

BIPOLAR AND RELATED DISORDERS

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Introduction

Bipolar and related disorders are characterized by shifts of mood with severe highs (mania) and extreme lows (depression). In a depressed episode, the child may have any or all of the symptoms of a depressive disorder. When in a manic episode, the child may be overactive, over talkative, and have a great deal of energy (American Psychiatric Association [APA], 2015). Depressive disorders are distinct from the bipolar and related disorders because they include an elevated mood component as well as a depressed mood state, the combination of which is reflected in the prefix bi, meaning “dual states” (Wilmshurst, 2014). The depressive disorders, in contrast, manifest a single (unipolar) emotional state of low positive affectivity characterized by sadness, lethargy, distress, and/or un-pleasurable engagement (Wilmshurst). The symptoms of bipolar and related disorders can damage relationships, cause problems at work or school, and even lead to suicide. Several studies have shown that up to 60 percent of adult patients diagnosed with bipolar and related disorders had onset of the disorder before age 21. Early-onset bipolar disorder can be a particularly severe form of the illness (Perlis et al., 2004), and evidence indicates that bipolar disorder in children may have a more severe course and poorer prognosis than bipolar disorder associated with older adolescents and adult-onset (Roberts, Bishop, & Rooney, 2008).

Once considered a disorder occurring only in adults, the rate of bipolar disorder diagnosis in youth has doubled in outpatient clinical settings, and quadrupled in community hospitals in the United States (Leibenluft & Rich, 2008). There has been a 40-fold increase of the diagnosis of bipolar disorder in children between 1995 and 2003 (Papolos & Bronsteen, 2013). There has also been an explosion of interest among researchers and clinicians in bipolar and related disorders in recent years.

Recent Changes from the DSM-IV to the DSM-5

In 2013, the American Psychiatric Association released the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. Bipolar disorders were separated from depressive disorders in the *DSM-5*, and the chapter “Bipolar and Related Disorders” was placed between “Schizophrenia Spectrum and Other Psychotic Disorders” and “Depressive Disorders.” The APA made this change because it now

views bipolar disorder as a bridge between psychotic and depressive disorders (APA, 2013a) based on recent research on symptoms, family history, and genetics (APA).

There are seven diagnoses included in the bipolar and related disorders section of the *DSM-5*:

1. Bipolar I disorder
2. Bipolar II disorder
3. Cyclothymic disorder
4. Substance/medication-induced bipolar and related disorder
5. Bipolar and related disorder due to another medical condition
6. Other specified bipolar and related disorder
7. Unspecified bipolar and related disorder

The term “bipolar disorder” may be used interchangeably with the term “bipolar and related disorders” when general observations and references are made in this section.

The *DSM-5* also modified the diagnostic criteria for bipolar disorder to promote earlier detection and accurate diagnoses. The diagnostic criteria focusing on manic and hypomanic (a more mild form of mania) episodes add emphasis to activity and energy changes along with mood (APA, 2013a). The *DSM-5* includes a new specifier, “with mixed features,” that applies to episodes of mania or hypomania when depressive features are present, and to episodes of depression in the context of major depressive disorder or bipolar disorder when features of mania/hypomania are present (APA, 2013b). An additional specifier, “anxious distress,” identifies patients with anxiety symptoms that are not part of the bipolar diagnostic criteria (APA, 2013b).

Additionally, the *DSM-5* adds and removes several diagnoses. “Bipolar disorder not otherwise specified” has been replaced by “bipolar and related disorder due to another medical condition,” “other specified bipolar and related disorder,” and “unspecified bipolar and related disorder.” These diagnoses allow clinicians to further specify, if they so choose, the symptoms that characterize the bipolar disorder.

A new diagnosis present in the *DSM-5*, “disruptive mood dysregulation disorder,” was established to prevent inappropriate bipolar disorder diagnoses in youth (APA, 2013a). Disruptive mood dysregulation disorder is discussed further in the depressive disorders section of this *Collection*.

The *DSM-5* is a manual for assessment and diagnosis of mental health disorders and does not include information for treatment of any disorder. In the future, more evidence supporting treatments of disorders with *DSM-5* classifications will be available as clinical studies utilizing *DSM-5* criteria are conducted. As a result, this *Collection* will reference studies that utilize *DSM-IV* diagnostic criteria to explain symptoms and treatments.

Prevalence

A meta-analysis of 12 epidemiological studies found an average rate of two percent for bipolar and related disorders in youths under age 19 (Jenkins et al., 2012). In outpatient clinical populations, evidence suggests prevalence estimates between 0.6 and 15 percent, depending on the diagnostic instrument, clinic specialization, and referral source (Jenkins et al.). Because the prevalence of bipolar disorder varies substantially by type of setting, it is important to consider the starting base rate in light of clinical context. Two published estimates indicated a base rate of six percent for bipolar and related disorders in an outpatient clinic (Jenkins et al.).

Table 1 outlines the prevalence of the various bipolar disorder categories in adult samples as contained in the *DSM-5*. Prevalence data on youth with bipolar disorder is limited because of the debate regarding the diagnosis. The *Diagnostic and Statistical Manual, Fourth Edition, Text Revised (DSM-IV-TR)* criteria prevalence is included, but not separated by diagnosis category.

Table 1
Prevalence of Bipolar and Related Disorders Categories

Disorder	12 Month Prevalence		Male to Female Ratio
	In U.S.	Internationally	
Bipolar I Disorder	0.6%	0.0 – 0.6%	1.1:1
Bipolar II Disorder	0.8%	0.3%	
Cyclothymic Disorder			
Lifetime	0.4% – 1.0%		1:1
With mood disorders	3.0% – 5.0%		
<i>DSM-IV</i> Bipolar I, Bipolar II, and Bipolar Disorder Not Otherwise Specified in Youths 12 and older	2.7%	1.8%	

Source: APA, 2013a.

Categories

The diagnostic class “bipolar and related disorders” describes disorders characterized by marked fluctuations in mood, activity, and behavior. As noted previously, there are seven primary diagnostic categories on the bipolar spectrum. The following are the diagnostic categories of bipolar and related disorders set forth in the *DSM-5*:

1. **Bipolar I disorder:** Requires a manic (or mixed) episode lasting at least one week, unless hospitalization is necessary. Depressive episodes are not required, but most youth experience major or minor episodes during their lifetime.
2. **Bipolar II disorder:** Requires major depressive episodes with at least one hypomanic episode (a lesser form of mania) lasting at least four days. There are no full manic or mixed manic episodes.
3. **Cyclothymic disorder:** Requires at least two years (one year in children and adolescents) of numerous periods of hypomanic symptoms that do not meet criteria for a hypomanic episode and numerous periods of depressive symptoms that do not meet criteria for a major depressive episode. Cyclothymic disorder is primarily a chronic, fluctuating mood disturbance.
4. **Substance/medication-induced bipolar and related disorder:** Requires that bipolar symptoms developed during or soon after substance exposure, intoxication, or withdrawal, and that the substance is capable of producing these symptoms.
5. **Bipolar and related disorder due to another medical condition:** Requires a persistent elevated, expansive, or irritable mood and high energy. No other mental disorder should be present that could explain the symptoms; instead, symptoms are a direct pathophysiological consequence of another medical condition.
6. **Other specified bipolar and related disorder:** Requires symptoms that do not meet the full criteria for any bipolar disorder but that cause significant distress. This includes short-duration hypomanic episodes and major depressive episodes, hypomanic episodes with insufficient symptoms or without accompanying major depressive episodes, or short-duration cyclothymia.
7. **Unspecified bipolar and related disorder:** This disorder is similar to “other specified bipolar and related disorder” but is diagnosed when the clinician chooses not to specify why symptoms do not meet bipolar criteria.

