

Role of the music therapy in neurorehabilitation of patients with disorders of consciousness – looking for rules of evidence based practice

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ABSTRACT

Neurological early and long-term rehabilitation plays a crucial role in the therapy of patients with disorders of consciousness (DOC) such as unresponsive wakefulness syndrome or minimally conscious state. Neuroscience tries to explain the effect of music therapy on all levels of the nervous system = activity in patients with DOC, but full understanding is still incomplete. This paper attempts to answer how current clinical outcomes may reflect the influence of various factors including music's capacity. Based on their interdisciplinary perspective and previous experiences, the authors try to investigate the extent to which current occupations have been explored. The authors analyzed the literature data concerning the results of the studies published until the first half of 2016, to sum up the current state of research. Research in the main databases: PubMed, PEDro, Health Source: Nursing/Academic Edition was

made using specified keywords and inclusion and exclusion criteria. Next, the authors sorted them all out into a coherent view of the current state. Music listening may constitute a part of an enriched environment setting. However, due to weak evidence, the therapeutic value of music-based interventions in patients with DOC is uneven or limited. The role of music therapy is thus complementary. Standardized clinical settings, protocols, and behavioral measures should be developed to increase its clinical validity, reliability, sensitivity, and objectivity. There is a reasonable hypothesis that music may produce a high level of diagnostic and therapeutic outcomes as stimuli usually reflecting strong personal meaning in patients with DOC.

Keywords: Neurorehabilitation, consciousness, arousal, disorders of consciousness, music, evidence-based medicine

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