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An Introduction to Bipolar Disorder and Co-Occurring Substance Use Disorders

Bipolar disorder is a serious, chronic mental illness characterized by unusual changes in mood, energy, and activity levels. Early diagnosis and appropriate treatment of bipolar disorder are important because the illness carries a high risk of suicide and can severely impair academic and work performance, social and family relationships, and quality of life.[1,2]

Research suggests that from 30 percent[3] to more than 50 percent[4,5,6,7,8] of people with bipolar disorder (bipolar I or bipolar II) will develop a substance use disorder (SUD) sometime during their lives. This co-occurrence complicates the course, diagnosis, and treatment of SUDs. However, treatment for bipolar disorder and SUDs is available, and remission and recovery are possible—especially with early intervention.[9,10,11]

This *Advisory* provides behavioral health professionals with information on the symptoms of bipolar disorder and the potential complications of co-occurring bipolar disorder and SUDs. Readers will also learn about screening for bipolar disorder, challenges in diagnosing it, theories about its co-occurrence with SUDs, and research on treatment for these co-occurring conditions. Although treatment for bipolar disorder is highly individualized and therefore beyond the scope of this *Advisory,* a brief overview is included to provide basic information.

An Overview of Bipolar Disorder

The *Diagnostic and Statistical Manual of Mental Disorders,* Fourth Edition, Text Revision (DSM-IV-TR),[12] classified bipolar disorder as a *mood disorder,* along with other related mood disorders (e.g., major depressive disorder, dysthymia). However, the Fifth Edition (DSM-5)[4] placed bipolar disorder in a new category—"Bipolar and Related Disorders."

Bipolar disorder involves experiencing two divergent emotional states: mania and depression, from which the disorder got its former name of *manic-depressive illness.* During manic episodes, people feel excited, self-confident, energetic, and euphoric, and often have a decreased need for sleep. During depressive episodes, they feel sad, despondent, and listless.

However, bipolar disorder is more complicated than a simple division between mania and depression. Many people with bipolar disorder go through periods when their mood is balanced, or *euthymic* (i.e., not euphoric, manic, or depressed), even without medication. Some people experience a "mixed state" that combines the features of mania and depression at the same time. Mania does not always involve feeling good, however. Some people feel irritable instead, especially when substance use is involved. Also, manic episodes can vary in severity. DSM-5 divides manic episodes into two types:

- ***Mania***—Lasting at least a week and causing significant impairment in social and occupational functioning or requiring hospitalization
- ***Hypomania***—Lasting at least 4 days, often with less severity (i.e., the change may be noticeable but may not impair functioning)

Some people with bipolar disorder experience psychotic features, such as delusions and hallucinations.

Estimates of the lifetime prevalence of bipolar disorder in the United States range from 1 percent[13] to almost 4 percent.[14]* Estimates for 12-month prevalence range from less than 1 percent[4,13] to 2.6 percent.[15] An analysis by Kessler, Petukhova, Sampson, Zaslavsky, and Wittchen[16] estimated the projected lifetime risk of developing bipolar disorder (in the United States) to be 4.1 percent.

One study found that individuals with bipolar disorder reported a significantly greater incidence of childhood trauma (such as sexual abuse or physical neglect) and internalized shame compared with a control group without bipolar disorder.[17] Another study found a history of childhood trauma in approximately 50 percent of individuals with bipolar disorder, and multiple forms of abuse were present in approximately 33 percent of individuals with bipolar disorder.[18] Other studies have also found an association between childhood trauma and a more complex or severe course of bipolar disorder.[18,19]

The types of bipolar disorder

DSM-5 organizes bipolar disorder into several different diagnostic categories based, in large part, on the frequency and severity of the manic and depressive episodes. To be diagnosed with bipolar I disorder, an individual must have had at least one episode of mania. People with bipolar I disorder experience depression, but having a major depressive episode is not necessary for the diagnosis.[4]

The diagnostic criteria for bipolar II disorder include having at least one episode of hypomania that lasts at least 4 days and a major depressive episode that lasts at least 2 weeks. Between 5 and 15 percent of people with bipolar II disorder eventually have a manic episode that reclassifies their condition as bipolar I disorder.[4]

Bipolar II disorder is sometimes misunderstood as being less severe than bipolar I disorder. It is not. Like bipolar I, bipolar II is a chronic illness, and the depressive phases of bipolar II can be severe and disabling.[4,20,21]

Significant numbers of individuals have bipolar symptoms at *subthreshold* or *subsyndromal* levels (i.e., below levels required for a diagnosis of bipolar I or II).[22,23] Some researchers have suggested that subthreshold bipolar symptom presentations be included in a broader category called *bipolar spectrum disorders,*[22] which could also include other types of bipolar disorders identified in DSM-5, such as cyclothymic disorder and substance/medication-induced bipolar and related disorder. The core patterns of bipolar disorder are illustrated in Exhibit 1.

