

# Introduction to Youth Bipolar Disorder

Dr. Benjamin Goldstein, Centre for  
Youth Bipolar Disorder, CAMH

October 11, 2023  
6 – 7 PM (EST)

camh



## Land acknowledgement

CAMH is situated on lands that have been occupied by First Nations for millennia; lands rich in civilizations with knowledge of medicine, architecture, technology and extensive trade routes throughout the Americas. In 1860, the site of CAMH appeared in the Colonial Records Office of the British Crown as the council grounds of the Mississaugas of the New Credit, as they were known at the time. Today, Toronto is covered by the Toronto Purchase, Treaty No. 13 of 1805 with the Mississaugas of the Credit. Toronto is now home to a vast diversity of First Nations, Inuit and Métis who enrich this city.

CAMH is committed to reconciliation. We will honour the land through programs and places that reflect and respect its heritage. We will embrace the healing traditions of the Ancestors, and weave them into our caring practices. We will create new relationships and partnerships with First Nations, Inuit and Métis – share the land and protect it for future generations.



Reference: <https://www.camh.ca/en/driving-change/building-the-mental-health-facility-of-the-future>

# AGENDA

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1

About the  
webinar  
hosts

2

About today's  
speakers

3

Presentation:  
Introduction  
to Youth  
Bipolar  
Disorder

4

Q&A session

# 1

## About the webinar hosts

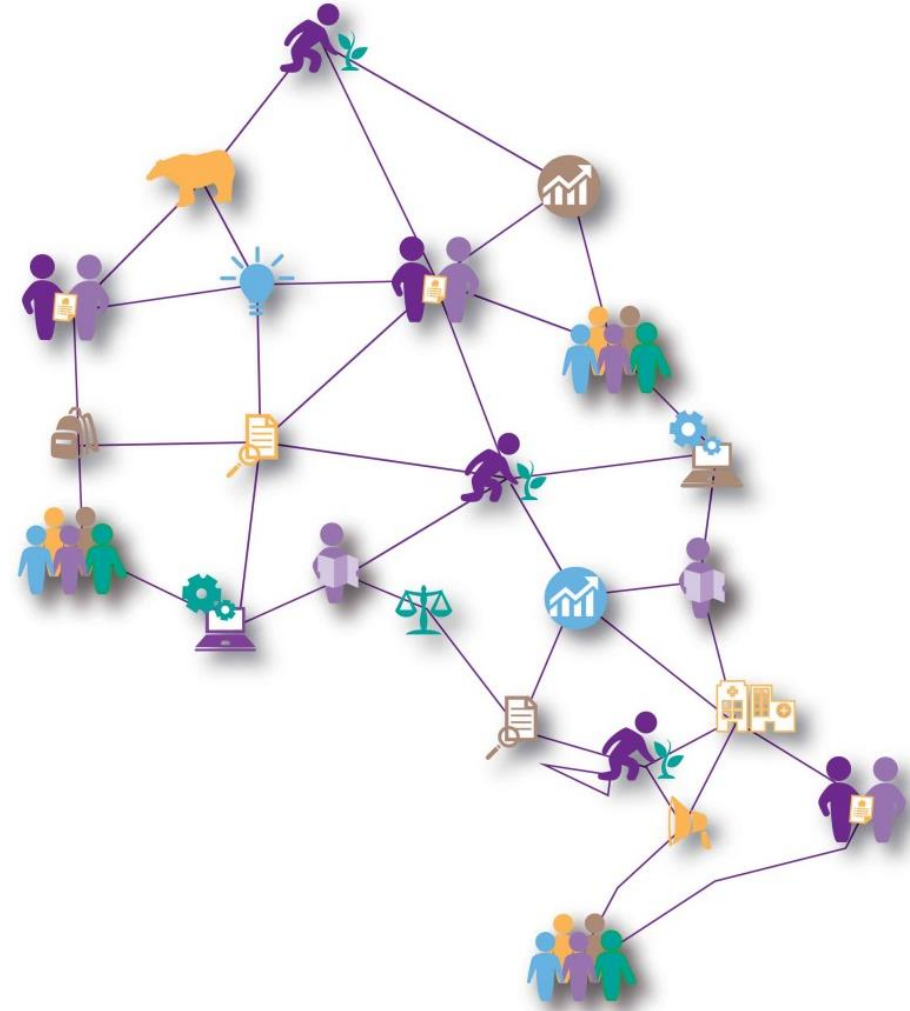
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# CAMH's Provincial System Support Program (PSSP)

