical but also pragmatical) of introducing music therapy in all types of medical institutions should be emphasized since, apart from the therapeutical function, it also has a general cultural value both for children and their parents, who often only in the event of the child's sickness find time for the so called higher needs, also referred to as spiritual needs.

REFERENCES

1. Gąsienica-Szostak A.: Muzykoterapia w rehabilitacji i profilaktyce. PZWL, Warszawa 2003.
2. Hatem T. P., Lira P. I. C., Mattos S. S.: The therapeutic effects of music in children following cardiac surgery. *Journal de Pediatria*, 82, 3, 2006.
3. Kierył M.: Mobilna rekreacja muzyczna. Warszawa 1995.
4. Kronenberger M.: Muzykoterapia. Podstawy teoretyczne do zastosowania muzykoterapii w profilaktyce stresu. Mediator, Szczecin 2003.
5. Lewandowska K.: Muzykoterapia dziecięca, Gdańsk 1996.
6. Marcanto C., Munhoz E. C., Menim M. M., Albach M. T.: Application of Receptive Music Therapy in Internal Medicine and Cardiology. *Arq Bras Kardiol.*, 77, 2, 2001.
7. Marciniowicz L.: Umiejętności komunikowania się. *Magazyn Pielęgniarki i Położnej*, 4, 1996.
8. Muzyczka K.: Muzykoterapia w praktyce wychowawczej Dziecięcego Szpitala Klinicznego w Lublinie. Niepublikowana praca magisterska, Wydział Pedagogiczny Wyższa Szkoła Związku Nauczycielstwa Polskiego w Warszawie, Warszawa 2006.
9. Pietras J.: Muzykoterapia dla kobiet oczekujących dziecka. *Nasz Głos*, 6, 2002.
10. Pilecka W.: Przewlekła choroba somatyczna w życiu i rozwoju dziecka. *UJ*, Kraków 2002.
11. Tores I. D.: Music is medicine for the hart. *Journal de Pediatria*, 82, 3, 2006.

SUMMARY

The article is based on the authors' own research and constitutes a presentation of activities connected with music therapy among patients of a children's ward of different age and with various disorders. The study was focused on cardiological patients since in this category of patients the positive impact of music therapy was particularly visible due to the fact that in the case of these patients the treatment was both long-lasting and systematic, so it was possible to observe the effects. The research are conducted in the Children's Clinical Hospital (CCH) in Lublin, beginning in February 2006.

STRESZCZENIE

Artykuł ten jest oparty na badaniach własnych i stanowi prezentację działań związanych z leczeniem muzyką, prowadzonych wśród pacjentów oddziału dziecięcego w różnym wieku i z różnymi schorzeniami. W opracowaniu skoncentrowano uwagę na pacjentach kardiologicznych, gdyż w tej kategorii pacjentów pozytywne oddziaływanie muzykoterapii było szczególnie zauważalne z uwagi na to, że byli to chorzy, których leczenie było zarówno długotrwałe, jak też systematyczne, a efekty były dostępne obserwacji. Badania były prowadzone od lutego 2006 r. w Dziecięcym Szpitalu Klinicznym (DSK) w Lublinie.

