Assessment & Treatment of Bipolar Spectrum Disorders NCH-BH Grand Rounds, 3/5/2021



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Conflicts of Interest

Dr. Axelson

- Royalties:
 - Wolters-Kluwer

Dr. Fristad

- Royalties:
 - Guilford Press
 - American Psychiatric Press
 - Child & Family Psychological Services
- Research:
 - Janssen





Objectives

- (1) Describe critical aspects of diagnosing bipolar spectrum disorders in youth.
- (2) List current biological interventions with evidence for use in youth with bipolar spectrum disorders.

(3) Name four characteristics of psychosocial interventions for youth with bipolar spectrum disorders.





What is bipolar disorder?

Episodes of abnormally elevated/expansive, irritable and/or depressed mood plus associated abnormalities in:

- Activity/energy
- Sleep/Circadian Rhythm
- Reward processing
 - hedonic capacity, motivation
- Cognition
 - attention, rate, control, valence bias, accuracy
- Perception





Symptoms of Mania/Hypomania

Distinct period of abnormally and persistently elevated, expansive, or irritable mood and persistently increased goal-directed activity or energy, plus:

- Inflated self-esteem or grandiosity
- Decreased need for sleep (feels rested with only 3 hours of sleep)
- More talkative than usual or pressure to keep talking
- Flight of Ideas or racing thoughts
- Distractibility (attention too easily drawn to irrelevant stimuli)
- Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation
- Excessive involvement in pleasurable activities that have a high potential for painful CONSEQUENCES (e.g. engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments





Manic / Hypomanic episodes in DSM-5

- At least 3 symptoms (at least 4 if irritable mood only)
- Mood and symptoms present most of the day, nearly every day
 - 7 days for manic episode (any duration if hospitalized)
 - 4 days for hypomanic episode
- Episodes that emerge during antidepressant treatment and persist at full syndromal level after stopping treatment "count"
- Specifiers for manic, hypomanic and major depressive episodes
 - With anxious distress
 - With mixed features





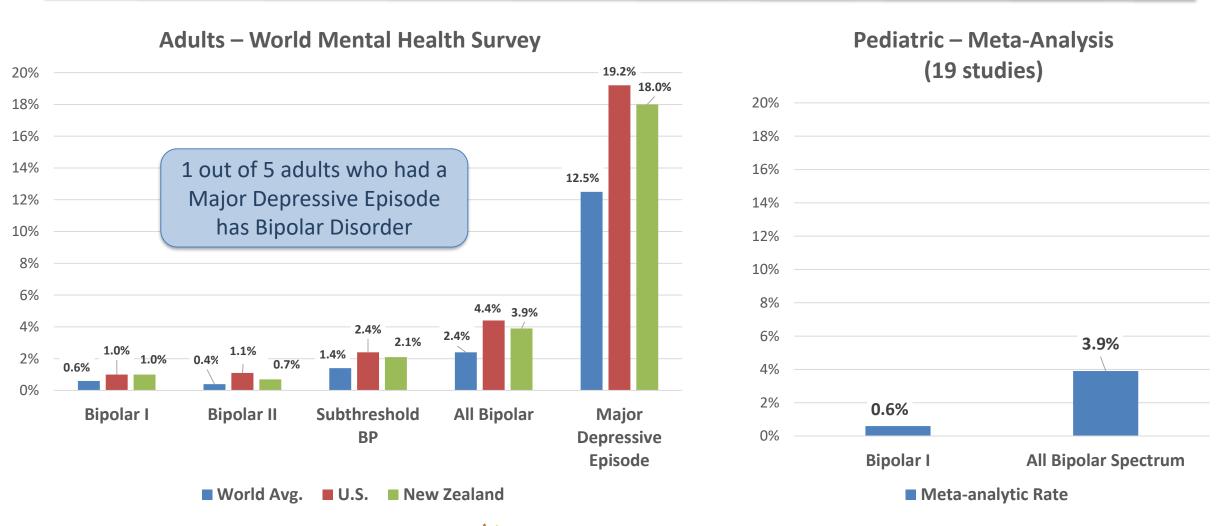
Bipolar and related disorders in DSM-5

- Bipolar I disorder: manic episode(s)
- Bipolar II disorder: hypomanic & major depressive episode(s)
- Cyclothymic disorder: numerous periods of subthreshold hypomania and depression over 2 years (1 year for kids)
- Substance/Medication-Induced or Due to Medical Condition
- Other Specified Bipolar and Related Disorder
 - Short (2-3 day) hypomanias + MDE's
 - Hypomanias with insufficient symptoms + MDE's
 - Hypomanic episodes with no prior MDE
 - Short-duration cyclothymia (? Minimum duration)
- Unspecified Bipolar and Related Disorder

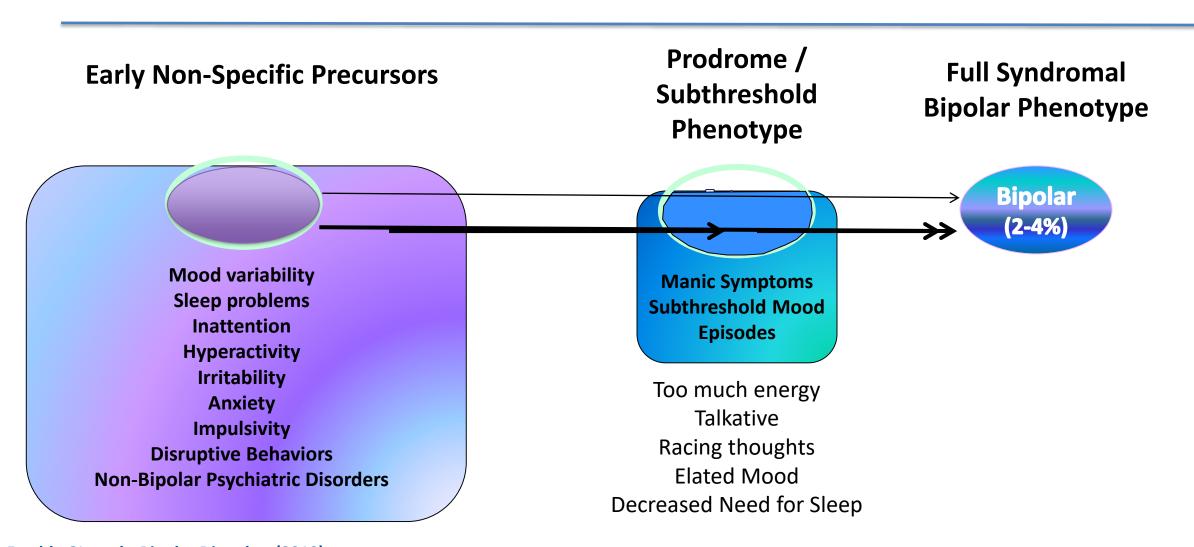




Epidemiology of Bipolar Disorder



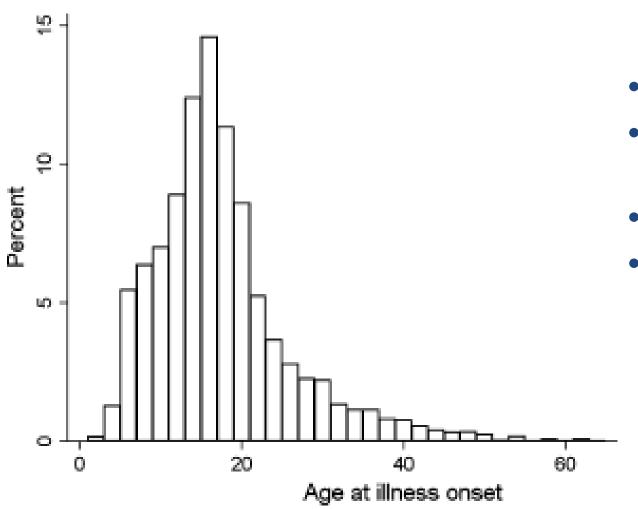
Developmental Progression of Bipolar Illness







