EFFECTIVENESS OF MUSIC THERAPY IN THE TREATMENT OF CHILDREN WITH MIGRAINE HEADACHE

ANNE KATHRIN NICKEL¹, THOMAS K. HILLECKE¹, RIEKE OELKERS², PETER PARZER², FRANZ RESCH², HANS VOLKER BOLAY³

¹ Deutsches Zentrum für Musiktherapieforschung (Viktor Dulger Institut) DZM e.V., AN-Institut der Fachhochschule Heidelberg (German Center for Music Therapy Research)
² Kinder- und Jugendpsychiatrie der Universität Heidelberg (Child and Adolescent Psychiatry of Heidelberg University)
³ Fachhochschule Heidelberg, (University of Applied Sciences Heidelberg)

AIM OF INVESTIGATION: The aim of this study is to evaluate music therapeutic treatment and drug versus placebo treatment in children with migraine headaches, of such strength and / or frequency that preventive interval treatment is indicated.

For this study a scientifically evaluated music-therapeutic concept for adults with chronic, non-malignant pain has been adapted to the requirements of treatment of children with migraine. As a preventive drug we use Petadolex, which proved effective and placebo superior in adult migraine interval treatment.

METHODS: A randomized, placebo-controlled, three-armed parallel group design (music therapy, petadolex, placebo) is used, the two drug arms (petadolex, placebo) are double-blind. Sample: 60 children are included in the trial, so that each of the three experimental groups consists of n=20.

Inclusion criteria: Age between 8-12 years, 2-6 attacks/month, 24 h between attacks, migraine after IHS (1.1, 1.2), migraine since > 1 year.

Target variables are headache variables as well as coping variables and psychological factors. The target variables are obtained through a headache diary or through interviews and psychological questionnaires.

Data collection: pre-post-measurements, process measurement daily (migraine diary - 8 weeks baseline, during therapy and 8 weeks post-line) and every 4 weeks (psychological questionnaires) as well as follow-up after 48 weeks.

RESULTS: The criterion for measuring the effectiveness of therapy on patients’ headache is mainly the number of attacks per week. Since frequencies of an event over a certain period of time usually follow a poisson-distribution, the frequency of events over time is analyzed with a random effect Poisson-Regression.

The change in coping variables and psychological factors is assessed using standardized measures which reach a test-retest reliability of at least .8. It is assumed that the measures provide approximately normally distributed values. Therefore the analysis is performed using a random effect Regression.

Data is still being collected, but will be analyzed and ready for presentation in June 2003.