

Potential benefits of music for patients with epilepsy

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Human race has been living with music since ancient times. People listen to music, play music, and create music. The connection of musical sounds and the brain functions is a major challenge of modern neuroscience. It has long been proven that music has a psychological effect on human beings, including induction and modification of cognitive states, moods and emotions. It is possible that brain mechanisms involved in musical processing may be involved in the generation and propagation of seizures, manifesting with musical semiology. Hyperexcitable cortical areas may also become sensitized to specific musical triggers and may explain the basis of musicogenic epilepsy. On the other hand, anticonvulsant role of music has largely been explored in cognitive science. The cognitive effects of music are well documented in the literature, although these effects have been subject to scrutiny. In our review of available literature, we explored the potential of listening, and playing music as a part of chronic anticonvulsant therapy. All of the collected data were distributed in three categories: music as a factor in reduction of the number of seizures, joint effect of music and pharmacotherapy, and the effect of music who underwent neurosurgical procedure. We have presented all our findings in infographics. In our review-study all the results clearly indicate that the music would be a powerful tool in the service of the neurological rehabilitation. Music activates many brain structures, increases cerebral circulation and stimulates the brain, but there is limited evidence of the anticonvulsant effect of music in epilepsy.