



# Mental health in adolescents and young adults with cerebral palsy

Jan Willem Gorter

Scotiabank Chair in Child Health Research, McMaster University

Executive member CP-NET



**CP-NET**  
Childhood Cerebral Palsy  
Discovery Network

[www.cp-net.org](http://www.cp-net.org)

# Welcome to the Workshop!

Opening

Cerebral Palsy

My Story Project

COVID-19

Workshop



How are you?



What is CP?



What do we know  
about mental health?



How is COVID19  
impacting everyone  
& what can we do?



Your turn!



# Go Green for Cerebral Palsy & Mental Health



**Cerebral Palsy  
Awareness**



**MENTAL HEALTH  
AWARENESS MONTH**

# How are you?

1. Take a deep breath
2. Listen to your inner self
3. How do you feel? What do you think? What did you do?

# If you are in crisis

- If you are in immediate danger or need urgent medical support, call 911.
- You may also access support workers, social workers, psychologists and other professionals for confidential chat sessions or phone calls by texting WELLNESS to:
  - 686868 for youth
  - 741741 for adults
- The [Wellness Together Canada portal for mental wellness and substance use issues](#) also offers a wide range of resources and support for Canadians.

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html>

# Struggles

- **Emotional (how you feel)**

- psychological functioning
- general behaviour and coping skills

- **Social (how you behave)**

- social skills and behaviours

- **Cognitive (how you think)**

- difficulties with problem-solving
- decision making
- general cognitive functioning needed to complete self-care activities

- **Physical (how your body works)**

- physical symptoms, e.g. fatigue

# Growing up is hard to do

*For some, it's even harder than for others.*

By various reports 5-30% of children in US have special needs, chronic illness or disability. (Bloom et al, Journal of Adolescent Health. 2012;51:213-219)

## NOUR



**VIDEO: [https://youtu.be/Sv5\\_c0EaAhE](https://youtu.be/Sv5_c0EaAhE)**

# Welcome to the Workshop!

Opening

Cerebral Palsy

My Story Project

COVID-19

Workshop



How are you?



What is CP?



What do we know  
about mental health?



How is COVID19  
impacting everyone  
& what can we do?



Your turn!





# How do we define Cerebral Palsy?

- Cerebral palsy describes:
  - a group of developmental disorders of movement and posture,
  - causing activity restriction or disability,
  - that are attributed to disturbances occurring in the fetal or infant brain.



# Brain development during gestation and first weeks after birth

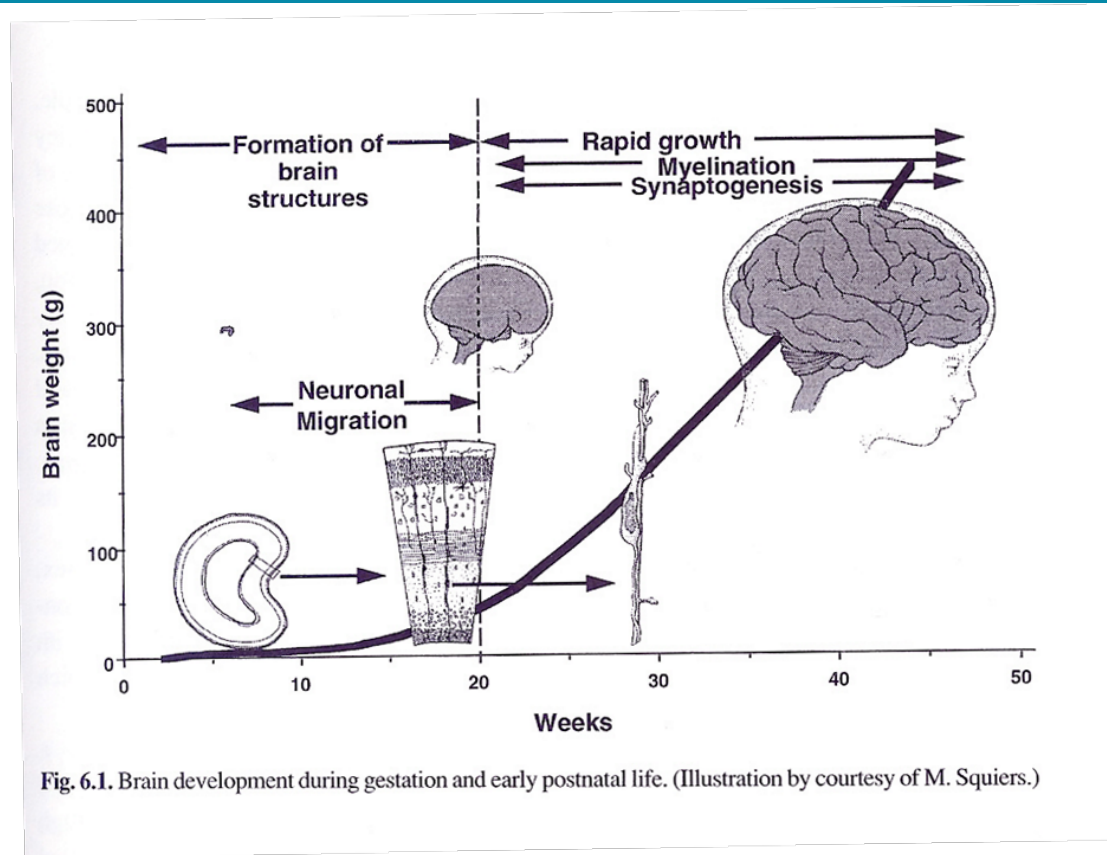
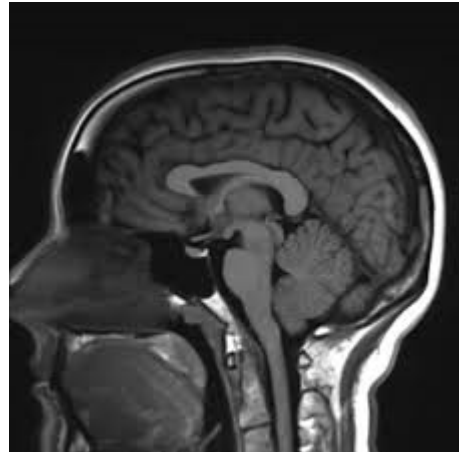
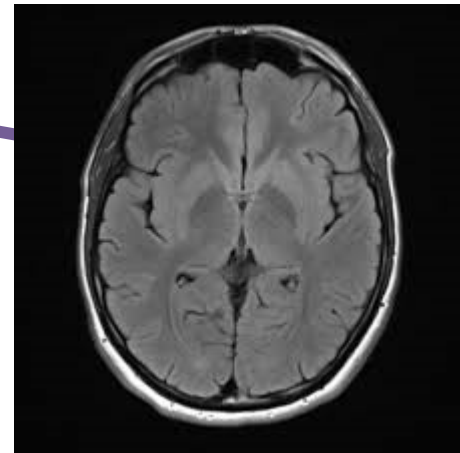
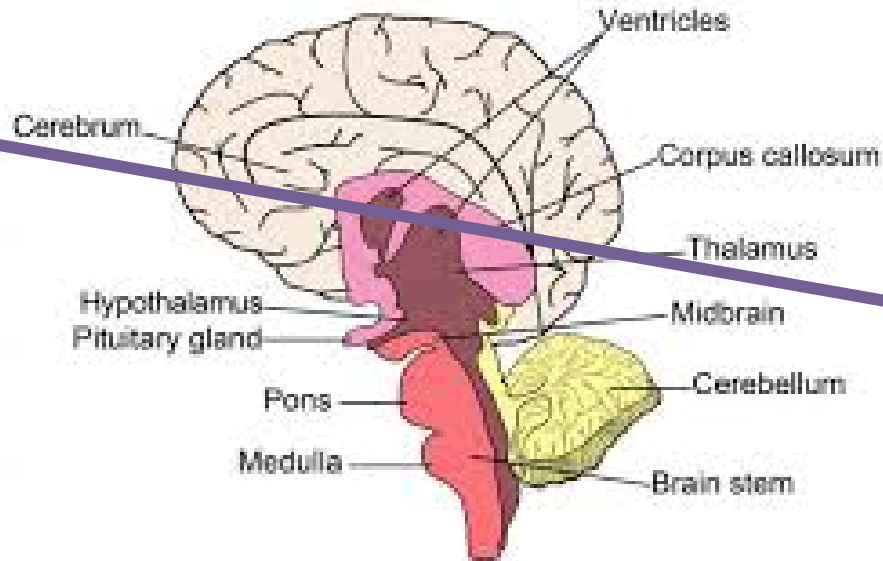


Fig. 6.1. Brain development during gestation and early postnatal life. (Illustration by courtesy of M. Squiers.)

