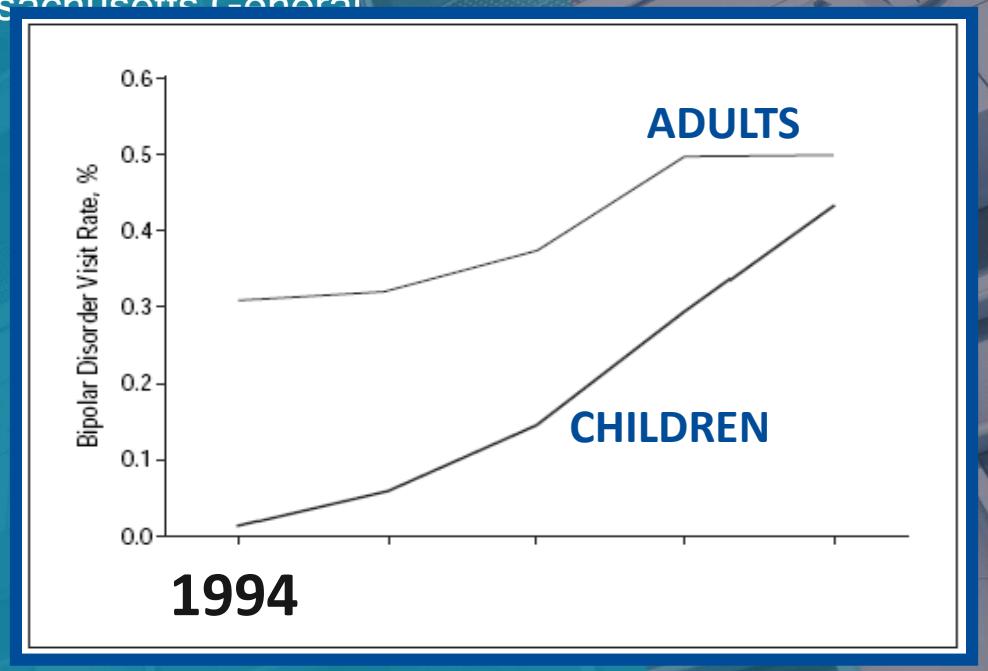
Bipolar Disorder in Children

Janet Wozniak, MD
Associate Professor of Psychiatry
Director, Pediatric Bipolar Disorder Research Program
Director, Child and Adolescent Psychiatry Outpatient Service
Harvard Medical School and Massachusetts General Hospital



MASSACHUSETTS GENERAL HOSPITAL

Pediatric Bipolar disorder is a highly morbid, biologically based, treatable condition that affects a significant minority of young children and adolescents.

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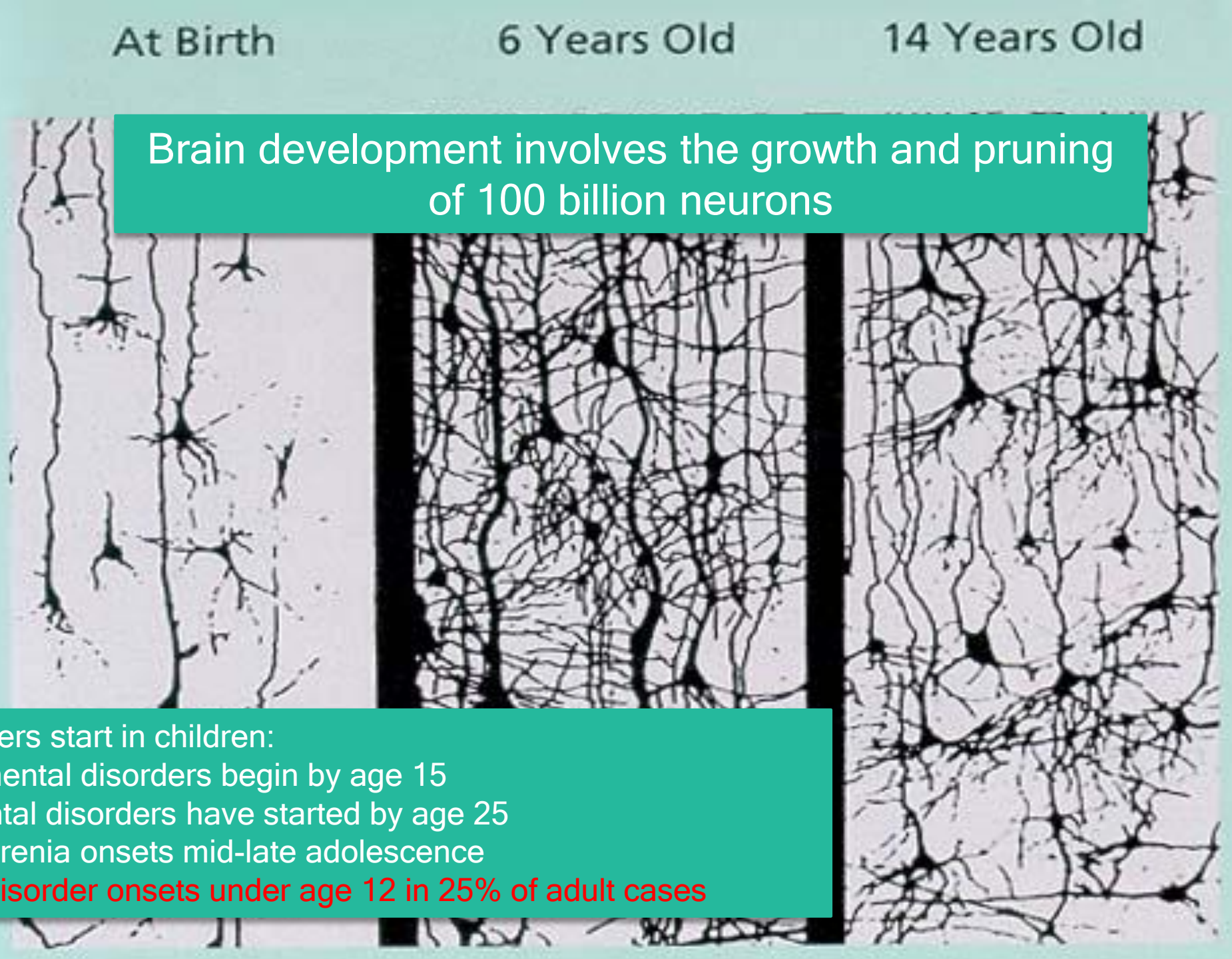

Brain development involves the growth and pruning of 100 billion neurons

Adult disorders start in children:

- 50% of mental disorders begin by age 15
- 75% mental disorders have started by age 25
- Schizophrenia onsets mid-late adolescence
- Bipolar Disorder onsets under age 12 in 25% of adult cases

1995 research paradigm shift: *bipolar disorder can occur in children*

ELSEVIER

Journal of the American Academy of Child & Adolescent Psychiatry

Volume 34, Issue 7, July 1995, Pages 867-876

Mania-Like Symptoms Suggestive of Childhood-Onset Bipolar Disorder in Clinically Referred Children

JANET WOZNIAK, M.D., JOSEPH
STEPHEN V. FARAONE, PH

Before the review process:

Childhood-onset Bipolar Disorder in Clinically Referred Children

1995

ABSTRACT

Objective: To examine the prevalence, characteristics, and correlates of mania among referred children aged 12 or younger. Many case reports challenge the widely accepted belief that childhood-onset mania is rare. Sources of diagnostic confusion include the variable developmental expression of mania and its symptomatic overlap with attention-deficit hyperactivity disorder (ADHD). **Method:** The authors compared 43 children aged 12 years or younger who satisfied criteria for mania, 164 ADHD children without mania, and 84 non-ADHD control children. **Results:** The clinical picture was fully compatible with the *DSM-III-R* diagnosis of mania in 16% ($n = 43$) of referred children. All but one of the children meeting criteria for mania also met criteria for ADHD. Compared with ADHD children without mania, manic children had significantly higher rates of major depression, psychosis, multiple anxiety disorders, conduct disorder, and oppositional defiant disorder as well as evidence of significantly more impaired psychosocial functioning. In addition, 21% ($n = 9$) of manic children had had at least one previous psychiatric hospitalization. **Conclusions:** Mania may be relatively common among psychiatrically referred children. The clinical picture of childhood-onset mania is very severe and frequently comorbid with ADHD and other psychiatric disorders. Because of the high comorbidity with ADHD, more work is needed to clarify whether these children have ADHD, bipolar disorder, or both. *J. Am. Acad. Child Adolesc. Psychiatry*, 1995, 34, 7:867–876. **Key Words:** bipolar disorder, attention-deficit hyperactivity disorder, comorbidity, children.