Because many individuals (particularly children and, to a lesser extent, adolescents) experience bipolar-like phenomena that do not meet the criteria for bipolar I, bipolar II, or cyclothymic disorder, the *DSM-5* included the “other specified bipolar and related disorder” category (APA, 2013a). The *DSM-5* also

includes additional specifiers that can further define certain additional symptoms that may accompany a child's bipolar disorder. A new specifier "with mixed features" no longer requires the full criteria for both depressive and manic episodes. This specifier can also be added to manic episodes with depressive features or to depressive episodes with manic or hypomanic features (APA, 2013b).

The specifiers for bipolar and related disorders are as follows:

- With anxious distress;
- With mixed features;
- With rapid cycling;
- With melancholic features;
- With atypical features;
- With mood-congruent psychotic features;
- With mood-incongruent psychotic features;
- With catatonia;
- With peripartum onset; and
- With seasonal pattern.

For the most part, children with bipolar and related disorders present with similar symptoms to those of adults, but symptoms manifest in more developmentally appropriate ways. Symptoms may also include a decreased need for sleep, racing thoughts or a sense that thoughts are out of control, rapid and often pressured speech, increased goal-directed activities or projects, hypersexuality, reckless behaviors and risk-taking, and delusions of grandeur (Bernstein, 2017).

In adolescents, mania is commonly associated with psychotic symptoms, rapidly changing moods, and mixed manic and depressive features (Pavuluri, Birmaher, & Naylor, 2005). Mania in younger children is usually defined by erratic changes in mood, energy levels, and behavior. Irritability and mixed manic/depressive episodes are usually more common than euphoria (McClellan et al., 2007).

Unlike what is noted in adults, well-defined and discrete episodes of abnormal mood are often missing in children and adolescents with this disorder. Special considerations are necessary to detect the diagnosis in children. Since children of the same chronological age may be at different developmental stages, it is difficult to define with precision what is normal or expected at any given point (APA, 2013a). Therefore, each child should be judged according to his or her own baseline. Due to sparse evidence of the diagnostic validity of bipolar disorder in young children, the American Academy of Child and Adolescent Psychiatry (AACAP) recommends extreme caution when diagnosing bipolar disorder in preschool age children (McClellan et al., 2007). Misdiagnosis can lead to unnecessary or too aggressive pharmacological treatment.

Causes and Risk Factors

Family history is one of the strongest and most consistent risk factors for bipolar disorders. There is a 10-fold increased risk, on average, among adult relatives of individuals with bipolar I and bipolar II disorders (APA, 2013a). The degree of risk increases with degree of kinship. According to Youngstrom (2007), out of 100 articles that discussed more than 30 risk factors associated with bipolar disorder, family history was the only factor significant enough to warrant clinical interpretation. The child of a bipolar parent is four times more likely to develop bipolar disorder than a child of a non-bipolar parent (Miklowitz & Johnson, 2006). There is also an overlap in genetic heritability between bipolar and certain other disorders, such as schizophrenia (15 percent) and depression (10 percent) (Brooks, 2013).

Other risk factors associated with the development of bipolar disorder are:

- Psychosocial stressors that interact with biological and/or genetic predisposition in eliciting episodes (Roberts, Bishop & Rooney, 2008);
- Poor peer relationships (Geller et al., 2000); and
- Early traumatic life events, which can lead to a more pernicious course (Leverich & Post, 2006).

Bipolar and related disorders present differently by economic status and is more common in high-income (1.4%) than low-income (0.7%) families (APA, 2013a). Research has also shown that males tend to exhibit mania more often, whereas females are more likely to present with depression (Duax et al., 2007).

Gestational influenza may also cause, or trigger, bipolar disorder in children. The increased risk to a child whose mother had influenza during pregnancy is four times that of a child whose mother did not (Louden, 2013). This connection does not carry over to other disorders of maternal respiration (Louden). Additional research revealed a similar link between gestational influenza and schizophrenia, further linking the two disorders and further supporting the necessity of influenza prevention in women who may become pregnant (Brown et al., 2004).

Assessment

Proper assessment of bipolar disorder in children is essential to early diagnosis, intervention, and treatment. Evidence has shown that, although symptoms may appear very early in a child, there is an estimated six-year delay in diagnosis, on average (Dagani et al., 2017). In adolescents, this delay is often longer because moodiness is sometimes mistaken by parents and doctors for the emotional ups and downs typical of the teenage years. In addition, mental health clinicians are not always able to distinguish the depressed phase of bipolar disorder from other types of depression.

Early intervention may lead to a better prognosis. Although no information on early intervention is available in the bipolar disorder literature, adult studies have found that a longer delay from the first appearance of symptoms to treatment was associated with an increase in hospitalizations, a decrease in social adjustment, and a greater risk of suicidal behaviors (Goldberg & Ernst, 2002).

There are a number of red flags that should trigger assessment for a possible bipolar diagnosis. Even though youth exhibiting these red flags often will not have a bipolar disorder (Youngstrom et al., 2012), they should still be assessed, especially if they have two or three indicators. Red flags are summarized in Table 2.

The AACAP Practice Parameters for bipolar disorder recommend a comprehensive, multi-informant assessment procedure. Clinicians should attempt to acquire assessment information from youth, parents, and teachers (McClellan et al., 2007). During the initial assessment period, clinicians should obtain a thorough family medical and psychological history, and choose both broadband (general screening tools) and narrowband measures (specific to the disorder) in order to rule in/out other possible diagnoses or comorbid disorders. Most youth with bipolar disorder have at least one other co-occurring disorder.

Bipolar disorder can often be confused with attention-deficit/hyperactivity disorder (ADHD) and conduct disorder due to the existence of overlapping symptoms (Wilmshurt, 2014). Children or adolescents who seem depressed and also demonstrate symptoms that resemble those of ADHD but are more severe (excessive temper outbursts, rapid mood swings) should be evaluated for the existence of a bipolar or related disorder, especially if family history is positive for the disorder. Misdiagnosis of major depressive disorder or ADHD and subsequent treatment with antidepressants or psychostimulants can cause a manic episode for youth with bipolar disorder (DeBello et al., 2001). Unnecessary exposure to medications that have not been well-studied in youth can also lead to serious side effects (Findling et al., 2004). Assessment should also include measures of hypomanic/manic and depressed symptoms (Youngstrom et al., 2012).

