



# Pediatric Depression

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Friday September 19, 2014

11-11:40 am



Nothing to  
disclose





# Objectives

- World health implications of pediatric depression
- What's new in pediatric depression
- Suicide risk evaluation
- Treatment options



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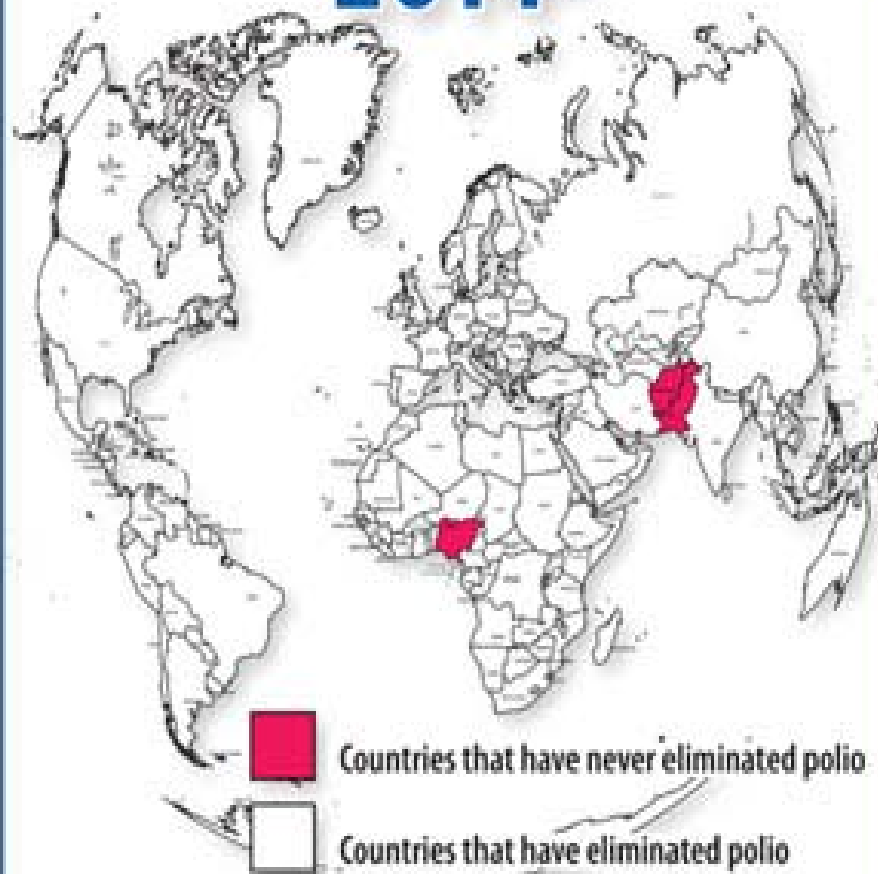