Wozniak, 1995

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What we learned about children with mania:

IRRITABLE

- The major mood disorder chief complaint of the parents was severe irritability (rather than euphoria)

MIXED

- The children had mostly mixed states (mania and depression overlapped in time)

CHRONIC

- The children were seldom well due to mixed states, many cycles and comorbidity (chronicity)

Wozniak, 1995; Biederman, 2004

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CHRONIC

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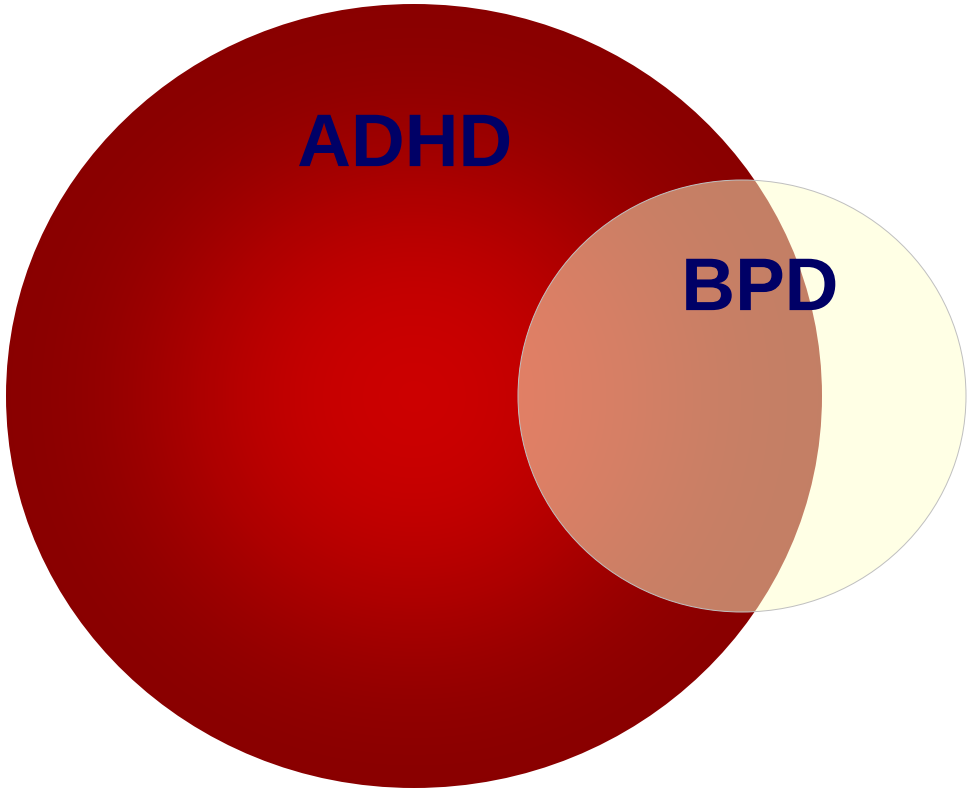
ADHD

- **Almost all of them had ADHD**
- (especially when the onset of mania was prior to age 12)

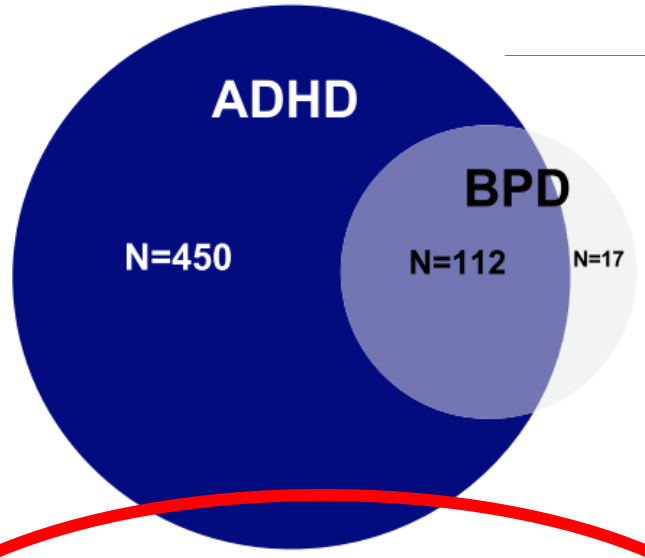
Wozniak, 1995; Biederman, 2004

ADHD+BPD: orphan diagnosis



Despite a substantial overlap, bipolar disorder is a different, more impairing, condition than ADHD

	MANIA	ADHD
Depression	**86%**	38%
Psychosis	**16%**	0
Defiance (ODD)	**88%**	48%
Conduct Disorder	**37%**	15%
Anxiety	**56%**	26%
Hospitalization	21%	2%
Functioning	Very poor	fair
Learning Disability	42%	14%



Most young children with bipolar disorder also have co-occurring ADHD

Wozniak, 1995; Biederman, 2004

Despite a substantial bi-directional overlap, bipolar disorder is a different more impairing condition from ADHD alone

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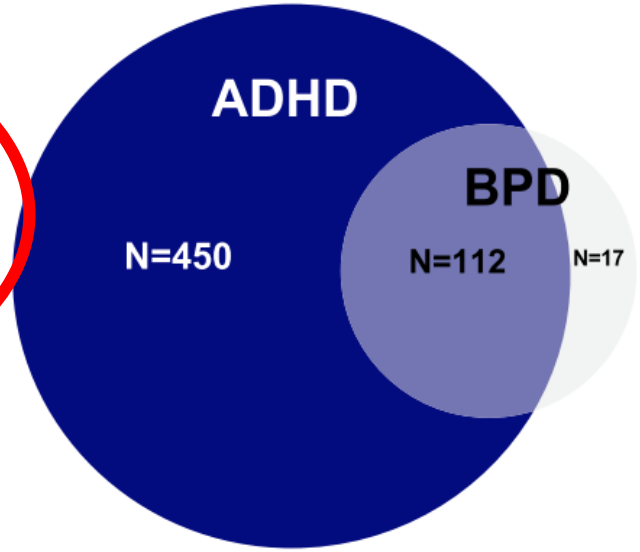

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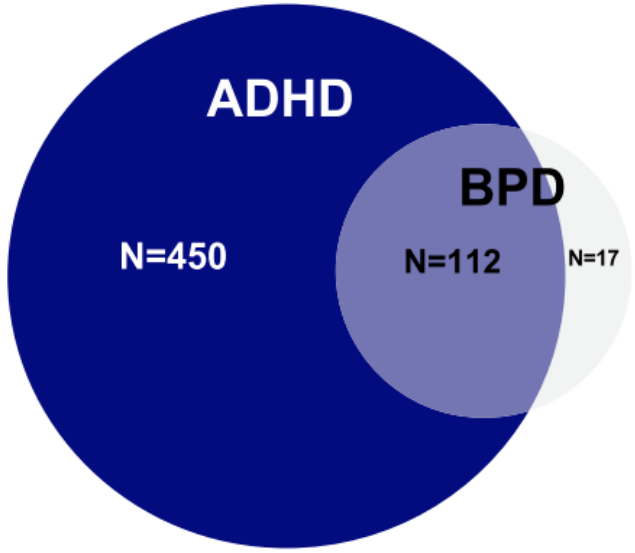


Most children with bipolar disorder also have co-occurring ADHD

Wozniak, 1995; Biederman, 2004

Bipolar disorder requires severe mood symptoms

A. A *distinct period* of abnormally and persistently elevated, expansive or irritable mood and persistently increased goal-directed activity or energy