Table 2
Red Flags that Trigger Assessment for Bipolar Disorder

Red Flag	Description	Reason
Family history of bipolar disorder	Bipolar disorder has a genetic contribution; family environment can amplify risk and affect treatment adherence and relapse	Five to 10 times increase for 1 st degree relative; 2.5 to 5 times for 2 nd degree relative; 2 times for “fuzzy” bipolar disorder in relative
Early onset depression	Onset less than 24 years of age; also, treatment resistant, recurrent, or atypical depression may be more likely to be bipolar	First clinical episode is often depression; 20% to 30% of depression ultimately shows a bipolar course
Antidepressant-coincident mania	Manic symptoms while being treated with antidepressants	The FDA recommends assessing for hypomania and family history of bipolar disorder before prescribing antidepressants
Episodic mood lability (marked fluctuation of mood)	Rapid switching between depressive and manic symptoms, depressive and manic symptoms at the same time	Common presentation; multiple episodes more suggestive of mood diagnosis
Episodic aggressive behavior	Episodic, high-energy, not instrumental or planned, reactive	Not specific to bipolar disorder but common
Psychotic features	True delusions/hallucinations in the context of mood	Delusions/hallucinations common during mood episode; bipolar more common as source of psychosis than schizophrenia in children
Sleep disturbance	Decreased need for sleep; less sleep but maintains high energy	More specific to bipolar disorder; indicates sleep hygiene component of treatment

Source: Youngstrom, et al., 2012.

One of the first steps in assessment should include an examination by a primary care provider to rule out any medical reason for the youth’s change from normal behavior. Many medical conditions, such as hyperthyroidism, epilepsy, and head trauma, can induce mania or resemble symptoms of mania (Fields & Fristad, 2008). Once medical conditions have been ruled out, a clinician should attempt to gain a longitudinal perspective to document the course of the disorder. Obtaining a baseline for normal behavior is important to determine a meaningful change in this behavior. Having parents complete a mood log, in which they track their child’s mood and energy for a certain number of weeks, is an effective way for a clinician to determine specific mood episodes and whether a child meets time-length criteria for specific bipolar disorder symptoms (Youngstrom, 2007). Ongoing assessment and reevaluation after the initial diagnosis is critical in bipolar disorder diagnosis (Youngstrom et al., 2005).

Some of the broadband and narrowband assessment tools available for clinicians to use in the assessment of bipolar disorder are:

- Behavior checklists, such as Achenbach’s Child Behavior Checklist (CBCL) (Achenbach, 1991);
- Clinical rating scales like the K-SADS-Mania Rating Scale (K-MRS) (Axelson et al., 2003), Child Mania Rating Scale (CMRS), General Behavior Inventory (GBI), or the Young Mania Rating Scale (Young et al., 1978);
- Mood rating scales, like the Mood Disorder Questionnaire for Bipolar Disorders in Adolescents (MDQ-A); and
- WASH-U-KSADS (Geller et al., 2001), a semi-structured interview with an expanded mania symptoms section.

The Externalizing Scale score on the CBCL is a useful screening tool, evidenced across multiple studies, in that it allows clinicians to screen for bipolar disorder quickly (Kahana et al., 2003; Youngstrom et al., 2004; Youngstrom, Youngstrom, & Starr, 2005). Although the scale score is sensitive to bipolar disorder, it is not specific due to the lack of a mania scale. Because of this, low Externalizing Scale scores usually help clinicians to rule out bipolar disorder as a diagnosis (Youngstrom, 2007). A high score, however, does not “rule in” a child; instead, it suggests the need for further bipolar disorder diagnostic assessment. The measure is a screening tool and, due to its lack of specificity, should not be the sole basis for a bipolar disorder diagnosis. Youngstrom also recommends adding a mania scale like the GBI, CMRS, or MDQ-A to assess mania in children for whom a bipolar disorder diagnosis is suspected (Youngstrom, et al., 2012). Table 3 lists the suggested assessment tools for bipolar and related disorders.

Knowledge of how developmental and cultural factors impact assessment and diagnosis is crucial to proper assessment. In youth, developmental issues and age-appropriate behavior must be considered in order for the clinician to interpret clinical data. It is also imperative that the clinician assesses not only symptoms, but also functional impairment.

Ongoing assessment of suicide risk is important due to the high risk of suicide attempts among youth with bipolar disorder. The lifetime risk of suicide in all individuals with bipolar disorder is estimated to be at least 15 times that of the general population (APA, 2013a). Bipolar disorder may account for one-quarter of all completed suicides (APA). Estimates show that 25 to 50 percent of youth with bipolar disorder will attempt suicide, and 20 percent will succeed (Faust, Walker & Sands, 2006). However, more recent literature on evidence-based assessment of bipolar and related disorders notes that these risks may be over-estimated based on the desire to avert risk (Youngstrom et al., 2012). A review of suicide assessment tools is provided in the “Youth Suicide” section of the *Collection*.

Comorbidity

Comorbidity complicates diagnosis because youth assessed for bipolar disorder frequently meet criteria for multiple psychiatric disorders (Jenkins et al., 2012). It is not uncommon for clinicians to focus on the comorbid condition and inadvertently neglect the bipolar disorder. Similar to the literature on adults, various research studies have shown that children and adolescents suffering from bipolar and related disorders have very high rates of comorbidity with other psychological disorders (Jenkins et al., 2012; Kessler, 1999; Kowatch et al., 2005), the most common being ADHD (e.g., Biederman et al., 2004; Masi et al., 2006; Youngstrom et al., 2005), oppositional defiant disorder (ODD) (Youngstrom et al., 2005), conduct disorder (Lewinsohn et al., 2002), and anxiety disorders (Harpold et al., 2005). Psychosis has also been shown to be comorbid with bipolar disorder (Biederman et al., 2004).

Evidence has shown that as many as 60 to 90 percent of youth with bipolar disorder have comorbid ADHD (Axelson et al., 2006; Joshi & Wilens, 2009), and as many as 78 percent of youth have comorbid anxiety disorders (Harpold et al., 2005). Youth with comorbid ADHD and/or anxiety disorders often show greater functional impairment and a worse prognosis (Youngstrom, 2007). Clinicians should take care to ensure that comorbid disorders are diagnosed because misattributing symptoms can lead to inappropriate diagnosis or utilization of pharmacotherapy (Joshi & Wilens).

Table 3
Suggested Assessment Tools

Measure Type	Name of Measure	Who Completes	Data Generated
Clinical interview	Washington University version of the Kiddie-Schedule for Affective Disorders and Schizophrenia	Clinician with youth & parent	Diagnosis
Clinical interview	The Children’s Interview for Psychiatric Syndromes (ChIPS)	Clinician with youth & parent	Diagnosis
Clinical interview	Mini-International Neuropsychiatric Interview (MINI)	Parent	Diagnosis
Rating scale	Mood Disorder Questionnaire (MDQ)	Parent or youth	Symptom ratings
Behavior checklist	Child Behavior Checklist (CBCL)	Parent	Syndrome scale scores; Competence scores
Behavior checklist	Youth Self-Report (YSR)	Youth	Syndrome scale scores; Competence scores
Rating scale	General Behavior Inventory (GBI)	Parent or youth	Symptom ratings
Rating scale	Young Mania Rating Scale	Clinician or parent	Symptom ratings
Rating scale	Child Mania Rating Scale	Parent	Symptom ratings
Rating scale	Pediatric Quality of Life Inventory (PedsQL)	Parent or youth	Child functioning ratings

Sources: Youngstrom, 2007; Youngstrom et al., 2012.