# The Brain – MRI scan

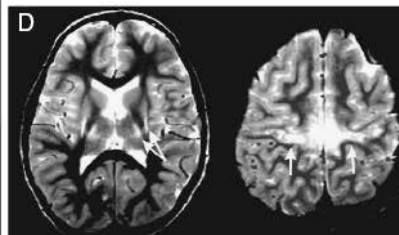
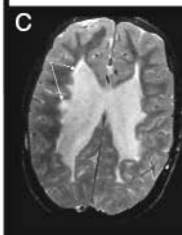
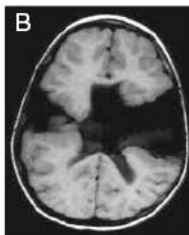
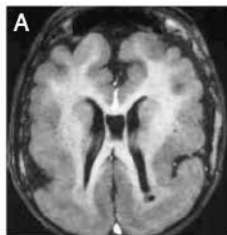


## HUMAN BRAIN



# Injury of the brain before, during or after birth

Bilateral



Conception

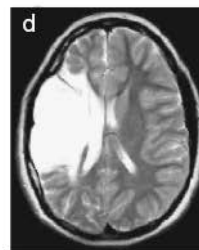
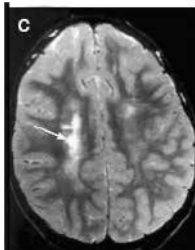
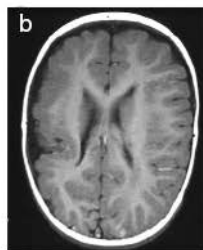
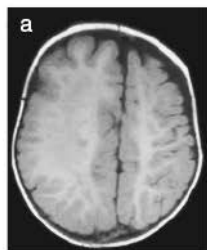
6wks

20wks

30wks

40wks birth

Unilateral



Brain maldevelopments  
'1st-2nd trimester' or genetic

9%

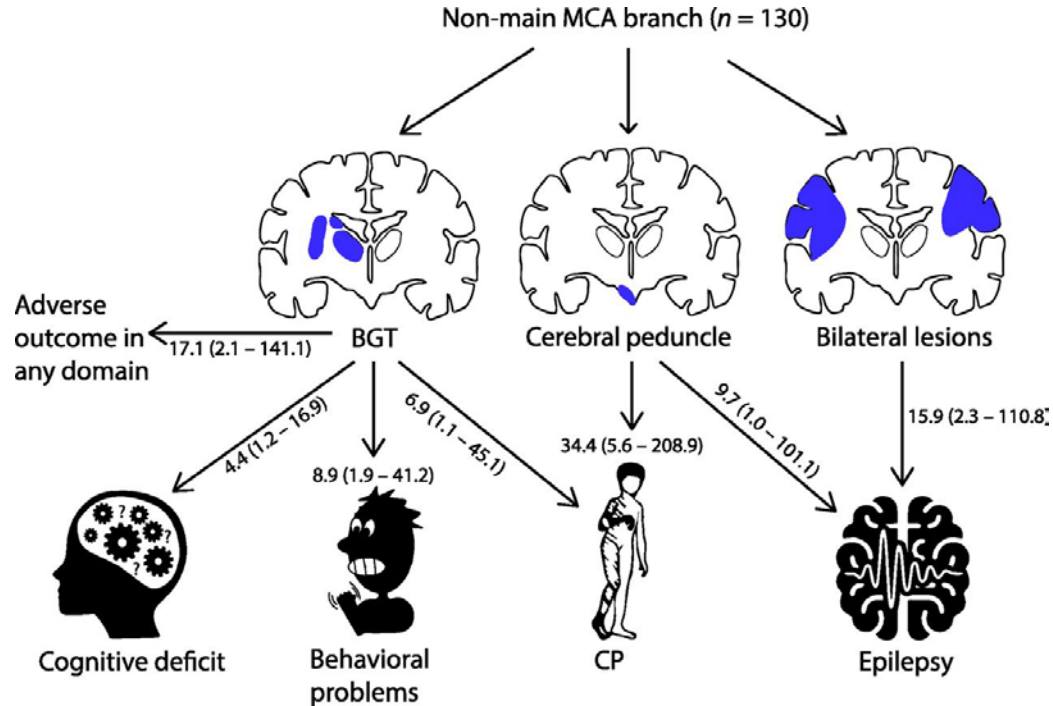
Periventricular lesions  
early '3rd trimester'

56%

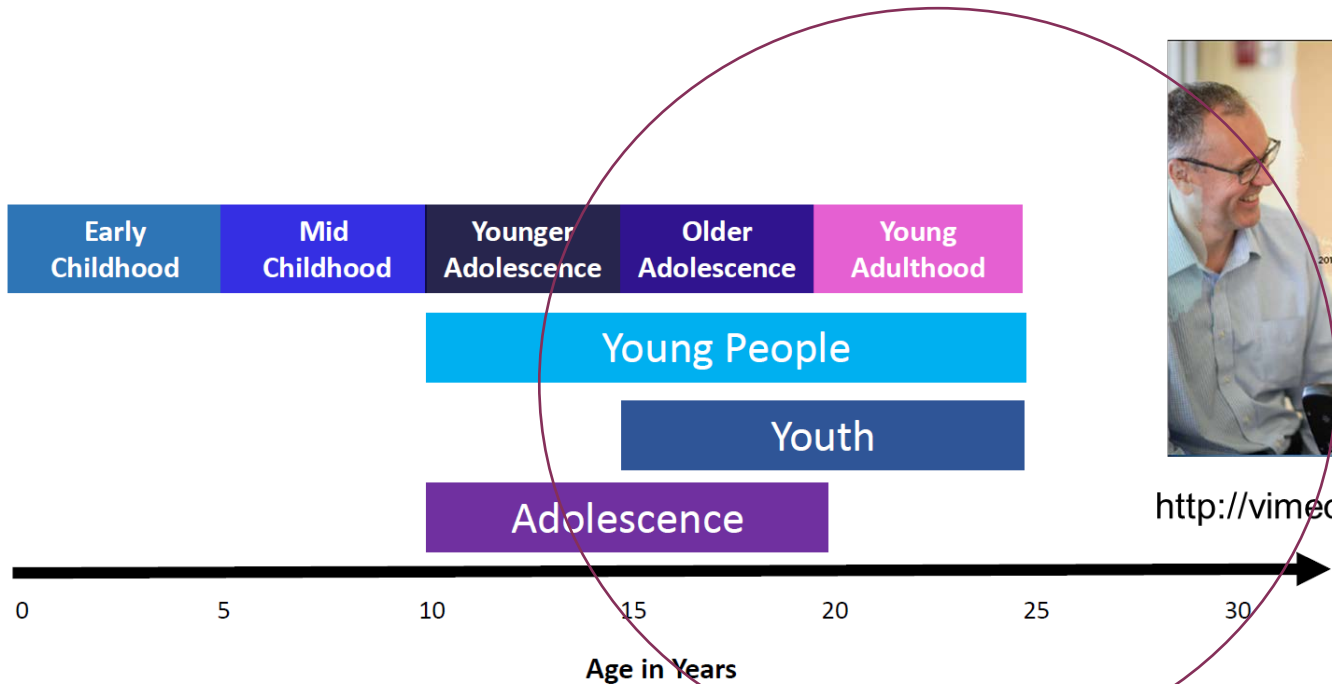
Grey matter lesions  
late '3rd trimester'

18%

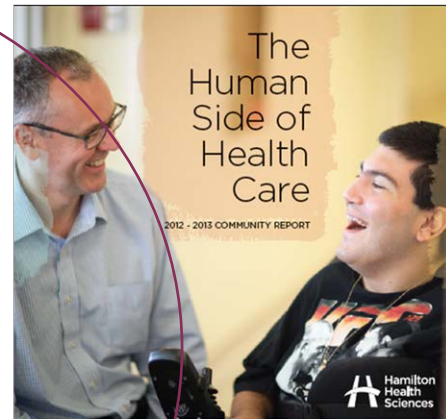
# Type of CP and symptoms depend on site, extent and location of the lesion (Here in full term infants with perinatal stroke)



