

Does the treatment of maternal Attention Deficit Hyperactivity Disorder enhance the effectiveness of parent management training for children's attention deficit hyperactivity disorder?

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Registration date 29/03/2007	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 17/12/2018	Condition category Mental and Behavioural Disorders	☐ Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
BMBF-ADHD-C2

Study information

Scientific Title

Does the treatment of maternal Attention Deficit Hyperactivity Disorder enhance the effectiveness of parent management training for children's attention deficit hyperactivity disorder?

Acronym

AIMAC: (ADHD In Mothers And Children)

Study objectives

Attention Deficit Hyperactivity Disorder (ADHD) is a serious mental disorder with a persistent pattern of severely impaired attention and concentration, hyperactive and impulsive behaviour, emotional instability, restlessness and disorganised behaviour. The prevalence in childhood is estimated to be about 5% and in adulthood the prevalence is indicated to 2% and 4%.

ADHD is highly familial. About one quarter of children presenting with ADHD will have an ADHD parent, and more than half of all parents with ADHD will have a child with ADHD. Bringing up a child with ADHD can prove to be very stressful. Calm and consistent parenting in structured settings is especially important.

However, parents with ADHD are less likely to be able to provide such care. Parent's ADHD can be expected to have negative impact on parenting, family functioning, and the child. Parental ADHD may also have negative influence on the treatment outcome of childhood ADHD. This may especially be the case for the efficacy of parent management training, because parents with ADHD are expected to present difficulties in following instructions and in complying with the treatment regime.

Furthermore they tend to impulsively switch to alternative treatment plans promising quick cures, to act disorganised and argumentative or to have problems with the implementation of token economies and consistent rewards. Therefore, the control of ADHD symptoms in parents is supposed to be a prerequisite for the success of parenting programs for ADHD children.

The proposed study will be the first controlled multi-centre clinical trial investigating the effect of the treatment of maternal ADHD on the efficacy of parent management training for childhood ADHD.

The principal research question is: Does the treatment of maternal ADHD enhance the effectiveness of parent management training for children's ADHD?

Other questions to be addressed are:

1. To what extent does treatment effects generalise across problem areas (ADHD core-symptoms, externalising symptoms at home, family functioning, global symptom severity), settings (school and home environment) and rater-perspectives respectively (child, mother, teacher)?
2. Is there a greater acceptance of parent management training in mothers treated for ADHD?
3. Are the effects of treatment stable over time?
4. Does the sole treatment of maternal ADHD already have influences on the child's symptoms?
5. Is there an association between the child's co-morbidity and treatment outcome?

The main hypothesis is: parent management training for children's ADHD is more effective in children whose mothers received treatment for adult ADHD as in children whose mothers did not.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics Committee of the faculty of medicine, Wuerzburg University, ref: 120/06

Study design

Randomised controlled trial, open study design, observer blinded

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Attention Deficit Hyperactivity Disorder (ADHD) in children and their mothers

Interventions

Two-armed design:

Experimental Group (EG): treatment of mother's ADHD with methylphenidate and a specific group psychotherapy program (12 weekly sessions, followed by monthly sessions, duration: 52 weeks)

Control Group (CG): 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 two booster sessions).

Manualised cognitive-behavioural programs are used for group psychotherapy (ADHD mother) and parent management training (ADHD child). Trained therapists are treating mothers and children. Treatment integrity is ascertained by independent supervision.

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Methylphenidate

Primary outcome(s)

Primary endpoint is the extent of externalising symptoms in the children:

1. ADHD-ODD-Scale (ODD: Oppositional Defiant Disorder): number of symptoms of ADHD and ODD present during the last two weeks before assessment (ADHD-section and ODD-section of the Kiddie Schedule for Affective Disorders and Schizophrenia [KIDDIE-SADS], blind investigator-rating)

Key secondary outcome(s)

Children:

1. ADHD-section and ODD-section of the KIDDIE-SADS (diagnosis +/-, responders-nonresponders: 30 percent reduction of the ADHD-ODD-Scale, blind investigator-rating)
2. Externalising and internalising symptoms: Strength and Difficulties Questionnaire (SDQ) (mother and teacher report)
3. Family functioning: Home-Situations-Questionnaire (HSQ, mother-report)
4. Impact of the child's symptoms on the family: Family Impact Questionnaire (FIQ, mother-report)
5. Process-quality, related to parent training (Fragebogen zur Beurteilung der Behandlung, FBB, mother- and therapist-report)

Mothers:

1. Symptom-Checklist (SCL-90-R, self-rating mother)
2. Conners Adult ADHD Rating Scale (CAARS-S:L, self-rating mother; CAARS-O:L, blind investigator rating)

Completion date

31/12/2009

Eligibility

Key inclusion criteria

All patients:

1. Voluntary and written informed consent of the mother, the child and other persons having the care and custody of the child

Children:

1. Aged six to 12 years
2. Diagnosis of ADHD according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria
3. No medication or on stable medication for at least four weeks before baseline assessment

Mothers:

1. Diagnosis of ADHD according to DSM-IV criteria
2. A score of 30 or more on the short version of the Wender-Utah-Rating-Scale
3. Aged 18 to 60 years, inclusive
4. Chronic course of ADHD symptoms from childhood to adulthood, onset of ADHD symptoms before the age of seven
5. No abnormality detected on physical examination, routine blood testing (blood count, renal, hepatic and thyroid function), Electrocardiogram (ECG) and Electroencephalogram (EEG)

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Mixed

Sex

All

Key exclusion criteria

All patients:

1. Participation in another clinical trial
2. Specific interventions for the treatment of ADHD within the last six months before screening
3. Need for inpatient treatment

Children:

1. Intelligence Quotient (IQ) less than 80
2. Pervasive developmental disorder, psychosis, schizophrenia, bipolar disorder, severe depressive episode

Mothers:

1. IQ less than 80
2. Schizophrenia, bipolar disorder, borderline personality disorder, antisocial personality disorder, suicidal or self-injurious behaviour, autism, motor tics, Tourette's syndrome
3. Substance abuse/dependence within six months prior to screening. Episodic abuse is not an exclusion criterion
4. Neurological diseases, seizures, glaucoma, uncontrolled hypertension
5. Current eating disorder/low weight (Body Mass Index [BMI] less than 20)
6. Pregnancy or breast-feeding

Date of first enrolment

01/04/2007

Date of final enrolment

01/05/2010

Locations**Countries of recruitment**

Germany

Study participating centre

Wuerzburg University Hospital

Wuerzburg

Germany

D-97080

Sponsor information

Organisation

Wuerzburg University Hospital (Germany)

ROR

<https://ror.org/03pvr2g57>

Funder(s)

Funder type

Government

Funder Name

Bundesministerium für Bildung und Forschung

Alternative Name(s)

Federal Ministry of Research, Technology and Space, Bundesministerium für Bildung und Forschung, Federal Ministry of Education and Research, BMBF

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Germany

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2013		Yes	No
Results article	results	01/12/2015		Yes	No
	results				

[Results article](#)

13/12/2018

Yes

No