Does the treatment of maternal ADHD enhance the effectiveness of parent management training for children’s ADHD?

Study protocol of a randomized controlled multicenter trial

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Objectives:
Parent training is an effective approach in the treatment of childhood Attention-Deficit Hyperactivity Disorder (ADHD). However, treatment outcome seems to be sparse if the parents are also affected by the disorder (Evans et al., 1994; Sonuga-Barke et al., 2002; Harvey et al., 2003). Because ADHD is highly familial this may be an important reason for treatment failures. The purpose of this study is to evaluate whether the treatment of maternal ADHD enhances the efficacy of parent management training for children’s ADHD. To our knowledge this will be the first randomized controlled study on combined treatment of mothers and children affected by ADHD.

**Design:**
randomized controlled multi-center trial, open study design, observer blinding

**Subjects:**
to be randomized: 144 mother-child pairs

**Principal inclusion criteria:**
All patients:
• diagnosis of ADHD according to DSM-IV criteria
Children:
• age 6-12 years
• no medication or on stable medication since at least 4 weeks before baseline assessment
Mothers:
• age 18-60 years, inclusive
• a score of 30 or more on the short version of the Wender-Utah-Rating-Scale

**Principal exclusion criteria:**
All patients:
• Study-specific interventions for the treatment of ADHD within the last 6 months before screening
• need for inpatient treatment
• I.Q. < 80
Children:
• pervasive developmental disorder, psychosis, schizophrenia, bipolar disorder, severe depressive episode
Mothers:
• schizophrenia, bipolar disorder, borderline personality disorder, antisocial personality disorder, suicidal or self injurious behaviour, autism, motor tics, Tourette’s syndrome, substance abuse/dependence within 6 months prior to screening

**Primary outcome:**
extent of externalizing symptoms in children: number of symptoms of ADHD and ODD (oppositional defiant disorder) present during the last two weeks before assessment (KIDDIE-SADS, blind investigator-rating)

**Main secondary outcomes:**
Children:
• Strength and Difficulties Questionnaire, SDQ (mother and teacher report)
• family functioning: Home-Situations-Questionnaire (HSQ, mother-report)
• impact of the child’s symptoms on the family: Family Impact Questionnaire (FIQ, mother-report)
• process-quality, related to parent training (Fragebogen zur Beurteilung der Behandlung, FBB, mother- and therapist-report)
Mothers:
• Conners Adult ADHD Rating Scale (CAARS-S-L, self-rating mother; CAARS-O-L, blind investigator rating)
• Symptom-Checklist (SCL-90-R, self-rating mother)

**Treatments:**
Manualized cognitive-behavioural programs are used for group psychotherapy (ADHD mother) and parent management training (ADHD child). Treatment integrity will be ascertained by independent supervision.

**Experimental group:** treatment of mother’s ADHD with methylphenidate and a specific group psychotherapy program (12 weekly sessions, followed by monthly sessions, duration: 52 weeks; treatment manual: Hesslinger et al., 2004)

**Control group:** clinical management for mother’s ADHD without any specific pharmacological or psychotherapeutic interventions (12 weekly sessions, followed by monthly sessions, duration: 52 weeks)

In both groups - after week 13 - children and their mothers will receive parent management training to treat the child’s ADHD (12 weekly sessions and 2 booster sessions)

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**References**
are available on request

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**AIMAC: ADHD in mothers and children** (study sites: University Hospitals of Wuerzburg, Freiburg and Saarland; Central Institute of Mental Health Mannheim)

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