Families should be cognizant of the possibility that bipolar may accompany substance use disorder (APA, 2013a). One in three teens with bipolar and related disorders developed substance abuse within four years of a study tracking youth with bipolar. The following are the top predictors of substance abuse in bipolar adolescents:

- Repeated alcohol experimentation
- Cannabis experimentation
- Oppositional defiant disorder
- Panic disorder
- Family history of substance abuse
- Low family cohesiveness
- Absence of antidepressant treatment (Goldstein et al., 2013)

Recreational substance use can be very dangerous for individuals with bipolar and related disorders (Goldstein, et al.).

Treatments

Available practice guidelines for bipolar and related disorders in youth are somewhat outdated. This is because of the lack of clinical trials on which to base treatment recommendations (Chang, 2016). Accordingly, treatment recommendations for youth incorporate findings from the small number of

available studies, utilize recommendations from adult studies, and incorporate clinical experience. Currently, there are no pharmacological or psychosocial therapies with enough evidence in youth samples to meet the standards for evidence-based treatments, although the treatments discussed in this section have been shown to be probably efficacious (what seems to work) (Chambless & Hollon, as cited by Youngstrom, 2007).

The AACAP Practice Parameters for treatment of early-onset bipolar disorder, which were published in 2007, provide a comprehensive, multimodal combination of both psychopharmacology and psychosocial therapies (Meers, & Fristad, 2017; McClellan et al., 2007). The AACAP Practice Parameters also advise that treatment should be tailored to the individual and based on several different factors, including treatment setting, the chronic nature of the disorder, the age of the child, and the family environment. The goals of therapy are to reduce symptoms, educate about the illness, and promote adherence to treatment, which works towards preventing relapse and promotes normal growth and development in youth with bipolar disorder (McClellan et al.). Table 4 summarizes the treatments for bipolar and related disorders.

Table 4
Summary of Treatments for Bipolar and Related Disorders

What Works	
There are no evidence-based practices at this time.	
What Seems to Work	
Psychopharmacological treatment (medication)	Mood stabilizers/Anticonvulsants Second-generation antipsychotics
Family-focused psychoeducational therapy (FFT)	Helps youth make sense of their illness and accept it and also to better understand use of medication. Also helps to manage stress, reduce negative life events, and promote a positive family environment.
Child- and family-focused cognitive behavioral therapy (CFF-CBT)	Emphasizes individual psychotherapy with youth and parents, parent training and support, and family therapy.
Multifamily psychoeducation groups (MFPG)	Youth and parent group therapy have been shown to increase parental knowledge, promote greater access to services, and increase parental social support for youth.
Not Adequately Tested	
Interpersonal social rhythm therapy (IPSRT)	Works to minimize the effects of life stressors by helping youth establish regular patterns of sleep, exercise, and social interactions
Omega-3 fatty acids	Unclear if supplementation helps with depressive symptoms when used in conjunction with other treatments
Topiramate Oxcarbazepine	Anticonvulsants; not proven to be effective in youth or adults
Dialectical behavior therapy (DBT)	Family skills training and individual therapy; not proven to help with mania or interpersonal functioning

Pharmacological Treatments

The goal of pharmacological treatment for bipolar and related disorders is to immediately reduce the severity of symptoms (Leibenluft & Rich, 2008). Pharmacotherapy, combined with psychotherapy, offers the best chance for symptom recovery. However, because few large-scale prospective studies have examined pharmacologic treatment for youth with bipolar and related disorders, many of these medications are used without specific FDA approval for youth (Washburn, West, & Heil, 2011). Accordingly, pharmacological treatment is modeled after treatment experiences with adults (Washburn, West, & Heil; Roberts, Bishop, & Rooney, 2008).

Although the number of studies that include children and adolescents remains quite small, preliminary evidence suggests that a combination of mood stabilizers/anticonvulsants and second generation antipsychotics have been shown effective in treating acute symptoms of bipolar disorder and for stabilization of symptoms for up to six months after the studies were complete (Fitzgerald & Pavuluri, 2015; Miklowitz & Johnson, 2006; Pavuluri, Birmaher & Naylor, 2005). The AACAP Practice Parameters suggest that treatment for bipolar disorder begin with lithium, another anticonvulsant/mood stabilizer, or an atypical antipsychotic that has been approved by the FDA for bipolar disorder in adults (McClellan et al., 2007).

Lithium is currently the most extensively studied medication for use with bipolar disorder (Findling & Pavuluri, 2008; Kafantaris et al., 2001, 2003; Pavuluri, Birmaher, & Naylor 2005; Hamrin & Iennaco, 2010). Lithium has been found to be effective in approximately 60-70 percent of adolescents and children with bipolar disorder and remains the first-line therapy in many settings (Bernstein, 2017). However, youth experience the same safety problems with lithium that adults may experience, such as toxicity and impairment of renal and thyroid functioning (Geller & Luby, 1997; Brauser, 2012). Lithium is not recommended for families unable to keep regular appointments, which are necessary to ensure monitoring of serum lithium levels in the blood and to manage conflicting side effects (Brauser). Relapse is also high for those youth who discontinue the medication.

When employing pharmacotherapy, mood stabilization is the first priority and should be addressed before the addition of stimulants to treat attentional difficulties (Fitzgerald & Pavuluri, 2015). Through the use of a medication algorithm, the addition of subsequent medications to treat residual symptoms or comorbid conditions is a recommended best practice, but only after primary affect dysregulation (emotional impairment) has been addressed. Table 4 divides the psychopharmacological treatments for bipolar disorder into two categories: What Works and What Seems to Work.

Youth diagnosed with bipolar disorder and comorbid ADHD respond less favorably to lithium treatment than youth who do not have ADHD. This may point to a genetic difference in the two populations (Joshi & Wilens, 2009). However, mood stabilizers show better results than stimulants in youth with bipolar disorder and comorbid ADHD.

The following is taken from a medication algorithm developed by Pavuluri, 2014. In establishing a plan for mood stabilization, four things are important to consider. First, a history should be obtained that details which medications worsened the youth's clinical status in the past, which were ineffective, and which were helpful. Second, the youth should be rapidly weaned off all ineffective medications. Third, selective serotonin reuptake inhibitors (SSRIs) should be discontinued. Despite compelling data in pediatric populations that shows that SSRIs worsen the symptoms of bipolar disorder either by switching or worsening mania, many children with bipolar or related disorders are on substantial doses of SSRIs. Bipolar and related disorders typically present with mixed or dysphoric states, and many physicians tune into depressive symptoms at the cost of worsening the clinical state. Fourth, stimulants should be discontinued. Mood stabilization is the primary treatment objective and should be attained prior to controlling symptoms of ADHD. However, if parents report that stimulants have been helpful, the

clinician may elect to continue stimulants at the lowest possible doses and, preferably, in long acting form.