**1988**



**2014\***



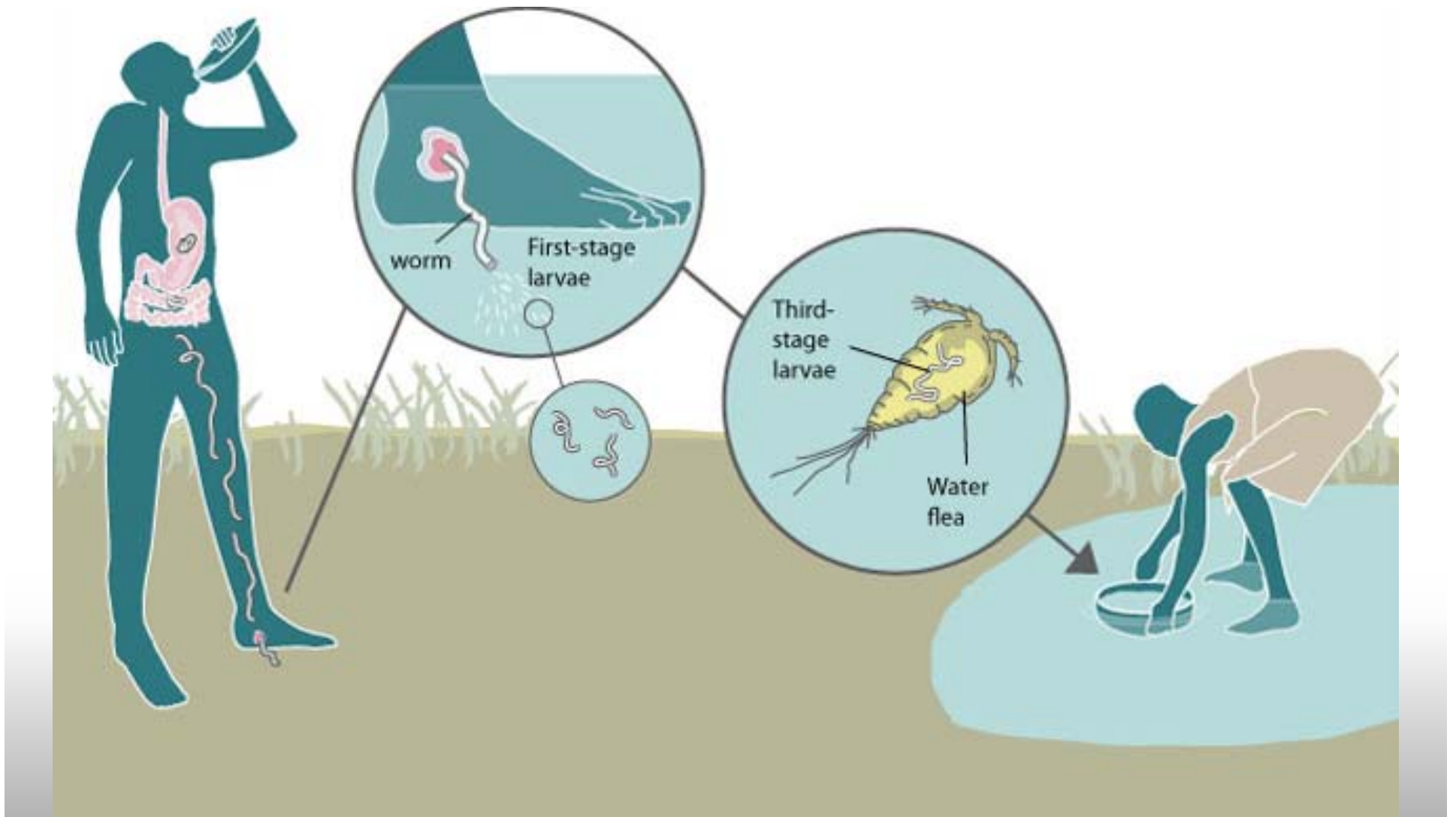
\*As of April 29, 2014



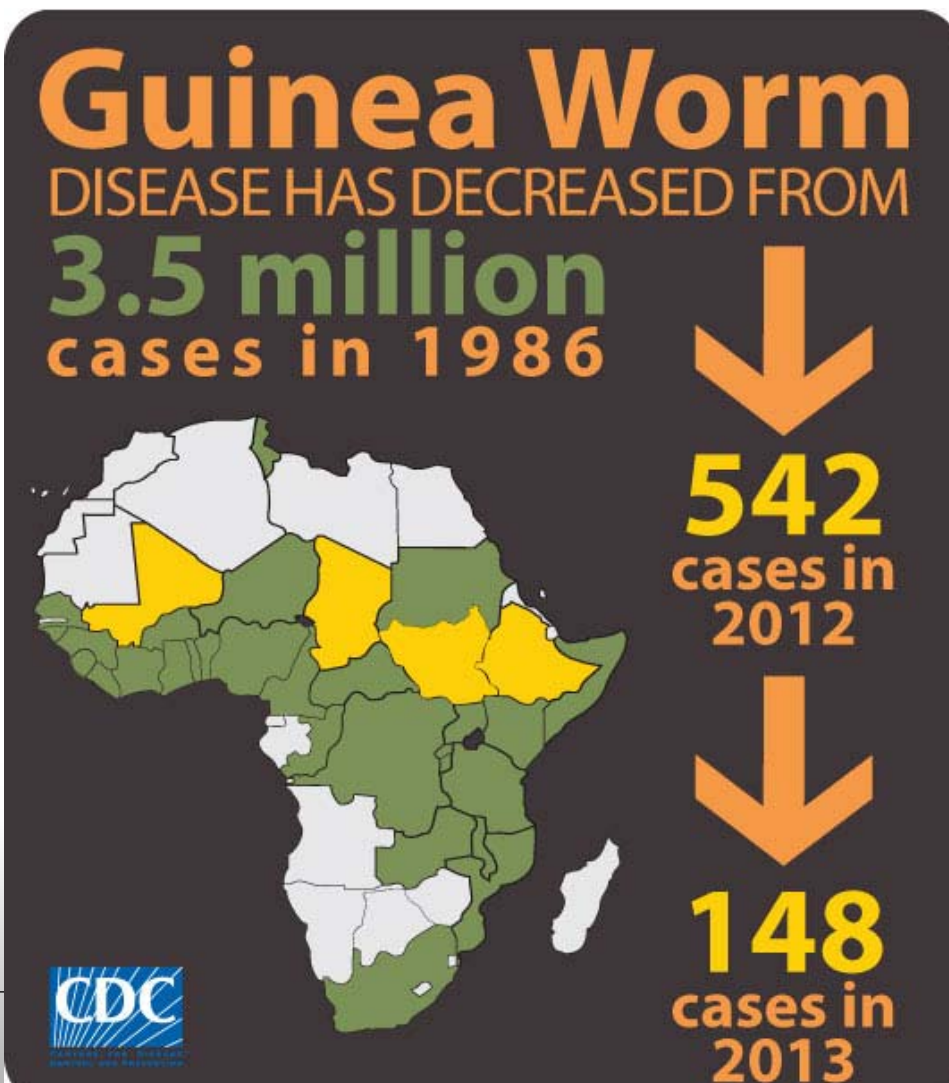
















- What are the top 10 for pediatric mortality?