# Growing up with CP

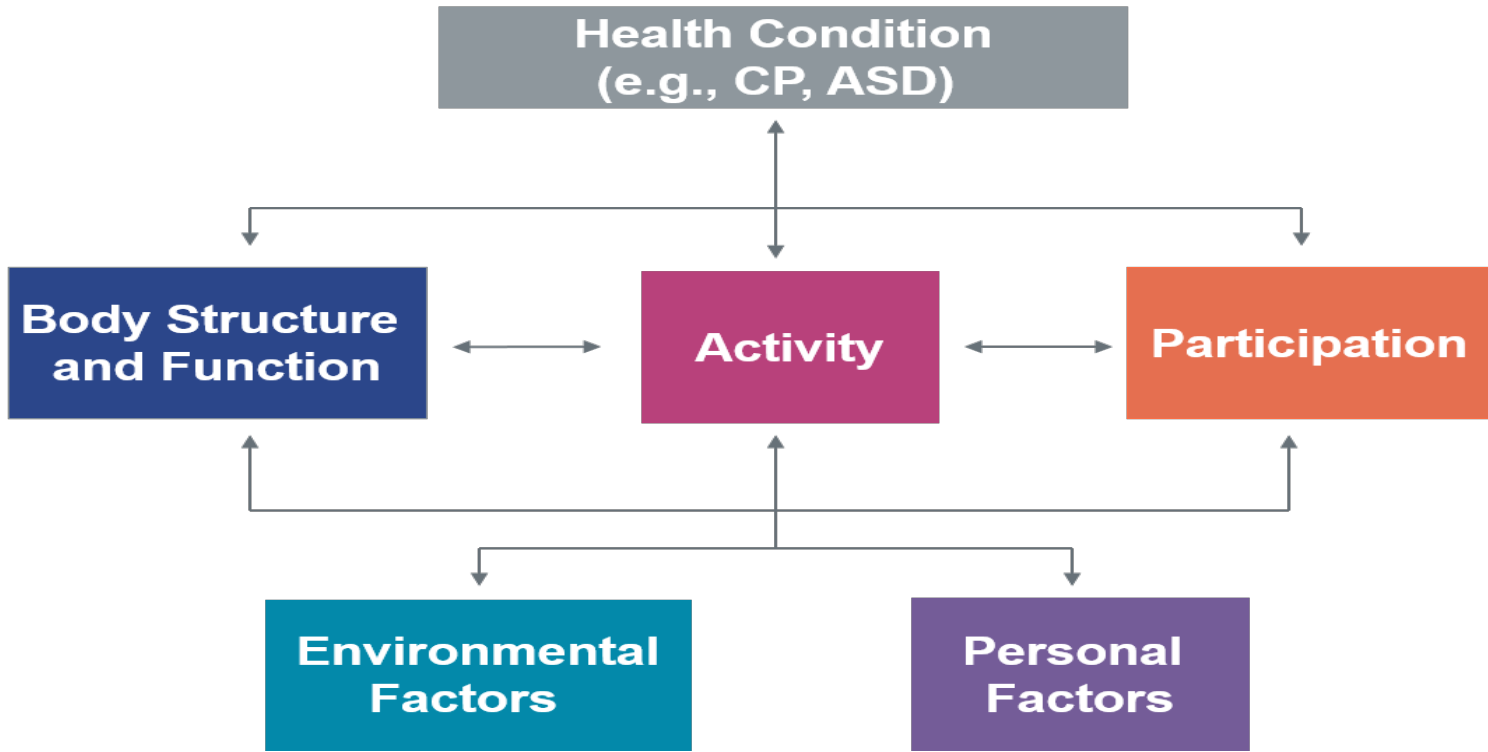


## NOUR



<http://vimeo.com/68925300>

# Clinical presentation



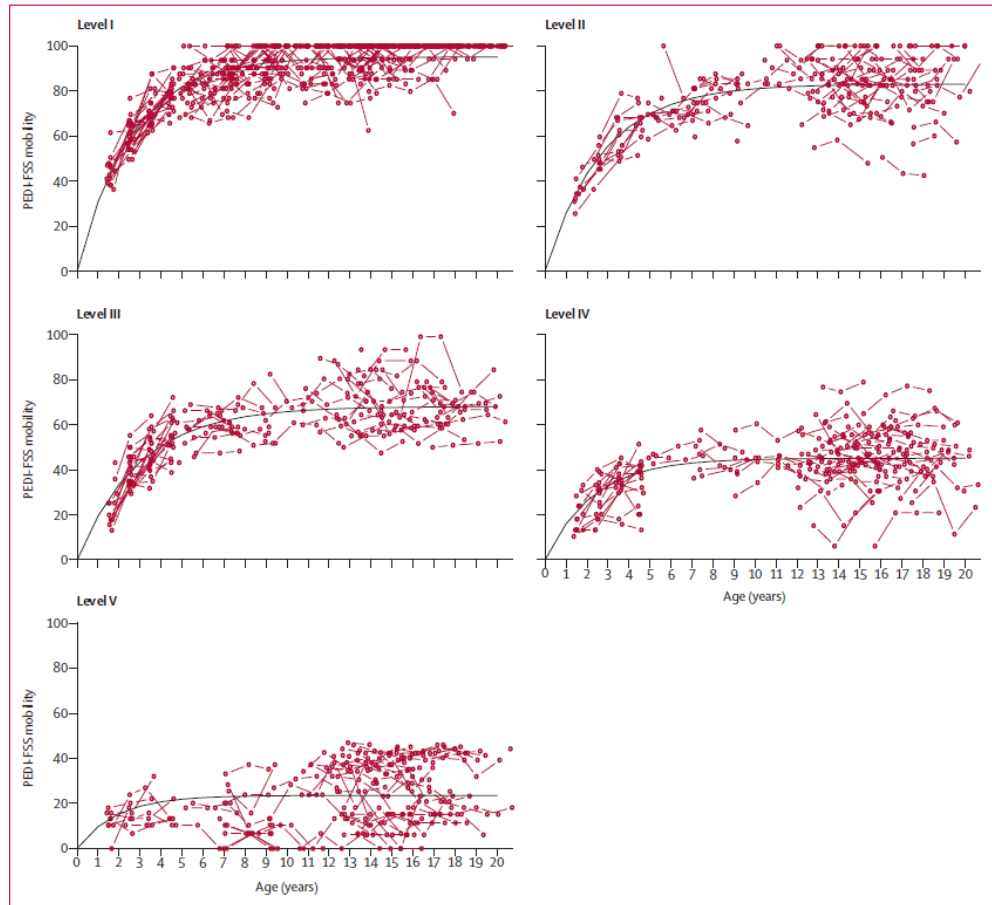
# Background

- Many children with Cerebral Palsy (CP) are challenged in preparing their best possible futures
- Parents of children with CP desire information about their child's functional prognosis of mobility and self-care capabilities

Bailes AF, Gannotti M, Bellows DM, Shusterman M, Lyman J, Horn SD. Caregiver knowledge and preferences for gross motor function information in cerebral palsy. *Dev Med Child Neurol* 2018; 60: 1264–70



# Results – mobility



**Figure 1:** Observed and modelled PEDI-FSS mobility scores for each GMFCS level  
GMFCS=Gross Motor Function Classification System. PEDI-FSS=Pediatric Evaluation of Disability Inventory-Functional Skills Scale.