Unfortunately, mood stabilizers and atypical antipsychotics have a number of adverse side effects, including, but not limited to, weight gain, drowsiness, decreased motor activity, constipation, increased salivation, rigidity, and dystonia (Fleischhaker et al., as cited by Meers & Fristad, 2017). It is very important that children on these medications be monitored for the development of serious side effects. These side effects need to be weighed against the dangers of the manic-depressive illness itself.

Psychosocial Treatments

Although no psychosocial treatments for bipolar disorder are considered evidence-based (Fristad, & MacPherson, 2014; Chambless & Hollon, 1998), recent evidence has shown that family-focused psychoeducational therapy (FFT) (Fristad, & MacPherson; Miklowitz et al., 2004), child- and family-focused cognitive behavioral therapy (CFF-CBT) (Pavuluri et al., 2004), and multifamily psychoeducation groups (MFPG) (Fristad, Goldberg-Arnold, & Gavazzi, 2002; Fristad, Gavazzi, & Mackinaw-Koons, 2003) show promise as adjunctive treatments to pharmacological treatment (Youngstrom, 2007). These three treatments have demonstrated symptom improvement and increased functioning in youth with bipolar disorder. The rationale behind these family-focused treatments are to give youth with bipolar disorder and their families knowledge and skills that could help limit the debilitating cycles of relapse and impairment that are characteristic of this disorder (Fristad, 2016).

Unproven Treatments

Topiramate and oxcarbazepine, both anticonvulsants, have not been proven to be effective in the treatment of bipolar and related disorders in youth, which is consistent with findings from adult studies (Fitzgerald & Pavuluri, 2015). Interpersonal social rhythm therapy (IPSRT) (Frank, Swartz, & Kupfer, 2000) has shown some evidence of support in adult studies. IPSRT works to minimize the effects of life stressors by helping youth establish regular patterns of sleep, exercise, and social interactions (Leibenluft & Rich, 2008). There is no current evidence of its usefulness in bipolar and related disorders, but current research is studying a version of IPSRT for bipolar and related disorders in youth. A pilot open trial of IPSRT found both statistically and clinically significant improvements in manic, depressive, and general psychiatric symptoms (Fristad & MacPherson, 2014). However, IPSRT has not yet been tested sufficiently to assert that it is evidence-based.

Dialectical behavior therapy (DBT) consists of 24 weekly and 12 bimonthly 60-minute sessions alternating between family skills training and individual therapy, with as-needed telephone coaching. An open trial of one year of DBT and pharmacotherapy (managed by psychiatrists following treatment guidelines at a specialty outpatient clinic) for 10 adolescents aged 14 to 18 with bipolar and related disorders found that, although adolescents demonstrated significant post-treatment improvement in suicidality, emotion dysregulation, and depression, there were no significant improvements in mania or interpersonal functioning, and no differences in number of medications prescribed (Fristad & MacPherson, 2014).

More recently, attention has turned to complementary and alternative medicines because they are associated with fewer side effects. There is growing evidence for the use of omega-3 fatty acids in the treatment of bipolar and related disorders and mood disorders (Meers & Fristad, 2017). Omega-3 has been shown to be more effective than placebo for depressive symptoms in adults and youth (Osher & Belmaker, as cited by Meers & Fristad). Although promising, these treatments have yet to acquire the extent of evidence available for the first-line pharmacotherapy interventions discussed earlier. However, available evidence does indicate that supplementation might be a safe and effective adjunct to pharmacotherapy and psychotherapy (Fristad, 2016).

Cultural Considerations

Unfortunately, little is available in the bipolar and related disorders literature about cultural differences in the prevalence or presentation of the disorder. Small sample sizes in treatment studies have not allowed for comparisons based on racial or ethnic groups (Brown et al., 2008).

However, when assessing, diagnosing, and treating youth with mental health disorders, it is imperative that a clinician take into consideration the youth's cultural background. Different cultures may have different beliefs about psychological issues, which should inform clinical judgment and decision-making. In Western cultures, people generally talk about their moods or feelings, whereas in many Eastern cultures, people refer to physical pain. Due to these differences, when assessing minority youth, clinicians should gather family history data at the symptom level, if possible, and be cautious about face value interpretation due to the potential for cultural bias (Garb, 1998).

Overview for Families

Families of children with bipolar disorder often notice the child has intense and extreme changes in mood and behavior. This may include the child varying between being excited, silly, and very sad. Children and youth with bipolar and related disorders experience unusual mood changes. The two “poles,” or extreme moods, of bipolar disorder are mania and depression. When children with bipolar disorder feel very happy or “up” and are much more active than usual, they are experiencing mania. A manic episode is a period of abnormally and persistently elevated mood. The child exhibits an increase in goal-directed activity or energy that lasts at least one week (APA, 2013a). Mania is often described as a period of euphoria or excessive cheerfulness, and often it is easily recognized (APA). When the same child feels very sad and “down” and is much less active than usual, he or she is experiencing depression. Bipolar symptoms are more powerful than the normal mood changes every youth experiences. Bipolar and related disorders can cause a youth to struggle in school or with friends and family members.

The causes of bipolar disorder aren't always clear, and scientists are continually researching possible causes and risk factors (NIMH, 2008a; NIMH, 2008b). Experts believe that bipolar and related disorders can be caused by several things, including:

- Genetics: A child with a parent or sibling with bipolar disorder are more likely to get the illness than other children
- Brain structure and function
- Anxiety disorders

Additionally, children with a family history of schizophrenia are also at risk, as the genetic cause of both bipolar and schizophrenia are likely linked (APA, 2013a).

Bipolar disorder has several symptoms that vary according to the mood episode, or mood changes, the youth experiences. Mood episodes can last one to two weeks or longer, and the symptoms last most of the day, almost every day. Manic episodes are characterized by feeling very happy or “up” and being much more active than usual. Depressive episodes occur when the youth feels very sad, “down,” and is much less active than usual. Some episodes may be mixed episodes, including both up and down symptoms. Children with bipolar disorder may have more mixed episodes than adults with bipolar. Signs to look for when a child or adolescent is experiencing a manic episode include:

- Feels very happy or acting silly, both of which are unusual
- Has a short temper
- Talks very fast about different things
- Struggles to focus
- Talks and thinks about sex more frequently
- Takes abnormal risks

Signs to look for when a child or adolescent is experiencing a depressive episode include:

- Feels very sad
- Complains about pain, including stomach aches and headaches
- Sleeps too little or too much
- Feels guilt and worthlessness
- Overeats or doesn't eat enough
- Has little energy or interest in fun activities
- Thinks about death or suicide

Table 5 describes some of the symptoms of both mania and depression. The list is not exhaustive.

Table 5
Manic and Depressive Symptoms

Manic Symptoms	Depressive Symptoms
<ul style="list-style-type: none"> • Severe changes in mood to either unusually happy or silly, or very irritable, angry, or agitated • Unrealistic highs in self-esteem • Greatly increased energy and the ability to operate on little or no sleep for days • Increased talking • Increasingly distracted, moving from one thing to the next • Repeating high risk behavior 	<ul style="list-style-type: none"> • Irritability, persistent sadness, frequent crying • Thoughts of death or suicide • No longer enjoys favorite activities • Frequent complaints of physical illness, like headaches • Decreased energy level • Major change in eating and sleeping patterns

Source: AACAP, 2008.