**World Health  
Organization**



## Top 10 causes of death and adolescence

World Health Organization, May 2014

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1. Road traffic injuries

2. HIV/AIDS

3. Suicide

4. Lower respiratory

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Top 10 causes of death children and adolescence  
World Health Organization May 2014

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5. Violence
6. Diarrhea
7. Drowning
8. Meningitis
9. Epilepsy
10. Endocrine



# Pediatric Morbidity

Years lost to disability



**World Health  
Organization**

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# WHO Top 10 causes of Morbidity

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1. Depression

2. Road traffic injuries

3. Anemia

4. HIV/AIDS

5. Self - harm

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## WHO Top 10 causes of morbidity

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6. Back and neck pain

7. Diarrhea

8. Anxiety disorders

9. Asthma

10. Lower respiratory infection



# Worldwide perspective

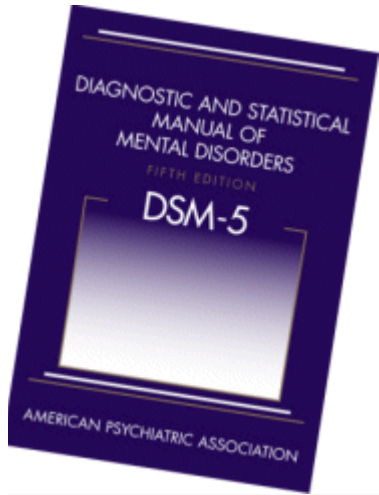
- Good News
  - Mortality rate for adolescents relatively low
  - Mortality rates for adolescents are trending lower
    - Safer public transportation/ roads/ cars/ seat belts
    - Alcohol and drug regulations
    - Tobacco use decreasing



# Worldwide perspective

- We can decrease pediatric and adolescent morbidity and mortality by addressing pediatric depression
- Patterns established in childhood reverberate across the life span









# DSM 5 Criteria

- A. 5 or more symptoms during same 2 week period
- Depressed mood, diminished interest, weight change, psychomotor agitation or retardation, insomnia or hypersomnia, fatigue, worthless feelings, inappropriate guilt, concentration problems, recurrent thoughts of death or suicide



# DSM V Depression

- B. symptoms cause clinically significant distress in functioning
- C. not attributable to substance or another medical condition



# DSM V Depression

- Responses to a significant loss, for example bereavement, financial ruin, losses from a natural disaster, a serious medical illness or disability may include the feelings of intense sadness, rumination about the loss, insomnia, poor appetite, and weight loss noted in criterion a which may resemble a depressive episode.



## Grief or depression

- Although such symptoms may be considered appropriate to the loss, the presence of a major depressive episode in addition to the normal response to a significant loss should also be carefully considered. This decision requires exercise of clinical judgment based on the individual's history and the cultural norms.



# DSM 5

- Criteria adjustments for children and adolescents
  - Irritable mood instead of depressed mood
  - Failure to make expected weight gain instead of change in weight



## DSM IV to DSM 5

- Premenstrual dysphoric disorder moved from appendix to main body of DSM 5
- Persistent Depressive Disorder includes chronic major depression and dysthymia



# DMDD

- Disruptive moods dysregulation disorder
  - Severe temper outbursts, three times a week
  - Sad, irritable or angry mood almost every day
  - Reaction is bigger than expected





## DMDD

- Child at least 6
- Symptoms prior to 10
- Symptoms at least a year
- more than one place







# DMDD

- Added to DSM 5 to address classification and treatment of irritable children relative to children who present with classic/episodic bipolar disorder



# Bipolar Disorder

- Both DSM IV and DSM 5 require distinct episodes of mania and hypo mania to qualify for Bipolar I
- Contention of some researchers that non-episodic irritability is a manifestation of pediatric mania



# DMDD

- Prevalence 2-5 %
- Development and Course - 50 % still meet criteria 1 year later but improves in adolescence
- Rates of conversion to bipolar disorder – very low



