# Physical fitness of preterm children aged 6 and 7 years. The influence of daily fysical activity level and the attitude of parents on fysical fitness.

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| Ethical review        | Approved WMO                      |
|-----------------------|-----------------------------------|
| Status                | Recruitment stopped               |
| Health condition type | Neonatal and perinatal conditions |
| Study type            | Observational non invasive        |

## Summary

#### ID

NL-OMON29805

**Source** ToetsingOnline

**Brief title** Physical fitness of preterm children

## Condition

- Neonatal and perinatal conditions
- Neonatal respiratory disorders

**Research involving** Human

### **Sponsors and support**

Primary sponsor: Universitair Medisch Centrum Groningen Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

Keyword: Bronchopulmonary Dysplasia, children, Physical fitness, preterm

#### **Outcome measures**

#### **Primary outcome**

**Physical fitness** 

Daily activity pattern

Parental health locus of control on daily physical activity in preterm

children.

#### Secondary outcome

Gender

Children with or without BPD

Children with smoking-parents or with non-smoking parents

## **Study description**

#### **Background summary**

Prematurely born children may have a disturbed or diminished lung function due to anatomical immaturity of lungs and chest wall. Reduced physical fitness of ex-preterms was observed in previous studies (Pianosi & Fisk, 2000 and Kriemler e.a., 2005). Hebestreit & Bar-Or suggested that differences in physical fitness and physical activities in preterm children could be related to the impact of prematurity on the motor system in combination with a sedentary lifestyle of ex-preterms. (2001) Although some authors mentioned a correlation between parental care and gestational age (Jensen & Harner, 1991 and Saigal e.a., 2000), up till now no study on parental health locus of control regarding physical activity in preterm children is available.

#### Study objective

The first aim of this study is to obtain insight in the physical fitness of ex-preterms. The second aim is to study the influence of the daily activity pattern of the children on physical fitness.

The third aim is to study the attitude of parents with respect to the movement model of their child on the physical fitness of the child. Finally, possible differences in activity level and attitude from parents are studied between ex-premature children with and without BPD, between boys and girls and between children with smoking and non-smoking parents.

#### Study design

An observational, cross-sectional study is performed. Physical fitness is measured with the Eurofit test battery. (Van Mechelen, 1991). Daily physical activity is measured with a pedometer (Digiwalker SW-200) and the PASCA questionnaire. The parental health locus of control regarding their children\*s physical activity is measured with the Health Locus of Control Parent/Child. (Tinsley 1989).

#### Study burden and risks

not of application

## Contacts

#### Public

Universitair Medisch Centrum Groningen

Hanzeplein 1 9713 GZ Groningen NL **Scientific** Universitair Medisch Centrum Groningen

Hanzeplein 1 9713 GZ Groningen NL

## **Trial sites**

### **Listed location countries**

Netherlands

## **Eligibility criteria**

#### **Age** Children (2-11 years)

#### **Inclusion criteria**

Experimental group

- Premature children (< 32 completed weeks)
- 6-7 years old

Control group

- 6-7 years old
- students of the Vensterschool in Vinkhuizen

### **Exclusion criteria**

Experimental group:

- Physical disabilities (which have negative influence on daily functioning)
- Use of wheelchair, crutches or other walking appliances
- Diagnosed motorial or cognitive disorders;Control group:
- Premature children (< 37 completed weeks)
- Birth weight <2500 gram
- Diagnosed lung patients
- Physical disabilities (which have negative influence on daily functioning)
- Use of wheelchair, crutches or other walking appliances
- Diagnosed motorial or cognitive disorders

## Study design

### Design

| Study type:         | Observational non invasive      |
|---------------------|---------------------------------|
| Intervention model: | Other                           |
| Allocation:         | Non-randomized controlled trial |
| Masking:            | Open (masking not used)         |
| Control:            | Active                          |
| Primary purpose:    | Diagnostic                      |

### Recruitment

| NL                        |                     |
|---------------------------|---------------------|
| Recruitment status:       | Recruitment stopped |
| Start date (anticipated): | 01-07-2006          |
| Enrollment:               | 64                  |
| Туре:                     | Actual              |

#### Medical products/devices used

Registration:

No

## **Ethics review**

| Approved WMO       |   |
|--------------------|---|
| Date:              | 02-06-2006  |
| Application type:  | First submission  |
| Review commission: | METC Universitair Medisch Centrum Groningen (Groningen) |

## **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 CCMO ID NL11735.042.06