# Results – Self-care

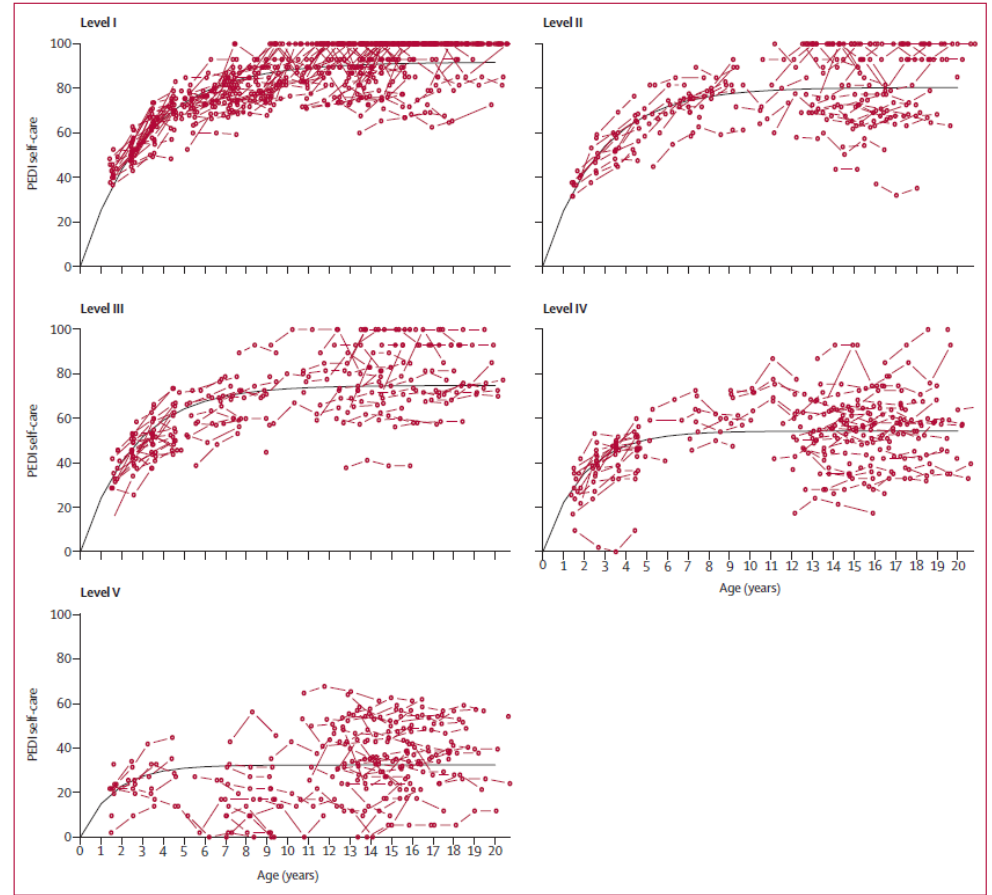


Figure 2: Observed and modelled PEDI-FSS self-care scores for each GMFCS level  
GMFCS=Gross Motor Function Classification System. PEDI-FSS=Pediatric Evaluation of Disability Inventory-Functional Skills Scale.

## Key findings in adults with CP (65 articles, $n=28429$ )

Outcomes Body Function	All adults with CP (95% CI)	Adults with CP Without Intellectual Disability
Pain	65.1% (55.1;74.5)	
Fatigue (Fatigue Severity Score)	4.1 (3.8;4.4)	
Outcomes (Activity)		
Ambulatory	57.9% (51.1;64.6)	
Manual ability (little/no limitation)	65.5% (61.2;69.7)	
Outcomes (Participation)		
Employed	39.2% (31.5;47.1)	72.6% (58.8;84.5)
Living independently	29.3% (9.0;55.3)	90.0% (83.8;94.9)

van Gorp M, Hilberink SR, Noten S, Benner JL, Stam HJ, van der Slot WM, Roebroek ME. The epidemiology of cerebral palsy in adulthood: A systematic review and meta-analysis of the most frequently studied outcomes. Arch Phys Med Rehabil. 2020

# Welcome to the Workshop!

Opening

Cerebral Palsy

My Story Project

COVID-19

Workshop



How are you?



What is CP?



What do we know  
about mental health?



How is COVID19  
impacting everyone  
& what can we do?

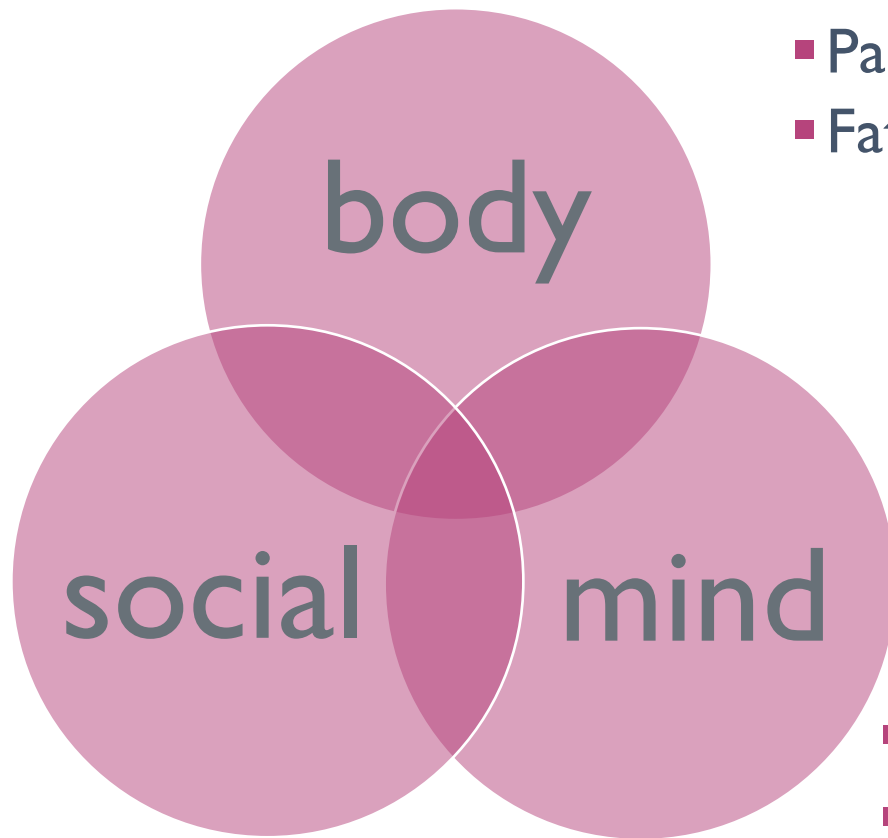


Your turn!



# Adult Health Outcomes

- Living on your own
- Employment
- Relationships



- Physical activity
- Pain
- Fatigue

- Anxiety
- Depression

What do we know about adolescent  
and young adult mental health &  
wellbeing of people with CP?



ORIGINAL RESEARCH

Annals of Internal Medicine

## Prevalence of Mental Health Disorders Among Adults With Cerebral Palsy

### A Cross-sectional Analysis

Daniel G. Whitney, PhD; Seth A. Warschausky, PhD; Sophia Ng, MPH, PhD; Edward A. Hurvitz, MD; Neil S. Kamdar, MA; and Mark D. Peterson, PhD, MS

Research

JAMA Neurology | **Original Investigation**

## Risk of Depression and Anxiety in Adults With Cerebral Palsy

Kimberley J. Smith, PhD; Mark D. Peterson, PhD; Neil E. O'Connell, PhD; Christina Victor, PhD; Silvia Liverani, PhD; Nana Anokye, PhD; Jennifer M. Ryan, PhD

# Adults (8.7 M) incl. 7348 Individuals with CP (mean age 52 years; 49.6% female) in the US (insurance claim database)

**Table 2.** Age-Standardized Prevalence of Mental Health Disorder Categories for Study Participants

Category	Women			Men		
	CP Alone, % (95% CI)	CP and ND Disorder, % (95% CI)	Without CP, %	CP Alone, % (95% CI)	CP and ND Disorder, % (95% CI)	Without CP, %
Schizophrenia, schizotypal disorder, delusional, and other nonmood psychotic disorders	3.2 (2.5 to 3.9)	7.3 (5.8 to 8.8)	0.6	2.8 (2.2 to 3.4)	6.5 (5.1 to 7.9)	0.7
Mood affective disorders	28.6 (26.8 to 30.4)	28.8 (26.1 to 31.5)	14.3	19.5 (18.0 to 21.0)	23.3 (20.9 to 25.7)	8.1
Anxiety, dissociative, stress-related, somatoform, and other nonpsychotic mental disorders	28.6 (26.8 to 30.4)	29.6 (26.9 to 32.3)	18.0	19.5 (18.0 to 21.0)	21.7 (19.4 to 24.0)	11.1
Behavioral syndromes associated with physiologic disturbances and physical factors	2.6 (1.6 to 3.6)	1.1 (0.7 to 1.5)	1.0	2.1 (1.6 to 2.7)	2.1 (1.6 to 2.7)	1.1
Disorders of adult personality and behavior	1.2 (0.8 to 1.6)	4.4 (3.2 to 5.6)	0.4	1.2 (0.8 to 1.6)	4.1 (3.0 to 5.2)	0.3
Alcohol- and/or opioid-related disorders	2.8 (2.2 to 3.4)	2.2 (1.3 to 3.1)	1.8	4.7 (3.9 to 5.5)	2.4 (1.5 to 3.3)	3.0

CP = cerebral palsy; ND = neurodevelopmental.



