## Music therapy for prematures. Further overtension or necessary stimulation?

• Reiner Haus<sup>1</sup>

## **Abstract**

Background: More than ever before the neonatological care besides the medical and nursing work has to been balanced between protecting the child against overextension due to the concept of "minimal handling" and on the other hand the necessary fostering of the young patients psychic and sensomotoric development during the long stationary treatment. In addition to known approaches of auditive stimulation as receptive music therapy a concept of active music therapy methods based on the Nordoff / Robbins creative music-therapy (University Witten / Herdecke) is presented in a case-report.

Patient and Methods: The report describes in a single case-report the music-therapeutic work with a premature of the 23+3.<sup>th</sup> week of pregnancy at the neonatology unit of the Vestische Kinder- und Jugendklinik Datteln, Universität Witten / Herdecke. The main focus was the evaluation of the prematures' reactions on specific synchronization of motoric, sensory and acoustical stimulation.

**Results:** Positive reactions allow to presume the effectiveness of music therapy with early born children as they are already shown in clinical studies about receptive music therapy. On the level of involuntary motional actions in the area of head-, face- and hand movements increased directly reactions of awareness on the coordination of sensomotoric and acoustical stimulation have been observed. Significant increase of oxygen partial pressure and reduction of heart/pulse rate during music therapy sessions seem to cause positive physiological effects.

Conclusions: active music therapeutic treatment does not seem to be an other risk of overtension for prematures, but offers through the coordination of different levels of perception an adequate development fostering stimulation.

## Corresponding author:

• Dr. rer. medic. Reiner Haus, Universität Witten/Herdecke, Vestische Kinder- und Jugendklinik Datteln, Dr.-Friedrich-Steiner-Straße 5, D-45711 Datteln, Germany, Tel.: +49 (0)2363/975-489, Fax: +49 (0)2363/64211 r.haus@kinderklinik-datteln.de

<sup>&</sup>lt;sup>1</sup> Universität Witten/Herdecke, Vestische Kinder- und Jugendklinik Datteln, Datteln, Germany