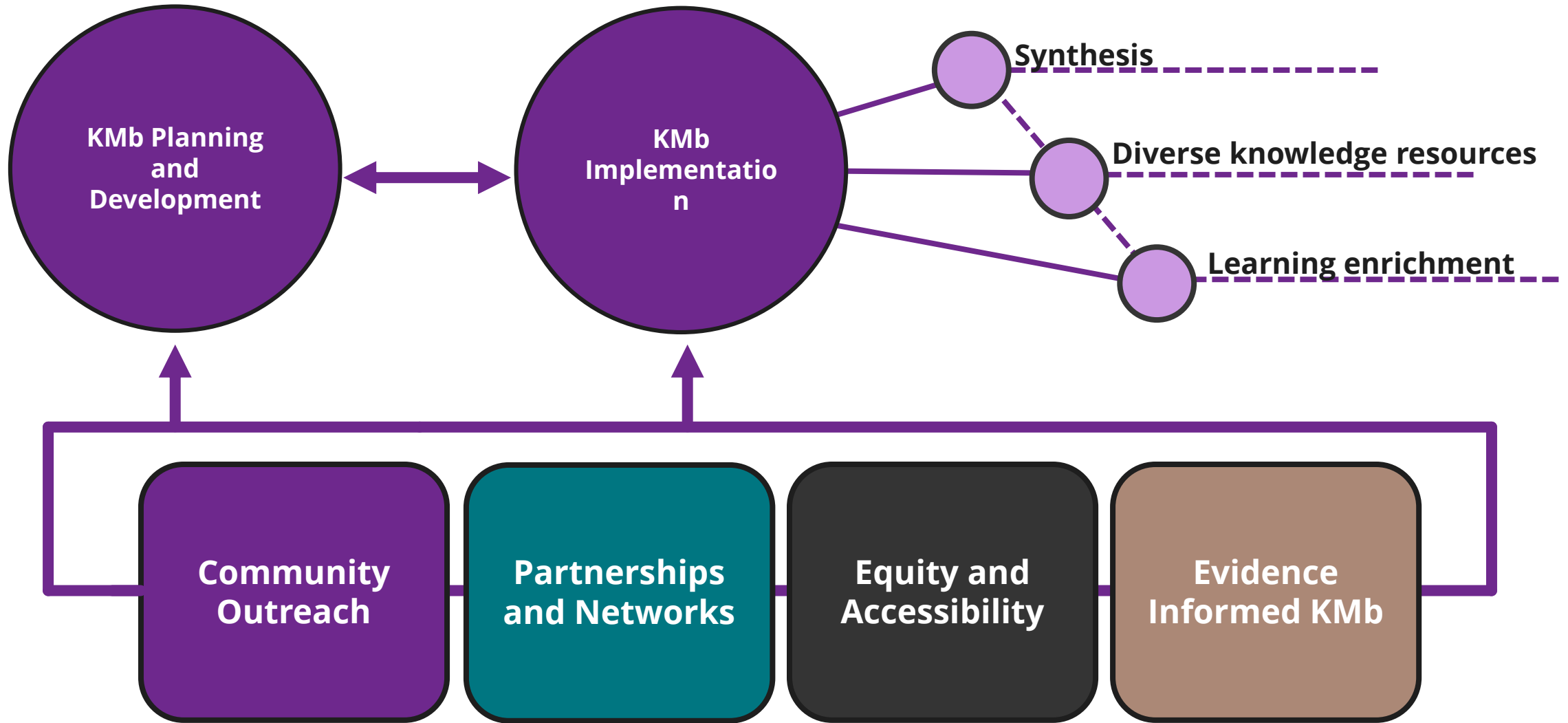
Our Knowledge Mobilization (KMb) team sits within PSSP at CAMH.

PSSP is on the ground collaborating with partners to build a more evidence-informed system, through our work and expertise in:

- knowledge mobilization
- health equity
- lived-experience engagement
- implementation
- data management
- evaluation



# KMb integrated functions



# The Centre for Youth Bipolar Disorder

The Centre for Youth Bipolar Disorder is a fully integrated clinical-research program that seeks to generate discoveries that are uniquely relevant to youth with bipolar disorder. CYBD's focus is on the full spectrum from biology (e.g., genetics, imaging) to clinical trials of pharmacological and psychotherapeutic interventions. CYBD is also committed to advocacy, stigma reduction and education in the field of youth bipolar disorder. You can find us at [www.camh.ca/CYBD](http://www.camh.ca/CYBD) and [@CYBDatCAMH](https://www.instagram.com/CYBDatCAMH).

# 2

## About the speakers

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## Our speakers



**Tera Armel** is a second year medical student at Queen's University and was originally diagnosed with bipolar disorder in Grade 12. She has since become a dedicated mental health advocate and feels that sharing her experiences provides her with a greater understanding of her own journey. She hopes she can empower others through her work as a Jack Talks speaker, President of the Jack.org Queen's Chapter and Consumer Collaborator with the Centre for Youth Bipolar Disorder.

## Our speakers



**Dr. Benjamin Goldstein** is a child-adolescent psychiatrist and the director of CYBD. He is also a Professor of Psychiatry and Pharmacology at the University of Toronto and an Adjunct Professor of Psychiatry at the University of Pittsburgh. He completed medical training at the University of Calgary, followed by residency training in general and child-adolescent psychiatry at the University of Toronto. Dr. Goldstein holds the RBC Investments Chair in Children's Mental Health and Developmental Psychopathology at the Centre for Addiction and Mental Health.

# 3

## Introduction to Youth Bipolar Disorder

# Welcome to the CYBD Webinar Series

A partnership between EENet and the Centre for Youth Bipolar Disorder

## Webinar 1



# SAVE THE DATE

**CENTRE FOR YOUTH BIPOLAR DISORDER  
CELEBRATES  
WORLD BIPOLAR DAY!**

**EVENING OF  
MARCH 28, 2024**

Free event, open to the public

*Knowledge ~ Research ~ Lived Experiences*

**camh** | Centre for Youth  
Bipolar Disorder

# Introduction to Youth Bipolar Disorder

**Benjamin I. Goldstein, MD, PhD, FRCPC**

*RBC Investments Chair in Children's Mental Health & Developmental Psychopathology*

*Director, Centre for Youth Bipolar Disorder, Centre for Addiction and Mental Health*

*Professor of Psychiatry & Pharmacology*

*University of Toronto Temerty Faculty of Medicine*



TEMERTY FACULTY OF MEDICINE  
UNIVERSITY OF TORONTO

**camh** Centre for Addiction  
and Mental Health

# Early-onset in Adult Bipolar Disorder

- 32-65% of adults have onset  $\leq 18$ yo
- More comorbid anxiety, substance abuse
- More episodes and symptoms
- More psychosis, suicidality, and violence
- Longer delay until treatment
- Greater functional impairment
- Earlier recurrence after remission
- **Less time well**