Age of Bipolar illness onset



- N = 3,658
- 1st onset of cluster of manic or depressive symptoms
- 29% child onset
- 38% adolescent

Research goal: Improve identification and accurate diagnosis of bipolar disorder in youth

- What are the clinical features of pediatric bipolar disorder?
- Do some children and adolescents with "subthreshold" presentations of mania/hypomania really have a bipolar illness?
- High-Risk Research Studies
 - Clinical High-Risk
 - Course and Outcome of Bipolar Youth (COBY)
 - Familial High-Risk
 - Pittsburgh Bipolar Offspring study (BIOS)





Course & Outcome of Bipolar Youth (COBY) Study

- Longitudinal follow-up of youth with BP-spectrum illness
- Funded by NIMH
- Pittsburgh, Brown, UCLA
- Referred Sample (outpatient, inpatient, advertisements)
- Ages 7 17
- Strict application of DSM-IV criteria for BP I (n=260) and BP II (n=33)
- Operationalized criteria Subthreshold Bipolar Disorder / BP-NOS (n=153)





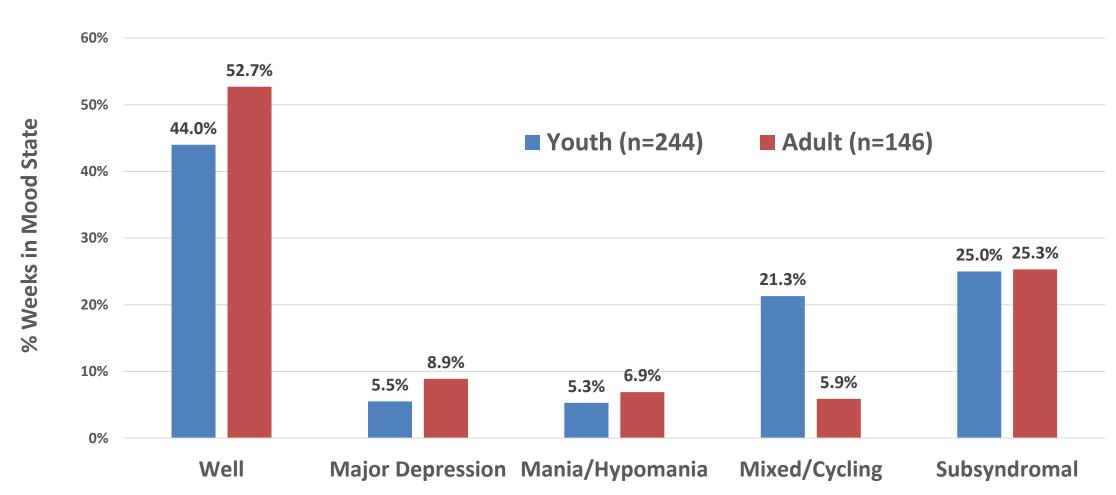
Manic Symptoms in Pediatric Clinical Samples with BP-I

	Mass General	WASH-U	Case Western	COBY BP-I
Elated/Elevated Mood	25%	89%	86%	90%
Irritability	84%	98%	92%	84%
Increased Energy	79%	100%	81%	90%
Grandiosity	57%	86%	83%	72%
Decreased Need for Sleep	53%	40%	72%	81%
Pressured Speech	68%	97%	81%	93%
Racing Thoughts	71%	50%	88%	74%
Distractibility	93%	94%	84%	89%
Motor Hyperactivity	90%	99%	81%	95%
Poor Judgment	90%	90%	86%	84%
Hypersexuality	25%	43%	32%	47%

Comorbid Disorders – Bipolar I Disorder

	Mass General	WASH-U	Case Western	COBY Age Adjusted	World Mental Health Survey Adults	
Attention-Deficit Hyperactivity D/O	87%	87%	70%	69 %	28%	
Oppositional Defiant D/O	86%	79%	47%	46%	30%	
Conduct D/O	41%	12%	17%	12%	28% D	Panic /O Panic
Anxiety D/O	54%	23%	14%	37%	76% Atta	acks
Substance Use D/O	7%	0%	7%	5%	52%	

Bipolar I Longitudinal Course: Youth vs. Adults



Subthreshold BP: Bipolar Not Otherwise Specified (BP-NOS)

- Duration too short (episodes < 4 days) and/or 1 symptom short
- Distinct period of abnormally Elated Mood plus 2 symptoms or Irritable Mood plus 3 symptoms
- Mood must be clear change from usual and symptoms must be associated/intensify with mood change
- Change in functioning
- Not associated with medication
- At least 4 hours meeting above criteria in a 24-hour period to count as "one day" (persistence / to a significant degree)
- Lifetime of ≥ 4 days total of meeting criteria (e.g. 4 one-day episodes; 2 two-day episodes, etc.)





Subthreshold BP Disorder - progression

- COBY Intake: 15 year old female
- Age 9: Panic attacks, frequent periods of anxiety
- Age 10: First major depressive episode (5 in total, with 1 serious suicide attempt, 2 inpatient hospitalizations)
- Age 13: First onset of brief hypomanias
 - Duration 1-2 days, maximum 2 days; ~50 lifetime
 - Elevated mood, cooking, cleaning fits, sleeps 3 hours/night, rapid speech, physically restless and energized, mildly inflated self-esteem
 - Could occur in the midst of major depressive episode
- Heavy THC use in late adolescence
- Schizoaffective Disorder, Bipolar Type as a young adult





COBY Intake: Subthreshold BP vs. "Full" BP-I

Similarities

- Types of symptoms & number to meet DSM-IV criteria
- Comorbidity
- Rates of prior Major Depressive Episode
- Family History (inc. BP and depression)
- Cross-sectional symptom severity & impairment at intake

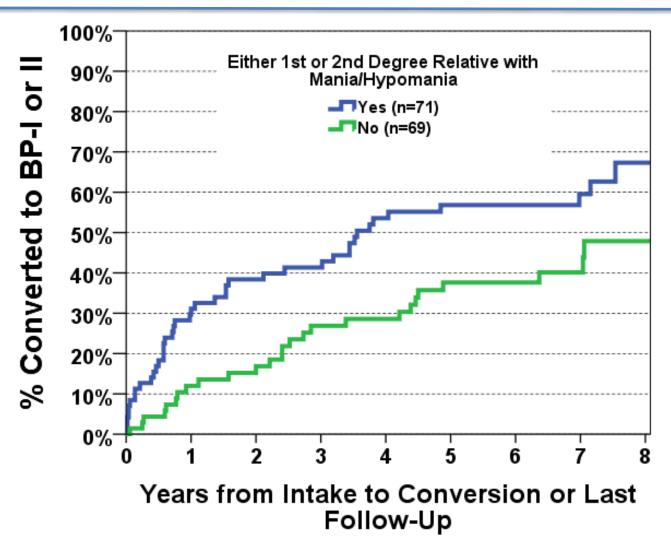
Differences

- Duration of episodes (had many short episodes)
- Lower severity of symptoms at most severe episode
- Lower severity of impairment at most severe episode
- Lower rates of severe features (psychosis, suicide attempts)