B. At least 3/7 (4/7 if mood is irritable)

ADHD symptoms

1) D Distractibility
2) I Increased activity/psychomotor agitation
3) G Grandiosity or inflated self-esteem
4) F Flight of ideas or racing thoughts
5) A Activities with painful consequences
6) S Sleep decreased
7) T Talkative or pressured speech

Whether children can display signs of ‘serious’ psychiatric disorder is a confounding question

2002

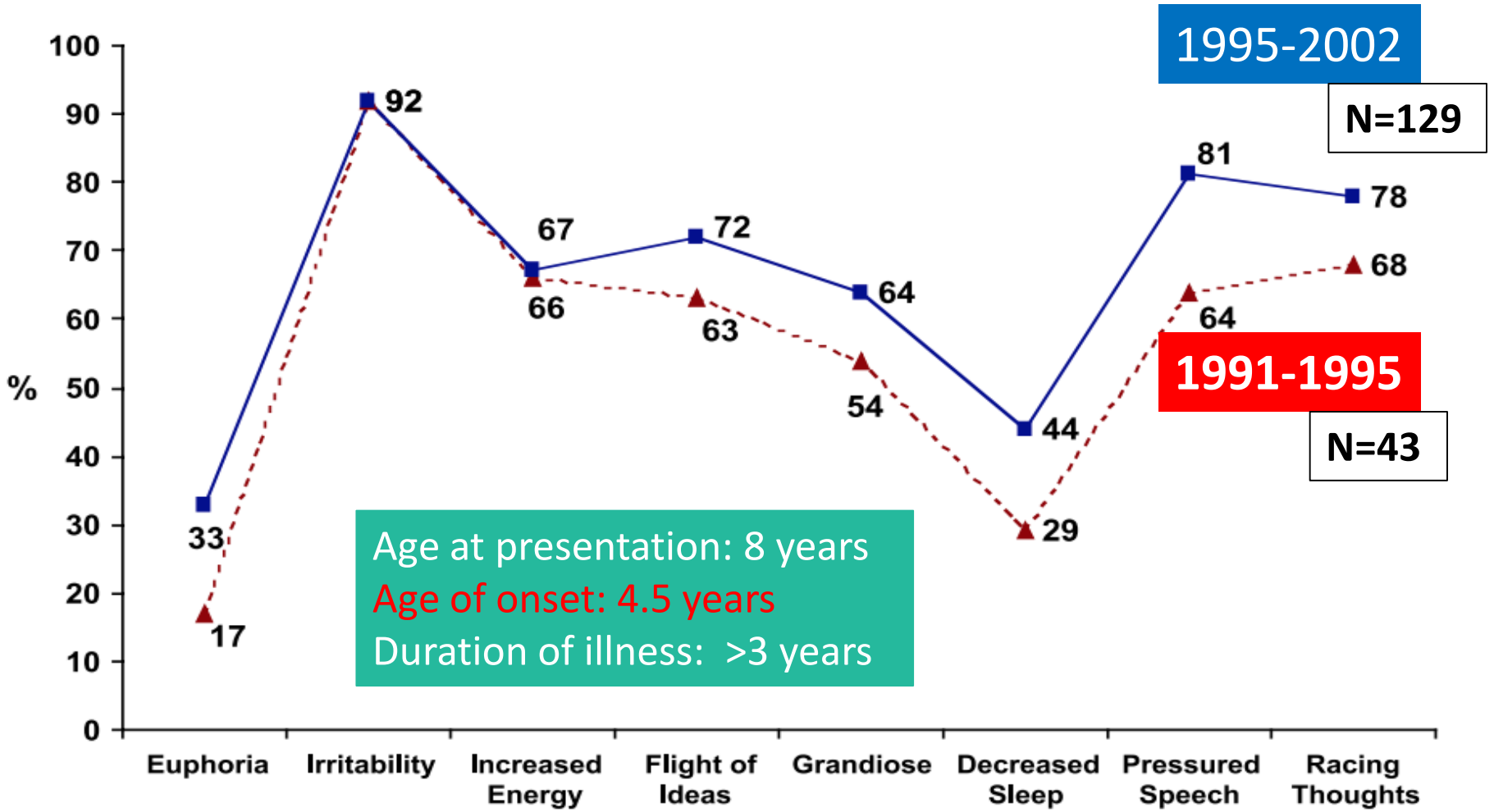
There are no problems diagnosing ADHD, autism, depression, OCD, anxiety disorders

Whether children can display signs of ‘serious’ psychiatric disorder is a confounding question

2002

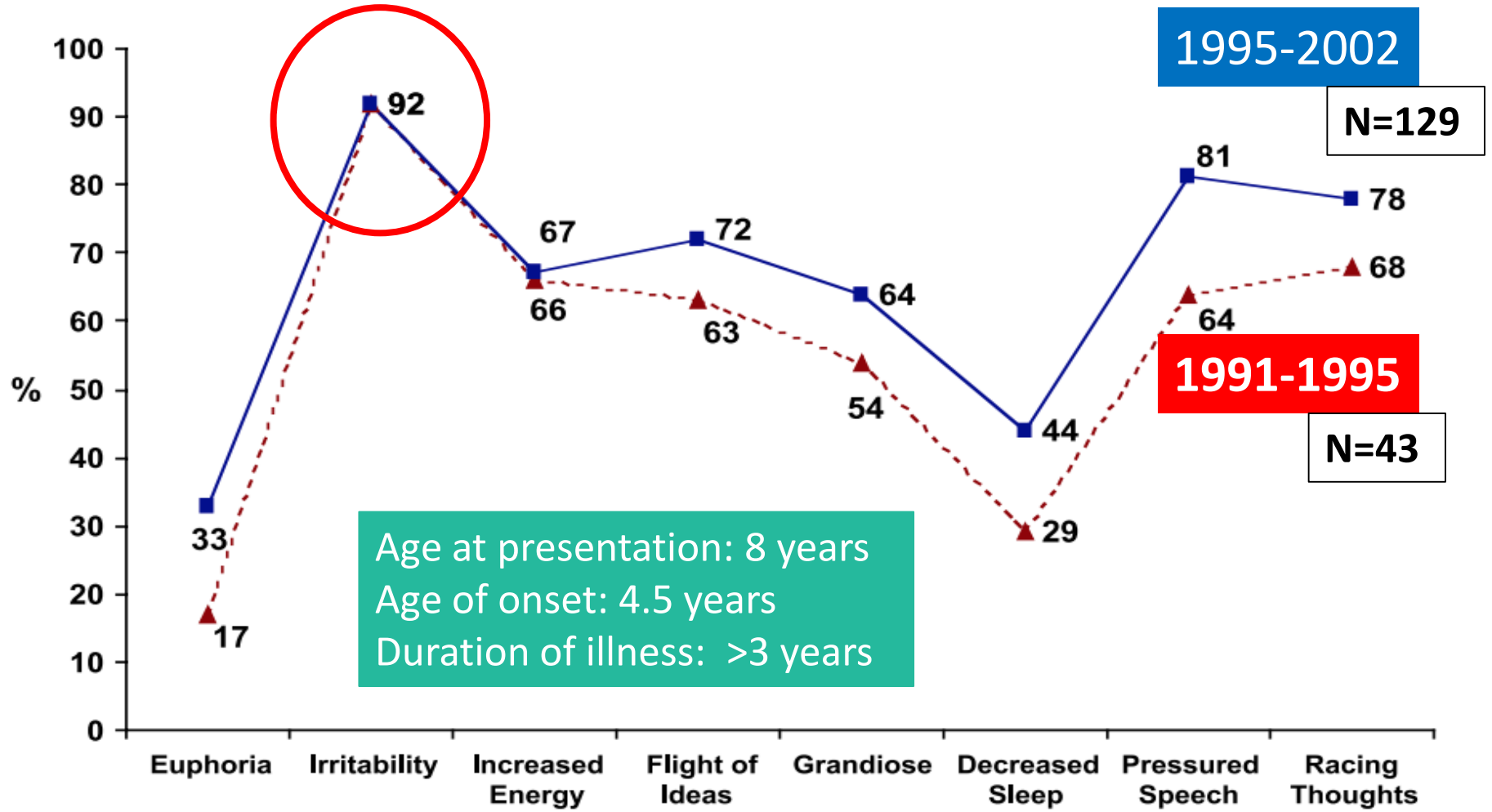
…. Nicole hallucinated wildly, trying to jump out of the car, pulling off her clothes and ranting that people were following her…….Nicole, 16, had been having problems for a while now--ever since she was 14 and began closeting herself in her bedroom, incapable of socializing or doing her schoolwork, and contemplating suicide

The symptoms of mania in children <12 years are the same across studies.