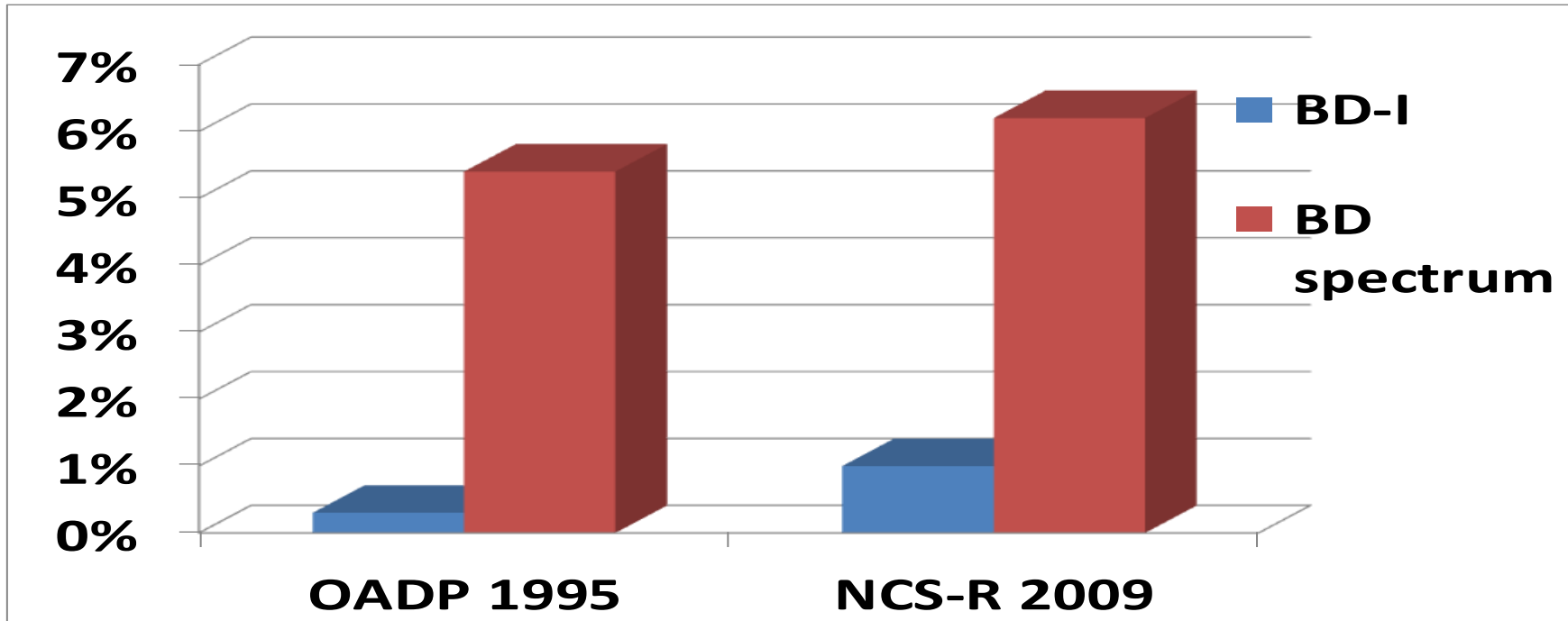
Goldstein & Levitt, *Am J Psychiatry* 2006; Leverich et al. *J Pediatr* 2007; Perlis et al. *Biol Psychiatry* 2004; Perlis et al, *Bipolar Disord* 2009

# Complexity and Under-treatment of Bipolar Disorder in Canadian Youth

|                    | 15-18yo | 19-24yo |
|--------------------|---------|---------|
| Female             | 64.9%   | 52.3%   |
| Anxiety disorder   | 41.8%   | 48.6%   |
| Substance abuse    | 32.1%   | 46.0%   |
| Suicidality        | 54.6%   | 48.6%   |
| Received treatment | 45.8%   | 60.3%   |



# “Epidemic” of Youth Bipolar Disorder?



**NCS BD-I or BD-II:**  
13-14yo: 1.9%  
15-16yo: 3.1%  
17-18yo: 4.3%

- Lifetime bipolar disorder in adolescents = 2.7%
- No significant increase over time
- No significant difference of U.S. vs. elsewhere

Lewinsohn et al, *JAACAP* 1995; Kessler et al, *JAACAP* 2009; Van Meter et al. *J Clin Psych* 2011

# BIPOLAR DISORDERS

AN INTERNATIONAL JOURNAL OF PSYCHIATRY AND NEUROSCIENCES

COMMENTARY

## Questions in psychiatry (QuiP): Is paediatric bipolar disorder a valid diagnosis?

Gin S. Malhi✉, Erica Bell

Reflections

ANZJP

### Paediatric Bipolar Disorder: prepubertal or premature?

Gin S. Malhi<sup>1,2,3</sup> , Erica Bell<sup>1,2,3</sup> , Amber Hamilton<sup>1,2,3</sup>   
and Grace Morris<sup>1,2,3</sup> 

Australian & New Zealand Journal of Psychiatry  
2020, Vol. 54(5) 547–550  
DOI: 10.1177/0004867420920365

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**Paediatric bipolar disorder:  
What are the dangers of  
treating a hypothetical  
disorder as a real disease?**

Stephen Allison<sup>1</sup>, Peter Parry<sup>1,2</sup>,  
Leigh Roeger<sup>1</sup> and Tarun  
Bastiampillai<sup>1,3</sup>

# Century-old Perspectives on Pediatric Bipolar Disorder

(from someone who knew a bit about bipolar)