# Individuals with CP (mean age 33 years; 46.8% female) and matched controls in the UK (primary care data)

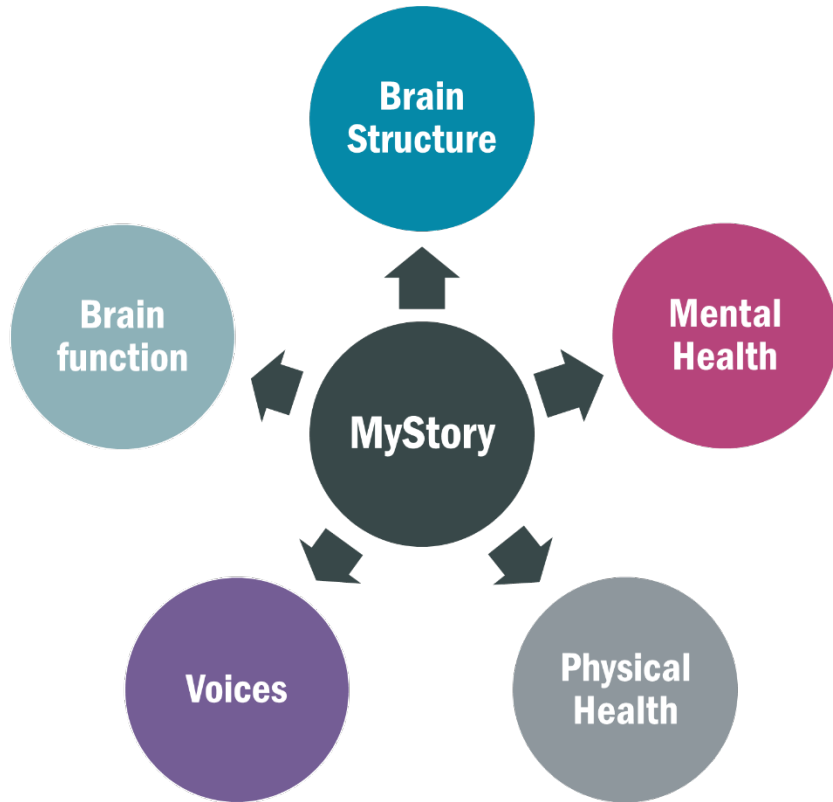
Table 2. Incidence of Depression and Anxiety in 1705 Individuals With CP Compared With 5115 Age-, Sex-, and Practice-Matched Controls

Variable	Events No. (%)	Person-Years in 1000s	Incidence Per Person-Year (95% CI)	Unadjusted		Adjusted	
				Hazards Ratio (95% CI)	P Value	HR (95% CI) <sup>a</sup>	P Value
Depression							
No CP	867 (17.0)	49.93	0.017 (0.016-0.019)	1 [Reference]	NA	1 [Reference]	NA
CP	312 (18.3)	12.64	0.025 (0.022-0.028)	1.43 (1.24-1.64)	<.001	1.28 (1.09-1.51)	.003
Anxiety							
No CP	697 (13.6)	51.67	0.013 (0.013-0.015)	1 [Reference]	NA	1 [Reference]	NA
CP	261 (15.3)	12.93	0.020 (0.018-0.023)	1.40 (1.21-1.63)	<.001	1.38 (1.15-1.64)	<.001

Abbreviations: CP, cerebral palsy; NA, not applicable.

<sup>a</sup> Adjusted for baseline (ie, predepression or preanxiety diagnosis) diagnosis of

diabetes, heart disease, lung disease, osteoarthritis, epilepsy, pain conditions, and general practitioner visits per year.

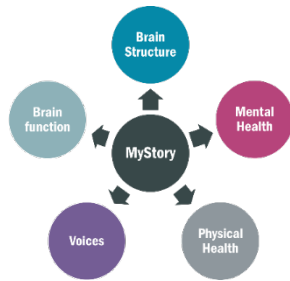


CP-NET  
Childhood Cerebral Palsy  
Neuroscience Discovery Network

<http://cp-net.org>



ONTARIO  
BRAIN  
INSTITUTE



**CP-NET**  
Childhood Cerebral Palsy  
Neuroscience Discovery Network

- Adolescents and Young adults with CP
- Age 13-30 years
- Longitudinal design (start in 2013, ongoing)
  - Annual Survey + hair sample (cortisol levels)
- Brain studies:
  - brain activity on MRI -fMRI
  - brain signals - EEG/ERP
- Interviews (Qualitative study)



Most brain research for people with Cerebral Palsy (CP) focuses on early brain development. More research is needed to understand how the brain changes through the teenage years and into adulthood. The **MyStory Project** will study physical health (fatigue and pain), mental health (anxiety and depression), chronic stress and overall well-being in adolescents and young adults with CP between the ages of 13-30.

**Research Study:**

**If I decide to participate, what will I be asked to do?**

Complete surveys and send in a sample of your hair for analysis (from home) A package will be mailed to you with instructions describing how to complete online or paper surveys about your experiences related to anxiety, depression, fatigue, quality of life, pain, family functioning, etc. You will also be provided instructions on how to submit a sample of hair (~50 strands) to McMaster. We are interested to see how these qualities are changing over time. We will ask you to complete the package 4 times (twice in the first year, and then once per year for two years).

You will receive a \$20 gift card for each set of surveys that you complete.



If you are 13-30 years old, have CP, and are interested in participating or if you have questions, please contact the research assistant:

Phone: 905-525-9140 ext. 27854 Email: [hopmansn@mcmaster.ca](mailto:hopmansn@mcmaster.ca)



REB: 13-840, CP-NET Poster, MyStory Phase 3 (Version date: April 11, 2019)

<http://cp-net.org>



## Brain-Behaviour correlates of Health and Well-being in Adolescents and Young Adults with Cerebral Palsy

Dr. Jan Willem Gorter (McMaster)  
Dr. Darcy Fehlings (Toronto)  
Dr. Mark Ferro (University of Waterloo)  
Dr. Geoffrey Hall (McMaster)  
Dr. Sidney Segalowitz (St. Catharines)  
Dr. Anna McCormick (Ottawa)  
Dr. Robert Palisano (McMaster/Drexel)  
Dr. Peter Rosenbaum (McMaster)

Post-Docs:  
Diana Parvinchi  
Christine Lackner  
Amanda Green

Staff: Brittany Speller, Dayle McCauley, Sarah Hopmans, Oksana Hlyva, Julia Hanes (medical student)



# Anxiety

- We used the State-Trait Anxiety Inventory
- State anxiety items (20) include: “I am tense; I am worried” and “I feel calm; I feel secure.”
- Trait anxiety items (20) include: “I worry too much over something that really doesn’t matter” and “I am content; I am a steady person.”
- Score between 0-160;
- 39-40 and higher is considered as clinical anxiety

In the MyStory project we found:

- average score **35.8 +/- 10.1**
- **35%** had a score > 39

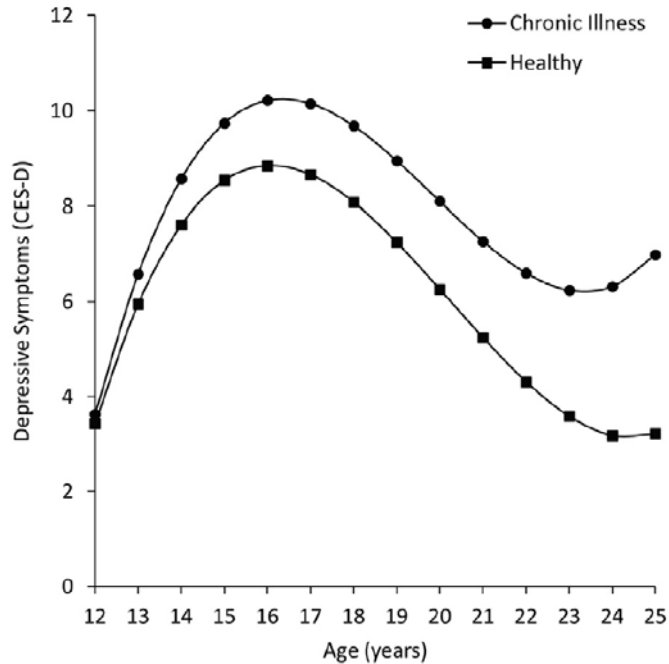
# Depression

- We used the CESD-questionnaire (20 questions)
- Symptoms associated with depression, such as restless sleep, poor appetite, and feeling lonely
- Score between 0-60
- 16 and higher is a depression

In the MyStory project we found:

- average score **14.2 +/- 8.4**
- **38%** had a score  $> 16$

# Mental well being



Emerging adulthood is a time when youth are predisposed to the development of elevated symptoms of depression and this relationship is augmented by having a chronic illness.