Family History at Intake associated with progression to BP-I or II



Log Rank (Mantel-Cox) $\chi^2 = 6.5$ p=.01

Median 6.9 years of follow-up

33 (24%) converted to BP-II (9 initially converted to BP-II)

35 (25%) converted to **BP-II**

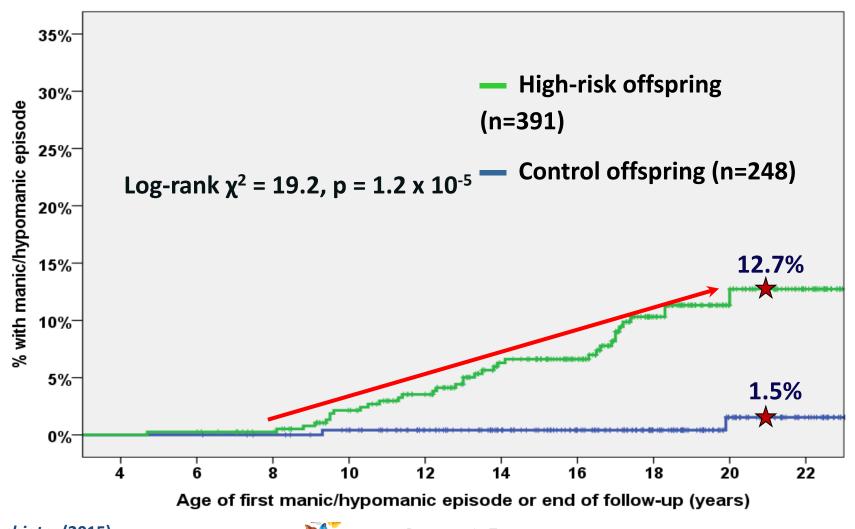
Pittsburgh Bipolar Offspring Study Design

- Case-control high-risk study
- Recruit parents who have bipolar disorder and child/adolescent offspring
- Demographically match control parents with child/adolescent offspring
- Examine offspring (blind to parent diagnosis) every 2 years
- 91% had follow-up; average 2.7 follow-up assessments

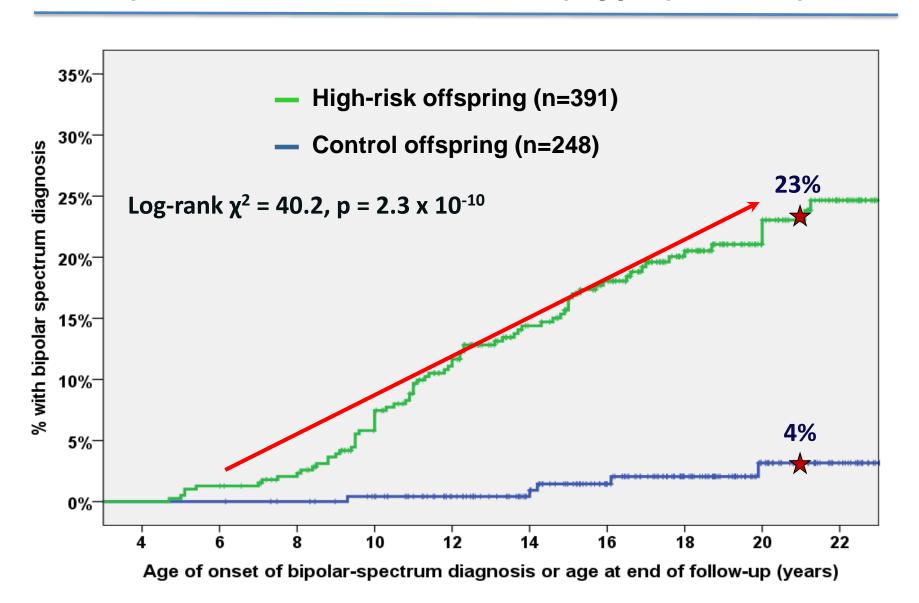




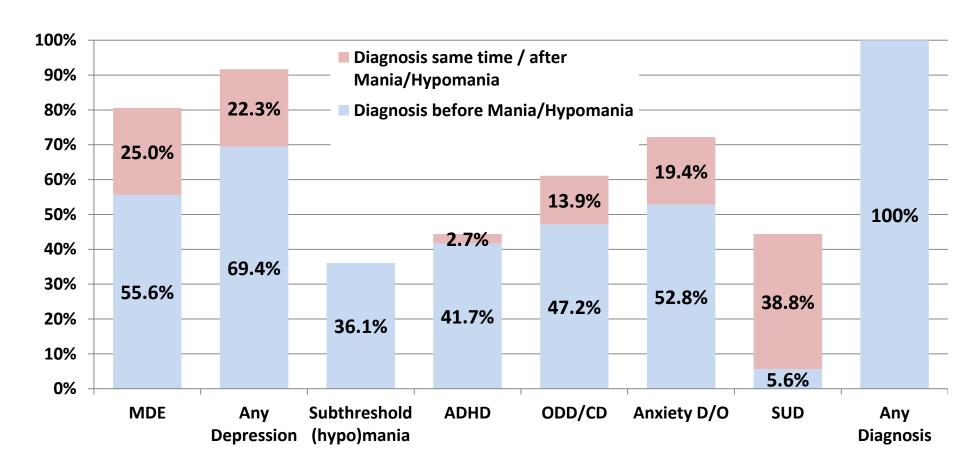
Age of Onset of 1st Manic / Hypomanic Episode



Age of onset of BP-spectrum disorder (includes subthreshold (hypo)mania)



Onset of depression and comorbid diagnoses relative to onset of 1st Manic/Hypomanic Episode (n=36)



Onset established when full diagnostic criteria was met

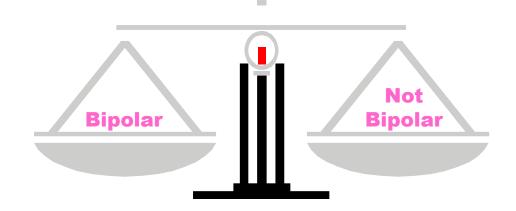
Diagnostic Difficulties

- Especially difficult to identify abnormally elevated mood, grandiosity
- Clear symptoms rarely observed in the office
- Lack of insight part of mania/hypomania must ask parent / caregiver
- Broad differential diagnosis (remember can be comorbid with bipolar disorder)
 - Moody ADHD/DBD
 - Unipolar depression
 - Severe Anxiety disorders
 - Substance Use disorders
 - PTSD
 - Reactive Attachment Disorder / Trauma
 - High functioning autism spectrum
- Often need repeated visits, longitudinal follow-up, remain humble