Wozniak, 1995; Biederman, 2004

Irritability was frequently the chief complaint



Wozniak, 1995; Biederman, 2004

MEDICAL DISPATCH APRIL 9, 2007 ISSUE

WHAT'S NORMAL?

The difficulty of diagnosing bipolar disorder in children.

By Jerome Groopman

April 2, 2007

The New Yorker

2007

In April, 2000, Steven Hyman, a psychiatrist who at the time was the director of the National Institute of Mental Health, convened a meeting of nineteen prominent psychiatrists and psychologists in order to discuss bipolar disorder in children. The disorder has long been recognized as a serious psychiatric illness in adults, characterized by

MEDICAL DISPATCH APRIL 9, 2007 ISSUE

WHAT'S NORMAL?

The difficulty of diagnosing bipolar disorder in children.

By Jerome Groopman

April 2, 2007

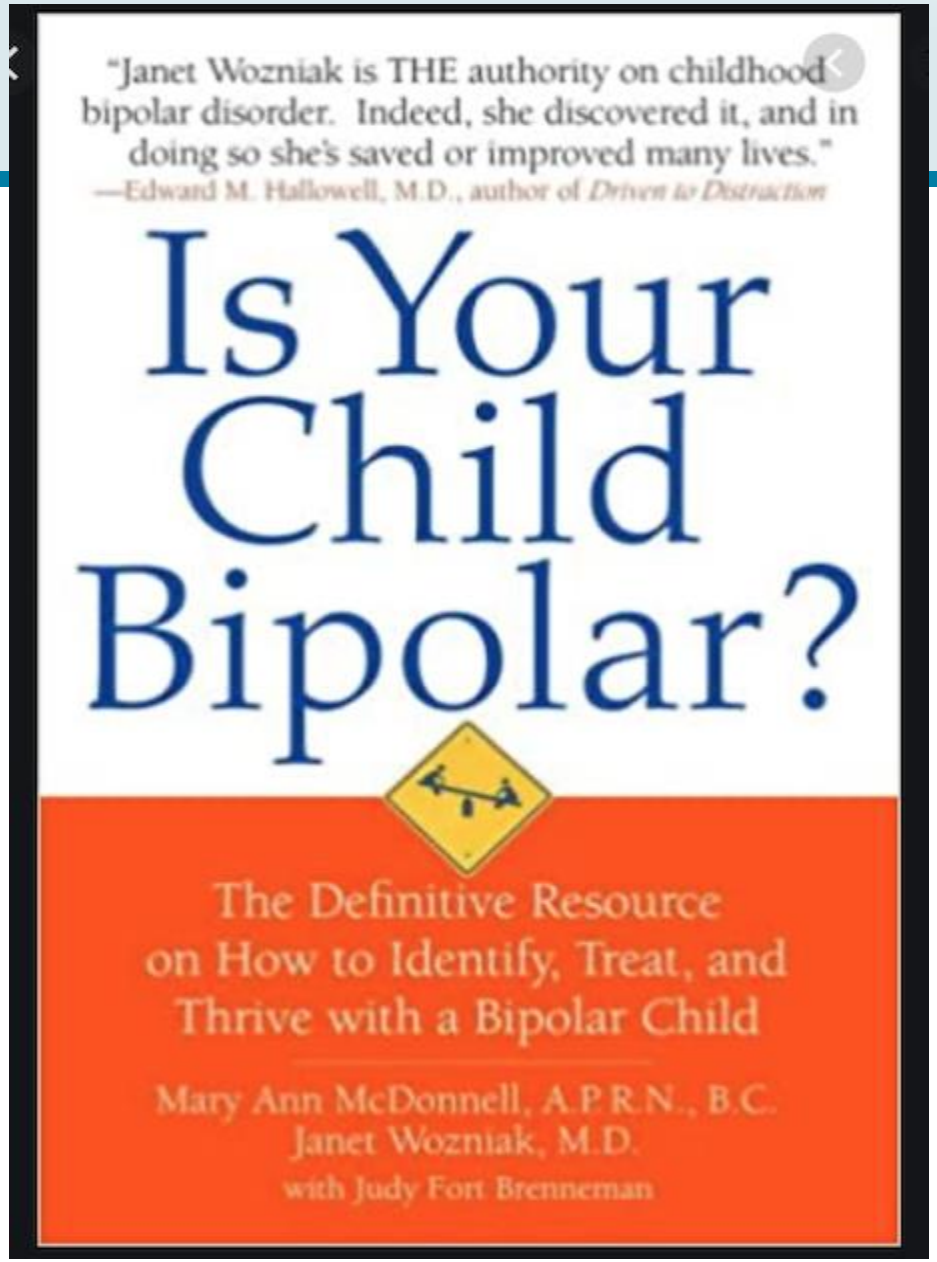
Dr. Prewitt…..spends a good deal of time "undiagnosing" children who have been told they are bipolar.

For example:
It turned out that the diagnosis was 'a divorce situation,' Prewitt said. Max's parents had separated and were undergoing bitter divorce negotiations.

2007

In April, 2000, Steven Hyman, a psychiatrist who at the time was the director of the National Institute of Mental Health, convened a meeting of nineteen prominent psychiatrists and psychologists in order to discuss bipolar disorder in children. The disorder has long been recognized as a serious psychiatric illness in adults, characterized by

2008


"Janet Wozniak is THE authority on childhood bipolar disorder. Indeed, she discovered it, and in doing so she's saved or improved many lives."
—Edward M. Hallowell, M.D., author of Driven to Distraction
Is Your Child Bipolar?
The Definitive Resource on How to Identify, Treat, and Thrive with a Bipolar Child
Mary Ann McDonnell, A.P.R.N., B.C.
Janet Wozniak, M.D.
with Judy Fort Brenneman

Like many children whose emotional problems are being diagnosed as bipolar disorder, his main symptoms are aggression and explosive rage (known in clinical parlance as “irritability”), and those traits have been visible in James from the time he was a toddler. Fifteen years ago his condition would probably not have been called bipolar disorder

2008

Like many children whose emotional problems are being diagnosed as bipolar disorder, his main symptoms are aggression and explosive rage (known in clinical parlance as "irritability"), and those traits have been visible in James from the time he was a toddler. Fifteen years ago his condition would probably not have been called bipolar disorder

Age 4-5 years: Life at home was devolving into a nightmare. "James used to wake up every morning violently angry," Mary said. "I used to wake up at 4:30 and heat his milk in his sippy cup so that when he woke up at 5:00 it would be exactly the right temperature. If it was too hot or too cold, he would take one sip from the cup, hurl it across the room and rage so loudly that it would wake Claire up, so that at three minutes after 5:00, I would be crying, Claire would be crying and my husband would be crying."

2008

The NEW ENGLAND JOURNAL of MEDICINE

Perspective

MAY 20, 2010

Pediatric Mental Health Care Dysfunction Disorder?

Erik Parens, Ph.D., Josephine Johnston, L.L.B., M.B.H.L., and Gabrielle A. Carlson, M.D.

2010

In February, the American Psychiatric Association released draft revisions for the next iteration of its diagnostic manual (the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* [DSM-V]).

One of the draft's most talked-about features is a new diagnostic category for children: temper dysregulation disorder with dys-

we get serious about reforming pediatric mental health care.