Received: 3 May 2019



Accepted: 23 June 2019

DOI: 10.1111/cch.12705

**RESEARCH ARTICLE**

WILEY

# Beyond stereotypes of cerebral palsy: Exploring the lived experiences of young Canadians

Julia E. Hanes<sup>1</sup> | Oksana Hlyva<sup>1</sup> | Peter Rosenbaum<sup>1</sup>  | Matthew Freeman<sup>2</sup> |  
Tram Nguyen<sup>1</sup> | Robert J. Palisano<sup>3</sup> | Jan Willem Gorter<sup>1</sup> 

Hanes et al, Child Care Health Dev 2019 (Open access)



- Semi-structured interview protocol -> **participants could discuss issues that were important and meaningful to them**
- 2 facilitators with CP
- In community settings

# Participants



- Purposive sampling  
16 participants (7 female and 9 male) + 1 father proxy
- Age range: 17-29 years; Mean=26, SD=3.0  
GMFCS levels: I- V
- Residence: 69% live in bigger metropolitan areas
- Education: 56% completed or work on their university degrees

# Who am I, when managing mental health



*When it comes to mental health, there is a huge stigma... especially for men...gender roles... play a bit into that. (age 24)*

*Anxiety is a big thing for me.... I am caring for my [ill] mum... and I've been trying to take care of myself... There have been times when I was very stressed out and I didn't really know where I was going to turn... Whatever services I went out to get I was either under- or over-qualified because... I didn't have a mental health diagnosis but I was barely physically disabled. So for about 5 months I was homeless... couch surfing... (age 26; GMFCS I)*

Hanes et al, Child Care Health Dev 2019

<https://onlinelibrary.wiley.com/doi/full/10.1111/cch.12705>

# Psychological factors (I)

- Identity formation

*“I don’t let CP be my main identifier and I want to be identified as a person, not as someone with a disability.”*

*(age 27; GMFCS III)*

# Psychological factors (2)

- Identity formation

*“When you have to explain to someone who doesn’t have a disability or depression or mental health challenges, like I have both, and put it in language that that “everybody understands” it becomes less authentically about your own experience. And this drives me nuts”*

*Kathy (age 24; GMFCS IV)*

# CP-Net Webinar

https://canchild.ca/en/resources/279-growing-up-with-cp-mental-health-well-being-cp-net-webinar

CanChild

## Growing up with CP: Mental health & well-being (CP-NET webinar)

Resource Details

Tagged as:

WEBINARS & PRESENTATIONS

CEREBRAL PALSY CEREBRAL PALSY

Presented by:  
Jessica Gieboers | Journalist and CP-NET Community Advisor  
Georgia Beauchemin | Student and CP-NET Community Advisor  
Jan Willem Gorter | Director of CanChild and CP-NET Advisory Board Member

https://canchild.ca/en/resources/?type=29

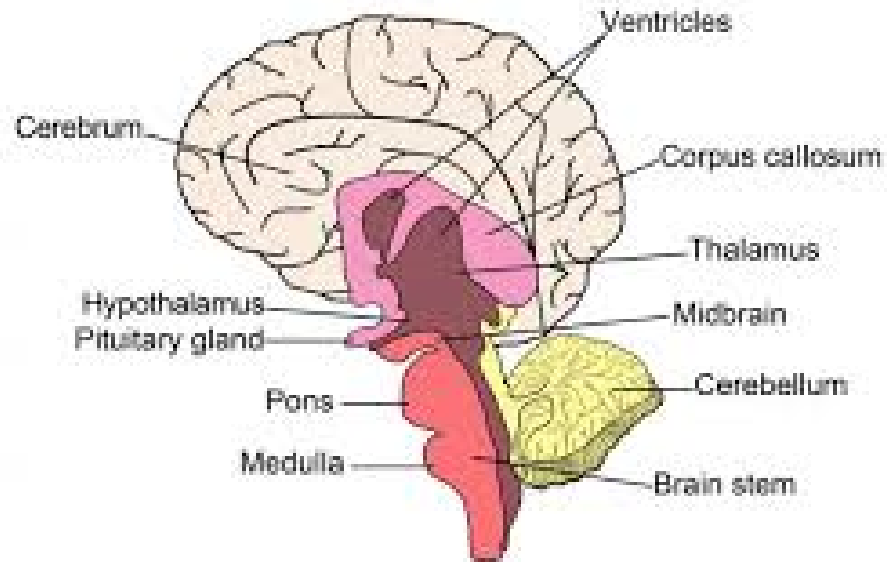
7:53 AM  
6/8/2017

<https://canchild.ca/en/resources/279-growing-up-with-cp-mental-health-well-being-cp-net-webinar>

How can we help?



## HUMAN BRAIN





# Struggles in CP

## ■ Emotional (how you feel)

- psychological functioning
- general behaviour and coping skills

## ■ Social (how you behave)

- social skills and behaviours

## ■ Cognitive (how you think)

- difficulties with problem-solving
- decision making
- general cognitive functioning needed to complete self-care activities

## ■ Physical (how your body works)

- physical symptoms, e.g. fatigue

# Proof-of-Concept EEG study in adults with CP

- ERP research is largely non-existent in CP (muscle spasticity; EEG sensitivity)
- The goals of our research were to:
  - see whether the participants can perform the tasks of the protocol
  - validate the use of our ERP methodologies in adolescents and young adults with CP.

Lackner, Segalowitz & Gorter et al, Cognitive Electrophysiology in Young Adults with Cerebral Palsy: A Proof of Concept Study, Under Review, 2020

# Protocol

- Participants (10) performed several kinds of computer tasks:
  - some that are known to activate primary visual processing regions
  - some that are known to recruit prefrontal regions (e.g., selective attention, and context switching tasks)

Lackner, Segalowitz & Gorter et al, Cognitive Electrophysiology in Young Adults with Cerebral Palsy: A Proof of Concept Study, Under Review, 2020

# Promising results

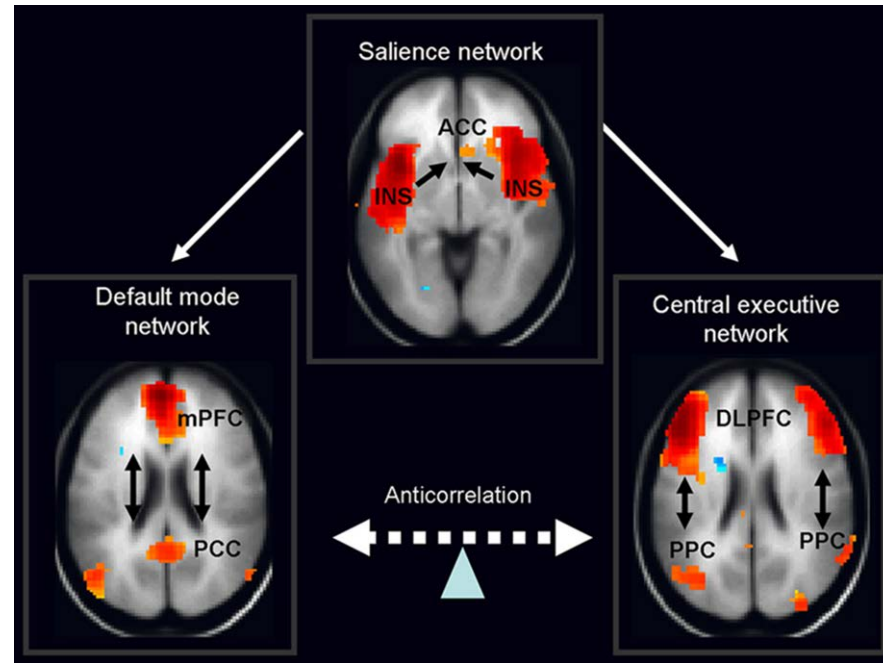
- We were able to get a good signal
- We were able to replicate several traditional ERP effects
- These developments mark a large step forward in ERP research in people with cerebral palsy

# fMRI – Feasibility study

We aimed to answer the following questions:

- 1) Will it be feasible to scan and obtain good quality resting state functional connectivity data in young adults with CP without sedation
  - Note that the fMRI scanning protocol requires to lie down straight and remaining still in a scanner for some time
  
- 2) Examine the connectivity pattern(s) that may be associated with depressive mood ratings, indices of pain and fatigue, and general well-being in this population.

# Three large-scale brain networks:



During typical development (6-31 years) the three networks show greater density and functional segregation from other networks (Fair et al., 2007).

## Findings (I)

The functional connectivity networks of interest were successfully identified in the data using standard seed regions defined previously in the literature

We found a relationship between the networks and well-being.

# Recap of my presentation

- Emerging evidence about mental health issues in adults with cerebral palsy
  - Large population based datasets
  - Clinical cohort studies
  - Lived experience of young people with cerebral palsy
- Brain function and neural networks can be assessed in adolescents and adults with cerebral palsy
- Future studies are needed to
  - explore the relationship between mental health and brain functioning (executive functioning)
  - identify people at risk for mental health issues
  - and develop interventions to prevent and manage mental health issues.