# DMDD

- Often meet criteria for Opp. Defiant disorder, adhd, depression

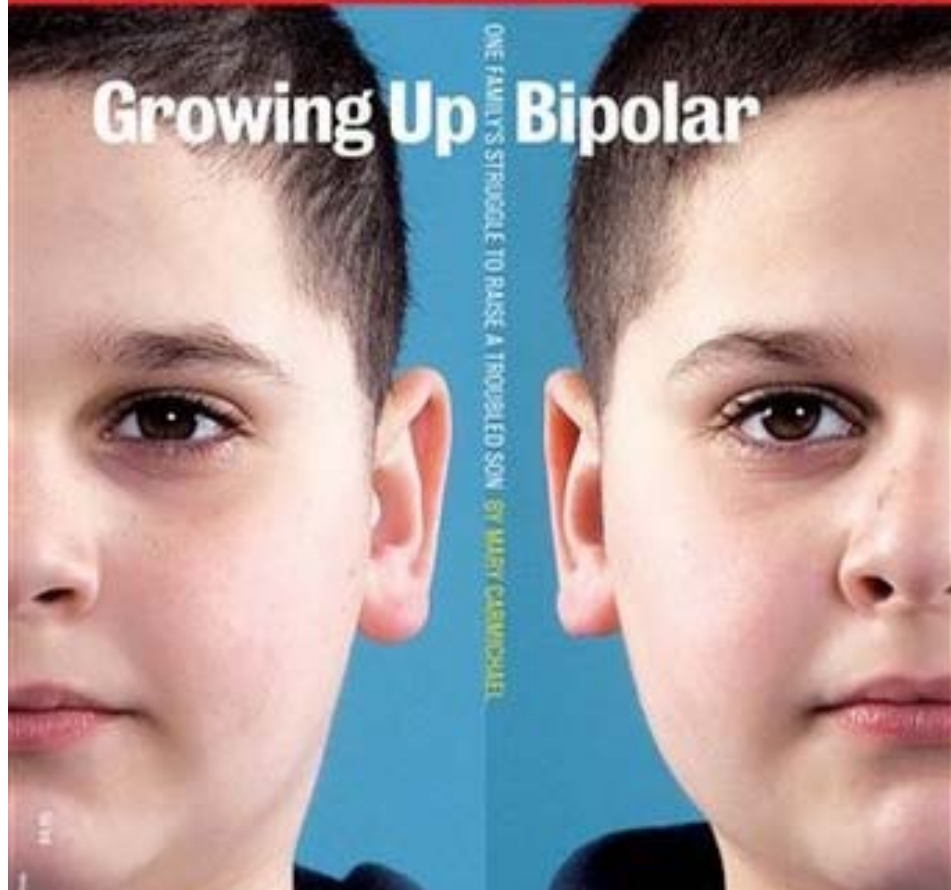


# DMDD v Bipolar

- Bipolar is discrete episodes different from child's usual mood
- Bipolar episode is accompanied by
  - Cognitive
  - Behavioral
  - Physical symptoms (distractibility, goal-directed activity)
  - Elevated or expansive mood
  - Grandiosity