Pearls to help with diagnosis

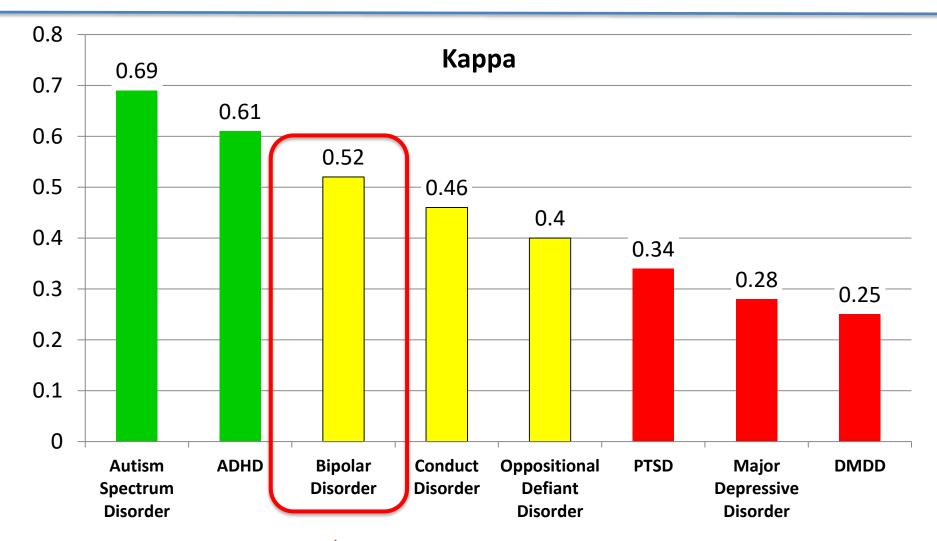


- Change compared to baseline, compared to peers in similar situations
- Presence of elation/euphoria, decreased need for sleep, grandiosity
- Look at timeline of symptoms not just current mental status
- Episodic worsening within chronic symptoms
- Family history (BP is highly heritable; Identical twin concordance ~ 30-70% vs. Fraternal ~ 10-20%)
- MDD: + psychosis, psychomotor retardation, childhood onset
- History of medication-induced manic symptoms

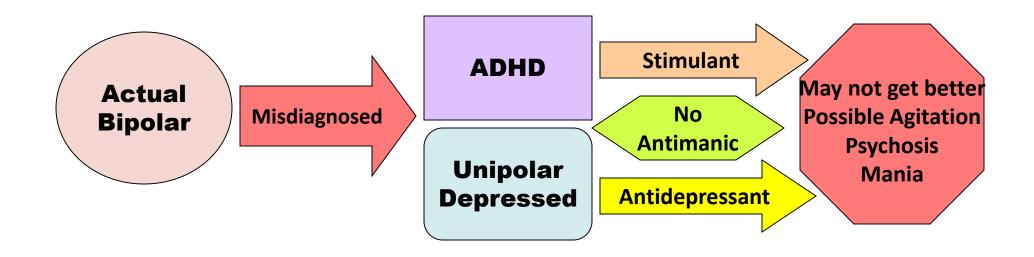


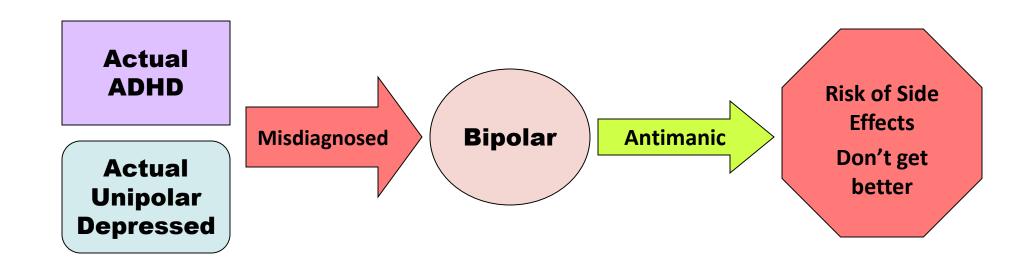


Test-Retest Reliability of DSM-5 diagnosis in youth



Diagnostic Implications for medication treatment





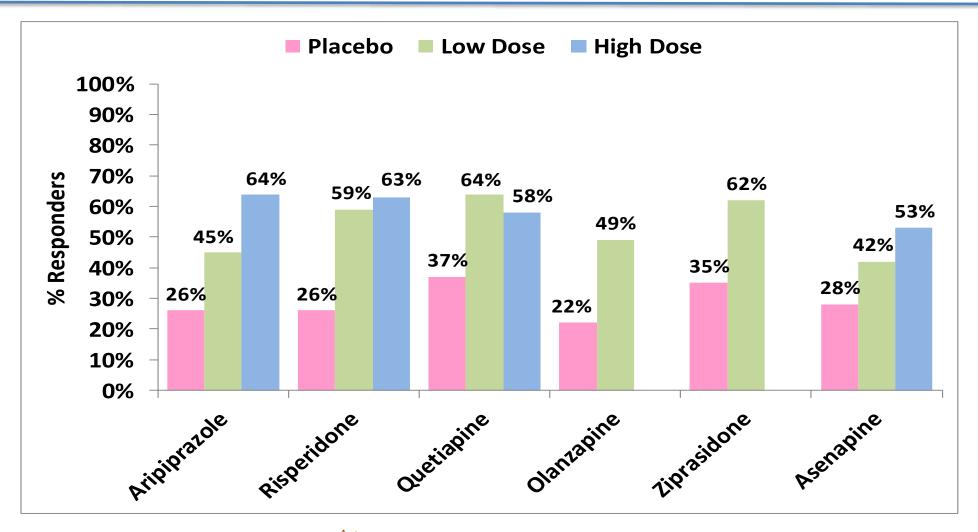
Mania / Mixed: Biological Treatments

- Second Generation Antipsychotics (SGAs: Risperidone, Quetiapine, Aripiprazole, Ziprasidone, Asenapine)
- Switch SGA
- Lithium
- SGA + Lithium
- Divalproex Sodium (Depakote)
- First Generation Antipsychotic
- Lamotrigine or Carbamazepine or Topiramate
- ECT
- Clozapine



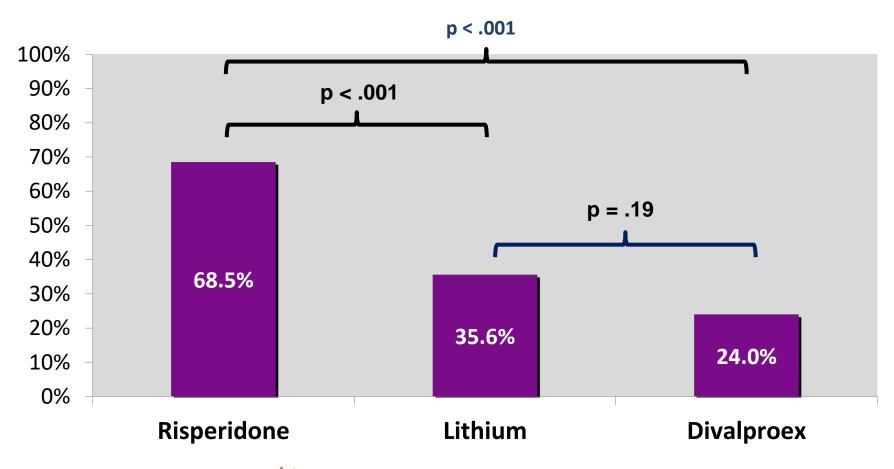


Response Rates: SGA acute mania trials in youth

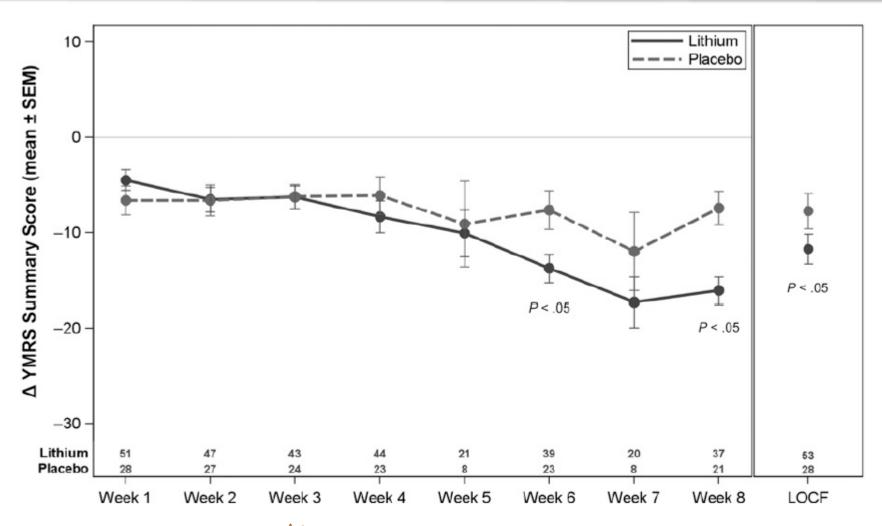


Treatment of Early-Age Mania

Responder (CGI-I = Much/Very Much Improved)



Lithium for Acute Mania



What to do if child is manic/mixed and on other meds?