Children and adolescents with bipolar disorder may have other problems as well. When disorders occur at the same time, they are called “comorbid.” Comorbid disorders can include:

- Substance abuse
- Attention-deficit/hyperactivity disorder (ADHD)
- Anxiety disorders, like separation anxiety
- Other mental illnesses, including depression (NIMH, 2008a; NIMH 2008b).

Youth with bipolar and related disorders can effectively be treated through a combination of educating the patient and family, medicine, and psychotherapy (AACAP, 2008). Therefore, a thorough evaluation by a child and adolescent psychiatrist should be sought when symptoms are exhibited.

Resources and Organizations

American Academy of Child & Adolescent Psychiatry (AACAP)

<http://www.aacap.org>

Bipolar Disorder: Parents' Medication Guide for Bipolar Disorder in Children, & Adolescents

<http://www.parentsmedguide.org/bipolarmedicationguide.pdf>

American Psychiatric Association (APA)

<https://www.psychiatry.org>

American Psychological Association (APA)

<http://www.apa.org/>

Association for Behavioral and Cognitive Therapies (ABCT)

<http://www.abct.org/Home/>

American Foundation for Suicide Prevention (AFSP)

<https://afsp.org/>

Anxiety and Depression Association of America (ADAA)

<https://adaa.org/>

Depression and Bipolar Support Alliance (DBSA) (formerly the National Depressive and Manic Depressive Association)

<http://www.dbsalliance.org>

Effective Child Therapy

<http://effectivechildtherapy.org/>

Healthy Place

Medication and Therapy for Treating Bipolar Disorder in Children

<https://www.healthyplace.com/bipolar-disorder/articles/medication-and-therapy-for-treating-bipolar-disorder-in-children/other-medications-for-bipolar-disorder/>

Juvenile Bipolar Research Foundation

<https://www.jbrf.org/about-jbrf>

Mental Health America (MHA) (formerly National Mental Health Association)

Bipolar Disorder in Children

<http://www.mentalhealthamerica.net/conditions/bipolar-disorder-children>

National Alliance on Mental Illness (NAMI)

Bipolar Disorder

<https://www.nami.org/Learn-More/Mental-Health-Conditions/Bipolar-Disorder/Support>

National Institute of Mental Health (NIMH)

Bipolar Disorder in Children and Teens

<https://www.nimh.nih.gov/health/publications/bipolar-disorder-in-children-and-teens/index.shtml>

Ryan Licht Sang Bipolar Foundation

<http://www.ryanlichtsangbipolarfoundation.org/site/c.ltJZJ8MMIsE/b.2107311/k.BCD3/Home.htm>

University of North Carolina Department of Psychiatry

UNC Center for Excellence in Community Mental Health—Bipolar Disorder

http://www.med.unc.edu/psych/cecmh/patients/clinics-programs/patient-client-information-and-resources/copy_of_clients-and-families-resources/a-family-guide-to-severe-mental-illness/ii-what-are-mood-disorders/bipolar-disorder

References

- Achenbach, T. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 profile*. Burlington: University of Vermont, Department of Psychiatry.
- American Academy of Child, & Adolescent Psychiatry (AACAP). (2008). Facts for families: Bipolar disorder in children and teens. Retrieved from http://www.aacap.org/App_Themes/AACAP/docs/facts_for_families/38_bipolar_disorder_in_children_and_teen.pdf
- American Psychiatric Association. (2015). *Understanding mental disorders: Your guide to DSM-5*. Washington, DC: Author.
- American Psychiatric Association (APA). (2013a). *Diagnostic and statistical manual of mental disorders* (5th ed.) (DSM-5). Washington, DC: Author.
- American Psychiatric Association. (2013b). Highlights of changes from DSM-IV to DSM-5. Retrieved from <https://dsm.psychiatryonline.org/doi/full/10.1176/appi.books.9780890425596.changes>
- American Psychological Association (APA) Division 53. (2013). Bipolar disorder. Retrieved from <http://effectivechildtherapy.com/content/bipolar-disorder-0>. *Not available December 2017*.
- Axelson, D., Birmaher, B., Brent, D., Wassick, S., Hoover, C., Bridge, J., & Ryan, N. (2003). A preliminary study of the kiddie schedule for affective disorders and schizophrenia for school-age children mania rating scale for children and adolescents. *Journal of Child and Adolescent Psychopharmacology*, *13*, 463-470.
- Axelson, D., Birmaher, B., Strober, M., Gill, M., Valeri, S. (2006). Phenomenology of children and adolescents with bipolar spectrum disorders. *Archives of General Psychiatry*, *63*, 1139-1148.
- Bernstein, B. (2017). Pediatric bipolar affective disorder. Retrieved from <https://emedicine.medscape.com/article/913464-overview>
- Biederman, J., Faraone, S., Wozniak, J., Mick, E., Kwon, A., & Aleardi, M. (2004). Further evidence of unique developmental phenotypic correlates of bipolar disorder: Findings from a large sample of clinically referred pre-adolescent children assessed over the last 7 years. *Journal of Affective Disorders*, *82* (Suppl.1), S45-S58.
- Brauser, D. (2012). Anticonvulsant use for psychiatric illness in children doubles. Retrieved from <https://www.medscape.com/viewarticle/774014>
- Brooks, M. (2013). Extent of genetic overlap in key mental disorders revealed. Retrieved from <https://www.medscape.com/viewarticle/809587>
- Brown, R., Antonuccio, D., DuPaul, G., Fristad, M., King, C., Leslie, L., ... Vitiello, V. (2008). Bipolar disorder. In *Childhood mental health disorders: Evidence base and contextual factors for psychosocial, psychopharmacological, and combined interventions* (pp. 87-96). Washington, DC: American Psychological Association.
- Brown, A. S., Begg, M. D., Gravenstein, S., Schaefer, C. A., Wyatt, R. J., Bresnahan, M., ... Susser, E. S. (2004). Serologic evidence of prenatal influenza in the etiology of schizophrenia. *Archives of General Psychiatry*, *61*(8), 774-80.
- Chambless, D., & Hollon, S. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, *66*, 7-18.
- Chang, K. (2016). Pediatric bipolar disorder: Combination pharmacotherapy, adverse effects, and treatment of high-risk youth. *Journal of Clinical Psychiatry*, *77*, Suppl E1, e3.
- Dagani, J., Signorini, G., Nielssen, O., Bani, M., Pastore, A., Girolamo, G. D., & Large, M. (2017). Meta-analysis of the interval between the onset and management of bipolar disorder. *Canadian Journal of Psychiatry*, *62*, 247-258.
- DelBello, M., Soutullo, C., Hendricks, W., Niemeier, R., McElroy, S., & Strakowski, S. (2001). Prior stimulant treatment in adolescents with bipolar disorder: association with age at onset. *Bipolar Disorder*, *2*, 53-57.
- Duax, J., Youngstrom, E., Calabrese, J., & Findling, R. (2007). Sex differences in pediatric bipolar disorder. *Journal of Clinical Psychiatry*, *68*, 1565-1573.
- Faust, D., Walker, D., & Sands, M. (2006). Diagnosis and management of childhood bipolar disorder in the primary care setting. *Clinical Pediatrics*, *45*, 801-808.
- Fields, B., & Fristad, M. (2008). Assessment of childhood bipolar disorder. *Clinical Psychology Science and Practice*, *16*, 166-181.
- Findling, R., Aman, M., Eerdekens, M., Derivan, A., Lyons, B., & Risperidone Disruptive Behavior Study Group. (2004). Long-term, open-label study of risperidone in children with severe disruptive behaviors and below-average IQ. *American Journal of Psychiatry*, *161*, 677-684.