“In **rare cases** the first beginnings can be traced back even to **before the tenth year**...The **greatest frequency** of first attacks fall, however, in the period of development with its increased emotional excitability **between the fifteenth and the twentieth year**”

--Emil Kraepelin, 1921



# Symptoms of Mania

**“A distinct period of abnormally and persistently elevated, expansive, or irritable mood, and persistently increased activity or energy”, plus:**

- Increased self-esteem, grandiosity
- Decreased need for sleep
- More talkative or pressure to keep talking
- Racing thoughts, stream of ideas
- Distractible
- Increased purposeful activity
- Risky, thrill-seeking behaviors

# Symptoms of Depression

**“Five (or more) of the following symptoms present during the same 2-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.”**

- Low mood or sadness
- No interest in fun activities
- Increased or decreased appetite and weight changes
- Sleeping too much or too little
- Changes in activity level
- Fatigue and loss of energy
- Feel guilty or worthless
- Difficulty concentrating
- Suicidal thoughts or actions

# DSM-5 Bipolar Disorders

## **Bipolar I Disorder**

- At least 1 Manic or Mixed Episode

## **Bipolar II Disorder**

- At least 1 Hypomanic Episode, AND
- At least 1 Major Depressive Episode

## **Cyclothymic Disorder**

- At least 1 year with numerous periods of hypomanic & depressive symptoms

## **“Other Specified Bipolar and Related Disorder”**

- Example: recurrent 2-day hypomanic episodes

# Why is this a Challenging Diagnosis?

- Symptom overlap with other disorders
- Less time well vs. adults
- More likely to have “mixed” states, involving both manic and depressive symptoms
- Historical recall affected by current mood
- Often need repeated visits, follow-up

# “Does this Youth Have Bipolar Disorder?”

More Likely

Somewhat Likely

Less Likely



|                              |                                 |
|------------------------------|---------------------------------|
| Elated, euphoric             | Only Irritable                  |
| Clear periods of euthymia    | Chronic mood symptoms           |
| Previously well              | “always been this way”          |
| Family history of bipolar    | Family history nonspecific      |
| Distinguishing symptoms      | No distinguishing symptoms      |
| Clear “switch” on medication | Improves with SSRI or stimulant |

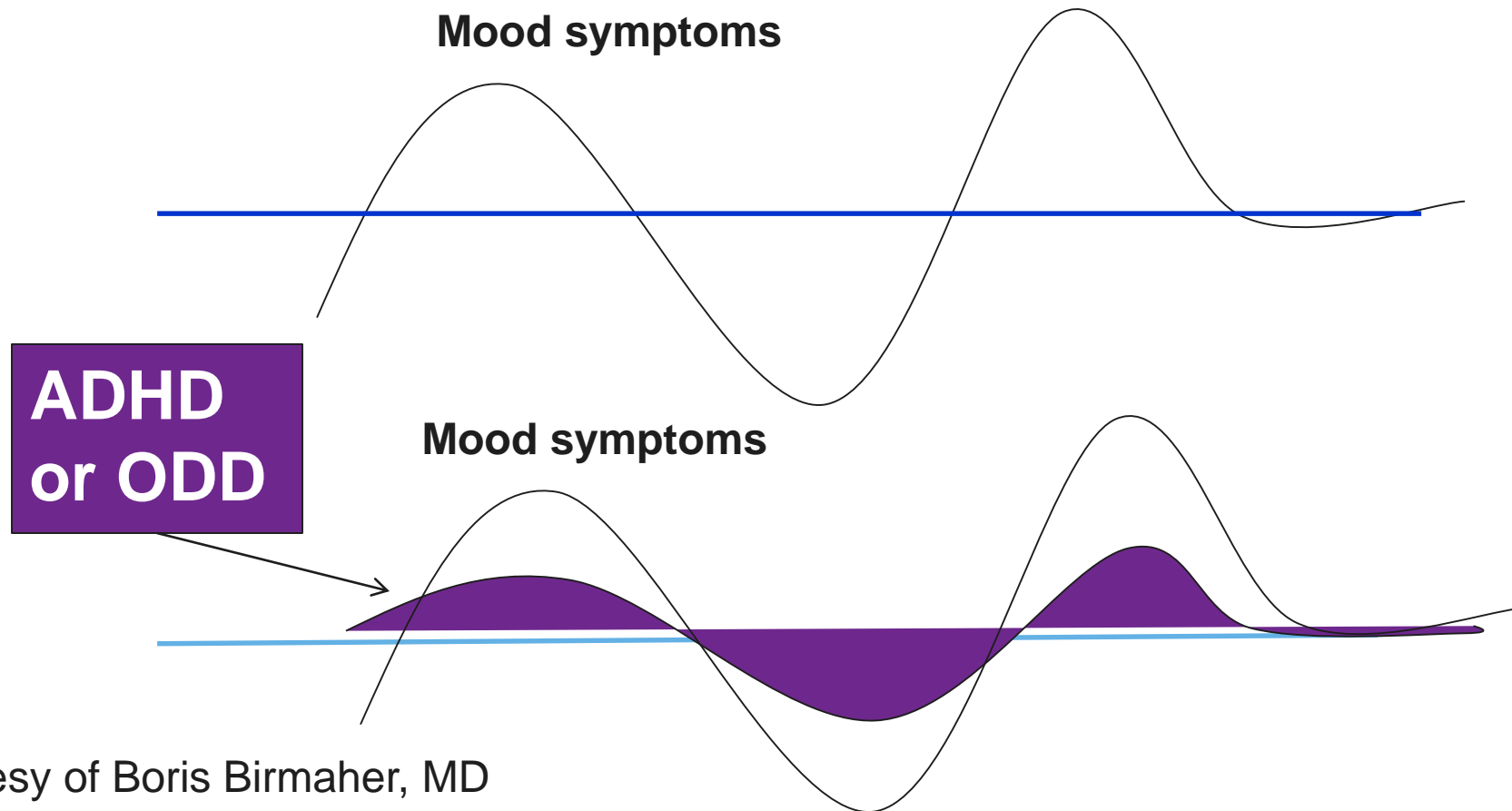


# Clinical Assessment Checklist

- Establish a “baseline”
- Identify an episode
- Look for a change in trajectory
- Determine onset, including precipitants
- Ensure there’s “enough”:
  - Enough symptoms
  - Enough duration
  - Enough functional impact, noticeability
  - Enough distinctiveness from comorbidities