- If antidepressant, strongly consider tapering off
- If stimulant, strongly consider tapering off, unless past history indicates that this has worsened the situation
- If alpha-2 agonist (clonidine, guanfacine), consider tapering

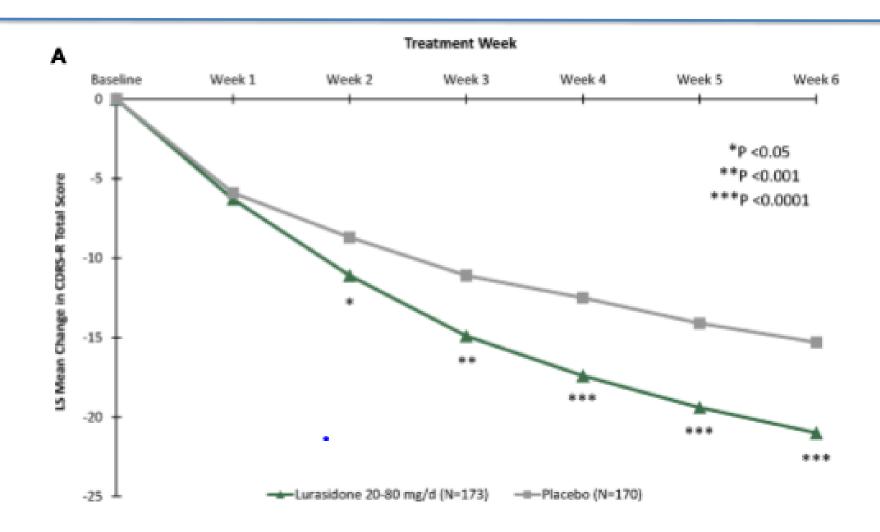


Bipolar Depression

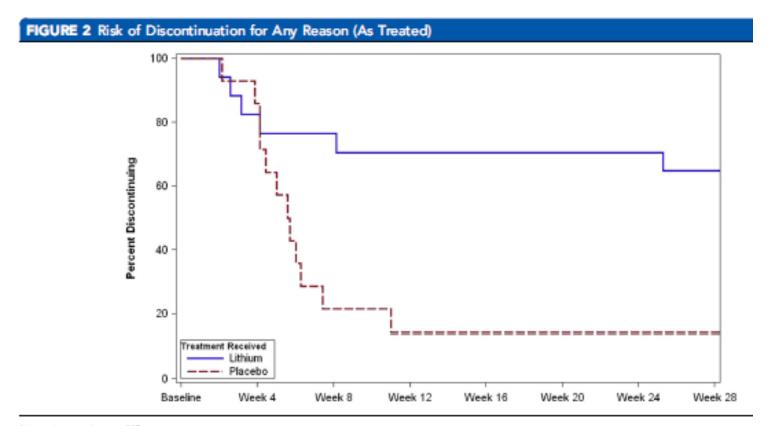
- Lurasidone
- Olanzapine-Fluoxetine FDA approved / SSRI (start low) added to SGA
- Lamotrigine
- Lithium
- Quetiapine (older adolescents)
- ECT



Lurasidone - Bipolar Depression



Maintenance – Very Little Data



- 28 weeks of lithium treatment
- 8 weeks minimum stable mood
- Randomized to stay on lithium (n=17) vs. Placebo taper (n=14)
- Patients randomized to placebo tapered off of lithium over 4 weeks

Note: Log-rank p = .007.



General Principles

- Outpatients: Start with low dose then gradually escalate
- •Be patient and be systematic do not give up on a medication too quickly or make major changes in response to clinical fluctuations
- Review potential serious side effects with families and review procedures to manage emergencies
- "Rational" Polypharmacy
- Don't rush to stop / change meds if patient is doing well
- Bipolar Youth can get better





Psychosocial Impact on Course of Illness

Geller et al, 2000; 2002; 2004

- At <u>baseline</u>, families of youth with BPD, compared to healthy and ADHD control groups:
 - Less warmth
 - Greater tension and hostility
- At 2 and 4 year <u>follow-up</u>,
 - Lower maternal warmth predicted faster relapse after recovery from mania
 - Intact families associated with faster rate of recovery
 - Medication status was not predictive of illness course





How to Conceptualize Family-Based Intervention

Historically, families

- Have been blamed
- Have not gotten useful information/support/skill building

This can result in families being "skittish" or "defensive" about family-based intervention





New Ideas about Working with Families Experiencing Serious Mental Illness

New models arose from both empirical investigation of clinical practice as well as lived experience

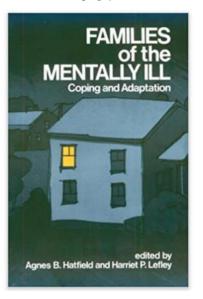
1986

SCHIZOPHRENIA and the FAMILY

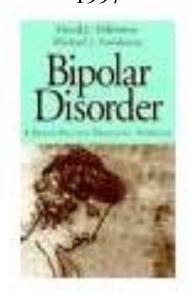
A Practitioner's Guide to Psychoeducation and Management

CAROL M. ANDERSON
DOUGLAS J. REISS
GERARD E. HOGARTY

1987



1997







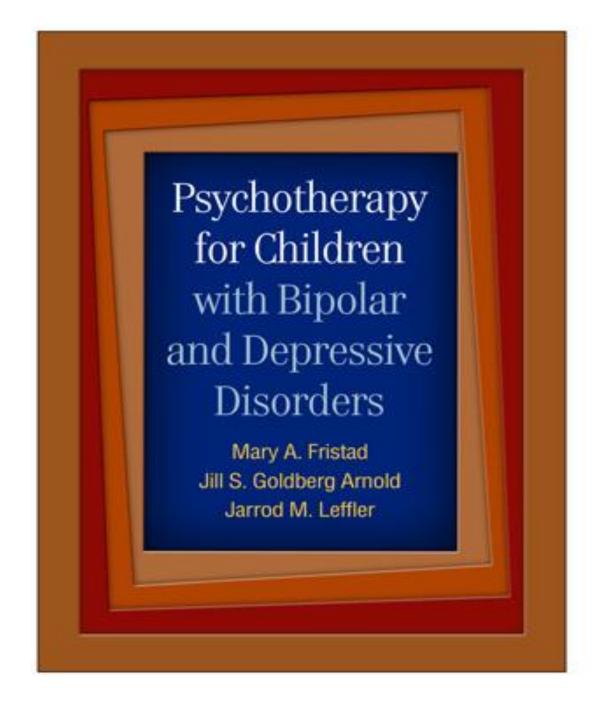
Evidence-Based Psychotherapy for Bipolar Disorder

