# Impact of an infant sleep parenting intervention at age 6 months on infant sleep problems at ages 6 to 12 months and maternal psychological and physical wellbeing

Submission date 07/09/2004	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively registered</li> <li>Protocol</li> </ul>
<b>Registration date</b> 04/11/2004	<b>Overall study status</b> Completed	<ul> <li>Statistical analysis plan</li> <li>[X] Results</li> </ul>
Last Edited 28/01/2013	<b>Condition category</b> Mental and Behavioural Disorders	[] Individual participant data

#### Plain English summary of protocol

Not provided at time of registration

**Study website** http://www.rch.org.au/ccch/research.cfm?doc\_id=10629

### **Contact information**

**Type(s)** Scientific

**Contact name** Dr Harriet Hiscock

#### **Contact details**

Centre for Community Child Health Royal Children's Hospital Flemington Road Parkville Melbourne Australia 3052 +61 (0)3 9345 6150 harriet.hiscock@rch.org.au

### Additional identifiers

EudraCT/CTIS number

#### **IRAS number**

ClinicalTrials.gov number

Secondary identifying numbers NHMRC 237120; ACTRN12607000036415

### Study information

#### Scientific Title

Impact of an infant sleep parenting intervention at age 6 months on infant sleep problems at ages 6 to 12 months and maternal psychological and physical wellbeing: a cluster controlled trial

#### Acronym

ISS - Infant Sleep Study / KIDS - Kids Sleep Study

#### **Study objectives**

Sleep problems (e.g. frequent night waking) in babies aged 6 to 12 months and impact of treating problems on maternal psychological and physical wellbeing.

1. A brief behavioural intervention delivered by Maternal and Child Health (MCH) nurses will lead to the following outcomes:

1.1. Decreased prevalence of infant sleep problems (3 months after treatment)

1.2. Improved infant sleep patterns (3 months after treatment)

1.3. Improved wellbeing for mothers with initial scores indicative of postnatal depression (3 months after treatment)

1.4. Sustained improvement in maternal wellbeing and infant sleep patterns (5 months after treatment)

2. A structured training and education package emphasising simple behavioural management strategies will lead to a sustained increase in knowledge, competence and confidence of MCH nurses in addressing sleep problems in 8-10 month infants

#### Added 23/06/10:

KIDS: Kids Sleep Study: Long-term outcomes and impacts on mental and physical health at age 6 of a randomised controlled trial of a behavioural sleep intervention delivered at 8-months - A follow up study, which ran from 01/04/09 to 31/12/09, was added to this trial called KIDS (all updates pertaining to the follow up study will be headed with the title KIDS) with the following hypotheses:

In a cohort of children drawn from the pre-existing Infant Sleep Study RCT, we hypothesise that: 1. At child age 6 there will be no meaningful differences between intervention and control groups in:

1.1. Current child sleep problems

1.2. Child emotional and behaviour problems

1.3. Maternal depression

1.4. Child stress as measured by salivary cortisol and glycosylated haemoglobin and

1.5. Disengaged neglectful parenting style and childrens disinhibited attachment; proxies for child attachment to the primary caregiver

- 2. Overweight/obesity at age 6 will be predicted by:
- 2.1. Group membership (i.e. intervention versus control groups), or
- 2.2. Shorter sleep duration at ages 12 and/or 24 months, regardless of group membership

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Ethics in Human Research Committee, Royal Childrens Hospital (ref: EHRC 23067B, for KIDS follow up ref: EHRC 28137F)

#### Study design

Randomised controlled trial with long term follow up

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

**Study setting(s)** Other

#### Study type(s) Treatment

#### Participant information sheet

#### Health condition(s) or problem(s) studied

ISS: Paediatric sleep problems KIDS: Long-term effects of a behavioural sleep intervention

#### Interventions

Cluster randomised controlled trial, cluster at the level of the well-child centre. Masking occurred at randomisation, with group allocation concealed from researchers and participants until allocation was complete.

Arm A: Behavioural interventions to manage frequent night waking and/or difficulty settling to sleep including controlled crying, camping out and advice on how to manage overnight feeding and dummies (pacifiers). Strategies were delivered by maternal and child health nurses over 2 to 3 visits (initial visit 30-60 minutes, subsequent visits 10-15 minutes).

Arm B: Usual care from maternal and child health nurses who provide a universal and free surveillance service to Melbourne families in the first 5 years of life (active control).

KIDS study contact details: Ms Anna Price Centre for Community Child Health Royal Children's Hospital Flemington Road Parkville Melbourne 3052 Australia +61 (0)3 9345 6355 anna.price@mcri.edu.au

#### Intervention Type

Other

**Phase** Not Applicable

#### Primary outcome measure

Maternal report of an infant sleep problem at ages 10 and 12 months

KIDS: Child emotional and behaviour problems

#### Secondary outcome measures

Maternal psychological and physical wellbeing, maternal sleep quantity and quality at ages 10 and 12 months

KIDS: Child stress, child sleep habits and problems, maternal psychological wellbeing and parenting style

Overall study start date 10/10/2003

Completion date 31/08/2004

## Eligibility

#### Key inclusion criteria

Families recruited were attending community well-child clinics across six Melbourne local government areas when infants were 4 months postpartum in October/November 2003. Families were recruited from a broad sociodemographic sample. Infants whose parents reported a problem with their sleep at 7 - 8 months were then eligible to take part in this trial.

KIDS: All families who participated in the original Infant Sleep Study (n=328)

Participant type(s) Patient

**Age group** Child

**Sex** Both

Target number of participants

Target sample size 270. Recruitment status achieved N = 328 (KIDS: Target sample size 200. Recruitment status achieved N = 225 of eligible 326)

#### **Key exclusion criteria** Mothers with insufficient English to complete brief written questionnaires

KIDS: Children diagnosed with intellectual disability or autism since turning 2 years old (n=2)

Date of first enrolment 10/10/2003

Date of final enrolment 31/08/2004

### Locations

**Countries of recruitment** Australia

**Study participating centre Centre for Community Child Health** Melbourne Australia 3052

### Sponsor information

**Organisation** Murdoch Children's Research Institute (Australia)

Sponsor details Royal Children's Hospital Flemington Road Parkville Melbourne Australia 3052 +61 (0)3 8341 6211 julia.malone@mcri.edu.au

**Sponsor type** Research organisation

ROR https://ror.org/048fyec77

### Funder(s)

**Funder type** Research council

**Funder Name** National Health and Medical Research Council (NHMRC) (Australia) (ref: 237120)

Alternative Name(s) NHMRC

**Funding Body Type** Government organisation

Funding Body Subtype National government

**Location** Australia

Funder Name KIDS:

**Funder Name** Foundation for Children (Australia) - Project Grant 2009

**Funder Name** University of Melbourne (Australia) - Melbourne Research Scholarship

### **Results and Publications**

**Publication and dissemination plan** Not provided at time of registration

Intention to publish date

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	01/11/2007		Yes	Νο
Results article	results	01/09/2008		Yes	No
Results article	results	01/06/2011		Yes	No
Results article	results	01/09/2012		Yes	No
<u>Results article</u>	results	01/10/2012		Yes	Νο