

**146. MUSIC THERAPY: THE EFFECTS OF THE ALTERED STATE OF CONSCIOUSNESS (MUSICAL TRANCE) IN PAIN ATTENUATION AND DISAPPEARANCE DURING A SYMPHONIC CONCERT**

Author: **Daniela Mîrzac**

Scientific adviser: Ion Moldovanu, MD, PhD, University Professor, Department of Neurology *Nicolae Testemitanu State University of Medicine and Pharmacy, Chisinau, Republic of Moldova*

**Introduction.** The impact of music on the brain is well-known and widely researched, as well as the use of different music therapy strategies in various medical situations (the treatment of anxiety, depression, stress, neurovegetative disorders, etc.).

**Aim of the study.** Investigating the analgesic effects on listeners trained according to certain rules of music perception in order to amplify, as much as possible, its therapeutic effects in a classical music concert.

**Materials and methods.** The analysis of questionnaires applied immediately after listening to classical music (F. Chopin, concerts Nr. 1 and 2) in the project "Music Therapy" VI edition, to patients suffering from pain (77 subjects) and comparing them with the tendency established in previous concerts.

**Results.** Of the total patients with pain at the beginning of the show, the disappearance or attenuation of pain was recorded at 84%, which is within the scope of the average tendency of 73.6 (established over 6 concerts, 1162 questionnaires). Factors such as female gender, younger age, no music studies, no psychotropic drugs prior to the concert, presence of stress - all of these can play a favorable role in the disappearance of pain while listening to classical music. The value of the feelings of happiness, joy, faith, and hope in group A (pain diminished or disappeared) was statistically significant ( $p < 0.05 - 0.005$ ) higher than those in group B (pain persisted). The only exception was the state of boredom, more pronounced in group B ( $p < 0.05$ ). Two affective phenomena (internal calm and the love) and four cognitive phenomena (the feeling of having no body, feeling of being connected to a higher force, pleasant bodily sensations, the impression that the sounds came from far away) - all these were statistically conclusively more pronounced in the group in which the pain disappeared as opposed to the group in which the pain persisted.

**Conclusions.** (1) The music can have a therapeutic effect only when the patient is thoroughly prepared to perceive it in compliance with certain rules of entering into an altered state of consciousness (musical trance). (2) The patients whose pain disappeared after listening to the music, as the results show, were significantly more sensitive to the effects of the music as opposed to the patients whose pain persisted after the concert ended. Thus, the phenomenon of the musical trance seems to be in fact the essential mechanism that induced the analgesic effects in group A, i.e. in patients for which the pain disappeared.

**Key words:** pain, altered state of consciousness, musical trance, music therapy