# Welcome to the Workshop!

Opening

Cerebral Palsy

My Story Project

COVID-19

Workshop



How are you?



What is CP?



What do we know  
about mental health?



How is COVID19  
impacting everyone  
& what can we do?



Your turn!



# COVID-19 Fears

- There is a concern that children with brain-based developmental disabilities may be more affected by COVID-19 than children without disabilities due to their unique needs and the potential for underlying health conditions that increase the risk of serious complications.
- Families in particular are concerned about:
  - The risks for their children, and
  - The type of support they may receive from the healthcare system during the COVID-19 pandemic.

<https://www.child-bright.ca/new-blog/2020/5/15/covid-rapid-review>

- A rapid review of the literature did NOT find information on the prevalence of COVID-19 in children with brain-based developmental disabilities.

### COVID-19 In Children With Brain-Based Developmental Disabilities: A Rapid Review

April 29th 2020

#### Current Situation

Prevalence of COVID-19 amongst children is reportedly low worldwide and its impact on their health mild.

However, little to no information is known regarding the potential impact of the virus on children with underlying conditions. Children with disabilities may have underlying health conditions that increase their risk of serious complications from COVID-19.

Concerned with the potential impact of COVID-19 on children with brain-based developmental disabilities, the SPOR-funded CHILD-BRIGHT Network commissioned a review of the topic.

#### For more information, please contact:

Annie LeBlanc, PhD  
Annie.leblanc@med.utoronto.ca  
Annette Majnemer, OT, PhD, FCAHS  
Annette.Majnemer@mcgill.ca

#### What were the objectives?

We aimed to answer whether children with brain-based developmental disabilities were more likely to be infected by COVID-19 and have complications or poorer outcomes following infection.

#### How was the review conducted?

We conducted a two-week rapid review in close collaboration with a panel of knowledge users (patients, caregivers, clinicians, decision makers) and leaders from the CHILD-BRIGHT Network.

#### What did the review find?

We did not find any study that specifically addressed the impact of COVID-19 in children with brain-based developmental disabilities.

Four studies, three from China and one from the United States, reported a total of seven cases of infected children (0 to 12 months) considered at risk of developing a brain-based developmental disability.

Although three of the identified children required pediatric intensive care, symptoms of COVID-19 were generally mild, most patients were discharged from the hospital and no deaths were reported.

#### What are the implications?

The current available information is not sufficient to inform practice or policymakers in light of the current pandemic situation and its impact on children with brain-based developmental disabilities.

There is an urgent need to further study current available data from public health agencies or health systems to assess impact on vulnerable children.

Funded by the CHILD-BRIGHT Network and the SPOR Evidence Alliance. Both Networks are supported by the Canadian Institutes of Health Research under Canada's Strategy for Patient-Oriented Research (SPOR) initiative.

Canada Institute of Health Research  
CI-1478 F66007 01 0411 01 0013

**Health Canada Document** on Disability, Family and COVID-19 (May 8, 2020)

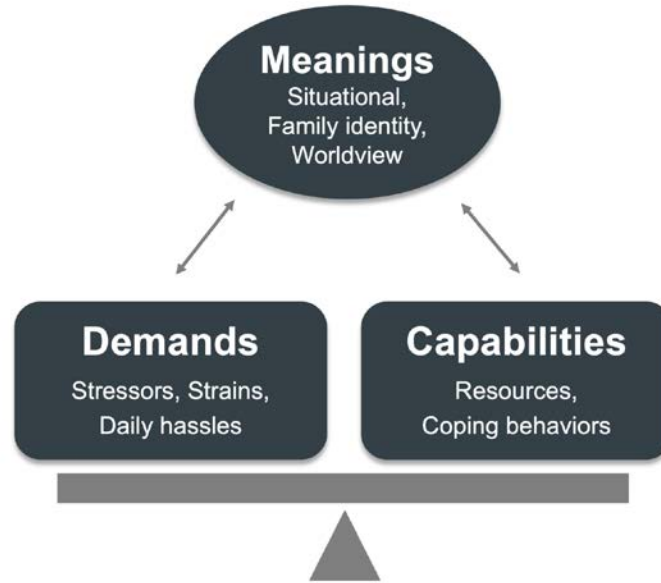
## **COVID-19 and people with disabilities in Canada**

- [Overview](#)
- [Protecting people with disabilities from COVID-19](#)
- [The healthcare system and COVID-19](#)
- [COVID-19 assessment centres](#)
- [Special considerations](#)
- [Infection prevention and control measures and personal protective equipment](#)
- [Educational materials](#)
- [Mental health](#)
- [COVID-19 disability advisory group \(CDAG\)](#)
- [Acknowledgments](#)

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/guidance-documents/people-with-disabilities.html>

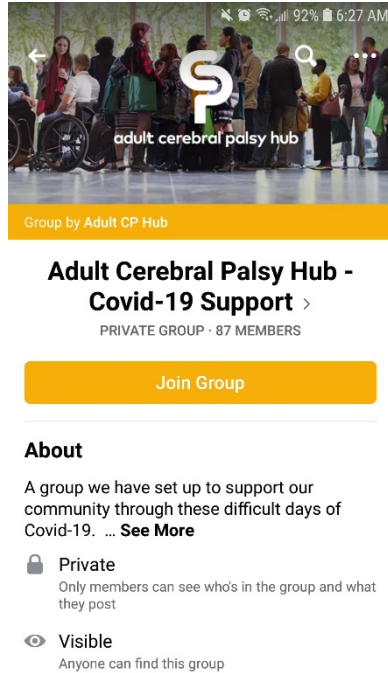
# COVID-19 is a time of stress – it is process of *balancing*

Family Adjustment and Adaptation Response Model (Patterson, 1988)

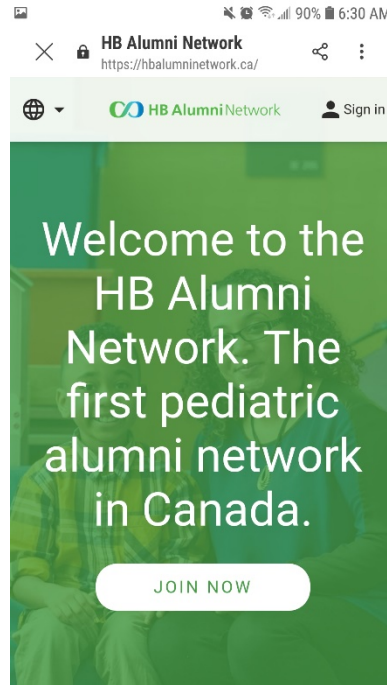


Courtesy: Dr. Jonathan Weiss: <https://asdmentalhealth.blog.yorku.ca/2020/05/supporting-mental-health-of-autistic-individuals-during-covid-times/>

# Belonging to a Community during COVID-19



<http://adultcpclub.org/>



<https://hbalumninetwork.ca/>



<https://www.ofcp.ca/>

# Research Networks in Canada & COVID-19

**#MyCOVIDDisabilityQ**



A collaboration between



réseau pour  
la santé du cerveau  
des enfants



CHILD-BRIGHT  
Network

**CanChild**

<https://www.canchild.ca/en/resources/my-covid-disability-q>

**Child-Bright**

<https://www.child-bright.ca/covid-19-resources>

**Kids Brain Health Network**

<https://kidsbrainhealth.ca/>

# Useful Resources

- [COVID-19 and people with disabilities in Canada](#)
- [La COVID-19 et les personnes en situation de handicap au Canada](#)
- [Coronavirus disease \(COVID-19\): Guidance documents](#)
- [Maladie à coronavirus \(COVID-19\) : Documents d'orientation](#)
- [Children with disabilities face health risks, disruption and marginalization under coronavirus](#)



# Tips for taking care of yourself

- Stay informed but take breaks from social media and the news.
- Practise physical distancing, but **stay socially connected to friends and family** through:
  - email
  - phone calls
  - video chats
  - social media
- Practise mindfulness by:
  - stretching
  - meditating
  - taking deep breaths

[https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html#\\_Tips\\_for\\_taking](https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html#_Tips_for_taking)

# Tips for taking care of yourself

Try to:

- eat healthy meals
  - exercise regularly
  - get plenty of sleep
- 
- Think about how to use any unexpected flexibility in your daily routine.
  - Focus on the positive aspects of your life and things you can control.
  - Be kind and compassionate to yourself and others.
  - If you can, limit your use of substances. If you do use substances, practise safer use and good hygiene.