- Findling, R., Correll, C., Nyilas, M., Forbes, R. A., McQuade, R. D., Jin, N., ... Carlson, G. A. (2013). Aripiprazole for the treatment of pediatric bipolar I disorder: A 30-week, randomized, placebo-controlled study. *Bipolar Disorder, 15*(2), 138-149.
- Findling, R. (2016). Evidence-based pharmacologic treatment of pediatric bipolar disorder. *Journal of Clinical Psychiatry, 77*, Suppl E1, e4.
- Findling, R., & Pavuluri, M. (2008). Lithium. In B. Geller, & M. DelBello (Eds.), *Treatment of bipolar disorder in children and adolescents* (pp. 43-68). New York: Guilford.
- Fitzgerald, J., & Pavuluri, M. (2015). Bipolar disorders. In T. P. Gullota, R. W. Plant, & M. A. Evans (Eds.), *Handbook of adolescent behavioral problems* (2nd ed.) (pp. 193-208). New York: Springer.
- Frank, E., Swartz, H., & Kupfer, D. (2000). Interpersonal and social rhythm therapy: Managing the chaos of bipolar disorder. *Biological Psychiatry, 48*, 593-604.
- Fristad, M. (2016). Evidence-based psychotherapies and nutritional interventions for children with bipolar spectrum disorders and their families. *Journal of Clinical Psychiatry, 77*(SE1).
- Fristad, M., Gavazzi, S., & Mackinaw-Koons, B. (2003). Family psychoeducation: An adjunctive intervention for children with bipolar disorder. *Biological Psychiatry, 53*, 1000-1008.
- Fristad, M., Goldberg-Arnold, J., & Gavazzi, S. (2002). Multifamily psychoeducation groups (MFPG) for families of children with bipolar disorder. *Bipolar Disorders, 4*, 254-262.
- Fristad, M. A., & MacPherson, H. A. (2014). Evidence-based psychosocial treatments for child and adolescent bipolar spectrum disorders. *Journal of Clinical Child, & Adolescent Psychology, 43*(3), 339-355.
- Garb, H. (1998). *Studying the clinician: Judgment research and psychological assessment*. Washington, DC: American Psychological Association.
- Geller, B., & Luby, J. (1997). Child and adolescent bipolar disorder: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry, 33*, 461-468.
- Geller, B., Zimmerman, B., Williams, M., Bolhofner, K., Craney, J., Delbello, M., & Soutullo, C. (2000). Diagnostic characteristics of 93 cases of prepubertal and early adolescent bipolar disorder phenotype by gender, puberty and comorbid attention deficit hyperactivity disorder. *Journal of Child and Adolescent Psychopharmacology, 10*, 157-164.
- Geller, B., Zimmerman, B., Williams, M., Bolhofner, K., Craney, J., Delbello, M., & Soutullo, C. (2001). Reliability of the Washington University in St. Louis Kiddie Schedule for Affective Disorders and Schizophrenia (WASH-U-KSADS) mania and rapid cycling sections. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 450-455.
- Goldberg, J., & Ernst, C. (2002). Features associated with the delayed initiation of mood stabilizers at illness onset in bipolar disorder. *Journal of Clinical Psychiatry, 63*, 985-991.
- Goldstein, B. I., Strober, M., Axelson, D., Goldstein, T. R., Gill, M. K., Hower, H., ... Birmaher, B. (2013). Predictors of first-onset substance use disorders during the prospective course of bipolar spectrum disorders in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 52*(10), 1026-1037.
- Hamrin, V., & Iennaco, J. (2010). Psychopharmacology of pediatric bipolar disorder. *Expert Review of Neurotherapeutics, 10*(7), 1053-1088.
- Harpold, T., Wozniak, J., Kwon, A., Gilbert, J., Wood, J., Smith, L., & Biederman, J. (2005). Examining the association between pediatric bipolar disorder and anxiety disorders in psychiatrically referred children and adolescents. *Journal of Affective Disorders, 88*(1), 19-26.
- Jenkins, M. M., Youngstrom, E. A., Youngstrom, J. K., Feeny, N. C., & Findling, R. L. (2012). Generalizability of evidence-based assessment recommendations for pediatric bipolar disorder. *Psychological Assessment, 24*(2), 269-281.
- Joshi, G., & Wilens, T. (2009). Comorbidity in pediatric bipolar disorder. *Child and Adolescent Psychiatric Clinics of North America, 18*(2), 291-viii.
- Kafantaris, V., Coletti, D., Dicker, R., Padula, G., & Kane, J. (2001). Adjunctive antipsychotic treatment of adolescents with bipolar psychosis. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 1448-1456.
- Kafantaris, V., Coletti, D., Dicker, R., Padula, G., & Kane, J. (2003). Lithium treatment of acute mania in adolescents: A large open trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 42*, 1038-1045.
- Kahana, S., Youngstrom, E., Findling, R., & Calabrese, J. (2003). Employing parent, teacher, and youth self-report checklists in identifying pediatric bipolar spectrum disorders: An examination of diagnostic accuracy and clinical utility. *Journal of Child and Adolescent Psychopharmacology, 13*, 471-488.