Challenges of Diagnosing Bipolar Disorder

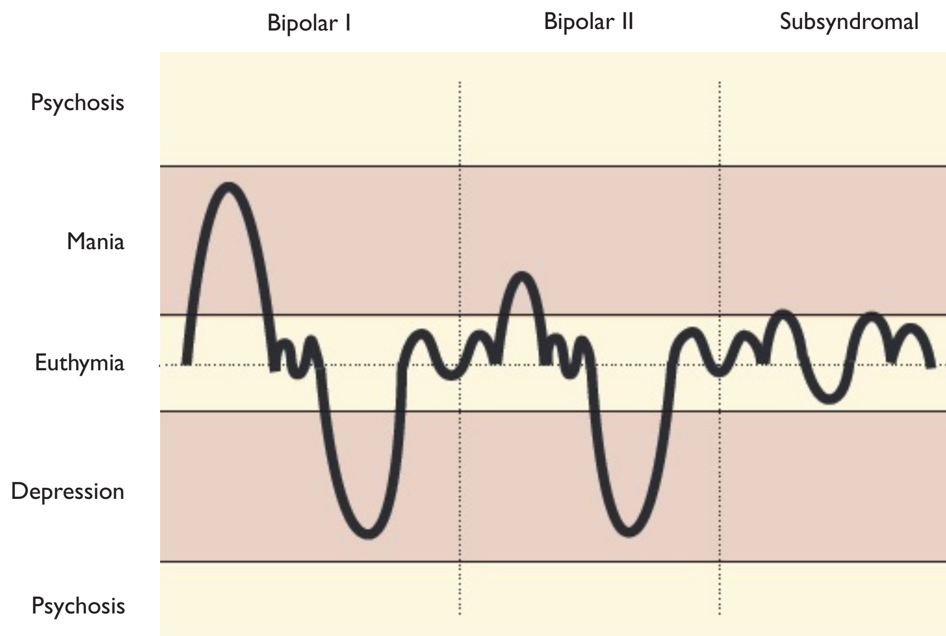
Some research suggests that bipolar disorder is underdiagnosed. One reason for underdiagnosis may be that people with bipolar disorder tend to seek treatment during a depressive phase, when manic or hypomanic episodes (or subthreshold symptoms) may not be readily remembered or may remain undetected by a clinician.[24,25] If providers do not elicit information from depressed patients about past episodes of mania and hypomania, these patients may be diagnosed with unipolar depression instead of bipolar disorder.

However, there is also evidence that bipolar disorder is overdiagnosed. A study of psychiatric outpatients found that less than half of those diagnosed with bipolar disorder actually had the disorder when researchers assessed them using the Structured Clinical Interview for DSM-IV.[26]

Other mental disorders can also be mistakenly diagnosed as bipolar disorder because of symptoms that overlap. For example, one study found that 40 percent of people with borderline personality disorder had been misdiagnosed as having bipolar disorder.[27] Bipolar disorder and attention deficit hyperactivity disorder also have many symptoms in common,[4] and distinguishing between the two is a task for an experienced, licensed mental health professional.

*The disparity between these estimates may be the result of algorithmic or other methodological differences.[28]

Exhibit 1. The Core Patterns of Bipolar Disorder[29]



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Symptoms that appear to be caused by bipolar disorder may instead be symptoms of acute substance misuse or withdrawal. Chronic use of central nervous system stimulants, such as cocaine and amphetamines, can produce manic-like symptoms, including euphoria, increased energy, grandiosity, and paranoia, whereas withdrawal can produce depression-like symptoms, including apathy, *anhedonia* (inability to feel pleasure), and thoughts of suicide. Chronic use of central nervous system depressants, such as alcohol, benzodiazepines, and opioids, can result in poor concentration, anhedonia, and sleep problems, whereas withdrawal can make people agitated and anxious.[30]

The Difficulties of Diagnosing Bipolar Disorder in Children and Adolescents

Although the onset of bipolar disorder can occur at any age, the average age of onset for bipolar I is 18.[4] However, diagnosing bipolar disorder in children and adolescents can be even more difficult than diagnosing it in adults, in part because of the affective shifts that often occur in normal child and adolescent cognitive and emotional development.[4,31]

For more information, see:

American Academy of Child and Adolescent Psychiatry, Bipolar Disorder Resource Center
www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/Bipolar_Disorder_Resource_Center/Home.aspx

National Institute of Mental Health, Bipolar Disorder in Children and Teens
www.nimh.nih.gov/health/publications/bipolar-disorder-in-children-and-teens-qf-15-6380/index.shtml

It is important that a diagnosis of bipolar disorder be made by a mental health professional licensed to diagnose mental disorders and familiar with *differential diagnosis* (the process of distinguishing between illnesses or disorders with similar characteristics).