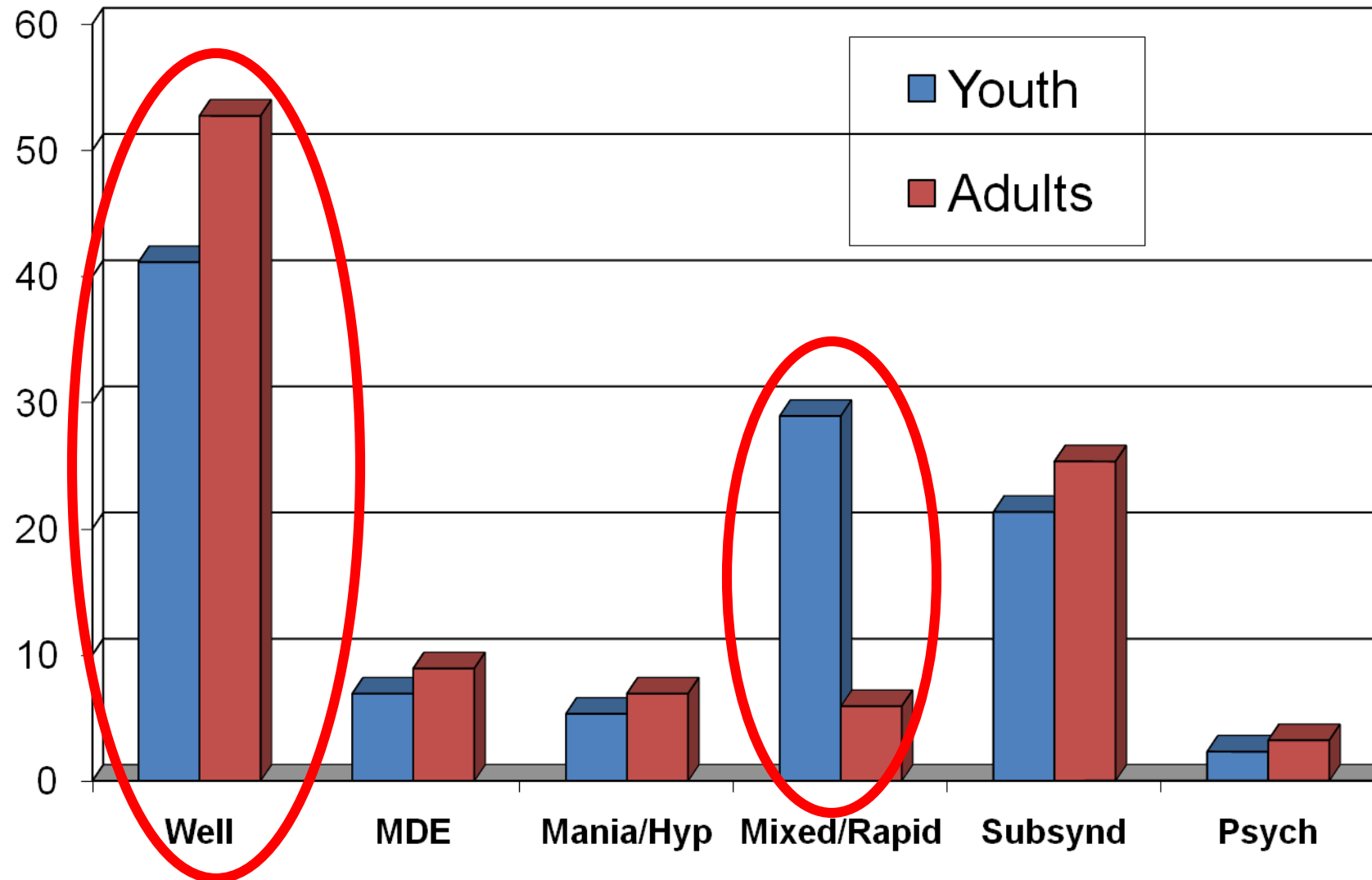
# Mood Symptoms Fluctuate and are Above and Beyond Comorbid Psychiatric Disorders

For example:

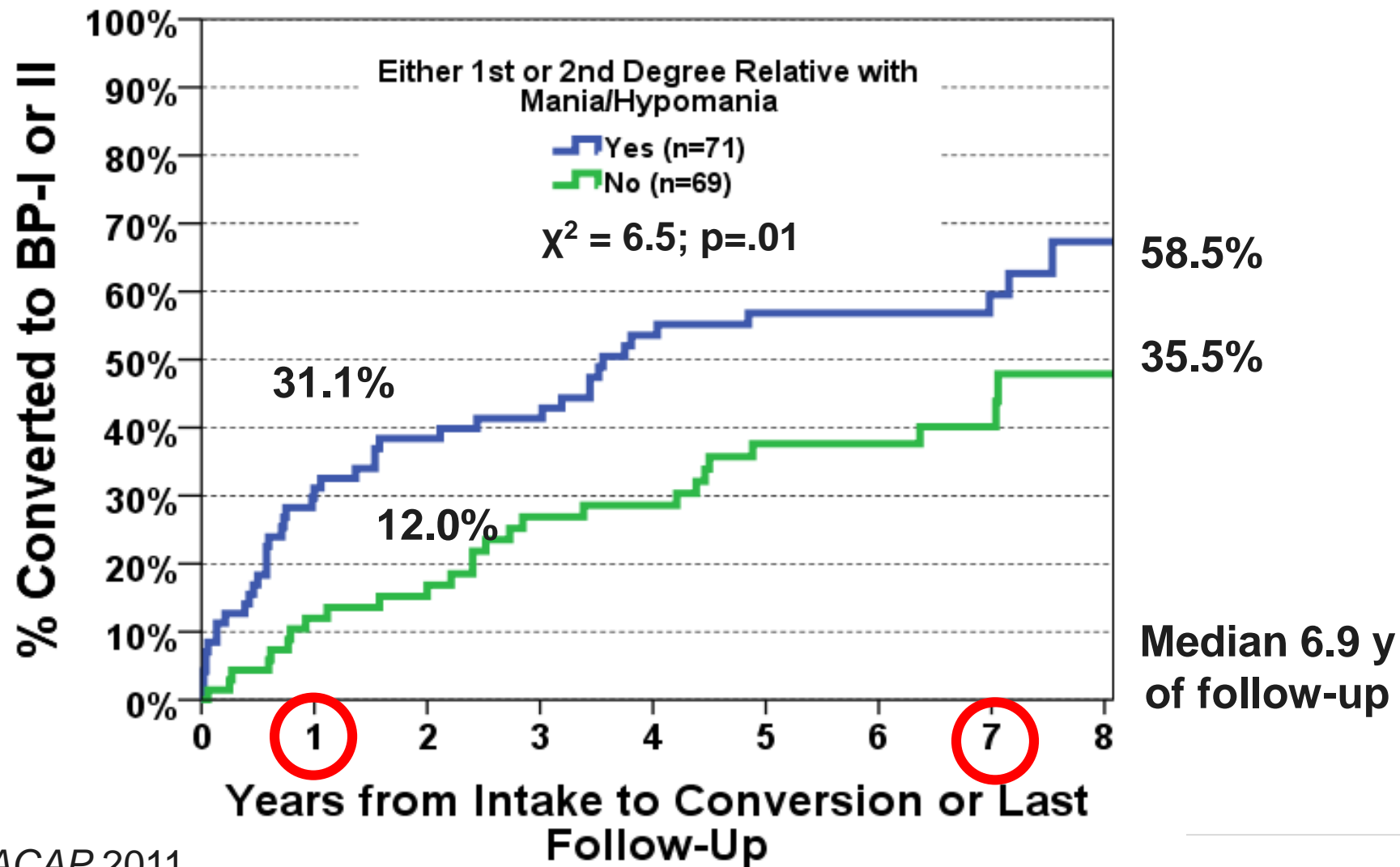


Slide courtesy of Boris Birmaher, MD

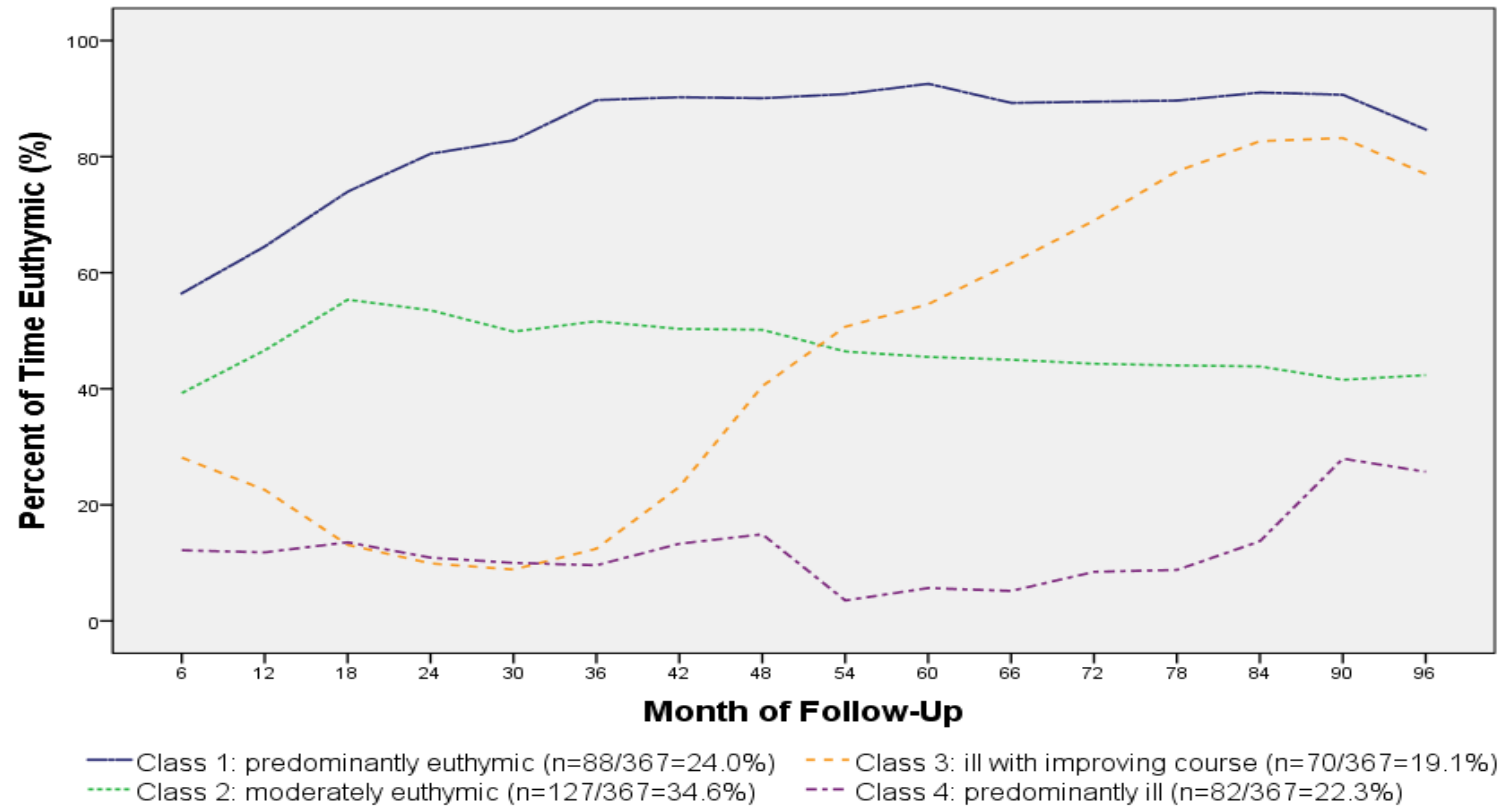
# Weekly Symptoms Status Comparing Youth with **BP-I** (Birmaher et al., 2006) vs. Adults with **BP-I** (Judd et al., 2002)