REVOLUTIONARY CHINA'S TRAGEDY SEX & THE GIFT

# Newsweek



## Growing Up Bipolar

ONE FAMILY'S STRUGGLE TO RAISE A TROUBLED SON BY MARY CAHOVITZ

THE SKINNY ON THE ANTI-FAT HORMONE

# TIME

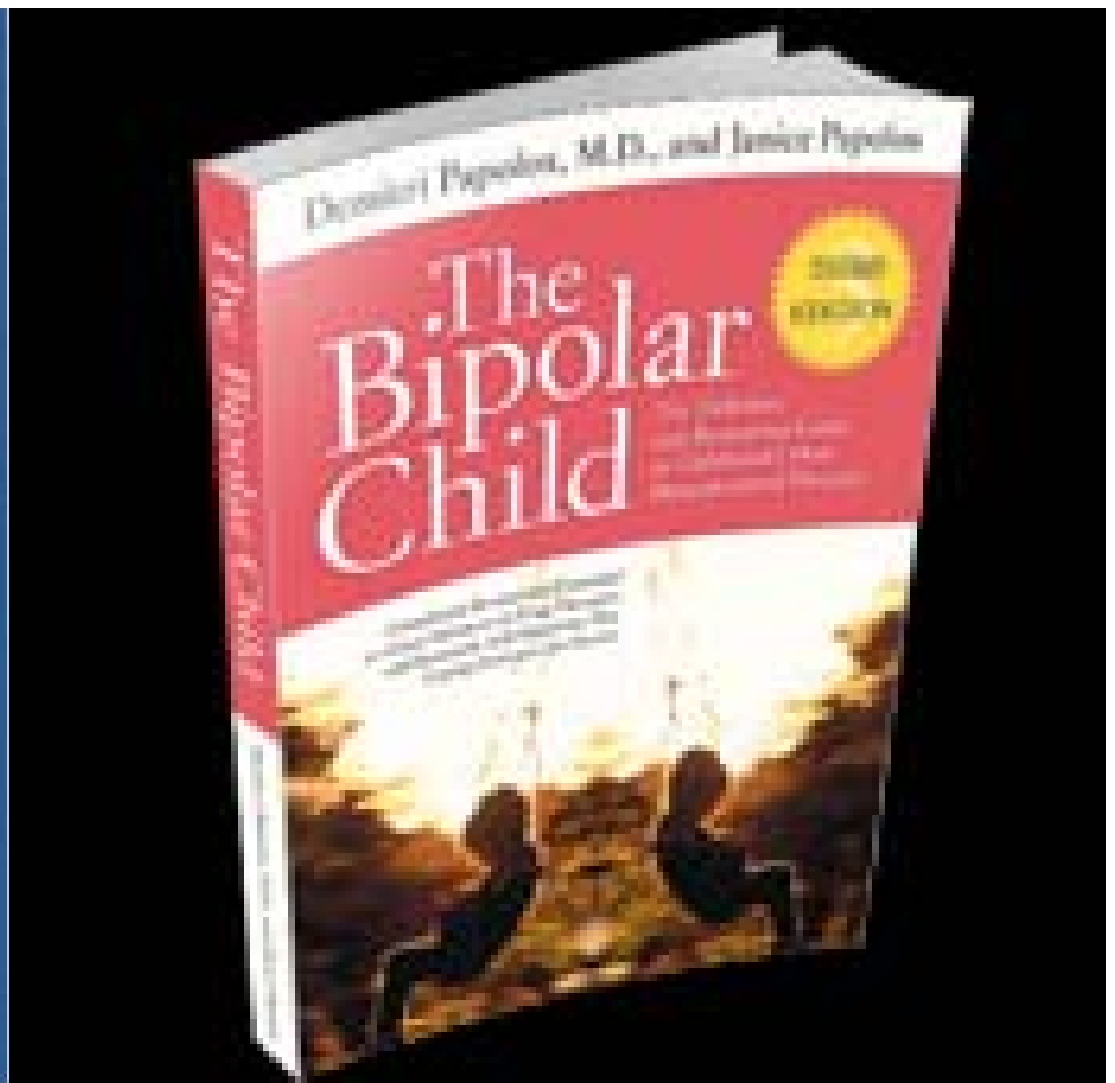
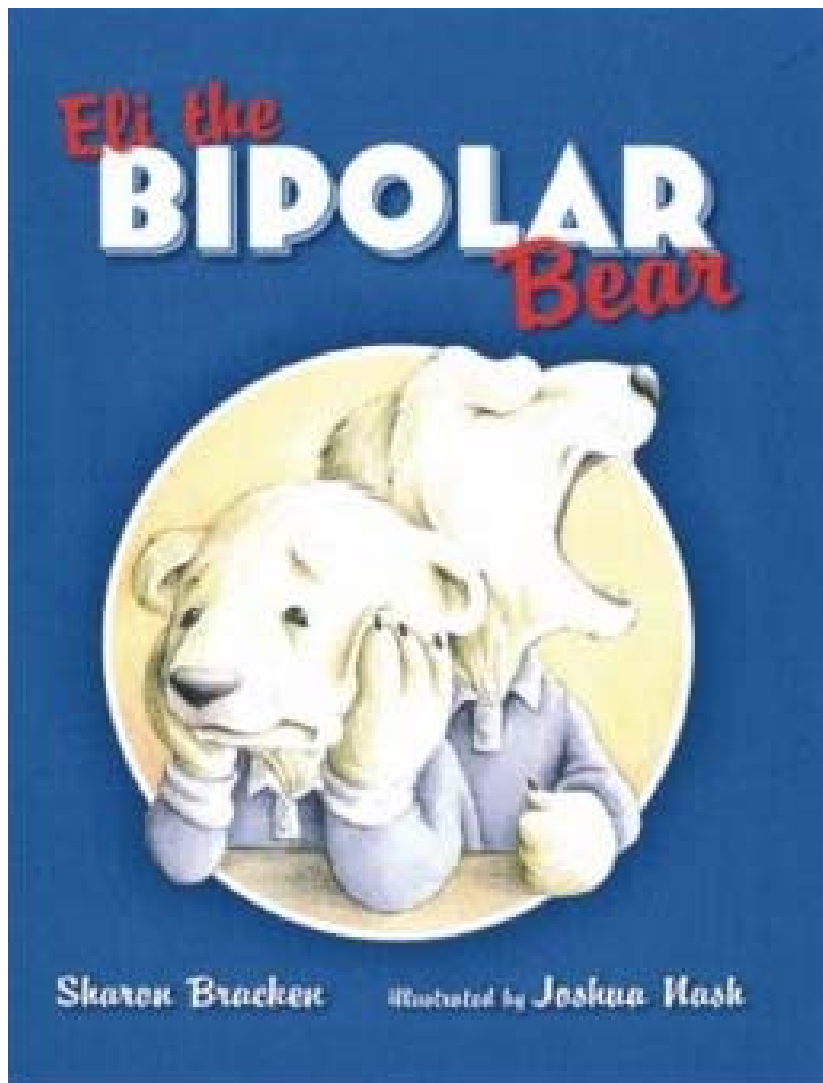


