

Parent-child interaction and development: a study in preterm and/ or very low birth weight children aged 5 years

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The objective of this study is to describe the association of physical, neuromotor, neurocognitive and social-emotional development with the parent-child interaction in high-risk NICU graduates at the age of 5 years, compared to term born age mates...

Ethical review	Approved WMO
Status	Pending
Health condition type	Other condition
Study type	Observational non invasive

Summary

ID

NL-OMON31340

Source

ToetsingOnline

Brief title

PINO (Preterm birth parent-child INteraction and development)

Condition

- Other condition
- Neonatal and perinatal conditions
- Psychiatric disorders

Synonym

child development, parent child interaction

Health condition

ouder-kind interactie en psychosociaal functioneren kind en ouder

Research involving

Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum

Source(s) of monetary or material Support: Ronald Mc Donald fonds

Intervention

Keyword: cognitive development, parent-child interaction, preterm, social-emotional development

Outcome measures

Primary outcome

1) Psychosocial en cognitive development child (psychologist):

- * WPPSI-III intelligence test
- * digit-span task
- * Attention task (ANT)
- * inhibition (STOP signal task) and emotion recognition (ANT)
- * Behavior-emotional development (SDQ)

2) Parent-child interaction task (3 boxes, NICHD) (psychologist):

3) Physical and neuromotor functioning child (pediatrician):

- * physical and neurological exam; Movement ABC; Beery-VMI

Secondary outcome

4) Early development of the child first 5 years (pediatrician)

- * 0-5 jaar: perinatal risk factors & development
- * mental and psychomotor developmental index MDI and/or PDI (BSID-II-NL) at ages 24 and 36 months (preterm group only)

5) Parental health and family characteristics

- * Psychological health parents (POMS)
- * Child Vulnerability Scale, Dutch translation
- * Perception of developmental delays using the ICCAP questionnaire (preterm group only)
- * Parenting stress (PSI)
- * Child temperament (CBQ)
- * Social-demographic background, ethnicity and previous developmental care or -assistance.

Study description

Background summary

In the Netherlands 2000-2500 children are born prematurely or with very low birth weight each year. These children are at risk for later problems concerning their physical condition, motor delays, and cognitive or psychosocial problems (1). At the age of 5 a majority of premature children have problems on one or more of these domains (2). On average they have lower IQ scores (3). Independent of IQ problems regarding executive functioning, visuo-motor skills and language development are reported (4). As a result, these children have to rely on special education programmes or additional educational support more often (5). Besides, behavioral and social-emotional problems (6) and lower quality of life (7) is reported in premature children. Not only does premature birth affect the child. Mothers suffer from psychological distress long after their child's premature birth (8). Besides, problems regarding parent-child interaction are reported more often after preterm birth (9). These problems seem to be precursors of the abovementioned developmental problems that are often reported in preterm born children (9). However, it still remains unclear which aspects of the parent-child interaction are related to which domains of the child's development.

Study objective

The objective of this study is to describe the association of physical, neuromotor, neurocognitive and social-emotional development with the

parent-child interaction in high-risk NICU graduates at the age of 5 years, compared to term born age mates. Another goal is to assess how parents perceive their child's health and how they support the development of their child, given existing developmental delays. With this study, we hope to improve developmental care for NICU graduates and their parents.

Study design

Cross sectional controlled study design at the age of 5 in preterm born children and a matched control group (age, sex and school) .

Study burden and risks

none

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Children (2-11 years)

Inclusion criteria

children born < 30 weeks gestation and/or birthweight < 1000 grammes at the AMC NICU and are included in our local Neonatal Follow-up protocol according to National Followup guidelines

Exclusion criteria

- 1) severe visual, motor or hearing impairment, or severe cerebral palsy, as a result of which the child cannot participate in psychological examination.
- 2) none of the parents comprehend the Dutch language sufficiently to be able to fill in the questionnaires included in the study.

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Basic science

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-09-2007
Enrollment:	120
Type:	Anticipated

Ethics review

Approved WMO	
Application type:	First submission
Review commission:	METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
CCMO	NL17109.018.07