# Family History Predicts Conversion from BD-NOS to BD-I or -II



# Eight-Year Trajectories of Youth Bipolar Disorder



**After 8 years: almost 50% doing very well, 25% so-so, 25% rarely well**

# Comparing Referred Youth with vs. without Bipolar Disorder: Findings from the Centre for Youth Bipolar Disorder 2009-2020

**394 youth (mean age 16.7 years) referred to a subspecialty clinic for assessment of bipolar disorder**



```
graph TD; A[394 youth (mean age 16.7 years) referred to a subspecialty clinic for assessment of bipolar disorder] --> B[255 confirmed bipolar disorder]; A --> C[139 without bipolar disorder];
```

**255 confirmed bipolar disorder**

**28% BD-I**

**33% BD-II**

**39% BD-NOS**

**139 without bipolar disorder**

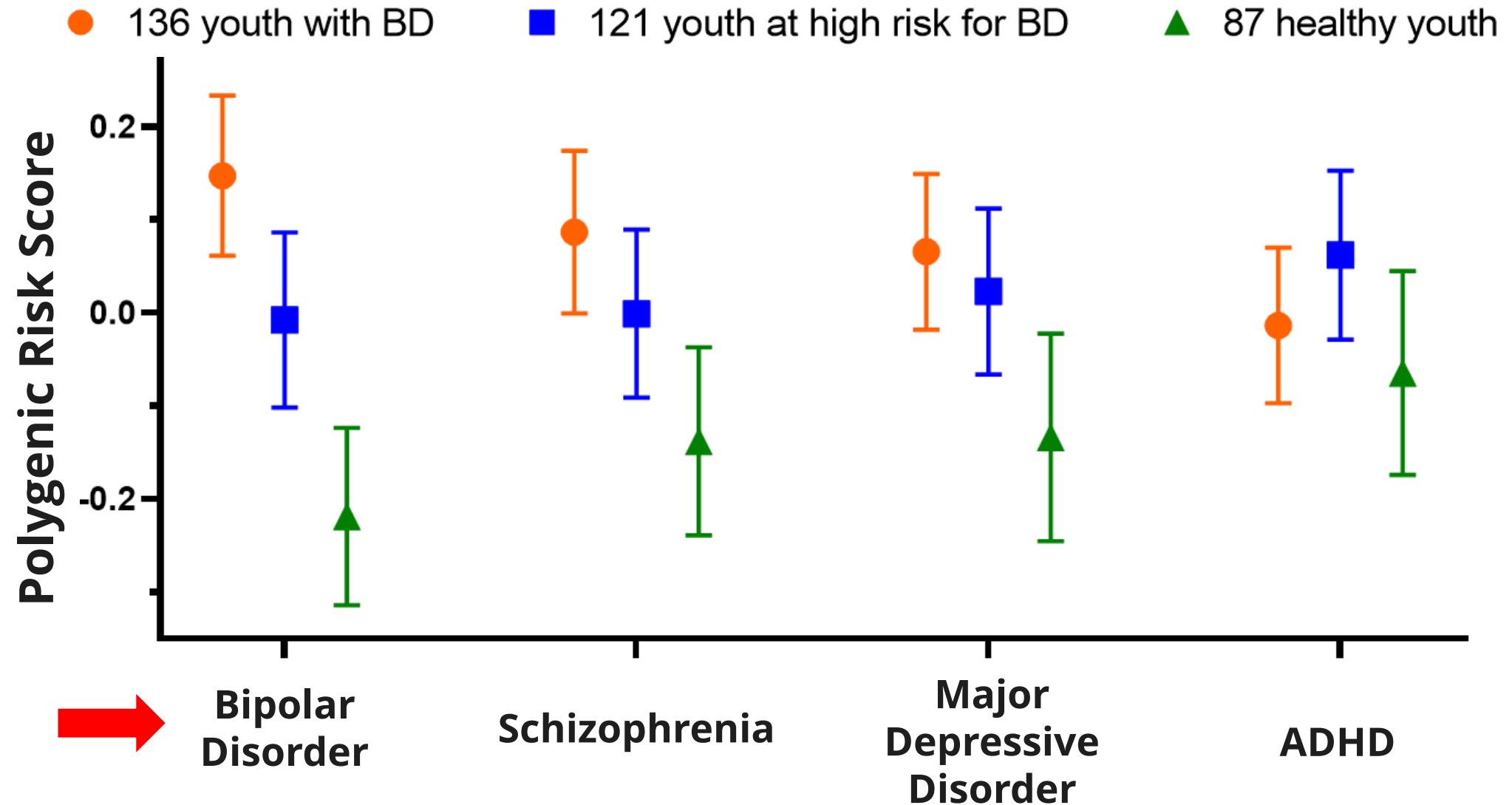
|                                 | <b>Bipolar Disorder</b> | <b>Non-Bipolar Disorder</b> | <b>p-value</b> |
|---------------------------------|-------------------------|-----------------------------|----------------|
| Oppositional defiant disorder   | 29.8%                   | 45.3%                       | 0.002          |
| Bulimia nervosa                 | 7.8%                    | 0.7%                        | 0.003          |
| Current mania symptoms          | 17.7±13.1               | 7.7±8.4                     | <0.001         |
| Most severe mania               | 29.7 ± 9.3              | 12.0 ± 9.2                  | <0.001         |
| Most severe depression          | 30.8 ± 10.8             | 28.0 ± 9.4                  | 0.003          |
| Most severe global functioning  | 41.9 ± 8.9              | 46.0 ± 9.8                  | 0.001          |
| Family history bipolar disorder | 44.7%                   | 20.9%                       | <0.001         |
| Lithium                         | 19.2%                   | 6.5%                        | 0.001          |
| Psychiatric hospitalization     | 48.2%                   | 28.8%                       | <0.001         |