Goldstein et al, 2017, Bipolar Disorders, 19(7): 524-543

Level of Evidence	Psychosocial Treatment	Citation
Well Established	Family Psychoeducation & Skill Building	Fristad et al, 2006, 2009, 2015 Miklowitz et al, 2004, 2008, 2011, 2013, 2020 Pavuluri et al, 2004/ West et al, 2007, 2009, 2014
Probably Efficacious		
Possibly Efficacious	Cognitive-Behavioral Dialectical Behavioral Interpersonal & Social Rhythm	Feeny et al,2006 Goldstein et al, 2007, 2015 Hlastala et al, 2010, Goldstein et al, 2018

Four Common Ingredients of Evidence-Based Psychotherapy

- psychoeducation
- family-based
- skill building
 - emotion regulation
 - problem solving
 - communication
- symptom management (sleep, school, med adherence, side-effect management, etc)



Goals of PEP

- Teach parents and children about
 - The child's illness & its treatment
- Provide support
 - Peers ("I'm not the only one")
 - Professionals understand the disorder
- Build skills
 - emotion regulation
 - problem-solving
 - communication
- Symptom management (e.g., sleep, school issues)





Psychoeducational Psychotherapy (PEP)

Orientation

- Nonblaming/growth-oriented
- Biopsychosocial—uses systems and cognitive-behavioral techniques

Education + Support + Skill Building → Better Understanding → Better Treatment + Less Family Conflict → Better Outcome

Two formats

- Multi-family psychoeducational psychotherapy (MF-PEP)
- Individual family psychoeducational psychotherapy (IF-PEP)





Multi-Family Psychoeducational Psychotherapy (MF-PEP)

Fristad, Verducci, Walters & Young (2009) Arch Gen Psych, 66(9): 1013-1021

- Children aged 8-11 (any mood disorder)
- 8 sessions, 90 minutes each
 - Begin/end with parents/children together
 - Middle (largest) portion-separate groups
 - Children receive *in vivo* social skills training after formal "lesson" is completed, then breathing practice
- Therapists: 1-parents; 2-children
- Families receive projects to do between sessions





8 Session Outline--Parents

- 1. Welcome, symptoms & disorders
- 2. Available treatments (medication, therapy, other)
- 3. "Systems": school/treatment team
- 4. Negative family cycle, WRAP-UP 1st ½
- 5. Problem solving
- 6. Communication
- 7. Symptom management (safety plans, sleep, stress management, family needs, etc.)
- 8. WRAP-UP 2nd ½ of program & graduate





8 Session Outline--Children

- 1. Welcome, symptoms & disorders, motto
- 2. Available treatment (medication, therapy, other), Naming the Enemy
- 3. "Tool kit" to manage emotions
- 4. Connection between thoughts, feelings and actions
- Problem solving
- 6. Nonverbal communication
- 7. Verbal communication
- Review & GRADUATE!





- Focus on Learning

 1. Repetition: Each session begins with a review/preview
- 2. Sequential: Each session builds on the previous session, reinforces prior learning
- 3. Multi-sensory: Each session uses words and pictures to convey critical concepts
- 4. Comprehension check: Each session ends with children joining their parents to
 - a. Summarize the Lesson of the Day
 - b. Demonstrate the Breathing for the Week
 - c. Explain the Project of the Week





Feelings



Happy



Sad



Angry



Calm/relaxed



Surprised



Embarrassed



Bored/Tired



Excited



Worried



Unhappy



Stressed



Scared

Strength of Feelings Danger High High Low Low IF-PEP Child Workbook 22 Feeling

Motto

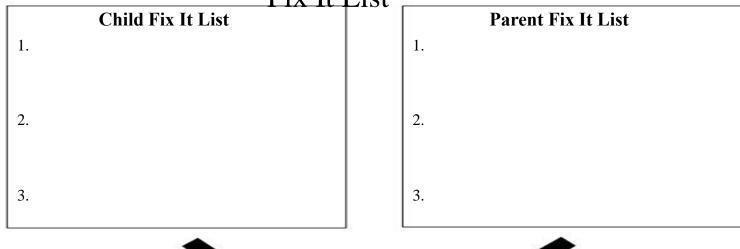
- It's not your fault, but it's your challenge...
 - Non-blaming- a salve
 - Not a "get out of jail free" card
 - Convey to kids that they are not expected to do this alonethey will be supported





Session 1 Family Project

Fix It List







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Family Fix It List

1.

2.

3.
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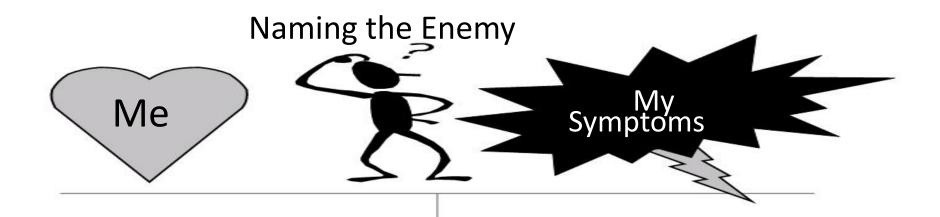
Main Goals of Each Session: Child #2

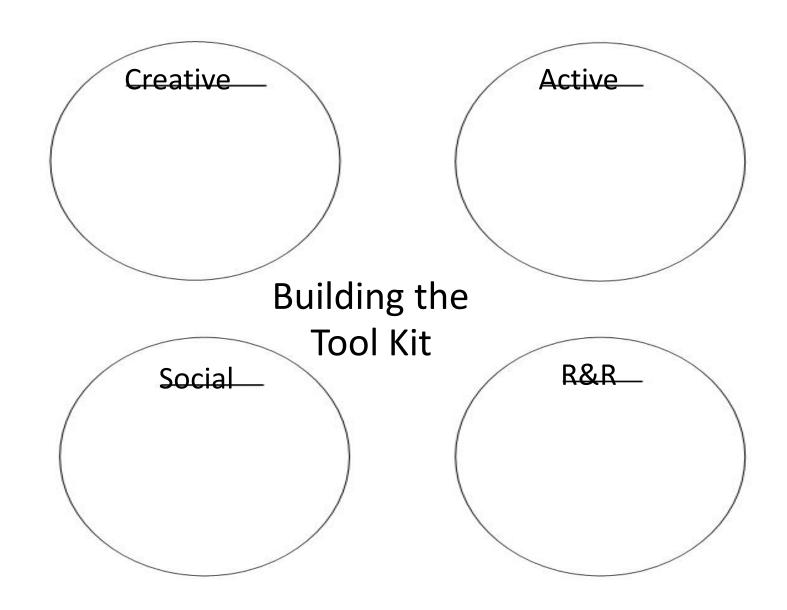
- 1. Naming the Enemy
 - a. Focus on positive attributes
 - b. Change language within family (powerful!)
 - c. Decrease stigma/power of the unknown CHILDREN: Always use the proper name for things. Fear of a name increases fear of the thing itself. --Professor Dumbledore, Page 298, Harry Potter and the Sorcerer's Stone

