Hand function and habilitation services in Cerebral Palsy

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Limited hand function is a major concern for many children with cerebral palsy (CP) and strongly influences their performance and participation in everyday activities. International research has shown that hand function can be improved through structured and goal directed interventions, yet it is still unknown to what extent the Norwegian habilitation system has included these evidence based interventions in the “usual services” for children with CP.

In the present study, children with CP aged 4 years or younger are invited to participate. Cross-sectional data from baseline will be used for a description of the children and the “usual habilitation services” in which they take part. Longitudinal data will be used in a study describing the development of bimanual hand function across eighteen months, at three tests situations with six months intervals. The project period is September 2012 – June 2016.

**Purpose of the project**

The overall purpose of the project is to increase knowledge on hand function and habilitation services in preschool children with CP.

The goals are to increase knowledge on preschool children with CP, with particular focus on:
- the development of bimanual hand function
- factors influencing the development of bimanual hand function
- “the usual habilitation services” aiming to improve hand function

**Methods**

The current project is a cohort study of 100 children aged four years and younger. Baseline data will be used for the first two sub-studies, and longitudinal data will be used in sub study three.

The project is a multi-center project, where data are being collected by project co-workers in seventeen of the twentyone Norwegian regional habilitation centers.

Assessment instruments and outcome measures:
- Manual Ability Classification System (MACS) and mini-MACS (http://www.macs.nu)
- The Assisting Hand Assessment (AHA) (http://www.ahanetwork.se)
- The Both Hands Assessment (BHA)
- The Habilitation Services Questionnaire (HabServ)
- The CPOP protocol for Occupational Therapy (http://www.ous-hf/cpop.no)
- MR data from the CPRN (http://www.siv.no/omoss/avdelinger/cp-register.no)

**Status per 12.05.2014**
- 81 children aged 13-58 months are recruited to the study
  - 41 children are tested twice
  - 5 children are tested three times

**Publications**