

Analysis of a Review Article on the Use of Music to Reduce Anxiety and Analgesic Consumption in Patients Undergoing Surgery

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Letter to the Editor

I have read with interest the review article by Dr. Jeremy Lee Kay Hock on the role of music in reducing anxiety and the amount of sedatives required in patients undergoing surgery [1]. The topic of this short review article may be considered very current and historically known at the same time, because, although the first scientific evidence on the anxiolytic and neuroendocrinological effects of music dates back to the eighties of the last century, during the perioperative time it is still not very common (especially here in Italy) the use of music as a non-pharmacological tool [2]. The topic is very actual and, if well analysed and studied, it could lead in the near future to organizational changes in the international operating rooms, highly because “music may not be available in all circumstances for every single patient” [1].

The author made several strong supportive statements as “Music has been shown to be a good non-pharmacological alternative to sedatives used during surgery” and “has also been proven to decrease anxiety levels in patients and increase overall patient satisfaction”. Unfortunately, because of the shortness of this review article, the main topic is only slightly analysed, and many aspects could not be deepened.

Apart from the ones already highlighted by the author (age, gender, and emotional state, and music preference, personal associations with the music, prior musical training, and culture, which are likely to influence the outcomes), in particular it could be interesting to define which kind of music was listened across the experiments, and to determine if it should be used different music based on the operative time and how to explain the cases in which the music therapy was not effective.

This lack of in-depth analysis leads to a reduced clarity of the importance of the available evidence showed through the text, but at the same time leaves room for many open questions that can be analysed in future studies and new reviews. The main objective should be to understand how to use this non-pharmacological tool at the best.

In particular, it is of primary importance, not only to analyse the articles with positive results, but also to understand why some of the items cited conclude that “music therapy was not found to reduce sedative requirements” and “No relationship was found between hearing music or not and the patient's comfort level” [3-5]. Could this controversial result be due to the difference in surgical programs or the analgesic management? Does it depend on the patient's consciousness?

In the operating room as well in the waiting room there is a constant search for methods to improve patient's well-being and satisfaction as for the best clinical practice. If on the one hand music can help relax the patient, on the other hand music played in the operating theatre can interfere with team communication [6]. As the patient well-being is our primary aim, it is also important for the best clinical practice the effect of music on the health professionals caring for the patient, and so this topic should be better analysed.

In 2005 an interesting randomized controlled trial showed that, in patients undergoing orthopaedic surgery under regional anaesthesia, it would be safe to use explanation and music instead of propofol but at the cost of a reduced patient satisfaction score compared to when the

more expensive drug is administered, but despite this single evidence, music should not be seen as an “alternative”, rather it should be considered as an “aid” to the routine procedures of health professionals [7].

In a big study published in 2015 on Lancet by Dr Hole, it was found that music could be offered as a way to help patients reduce pain and anxiety during the postoperative period and that timing and delivery can be adapted to individual clinical settings and medical teams, so a possible indication for the future could be to make special operative units where music is used as a non-pharmacological tool, especially during the postoperative time [8].

In conclusion, there is still much more to do, it is probably the lack of literature evidence or the lack of applicability that has limited the use of music as a non-pharmacological tool in the operating theatre until now, so it is needed to further investigate this topic and prioritise indications that are derived from evidence based medicine (EBM) clearly stating and analysing this findings in future reviews so that the applicability may show its scientific basis [9,10].

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