The hallmark of bipolar disorder in adults is a manic epi-

as reported by Moreno and colleagues,[1] the number of children with a diagnosis of bipolar disorder visiting outpatient clinics increased by a factor of 40. These children, some preschoolers, were primarily being treated with mood stabilizers and a new generation of antipsychotic drugs.

No one disputes that these

The NEW ENGLAND JOURNAL of MEDICINE

about features is a new diagnostic category for children: temper dysregulation disorder with dysphoria (TDD). The addition has been praised by some as a verdict on one of the hottest questions in child psychiatry: Is the dramatic increase in the number of children with a diagnosis of bipolar disorder appropriate? The answer appears to be no. But the creation of this new category raises another question: Will the TDD diagnosis advance what everyone agrees should be the ultimate goal of psychiatric classification — helping troubled children to flourish? Sadly, the answer to the second question is also no, unless

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The hallmark

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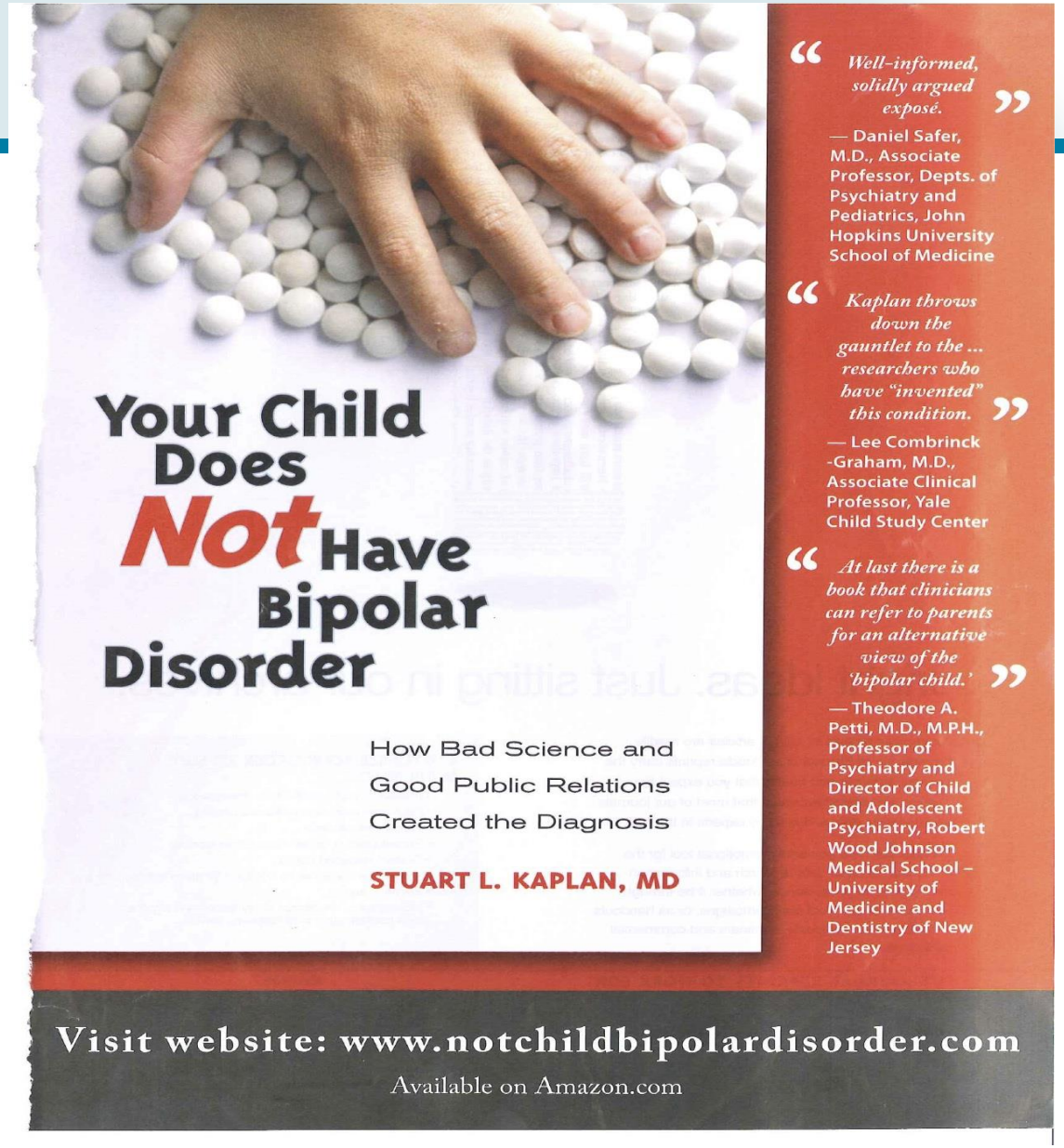
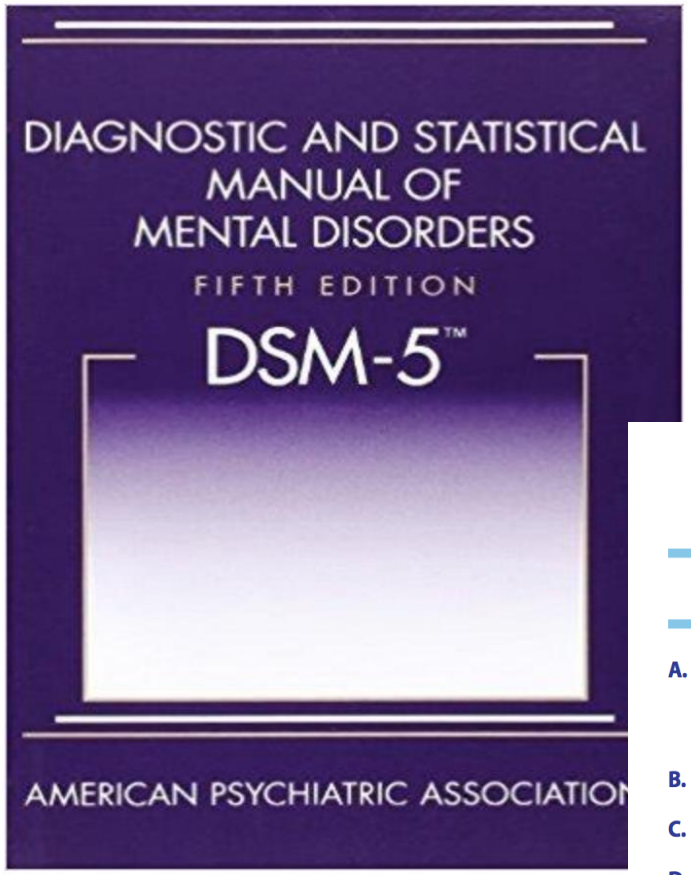

Your Child Does Not Have Bipolar Disorder
How Bad Science and Good Public Relations Created the Diagnosis
STUART L. KAPLAN, MD
"Well-informed, solidly argued exposé."
— Daniel Safer, M.D., Associate Professor, Depts. of Psychiatry and Pediatrics, John Hopkins University School of Medicine
"Kaplan throws down the gauntlet to the ... researchers who have "invented" this condition."
— Lee Combrinck -Graham, M.D., Associate Clinical Professor, Yale Child Study Center
"At last there is a book that clinicians can refer to parents for an alternative view of the 'bipolar child.'"
— Theodore A. Petti, M.D., M.P.H., Professor of Psychiatry and Director of Child and Adolescent Psychiatry, Robert Wood Johnson Medical School – University of Medicine and Dentistry of New Jersey
Visit website: www.notchildbipolardisorder.com
Available on Amazon.com

A new disorder was created called *Disruptive Mood Dysregulation Disorder*

2013

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CLINICAL PSYCHIATRY

Focus on Childhood and Adolescent Mental Health

Examining the Proposed Disruptive Mood Dysregulation Disorder Diagnosis in Children in the Longitudinal Assessment of Manic Symptoms Study

DSM-5™ Diagnostic Criteria

Disruptive Mood Dysregulation Disorder	296.99	(F34.8)

A. Severe recurrent temper outbursts manifested verbally (e.g., verbal rages) and/or behaviorally (e.g., physical aggression toward people or property) that are grossly out of proportion in intensity or duration to the situation or provocation.