- Kessler, R. (1999). Comorbidity of unipolar and bipolar depression with other psychiatric disorders in a general population survey. In M. Tohen (Ed.), *Comorbidity in affective disorders* (pp. 1-25). New York: Marcel Dekker.
- Kessler, R., Avenevoli, S., & Merikangas, K. (2001). Mood disorders in children and adolescents: An epidemiological perspective. *Biological Psychiatry*, *49*, 1002-1014.
- Kowatch, R., Fristad, M., Birmaher, B., Wagner, K., Findling, R., & Hellander, M. (2005). Treatment guidelines for children and adolescents with bipolar disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, *44*, 213-235.
- Kowatch, R., Suppes, T., Carmody, T., Bucci, J., Hume, J., Kromelis, M., ... Rush, A. (2000). Effect size of lithium, divalproex sodium, and carbamazepine in children and adolescents with bipolar disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*, 713-720.
- Kowatch, R., Suppes, T., Gilfillan, S., Fuentes, R., Granneman, B., & Emslie, G. (1995). Clozapine treatment of children and adolescents with bipolar disorder and schizophrenia: A clinical case series. *Journal of Child and Adolescent Psychopharmacology*, *5*, 241-253.
- Leibenluft, E., & Rich, B. (2008). Pediatric bipolar disorder. *Annual Review of Clinical Psychology*, *4*, 163-187.
- Leverich, G., & Post, R. (2006). Courses of bipolar illness after a history of childhood trauma. *The Lancet*, *367*, 1040-1042.
- Lewinsohn, P., Seeley, J., Buckley, M., & Klein, D. (2002). Bipolar disorder in adolescence and young adulthood. *Child and Adolescent Psychiatry Clinics of North America*, *11*(3), 461-475.
- Louden, K. (2013). Gestational influenza increases risk for bipolar disorder. Retrieved from <http://www.medscape.com/viewarticle/803822>
- Masi, G., Perugi, G., Toni, C., Millepiedi, S., Mucci, M., Bertini, N., & Pfanner, C. (2006). Attention-deficit hyperactivity disorder—Bipolar comorbidity in children and adolescents. *Bipolar Disorders*, *8*, 373-381.
- McClellan, J. (2005). Commentary: Treatment guidelines for child and adolescent bipolar disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, *44*, 236-239.
- McClellan, J., Kowatch, R., Findling, R., & the Workgroup on Quality Issues. (2007). Practice parameter for the assessment and treatment of children and adolescents with bipolar disorder. *Journal of the American Academy of Child and Adolescent Psychiatry* *46*, 107-125.
- Meers, M. R., & Fristad, M. A. (2017). Evidence-based interventions for pediatric bipolar disorder. In L. Theodore (Ed.), *The handbook of applied interventions for children and adolescents* (pp. 413-427). New York: Springer.
- Miklowitz, D., & Johnson, S. (2006). The psychopathology of bipolar disorder. *Annual Review of Clinical Psychology*, *2*, 199-235.
- Miklowitz, D., George, E., Axelson, D., Kim, E., Birmaher, B., Schneck, C., ... Brent, D. A. (2004). Family-focused treatment for adolescents with bipolar disorder. *Journal of Affective Disorders*, *82* (Suppl. 1), S113-S128.
- National Institute of Mental Health (NIMH). (2000). Depression in Children and Adolescents. NIH Publication No. 00-4744.
- National Institute of Mental Health (NIMH). (2008a). *Bipolar Disorder*. NIH Publication No. 09-3679.
- National Institute of Mental Health (NIMH). (2008b). Bipolar Disorder in Children and Teens. NIH Publication No. TR-08-6380.
- Papoulos, D. F., & Bronsteen, A. (2013). Bipolar disorder in children: Assessment in general pediatric practice. *Current Opinion Pediatrics*, *25*(3), 419-426.
- Pavuluri, M. (2014). Pediatric bipolar disorder: Medication algorithm. Retrieved from https://www.researchgate.net/publication/242575840_Pediatric_Bipolar_Disorder_Medication_Algorithm
- Pavuluri, M., Birmaher, B., & Naylor, M. (2005). Pediatric bipolar disorder: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, *44*, 846-871.
- Pavuluri, M., Graczyk, P., Henry, D., Carbray, J., Heidenreich, J., & Miklowitz, D. (2004). Child- and family-focused cognitive-behavioral therapy for pediatric bipolar disorder: Development and preliminary results. *Journal of the American Academy of Child and Adolescent Psychiatry*, *43*, 528-537.
- Pavuluri, M., Henry, D., Carbray, J., Sampson, G., Naylor, M., & Janicak, P. (2006). A one-year open-label trial of risperidone augmentation in lithium nonresponder youth with preschool-onset bipolar disorder. *Journal of Child and Adolescent Psychopharmacology*, *16*, 336-350.
- Perlis, R. H., Miyahara, S., Marangell, L. B., Wisniewski, S. R., Ostacher, M., DelBello, M. P., ... Nierenberg, A. A. (2004). Long-term implications of early onset in bipolar disorder: Data from the first 1000 participants in the systematic treatment enhancement program for bipolar disorder (STEP-BD). *Biological Psychiatry*, *55*, 875-881.

- Roberts, C., Bishop, B., & Rooney, R. (2008). Depression and bipolar disorder in childhood. In T. P. Gullotta, & G. M. Blau (Eds.), *Handbook of childhood behavioral issues: Evidence-based approaches to prevention and treatment* (pp. 239-271). New York: Routledge.
- Washburn, J. J., West, A. E., & Heil, J. A. (2011). Treatment of pediatric bipolar disorder: A review. *Minerva Psichiatrica*, 52(1), 21-35.
- Wilmshurst, L. (2014). *Essentials of child and adolescent psychopathology* (2nd ed., Essentials of Behavioral Science). Hoboken: Wiley.
- Young, R., Biggs, J., Ziegler, M., & Meyer, D. (1978). A rating scale for mania: Reliability, validity, and sensitivity. *British Journal of Psychiatry*, 133, 429-435.
- Youngstrom, E. (2007). Pediatric bipolar disorder. In E. J. Mash, & R. A. Barkley (Eds.), *Assessment of childhood disorders* (4th ed.) (pp. 253-304). New York: Guilford.
- Youngstrom, E., Findling, R., Calabrese, J., Gracious, B., Demeter, C., Bedoya, D. D., & Price, M. (2004). Comparing the diagnostic accuracy of six potential screening instruments for bipolar disorder in youth aged 5 to 17 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 847-858.
- Youngstrom, E., Findling, R., Youngstrom, J., & Calabrese, J. (2005). Toward an evidence-based assessment of pediatric bipolar disorder. *Journal of Clinical Child and Adolescent Psychiatry*, 34, 433-448.
- Youngstrom, E., Jenkins, M. M., Jensen-Doss, A., & Youngstrom, J. K. (2012). Evidence-based assessment strategies for pediatric bipolar disorder. *Israel Journal of Psychiatry and Related Sciences*, 49(1), 15-27.
- Youngstrom, E., & Kendall, P. (2008). Psychological science and bipolar disorder. *Clinical Psychology Science and Practice*, 16, 93-97.
- Youngstrom, E., Youngstrom, J., & Starr, M. (2005). Bipolar diagnoses in community mental health: Achenbach CBCL profiles and patterns of comorbidity. *Biological Psychiatry*, 58, 569-575.

Additional References of Interest

- Gleason, M., Egger, H., Graham, E., Greenhill, L., Kowatch, R., Leiberman, A. F., ... Zeanah, C. H. (2007). Psychopharmacological treatment for very young children: Contexts and guidelines. Special communication. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(12), 1532-1572.
- Jones, J. (2010). Identifying youth at high risk for bipolar disorder. Retrieved from <https://psychcentral.com/news/2010/07/20/identifying-youth-at-high-risk-for-bipolar-disorder/15805.html>
- Parens, E., & Johnston, J. (2010). Controversies concerning the diagnosis and treatment of bipolar disorder in children. *Child and Adolescent Psychiatry and Mental Health*, 4 (9). Retrieved from <https://capmh.biomedcentral.com/articles/10.1186/1753-2000-4-9>

DISCLOSURE STATEMENT

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