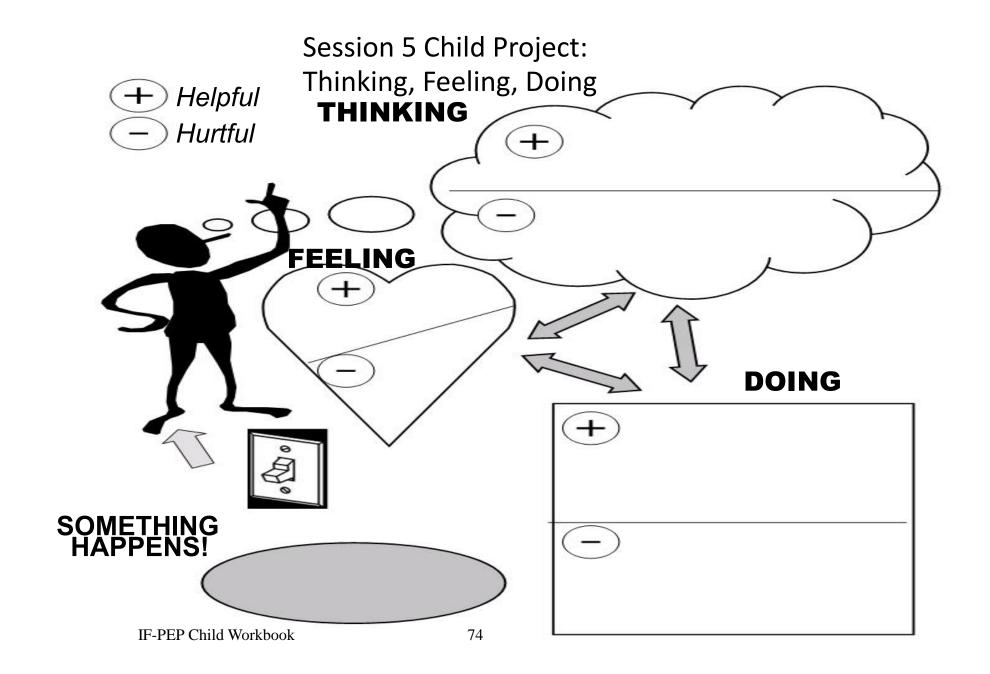
PARENTS: The beginning of wisdom is to call things by their right names. *ancient Chinese saying*



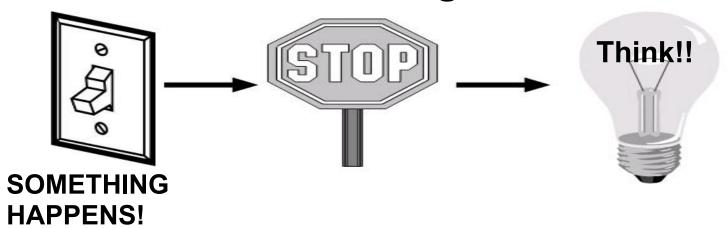


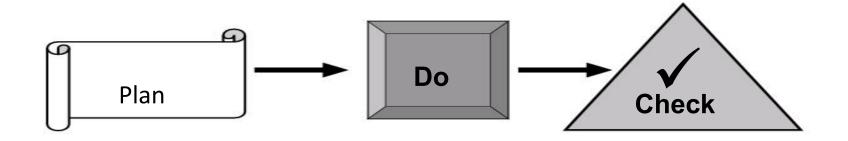






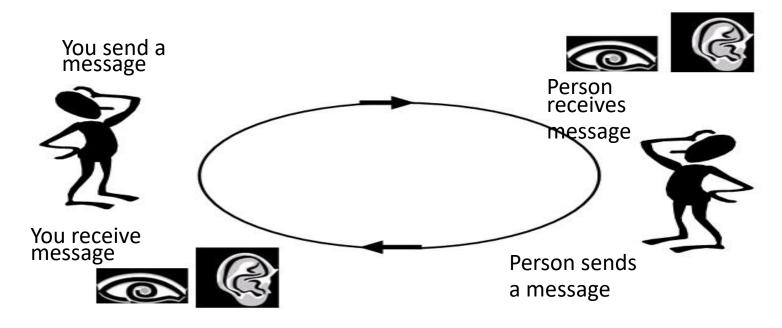
Problem Solving





The Communication Cycle (Verbal and Nonverbal)

All communication--Verbal and nonverbal--involves both sending and getting a message.

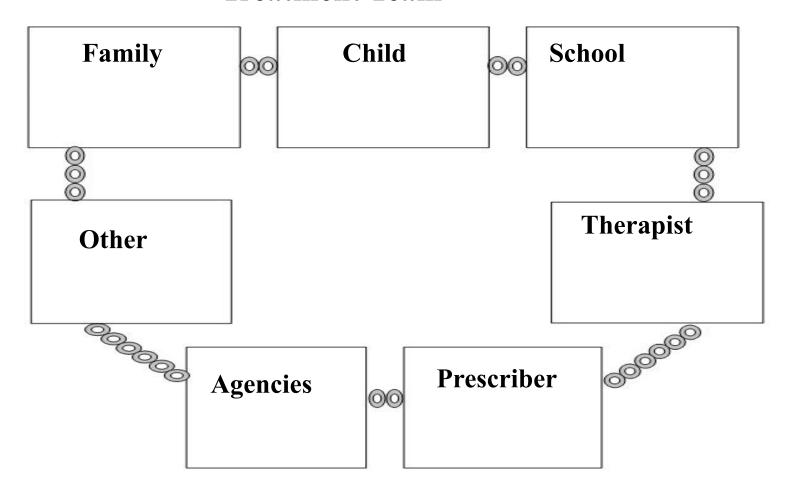


(3)				feeling today?				
-5	-4	-3	-2	-1	0	1	2	3
M T								
W								
Th				•••••				
F				•••••				
Sa				•••••				

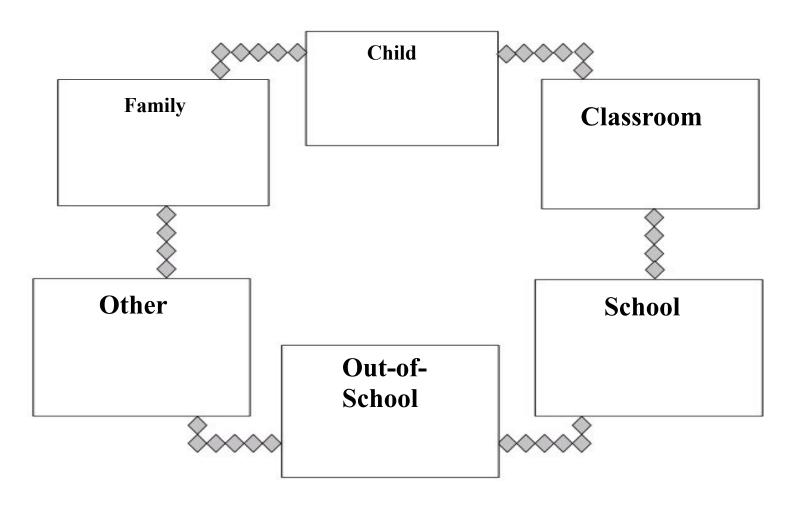
Session 2 - Understanding My Child's Medication

Medication & Dose	Target Symptom	Side Effects	How to Manage Side Effects	Important Things to Remember
1.				
2.				
3.				
4.				
5.				
6.				

Session 3 Parent Project - My Child's Treatment Team



Session 3 Parent Project My Child's Educational Team



Clinical Caveats

- Many core mood symptoms (eg, euphoric mood, pressured speech, delusional thinking) do not respond to behavioral management in a conventional manner
- Symptoms will wax and wane, so plans must be <u>flexible</u>
- Comorbidities often do respond to behavioral management (eg, ADHD symptoms)
- This disorder humbles each & every person affected by it!
- We all need to stay on the same team, or we'll be defeated!

