Music Therapy for Children with Migraine

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Migraine
through children’s eyes
Epidemiology

Headache is one of the most common somatic disorders of schoolchildren. Since 1960, prevalence has increased, while the mean manifestation age has decreased. Recurrent headache is often underestimated by parents and teachers. Before adolescence, males are affected more frequently than females (m>f), whereas after adolescence, females are affected more frequently than males (f>m).
Chronification

children and adolescents

Psychiatric disorders

85% chronification

adults

60% chronification

sufficient therapy
insufficient therapy

DZM
Comorbidity

- migraine: comorbidity with anxiety, depression, (suicide attempts, drug addiction)
- often to a relevant extent (psychiatric diagnosis)
- probably bi-directional correlation between migraine - depression
- characteristic for children:
  - more days absent in school
  - more problems at school (primary headache as model for „school-avoiding“ somatic disorders)
  - more other somatic complaints (somatisation)
Sample

• **60 children** at the age of 8 - 12 years
• **migraine**
  - persisting symptoms $\geq$ 1 year,
  - frequency of pain attacks $\geq$ twice per month

• **exclusion criteria:**
  – severe other illness
  – present psychotherapy
  – other forms of headache
Design

- **Month:**
  - 2 months:
    - Migraine Coping/Comorbidity
  - 4 months:
    - Music therapy (+ standard medical care)
    - Petadolex® (+ standard medical care)
  - 6 months:
    - Migraine Coping/Comorbidity
  - 12 months:
    - Migraine Coping/Comorbidity

- **Diary:**
  - 8 weeks diary

- **Placebo:**
  - (+ standard medical care)
Music therapy group

- Individual treatment
- 12 weekly treatment sessions (50 minutes each)
- 4 monthly family counseling (50 minutes each)
- Use of a specific treatment concept
- Monthly medical counseling
- Multi-disciplinary case supervision
Theoretical framework

- Heidelberg Model for children with migraine
- Inhibited expressiveness
- Interdisciplinarity
- Age-specific pain concepts
- Common and specific factors
- Family therapeutic concepts
- Phase model
# Treatment Phase #1

## Remoralization (Session 1 to 4)

<table>
<thead>
<tr>
<th>Therapeutic goals</th>
<th>Specific factors of music therapy</th>
<th>Music therapeutic techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building of a relationship</td>
<td>Relationship building by the unifying experience of musical interaction</td>
<td>Duo plays</td>
</tr>
<tr>
<td>Activation of “remembered well-being”</td>
<td>Musically supported activation of cognitive and emotional resources</td>
<td>Musically guided imagery with induction of relaxation</td>
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<tr>
<td>Training of body awareness</td>
<td>Music as a tool for increasing physical perception and expression</td>
<td>Body percussion</td>
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<td>Guided movement with music</td>
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<td>Vibro-tactile stimulation</td>
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## Treatment Phase #2

### Remediation (Sessions 5 to 9)

<table>
<thead>
<tr>
<th>Therapeutic goals</th>
<th>Specific factors of music therapy</th>
<th>Music therapeutic techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>work on symptoms</td>
<td>externalization of pain in music</td>
<td>Symptom improvisation</td>
</tr>
<tr>
<td>work on inhibited expressiveness</td>
<td>increase of musical flexibility imaginative activation and reproduction through music</td>
<td>Ritual improvisation</td>
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<td></td>
<td></td>
<td>Variation of musical parameters</td>
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<td></td>
<td></td>
<td>Daydream improvisation</td>
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<td></td>
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<td>Musical family symbolization</td>
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</table>
## Treatment Phase #3

### Rehabilitation (Sessions 9 to 12)

<table>
<thead>
<tr>
<th>Therapeutic goals</th>
<th>Specific factors of music therapy</th>
<th>Music therapeutic techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning and implementation of flexible/alternative forms of behavior and experience</td>
<td>Training of adequate forms of interaction through non-verbal techniques</td>
<td>Reality improvisation</td>
</tr>
<tr>
<td>Generalization</td>
<td>Stabilization of therapeutic accomplishments and preparation of end of therapy</td>
<td>Musical role play</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Musical self-portrait and treatment evaluation</td>
</tr>
</tbody>
</table>