Inside the Volatile World of the

## YOUNG AND BIPOLAR

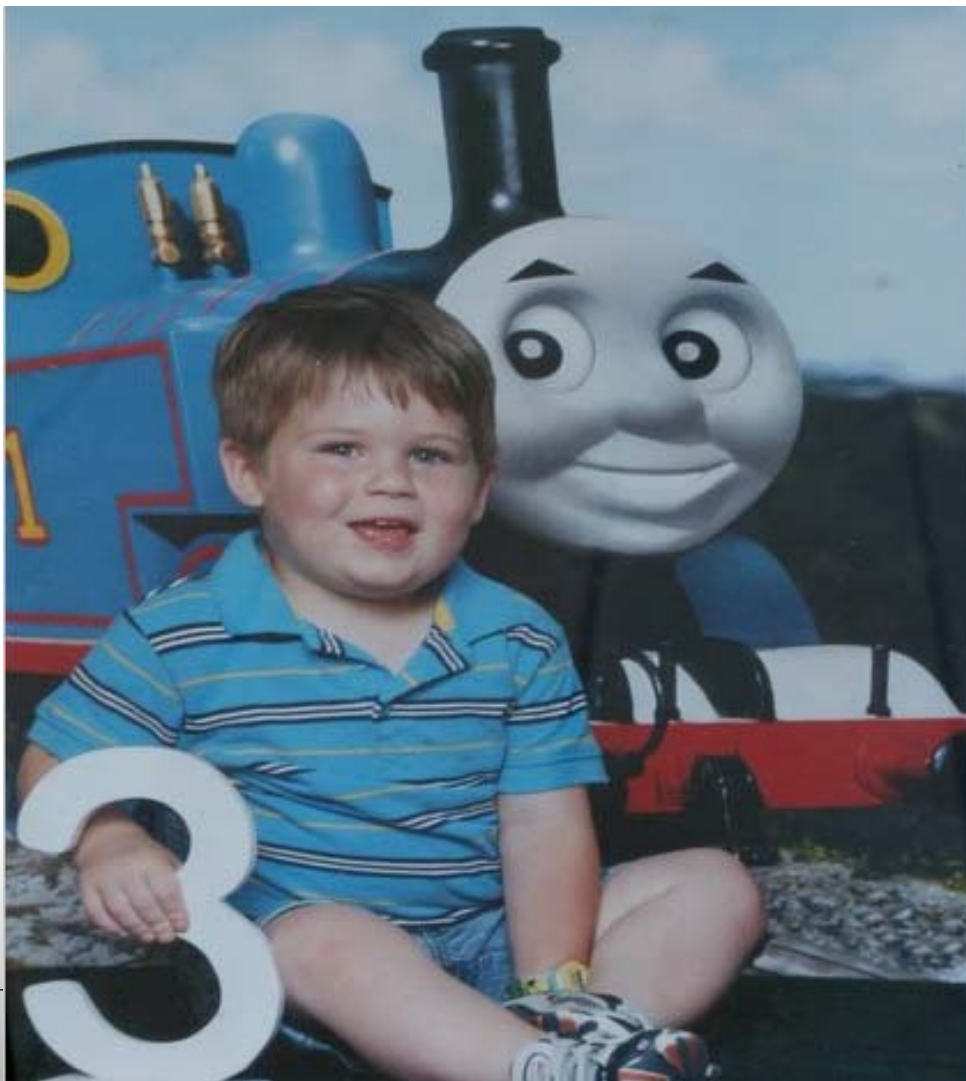
Why are so many kids being diagnosed with the

Jan Palmer, 9, is being treated for bipolar disorder









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# Aacap practice parameters

- Confidentiality
- 1. “maintain a confidential relationship with the child or adolescent while developing collaborate relationship with parents, medical providers, other mental health professionals and appropriate school personnel.”