B. The temper outbursts are inconsistent with developmental level.

C. The temper outbursts occur, on average, three or more times per week.

D. The mood between temper outbursts in persistently irritable or angry most of the day, nearly every day, and is observable by others (e.g., parents, teachers, peers).

American Psychiatric Association's *Diagnostic Statistical Manual, Fifth Edition*, or *DSM-5*

Child WorkGroup Mission: REDUCE THE NUMBER OF BIPOLAR DIAGNOSES IN CHILDREN

2013

Since 2001, the rate of bipolar-disorder diagnosis among children and teens has jumped more than 4,000 percent (times 40).

Bipolar disorder often gets treated with combinations of antipsychotic and mood-stabilizing drugs (lithium and Risperdal, for instance) that have strong side effects.

This diagnosis carries a huge stigma and attendant effect on self-image.

The new diagnosis could theoretically lead to a reduction in the number of kids getting medicated for bipolar disorder unnecessarily and an increase in kids getting more appropriate interventions.

American Psychiatric Association's *Diagnostic Statistical Manual, Fifth Edition*, or *DSM-5*

Adult WorkGroup Mission: ENSURE THAT BIPOLAR DISORDER IS NOT MISSED

Captures subsyndromal mixed symptoms which has significant implications for both diagnosis and treatment

2013

Acknowledges the existence of highly prevalent subsyndromal mixed states not captured in the *DSM-IV-TR* and can contribute to the detection of bipolar disorder.

Hu 2014; 16(2): PCC.13r01599.

The New Temper Tantrum Disorder

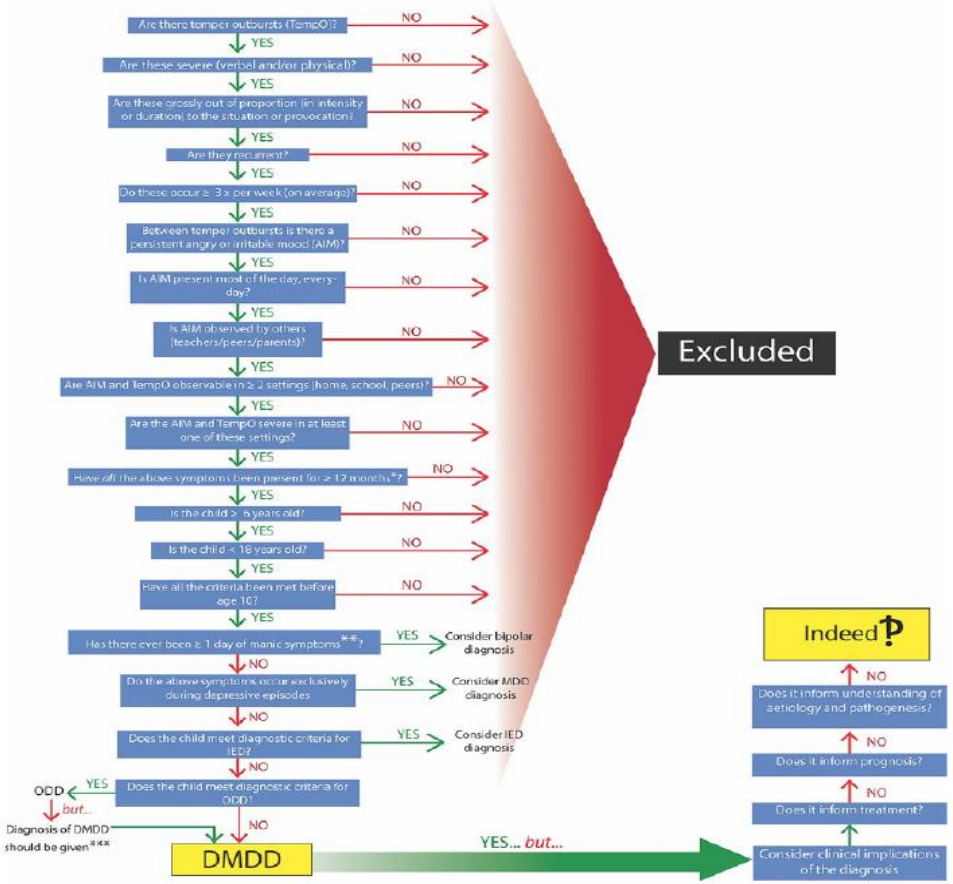
Will the new diagnostic manual for psychiatrists go too far in labeling kids dysfunctional?

By David Dobbs|Posted Friday, Dec. 7, 2012, at 1:12 PM ET

Severe Mood Dysregulation…Temper Dysregulation Disorder…Disruptive Mood Dysregulation Disorder…….

Step-wise diagnosis of DMDD:
A convoluted process that does not inform management

Figure 2. Step-wise diagnosis of DMDD. The decision tree shows the questions that need to be considered in order to arrive at a diagnosis of DMDD as per DSM-5 criteria. It illustrates the complexity of the process and highlights the futility of the experience given that the diagnosis does not inform prognosis or treatment and does not provide any meaningful understanding of the individual's behaviour and distress.



This convoluted process – many aspects of which are clearly unrealistic – would at least be theoretically acceptable were it not for the fact that successfully making a diagnosis of DMDD does not inform management

Malhi, Australian & New Zealand Journal of Psychiatry 2019

What harm is done by continued denial?

Pediatric Bipolar disorder is a highly morbid, biologically based, treatable condition that affects a significant minority of young children and adolescents.

In study of 10,000+ US adolescents, 2.9% were bipolar and in a meta-analysis of international studies, the rate of pediatric bipolar disorder was 1.8%

Lifetime Prevalence of Mental Disorders in U.S. Adolescents: Results from the National Comorbidity Survey Replication–Adolescent Supplement (NCS-A)

Kathleen Ries Merikangas, Ph.D., Jian-ping He, M.Sc., Marcy Burstein, Ph.D., Sonja A. Swanson, Sc.M., Shelli Avenevoli, Ph.D., Lihong Cui, M.Sc., Corina Benjet, Ph.D., Katholiki Georgiades, Ph.D., Joel Swendsen, Ph.D.

Objective: To present estimates of the lifetime prevalence of *DSM-IV* mental disorders with and without severe impairment, their comorbidity across broad classes of disorder, and their sociodemographic correlates. Method: The National Comorbidity Survey–Adolescent Supplement NCS-A is a nationally representative face-to-face survey of 10,123 adolescents aged 13 to 18 years in the continental United States. *DSM-IV* mental disorders were assessed using a modified version of the fully structured World Health Organization Composite International Diagnostic Interview. Results: Anxiety disorders were the most common condition (31.9%), followed by behavior disorders (19.1%), mood disorders (14.3%), and substance use disorders (11.4%), with approximately 40% of participants with one class of disorder also meeting

Approximately one in every four to five youth in the U.S. meets criteria for a mental disorder with severe impairment across their lifetime. The likelihood that common mental disorders in adults first emerge in childhood and adolescence highlights the need for a transition from the common focus on treatment of U.S. youth to that of prevention and early intervention. J. Am. Acad. Child Adolesc. Psychiatry, 2010;49(10):980–989. Key Words: epidemiology, adolescents, mental disorders, National Comorbidity Survey, correlates

Despite the rise in rate, pediatric bipolar disorder affects a minority of youth and ADHD is more common (8.7%)

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CLINICAL PSYCHIATRY

Results: The overall rate of bipolar disorder was 1.8% (95% CI, 1.1%–3.0%). There was no significant difference in the mean rates between US and non-US studies, but the US studies had a wider range of rates. The highest estimates came from studies that used broad definitions and included bipolar disorder not otherwise specified. Year of enrollment was negatively correlated with prevalence ($r = -0.04$) and remained nonsignificant when controlling for study methodological differences.

