



Health Conditions of Children With Cerebral Palsy (CP)

Movement and Participation in Life Activities of Young Children

Information for Families and Service Providers

The Move & PLAY study.....in brief:

Who participated? 430 preschool (18 months to 5 years) children with **Cerebral Palsy (CP)** and their families were recruited from many regions of Canada and the USA; all children had CP or problems with motor activities, **muscle tone** and **balance**.

What did we do? We focused on learning what helps children with CP progress in their ability to move around, take care of themselves (**self-care**: feeding, dressing, bathing) and **play**.

What was our goal? We wanted to find out what we can change about the way we help young children who need rehabilitation services, so we can focus on providing the services that are most beneficial.

How did we do this? We collected information about many characteristics of the child, the family, and the recreation and rehabilitation services they receive, during 3 sessions over a one-year period.

Looking at health conditions:

This report focuses on what parents told us about the health conditions their children have, and how these conditions affected their daily lives. When we say "**health**", we mean **all the different functions of the whole body**.

- A parent survey asked if their children had problems with any of these 16 health conditions: seeing, hearing, learning, communicating, controlling emotions, seizures, the mouth, teeth and gums, digestion, growth, sleeping, repeated infections, breathing, the skin, the heart, and pain (**link to measure**)
- Parents also rated how much each condition affected their children's daily activities - from "not at all" to "a very great extent". We call this "impact" of health conditions in this report

Comparisons between children with and without CP

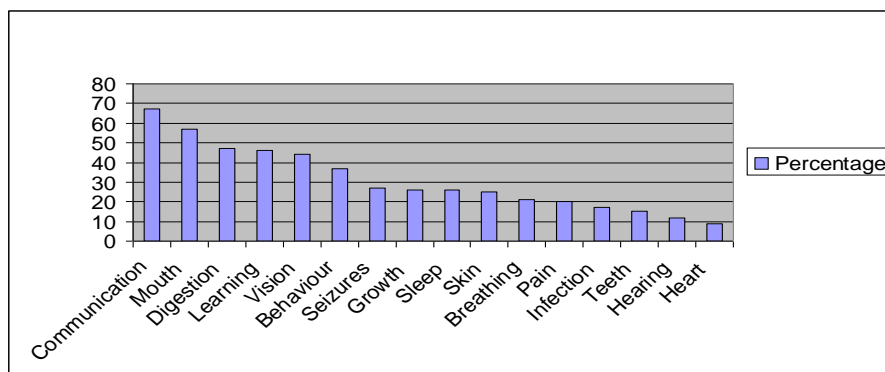
- Small substudy with 107 families with preschool children who did not have CP or problems with movement
- We compared health conditions and their impact, between the 2 groups (430 children with CP and 107 without CP)

What did we learn?

*Please keep in mind that these results are based on averages for the total group.
Children are individuals and not all would fit the results described below.*

Health conditions in children with CP

- **16 health conditions:** this shows the percentage of children with each condition, starting with the most common one on the left- Communication (67% of children had difficulties with communication)



- **Average number of health conditions per child** increased as motor ability decreased; average number for children with greater motor abilities was 3 problems; average for those with the lowest motor abilities was 7 problems

Words highlighted in blue link to definitions in our glossary. The glossary and other summaries reporting the results of this study are available on the CanChild website : <http://www.canchild.ca/en/ourresearch/moveplay.asp>

- **Impact** of health conditions:
 - Similar for both boys and girls, and similar for children at all ages
 - Health conditions affected daily life more for children with lower motor abilities than for children with higher motor abilities
 - Some health conditions had more impact on daily life (i.e. problems with learning and understanding, communicating, and behaviour)
- During the study year, 25% of children with CP had been in hospital, and 49% had some type of surgery

Comparisons with children who do not have CP:

- Each one of the 16 health conditions (except skin) occurred in **lower percentages in children without CP** compared to children with CP
- **Average number of health conditions** for children without CP was less than one problem; this is a significant difference compared to children with CP
- Average **impact** of health conditions on children without CP was significantly less than with children who had CP
- Only 4% of children without CP had been in hospital during a year, and 12% had some type of surgery

What does this mean?

Thoughts for families

- ◇ Therapists need to know about the whole child, and all aspects of how the body functions; a problem with moving around is not the whole picture of your child's health
- ◇ Knowledge about your child's health issues, and about how these health conditions affect daily life, is important for everyone involved in their care
- ◇ Parents need to share information with their children's therapists about health conditions, hospitalizations, and surgeries, so that together, they can plan the best care
- ◇ Therapists are health care professionals, and a source of information regarding your child's health

Thoughts for service providers

- ◇ There is a lot of variation in children's health
- ◇ Service providers working with young children with CP need to regularly ask about health conditions, and consider their impact when planning care
- ◇ Children with CP are affected by more health conditions than children without CP, and the average impact of these conditions is also greater among all children with CP, regardless of motor ability
- ◇ The high occurrence of a variety of health conditions, and the extent to which they affect the children's daily activities, suggests that more attention be paid to this important aspect, particularly for children with lower motor abilities
- ◇ It is important for therapists to discuss with families how the children's health conditions impact the children's daily lives. Service providers have a role in health promotion and prevention. They can include strategies in care plans to reduce the impact of health conditions on daily life of children and families
- ◇ There is a need for coordinated care, including monitoring children's health, and providing information to families. Service providers should make referrals to other appropriate health professionals as indicated

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For more details regarding Health Conditions, please refer to our paper: Wong C, Bartlett D, Chiarello L, Chang H-J, Stoskopf B. *Comparison of the prevalence and impact of health problems of preschool children with and without cerebral palsy.* (in press; *Child: Care, Health and Development*, 2011)



Understanding Determinants of Basic Motor Abilities, , and Play of Young Children with Cerebral Palsy

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