# AACAP Parameters

- 2. Screening

<http://www.psychiatry.org/practice/dsm/dsm5/online-assessment-measures>





- 3. psych evaluation
- 4. evaluate for presence of harm to self or others
- 5. assess for ongoing or past exposure to negative events, the environment, support and family history



- 6. treatment of depression should include acute and continuation phase, may also need maintenance phase



- 7. treatment should include psychoeducation, supportive management, family involvement, school involvement







- 8. education, support, and case management appear to be sufficient treatment for the management of depressed children and adolescents with an uncomplicated or brief depression or mild psychosocial impairment



- 9. for children and adolescents who do not respond to supportive psychotherapy or who have more complicated depressions, **a trial with specific types of psychotherapy and/or antidepressants is indicated**





- 10. treat 6-12 months
- 11. to prevent recurrences some patients should be treated longer



- 12. depressed patients with psychosis, seasonal depression, and bipolar disorder may require specific somatic treatments
- 13 Treat co-morbid conditions



- 14. frequent follow-up contacts to monitor the subject's clinical status, environmental conditions, and if appropriate medication side effects
- 15. for non responders,
  - consider factors associated with poor response





- 16. children with risk factors associated with development of depressive disorders should have access to early services interventions





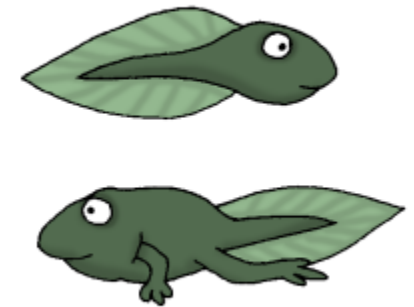
# TADS

- Treatment for Adolescents with Depression Study
  - 2003
  - Fluoxetine alone
  - Placebo alone
  - Cognitive Behavioral therapy alone
  - Fluoxetine and CBT





# TADS



- Response Rates

- Fluoxetine and CBT combined = 86 %
- Fluoxetine alone and CBT alone = 81 %
- Placebo alone = 35 %





# TORDIA

- Treatment of resistant depression in adolescents
- Teens not improved after
  - SSRI x 12 weeks





# TORDIA

- 1. Switch to another SSRI
  - Paroxetine, citalopram, fluoxetine
- 2. Switch to SSRI plus CBT
- 3. Switch to venlafaxine
- 4. Switch to venlafaxine plus CBT





# TORDIA

- 40 % remission at 24 weeks
  - Regardless of treatment
  - Remission patients responded early
- 61 % remission by week 72
  - Many still had residual irritability, fatigue, low self esteem



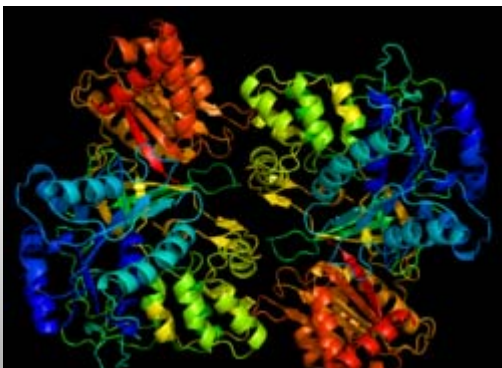
# Cytochrome P450

Reference:	1456CIP	Order Number:	9299
Clinician:	Sample Clinician	Report Date:	4/03/2014
<b>Antidepressants</b>			
<b>USE AS DIRECTED</b>	<b>USE WITH CAUTION</b>	<b>USE WITH INCREASED CAUTION AND WITH MORE FREQUENT MONITORING</b>	
desvenlafaxine (Pristiq®) levomilnacipran (Fetzima®)	bupropion (Wellbutrin®) [1,6] selegiline (Emsam®) [1] sertraline (Zoloft®) [1,4] trazodone (Desyrel®) [1] vilazodone (Viibryd®) [1]	amitriptyline (Elavil®) [1,6,8] citalopram (Celexa®) [1,4,6] clomipramine (Anafranil®) [1,6,8] desipramine (Norpramin®) [1,6,8] doxepin (Sinequan®) [1,6,8] duloxetine (Cymbalta®) [1,6,8] escitalopram (Lexapro®) [1,4,6] fluoxetine (Prozac®) [1,4,6] fluvoxamine (Luvox®) [1,4,6,8] imipramine (Tofranil®) [1,6,8] mirtazapine (Remeron®) [1,6] nortriptyline (Pamelor®) [1,6,8] paroxetine (Paxil®) [1,4,6,8] venlafaxine (Effexor®) [1,6] vortioxetine (Brintellix®) [1,6,8]	



# Mayo Clinic Study

- Financial interest associated with company
- Patients treated with cytochrome p450 data
  - Improved Depression Symptomatology by 8 wk
  - Doubled remission rates on Hamilton Rating







- New York Times
- Matthew Nock MD
- Suicide Detective





# Stroop test

Life

Not Me

Death

Me

Suicide





# Project Implicit

- [implicit.harvard.edu/implicit/](http://implicit.harvard.edu/implicit/)
- implied though not plainly expressed
- Treatment IAT: Do you implicitly favor medication or talk therapy?
- Anxiety IAT: Do you implicitly associate yourself with being anxious or calm?