[https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html#\\_Tips\\_for\\_taking](https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html#_Tips_for_taking)

# If you need help you can call:

- **your primary health provider**
- **a registered psychologist**
- **another mental health provider in your community**

You may also find the following contacts helpful.

- **Kids Help Phone:** Call 1-800-668-6868 (toll-free) or text CONNECT to 686868.
  - Available 24 hours a day to Canadians aged 5 to 29 who want confidential and anonymous care from professional counsellors.
  - Download the [Always There app](#) for additional support or access the [Kids Help Phone website](#).
- **Hope for Wellness Help Line**
  - Call 1-855-242-3310 (toll-free) or connect to the [online Hope for Wellness chat](#).
  - Available to all Indigenous peoples across Canada who need immediate crisis intervention. Experienced and culturally sensitive help line counsellors can help if you want to talk or are distressed.
  - Telephone and online counselling are available in English and French. On request, telephone counselling is also available in Cree, Ojibway and Inuktitut.
- **Crisis Services Canada**
  - If you or someone you know is thinking about suicide, call the Canada Suicide Prevention Service at 1-833-456-4566.
  - Available to all Canadians seeking support. Visit [Crisis Services Canada](#) for the distress centres and crisis organizations nearest you.

[https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html#\\_Tips\\_for\\_taking](https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html#_Tips_for_taking)

# If you are in crisis

- If you are in immediate danger or need urgent medical support, call 911.
- You may also access support workers, social workers, psychologists and other professionals for confidential chat sessions or phone calls by texting WELLNESS to:
  - 686868 for youth
  - 741741 for adults
- The [Wellness Together Canada portal for mental wellness and substance use issues](#) also offers a wide range of resources and support for Canadians.

<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/mental-health.html>

# Welcome to the Workshop!

Opening

Cerebral Palsy

My Story Project

COVID-19

Workshop



How are you?



What is CP?



What do we know  
about mental health?



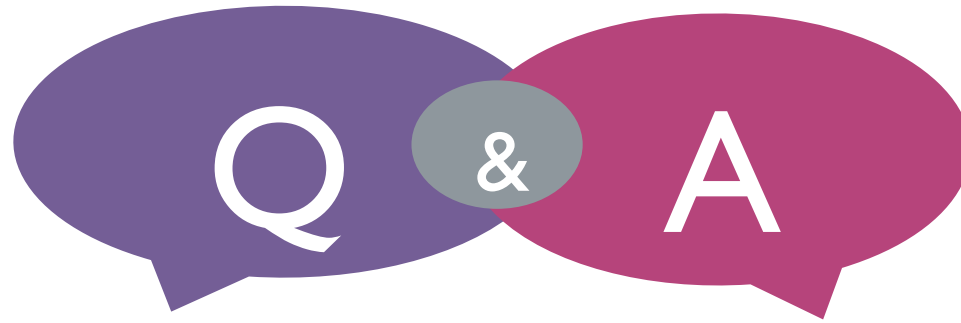
How is COVID19  
impacting everyone  
& what can we do?



Your turn!

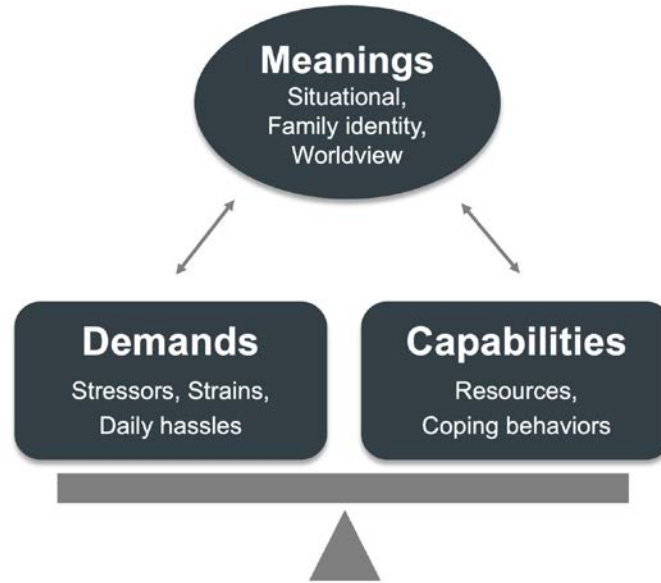


# Q & A Session



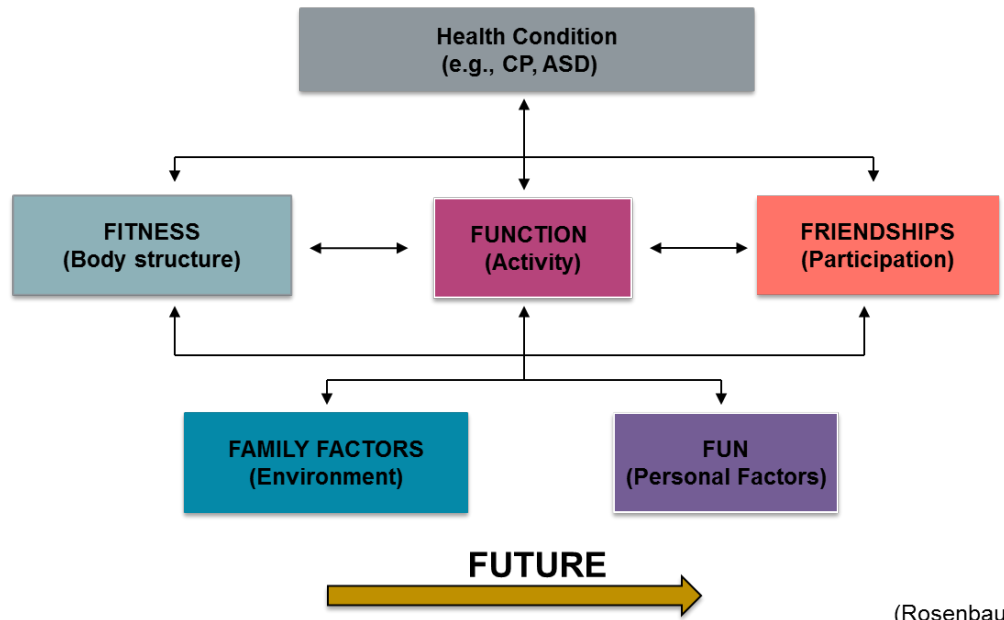
# COVID-19 is a time of stress – it is process of *balancing*

Family Adjustment and Adaptation Response Model (Patterson, 1988)



Courtesy: Dr. Jonathan Weiss: <https://asdmentalhealth.blog.yorku.ca/2020/05/supporting-mental-health-of-autistic-individuals-during-covid-times/>

# The F-Words in Childhood Disability



(Rosenbaum & Gorter, 2012)

<https://onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2214.2011.01338.x>



# What could you do?

## Family and Friends

- Spend time with and take care of your family and friends.
- If it suits you, stay connected with your family and friends by calling, emailing, videoconferencing, or sending cards or letters via post mail.
- ...

Courtesy: Dr. Jonathan Weiss: <https://asdmentalhealth.blog.yorku.ca/2020/05/supporting-mental-health-of-autistic-individuals-during-covid-times/>

# What could you do?

## Fitness

- Eat a balanced diet and stay hydrated.
- Do physical activities and stay active.
- Try to sleep well. | Getting a good night's rest can be helpful for your mental health.
- ...

Courtesy: Dr. Jonathan Weiss: <https://asdmentalhealth.blog.yorku.ca/2020/05/supporting-mental-health-of-autistic-individuals-during-covid-times/>

# What could you do?

## Function

- Prioritize coping and calming. Try different calming strategies, like relaxation activities or app-based ones
- Go outside, in a safe way.
- Create structure and routine, perhaps around key activities (like sleep/wake routines, daily living ones) to ensure predictability during the day.
- Make schedules flexible to encourage being present in the planned activity.
- ...

Courtesy: Dr. Jonathan Weiss: <https://asdmentalhealth.blog.yorku.ca/2020/05/supporting-mental-health-of-autistic-individuals-during-covid-times/>

# What could you do?

## Fun

- Schedule in a nice thing every day, something you can do that puts a smile on your face (e.g., petting a dog, listen to music).
- Play games online with others or alone
- See when screen time is OK.
- Be creative with your time
- Do something sensory pleasing to help regulate emotions
- ...

Courtesy: Dr. Jonathan Weiss: <https://asdmentalhealth.blog.yorku.ca/2020/05/supporting-mental-health-of-autistic-individuals-during-covid-times/>



Thank you for your participation today!

And remember:

We are all in this together!



**CP-NET**  
Childhood Cerebral Palsy  
Discovery Network