The Can'ts, Won'ts, and Combos

• Learn what your child CAN'T do (versus what he WON'T do)

This is not easy!

Learn your child's signs

<u>Cant's</u>	Won'ts
"That look in his eyes"	A naughty twinkle
"She's gone"	He gets a nasty smile on his face

How Can Mood Disorders "Mess Up" Family Life?

- Results in problems getting along
 - reassurance doesn't help!
 - overly sensitive, preoccupied with self
 - negative behavior appears to be "on purpose"
 - expectations aren't met
 - need to be in control
 - fail with regular responsibilities
 - feel like the family needs to "walk on eggshells"

More Problems Caused by Mood Disorders...

- Unpredictable behavior
- Dangerous/violent outbursts
- Agitation
- Lack of "reasonability"
- Apparent lack of caring for others

Negative Family Cycles...

- Family tries to help by coaxing, reassuring, protecting
- Child doesn't respond + to this
- Family either tries even harder or withdraws
 - parents often attempt different solutions, then start quarreling with each other
- Child feels more alienated & family feels rejected, family either withdraws or gets angry or does BOTH

Negative Family Cycles (Cont'd)

• Family feels guilty, goes back to coaxing, etc.

Child feels unworthy, hopeless, infantilized

Family burns out over time but still feels guilty/angry

End result: alienation &/or overprotection

How to Break the Negative Family Cycle

- First, "hold" and acknowledge the child's feelings (use imagery—container)
 - No one asks for lousy emotions
 - Empathy without blame is a salve
- Next, shift to communication and problem solving strategies to manage symptoms

Session 5 Family Project Symptom Management using Problem Solving

- 1. The problem is...
- 2. I/We have talked to...
- 3. Possible solutions are...
- 4. Their pros and cons) are...

Solution?	Pros	Cons

- 5. We'll try:
- 6. This is how it worked:
- 7. Next time we will:

Session 8 Parent Project —Out with the Old Communication,

In With the New

	111 1111		
Day	—Old (Hurtful Communication)	When Did I Catch Myself *	—New (Helpful Communication)
1	,		
2			
3			
4			
5			
6			
7			

^{*}Right away? When I saw my child's reaction? An hour/day later?

Pro's and Con's of IF-PEP

- +Can flexibly administer treatment modules
- +Includes Healthy Habits, siblings, school professional contact
- +In-the-bank sessions allow for repeating and/or augmenting of treatment
- +Easier to schedule for families
- +Can start at any time (don't need to wait for a group cycle)
- -Don't meet others struggling with unique issues of mood disorder
- -Social skills training with peers not available in session





Therapist (1) Requirements: IF-PEP

- Be familiar with
 - Mood disorders
 - Children and families
- Learn details of IF-PEP





Additional IF-PEP Content

- Healthy Habits: Sleep, Eating, Exercise
- School Consultation Session
- Sibling Session





Books for Children

Brandon & the Bipolar Bear -- T. Anglada

My Bipolar, Roller Coaster, Feelings Book & Workbook—B. Hebert

The Storm in My Brain -- Child & Adolescent Bipolar Foundation (CABF)

Kid Power Tactics for Dealing with Depression -- N. & S. Dubuque

Matt, The Moody Hermit Crab -- C. McGee

Anger Mountain—B. Hebert



Books for Adolescents

Mind Race: A Firsthand Account of One Teenager's Experience with Bipolar Disorder – *P.E. Jamieson & M.A. Rynn*

- When Nothing Matters Anymore: A Survival Guide for Depressed Teens -- B. Cobain
- Recovering from Depression: A Workbook for Teens -- M. E. Copeland & S. Copans
- Monochrome Days: A First-Hand Account of One Teenager's Experience with Depression *Irwin, Evans & Andrews*





Children's Literature

The Phoenix Dance

- Dia Calhoun, award winning author
- •Farrar, Straus & Giroux, NY, 2005

- Based on the Grimms' Twelve Dancing Princesses
- •Explores the experience of bipolar disorder in an adolescent girl





Books for Parents

Raising a Moody Child: How to Cope with Depression and Bipolar Disorder -- M.A. Fristad & J.S. Goldberg-Arnold

The Bipolar Teen: What You Can Do to Help Your Child and Your Family – D.J. Miklowitz & E.L.George

New Hope for Children & Teens with Bipolar Disorder—B. Birmaher

The Childhood Bipolar Disorder Answer Book- T. Anglada & S.M. Hakala

The Bipolar Child -- D. & J. Papalos





Books for Adults

Living Without Depression & Manic Depression -- M. E. Copeland

An Unquiet Mind -- K. Redfield Jamison

Clinician's Guide to Bipolar Disorder – Miklowitz & Gitlin

The Bipolar Survival Guide: What You and Your Family Need to Know -- D.J. Miklowitz





Educational Websites

Information re: BPD for Parents, Children and Educators

- www.bpchildren.com
- www.thebalancedmind.org (Depression and Bipolar Support Alliance)

Special Education Advocacy -- <u>www.wrightslaw.com</u>

National Association of Therapeutic Schools and Programs— <u>www.natsap.org</u>

Internet Special Education Resources (ISER)

•www.iser.com





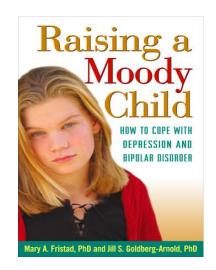
Groups/Websites

- National Alliance on Mental Illness (NAMI): 1-800-950-6264 <u>www.nami.org</u>
- (National) Mental Health America (NMHA): 1-703-684-7722 www.nmha.org
- Depressive & Bipolar Support Alliance (DBSA): 1-800-826-3632 www.dbsalliance.org
 - Balanced Mind Parent Network
 - MoodCrewTM
- Families for Depression Awareness (FFDA): 1-718-890-0220 www.familyaware.org
- Juvenile Bipolar Research Foundation (JBRF): 1-866-333-5273, www.bpchildresearch.org
- BP Children: 1-732-909-9050 (fax) www.bpchildren.com

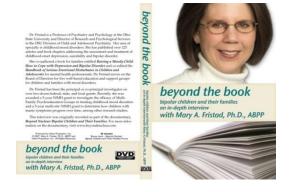


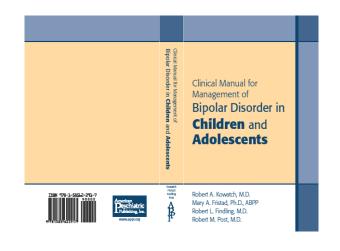


IF-PEP & MF-PEP Resources



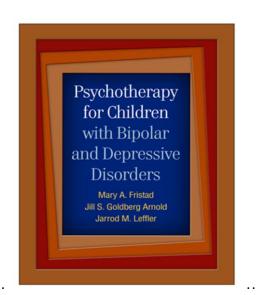
Books & DVD for parents or therapists—order from www.amazon.com





Home Study Course—for professionals

Taped 2 day seminar by Dr. Fristad
6 or 12 hours Continuing Education
credit
\$95 for CD or cassette
\$65 for test scoring/reporting
www.jkseminars.com



Treatment Manual—2011, Guilford Press

https://tinyurl.com/PEP-Materials

Child, Parent & Child Therapist MF-PEP Workbooks

Child & Parent PEP Workbooks





Conclusion

Bipolar spectrum disorders CAN be diagnosed in youth

Take your time and be thorough

Treatment should be multi-modal

Therapy should include the child and family

Psychoeducational psychotherapy works!





Thank you



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