## Reasons Bipolar Disorder Diagnosis was Not Given for 139 Participants without Bipolar Disorder

|   | N (%)      |
|---|------------|
| • Symptoms <b>cannot be differentiated</b> from other psychiatric disorders (i.e., ADHD, ODD, CD, MDD, ASD) | 71 (51.1%) |
| • <b>Never experienced <math>\geq 4</math> hrs of manic symptoms</b> in 24-hr period                        | 35 (25.2%) |
| • <b>&lt;4 cumulative lifetime day(s)</b> meeting manic symptom criteria                                    | 12 (8.6%)  |
| • The <b>history was not sufficiently detailed and/or reliable</b> to confirm BD diagnosis                  | 32 (23.0%) |
| • Manic symptoms <b>solely in the context of psychotropic medication</b> (stimulants, antidepressants)      | 15 (10.8%) |
| • Manic symptoms <b>solely in the context of substance use</b>  | 5 (3.6%)   |



# Specifically Elevated Polygenic Risk for Bipolar Disorder among Youth with Bipolar Disorder





# NEVER ALONE: A YOUTH'S GUIDE TO BIPOLAR DISORDER

*Written by Youth for Youth*

**camh** | Centre for Youth  
Bipolar Disorder

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## table of contents

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|           |   |
|-----------|---|
| <b>01</b> | <b>CHAPTER 1: STIGMA</b>                      |
| <b>11</b> | <b>CHAPTER 2: DIAGNOSIS AND<br/>TREATMENT</b> |
| <b>29</b> | <b>CHAPTER 3: STRATEGIES AND<br/>SKILLS</b>   |
| <b>41</b> | <b>CHAPTER 4: SCHOOL AND WORK</b>             |
| <b>49</b> | <b>CHAPTER 5: ADVICE AND OTHER</b>            |
| <b>63</b> | <b>INDEX</b>                                  |
| <b>64</b> | <b>RESOURCES</b>                              |
| <b>65</b> | <b>ACKNOWLEDGEMENTS</b>                       |

<https://t.co/fobpyu7TtR>

# Summary and Conclusions

- No significant change in prevalence of pediatric bipolar disorder, no significant international difference (accounting for measurement of BD-I vs BD spectrum)
- Less common in children vs. adolescents, nonetheless children can and do experience classical mania
- BD-NOS shares many similarities with BD-I/BD-II and predicts future BD-I/BD-II, especially in presence of family history
- Youth referred with the query of BD share many similarities, whether or not diagnosed with BD; this includes clinical characteristics, family history, genetics
- There are risks of false positives and false negatives; to optimize diagnostic reliability/validity consider: adherence with DSM-5, ensure observability, establish minimum quality of narrative, consider plausibility

# Acknowledgments

## **Patients, research participants, and their families**

*Current:* CAMH Discovery Fund, RBC Investments, Copland Family

Donations in memory of Norman Reisman

*Previous:* Anonymous Donor, Great Gulf Foundation

Michael Albert Garron Foundation



# Thank You to the CYBD Team



Ariel Bettridge, MSc  
Jessica Barton, MSc  
Vanessa Rajamani, MSW  
Jessica Roane, MSW  
Danielle Omrin, MSW  
Amanda Moss, MSW  
Mojdeh Zamyadi, MSc  
Alana Friedlander, HBSc  
Diana Khoubaeva, HBSc  
Charles Umeizudike, HBSc  
Randa Shickh, MPK  
Golda Osei-Bonsu, HBSc  
Tani Orimolade, BSc  
Aaron Silverman, MD  
Clement Zai, PhD  
Mikaela Dimick, PhD  
Kody Kennedy, PhD  
Megan Mio, PhD

Alysha Sultan, PhD  
Joyce (Xinyue) Jiang, HBSc  
Nidhi Kulkarni, MSc  
Oana Mirel, HBSc  
Suyi Shao, HBSc



**Keep up-to-date on the latest information  
and findings about youth bipolar disorder!**



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# 4

## Q&A

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**Thank You**

**camh**