

## 18. THE EFFECT OF MUSIC THERAPY ON PATIENTS FOLLOWING HEART SURGERY

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**Introduction.** Over time, music therapy is increasingly used to reduce or stabilise medical symptoms or complications, whether it is chronic pathology in psychiatry, neuropsychiatry, neurology, cardiology, oncology, or palliative care, or temporary symptoms, such as preoperative stress and anxiety or postoperative pain. The therapeutic potential of music is suggested by its effects on the body. It acts on the cortical, limbic and paralimbic levels, leads to the release of dopamine, serotonin, oxytocin, influences the immune system, as well as the social attitude of the patient.

**Background.** Up-to-date information on methods for quantifying stress, pain and anxiety levels in patients after heart surgery were analysed in order to demonstrate the influence of music therapy on the patient's pre- and postoperative condition.

**Methods and materials.** Research motors PubMed and Google Scholar submitted 80 results, 10 of which met the research criteria.

**Results.** All studies used the Visual Analogue Scale, Numerical Calibrated Scale, or McGill Pain Questionnaire to quantify the patient's postoperative pain level after heart surgery. 3 studies performed by researchers in Turkey, Iran, and China showed a significant decrease in the need for painkillers, while another 7, mainly in Europe, did not show an improvement in the patient's vital signs after music therapy. 5 studies conducted in Europe quantified the level of anxiety, using the Analog Visual Scale, 2 of them showing a significant improvement, while another 3 do not confirm the importance of therapy. The heterogeneity of the results obtained is probably due to the small number of participants in the study, the subjective perception of pain, anxiety, types of music, the part of the day in which the music therapy was performed, but also the surgeries previously performed.

**Conclusion.** The analysed studies prove the therapeutic potential of music in cardiac patients in the postoperative period. Due to the significant heterogeneity of the study results, there is no evidence to support the use of music therapy in postoperative pain management. This underscores the importance of developing a standard protocol for music therapy, identifying a cohort group, establishing the optimal duration and frequency of therapy.