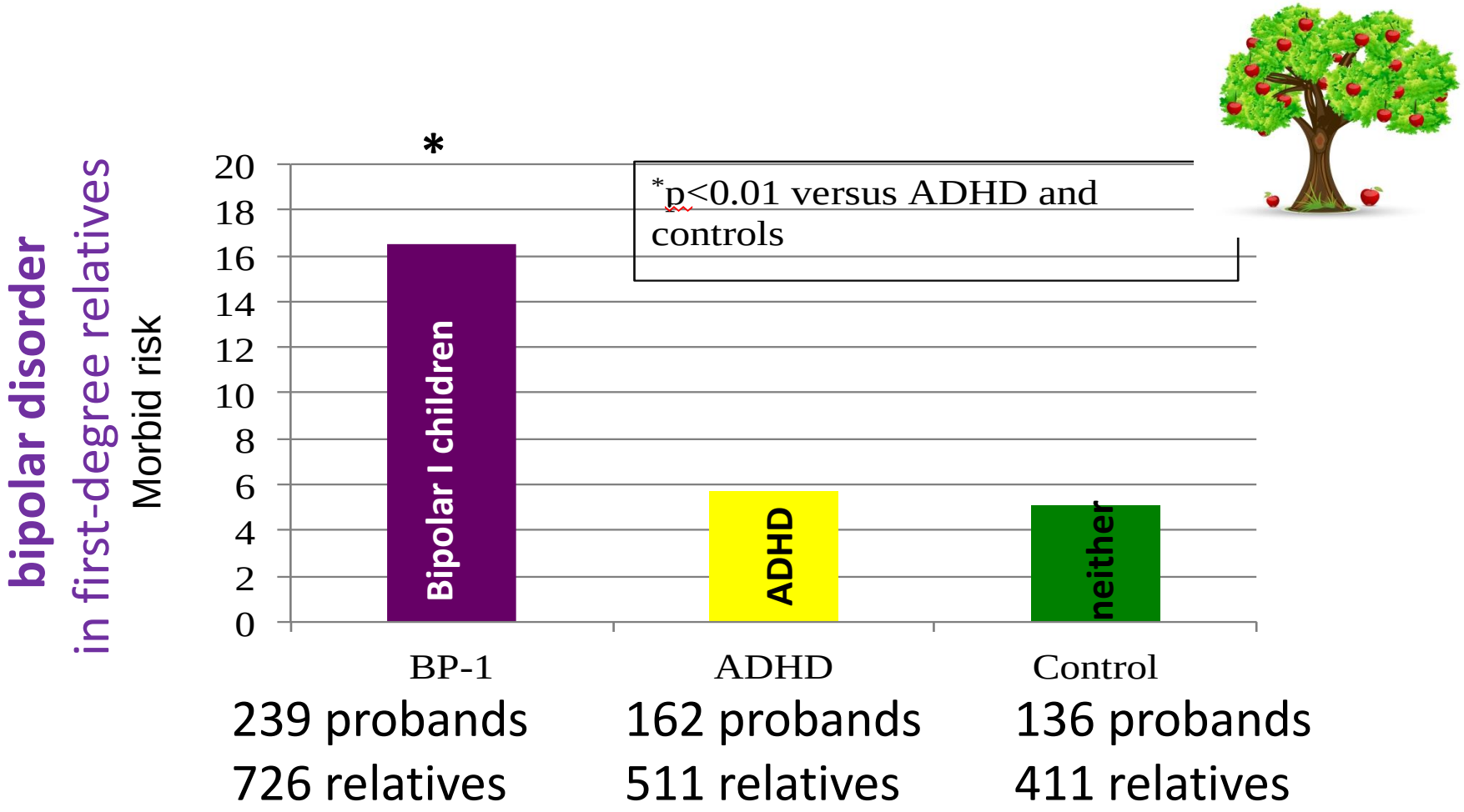
Conclusions: Mean rates of bipolar disorder were higher than commonly acknowledged and not significantly different in US compared to non-US samples, nor was there evidence of an increase in rates of bipolar disorder in the community over time. Differences in diagnostic criteria were a main driver of different rates across studies.

J Clin Psychiatry 2011;72(9):1250–1256

Merikangas 2010: Van Meter J Clin Psych 2011

Pediatric bipolar disorder is familial, a feature of a valid diagnosis

Familial risk of bipolar I disorder is greatest in first-degree relatives of pediatric BP-I probands *versus* ADHD and control probands



Wozniak J Clin Psych 2012

Pediatric bipolar disorder is familial, a feature of a valid diagnosis

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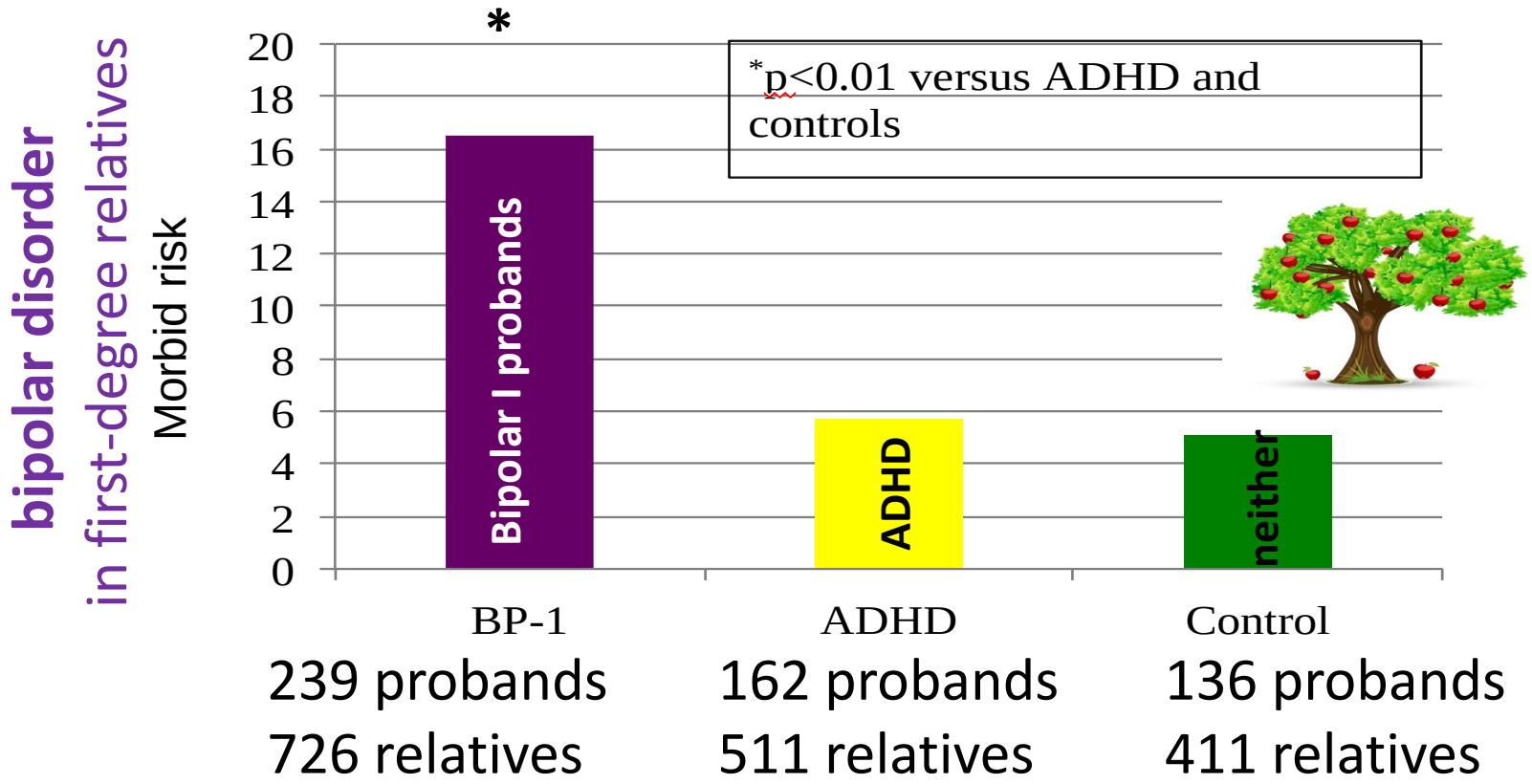
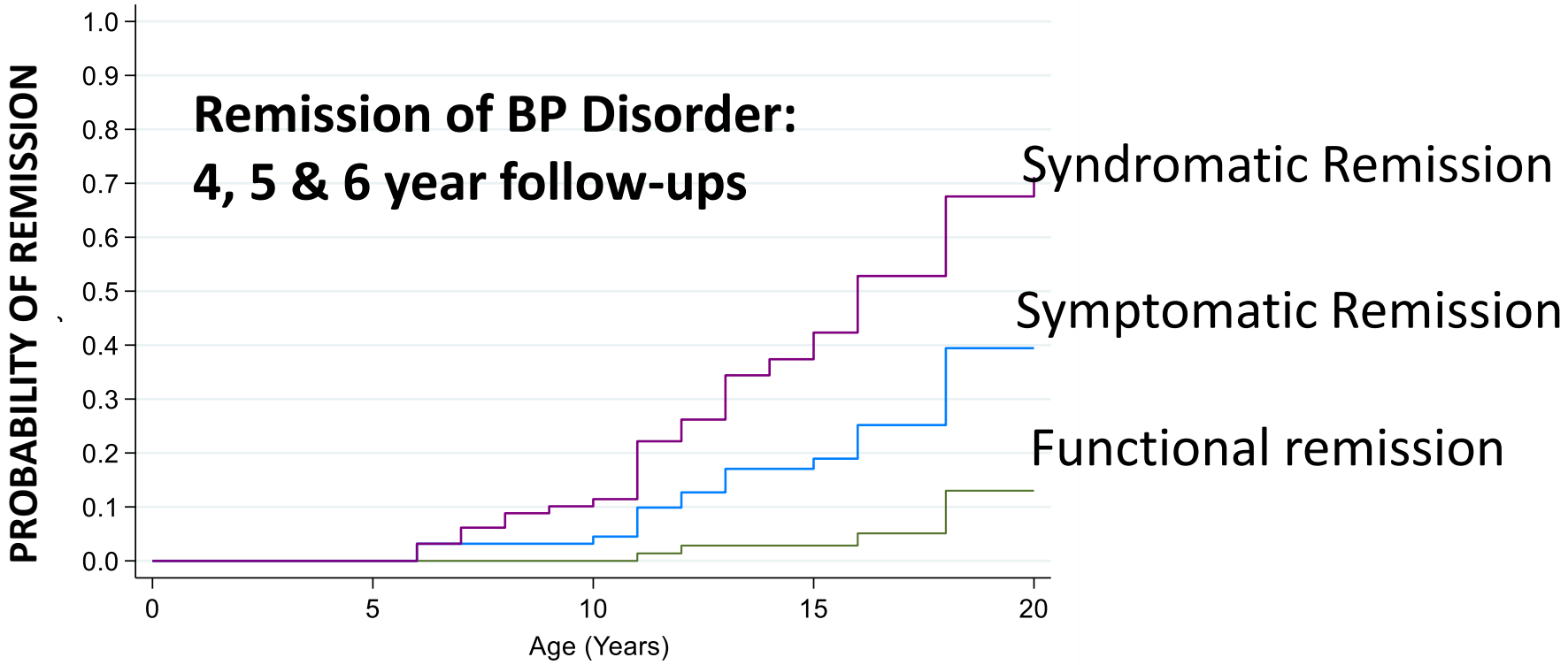
Pediatric probands with subthreshold bipolar disorder have rates of familiality similar to full syndrome probands