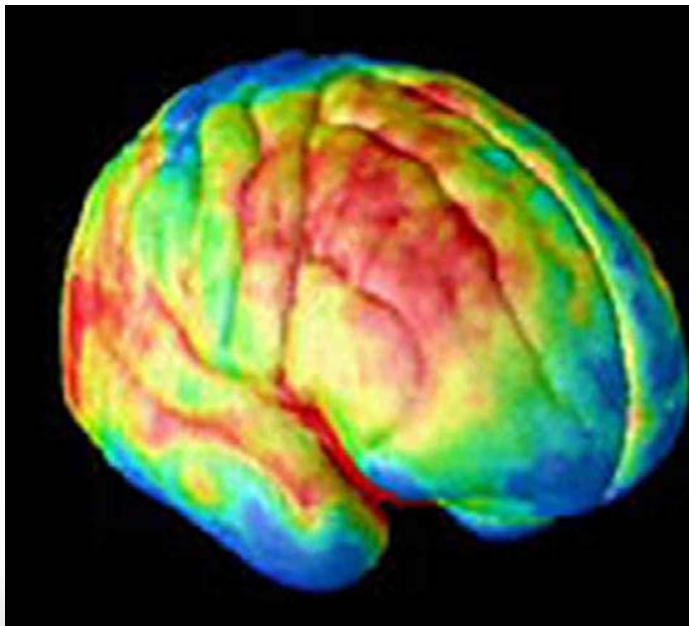


# Implicit tests

- Mental Illness IAT: Do you implicitly think people with mental illnesses are dangerous?
- Self-esteem IAT: Do you implicitly associate yourself as good or bad?
- Eating IAT: Do you implicitly feel eating high-fat food is shameful?



# What treatment to choose?



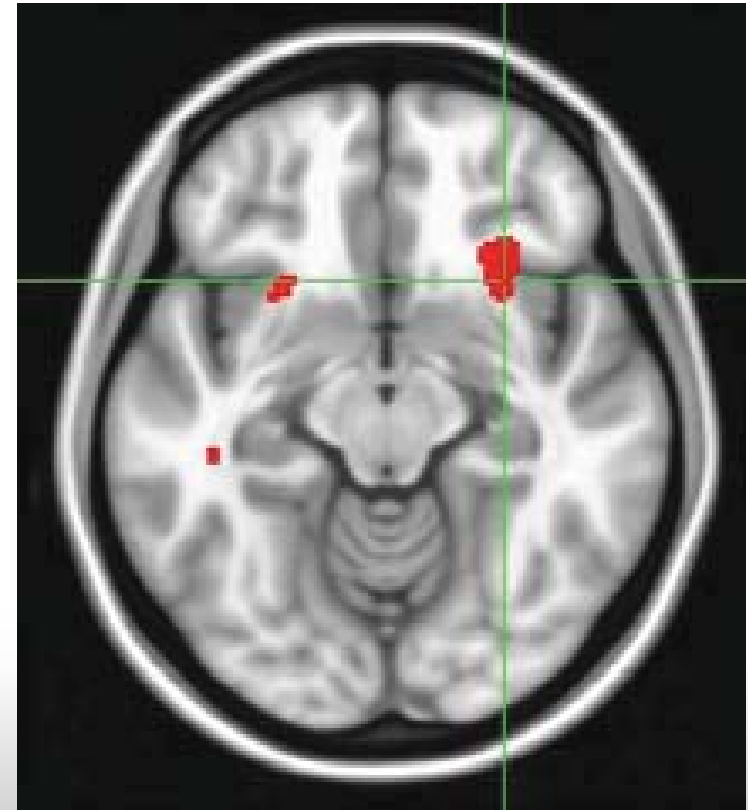


# Pet Scan to pick treatment

- Helen Mayberg, MD Emory
  - Used brain scans to predict who responds well to CBT or escitalopram



- Anterior insula
  - Emotional states
  - Self-awareness
- changes noted with
  - Meds
  - Mindfulness training
  - Vagal nerve stimulation



**UL** of Preschoolers ?





# PCIT-ED

- Parent-child interaction therapy-emotional development
  - Judy Luby, M.D. Washington University
  - Strengthen parent-child relationship
  - Positive parenting techniques
  - Coaching parents
  - Training parents to handle noncompliance





# Comparison Study

- PCIT-ED compared to basic psycho-education
  - 12 weeks, 54 preschoolers age 3-7
  - Both groups improved
  - PCIT-ED showed improvements in
    - Hyperactivity, conduct, hostility, inattention
    - Executive functioning, recognizing emotions
    - Parental stress and depression decreased







1. Enhance Access and Continuity of Care
2. Identify and manage patient populations
3. Plan and manage care
4. Provide self-care and community support
5. Track and coordinate care
6. Measure and improve performance
7. Template of the future