Functional Remission
(no symptoms, good functioning) is less likely than

Symptomatic Remission
(no symptoms, functioning impaired) which is less likely than

Syndromatic Remission
(symptoms persist, functioning impaired)

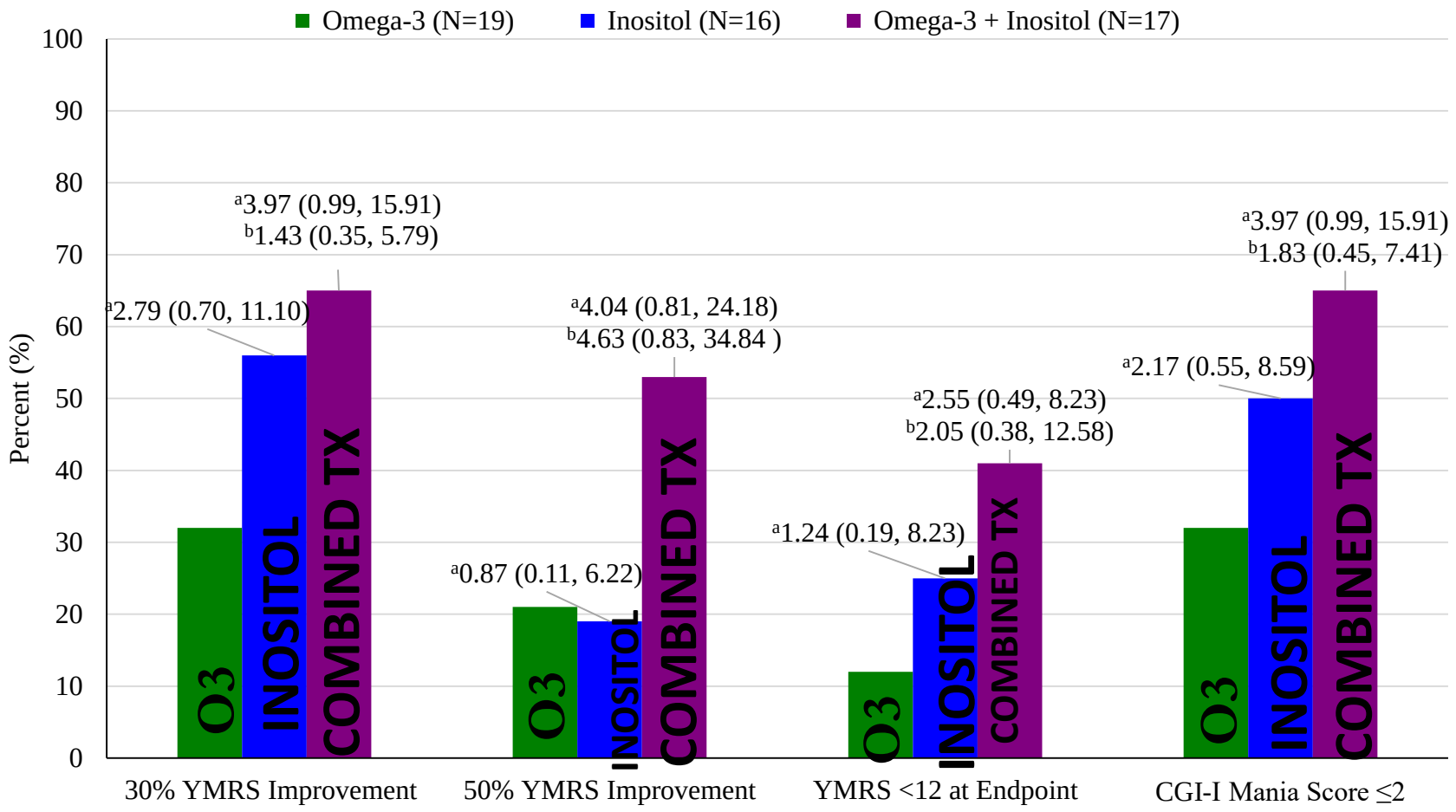


Symptoms and poor functioning found at follow-up

Wozniak 2020

Supported by a generous philanthropic donation from Kent and Elizabeth Dauten Chicago, IL

Omega-3 + Inositol combined outperforms either used alone for mania (N=52)



Treatment for bipolar disorder involves medications with significant side effects, fueling reluctance to diagnose

What questions do you have?

Pediatric Bipolar disorder is a highly morbid, biologically based, treatable condition that affects a significant minority of young children and adolescents.