Bipolar Disorder and Co-Occurring SUDs

Results from the National Epidemiologic Survey on Alcohol and Related Conditions showed that SUD co-occurrence was higher among people with bipolar disorder than among people with any of the other mental disorders included in the survey.[32] Studies indicate that lifetime co-occurrence of SUDs for individuals with bipolar disorder ranges from 21.7 percent[33] to 59 percent[34] and that 12-month co-occurrence ranges from 4 percent[35] to more than 25 percent.[32] However, it is not only individuals meeting full criteria for bipolar disorder who are at risk for SUDs. Hypomania is also associated with an increased risk for SUDs.[36]

Alcohol is commonly misused by people with bipolar disorder,[6,34,35] and people with bipolar disorder and co-occurring alcohol use disorder are less likely to respond and adhere to treatment and more likely to be hospitalized[34] and to attempt suicide[37,38] than people with bipolar disorder only. In some cases, the combination of bipolar disorder and an SUD may deepen bipolar disorder's manic and depressive symptoms.[34,39,40]

Explanations for bipolar disorder and SUDs co-occurrence

Researchers have offered several possible explanations for bipolar disorder and SUD co-occurrence. Khantzian[41] formulated the self-medication hypothesis, which proposes that people misuse substances to relieve psychological suffering and that the substances they misuse are specific to the type of suffering they experience. Swann[42] argues that bipolar disorder and substance misuse can be viewed as overlapping disorders of the systems in the brain that regulate impulsivity, motivation, and the feeling of reward. Another model for co-occurring bipolar disorder and SUDs proposes an underlying shared vulnerability (e.g., genetic liability).[43,44] Whatever the etiology, it is clear that SUDs may precede, precipitate, exacerbate, be a consequence of, or have separate etiologies from bipolar disorder,[40,45] and the co-occurrence of bipolar disorder and SUDs can complicate both diagnosis and treatment.[33,34,40,45]

Screening for Bipolar Disorder

Because bipolar disorder has a wide range of symptoms, it can be mistaken for other conditions. This can make screening (and diagnosis) difficult. Substance use treatment professionals using screening tools for mental disorders should remember that these tools are not for *diagnosis*. Clients who screen positive for bipolar disorder—or, in fact, *any* mental disorder—will need to be referred for an assessment by a behavioral health professional licensed to diagnose and treat mental disorders. The same is true for clients who are not formally screened but who appear to have mental disorders.

One well-known screening tool for bipolar disorder is the Composite International Diagnostic Interview (CIDI)-Based Screening Scale for Bipolar Spectrum Disorders. The CIDI-based screening scale consists of questions about symptom clusters and individual symptoms. Researchers have estimated that the

For more information about general screening for mental disorders, see Treatment Improvement Protocol (TIP) 42, *Substance Abuse Treatment for Persons With Co-Occurring Disorders.*[46]

CIDI-based screening scale identifies between 67 percent and 96 percent of bipolar disorder cases, depending in part on where the cut points for a positive result are set.[47] The screening scale is available at www.integration.samhsa.gov/images/res/STABLE_toolkit.pdf.

A Brief Overview of Bipolar Disorder Treatment

Only a behavioral health professional who is licensed to diagnose and treat mental disorders should provide treatment for bipolar disorder. Treatment can be complex and is often individualized according to a patient's symptoms, needs, preferences, and responses to treatment. Treatment generally involves both pharmacological and psychosocial therapies, as described below.

Pharmacological therapy

- ***Mood stabilizers***—Lithium has been the first-line mood stabilizer for years, but other mood stabilizers, such as divalproex sodium (Depakote) and several other anticonvulsants, are also often prescribed.[48,49,50]
- ***Atypical antipsychotics***—Atypical (or "second generation") antipsychotics such as quetiapine (Seroquel) or olanzapine (Zyprexa) are often used alone or in combination with other medications, such as lithium.[49,50] In 2013, the Food and Drug Administration (FDA) approved the atypical antipsychotic lurasidone (Latuda) for the treatment of bipolar depression, alone or in combination with lithium or valproate.[51] Atypical antipsychotics are not only used when psychotic symptoms are present. Many are used to treat mania; only one medication (quetiapine) is indicated for treatment of both bipolar mania and depression.[49,50]
- ***Antidepressants***—There is no FDA-approved antidepressant monotherapy for bipolar disorder. The selective serotonin reuptake inhibitor (SSRI) fluoxetine (Prozac), in combination with the atypical antipsychotic olanzapine, is approved for acute bipolar I depression;[52] the fluoxetine–olanzapine combination is available in a single capsule (Symbyax). Other SSRIs are also sometimes used (off label) for depressive episodes—but typically in conjunction with a mood stabilizer, because of concerns that antidepressant monotherapy could precipitate a manic or hypomanic episode.[49,50]

Each of these types of medications has its own potential side effects (such as weight gain with some atypical antipsychotics) or contraindications (e.g., divalproex sodium is contraindicated in pregnant women).[48,49] Combining these medications with alcohol or drugs can be quite dangerous. For example, marijuana can cause a dramatic and even toxic increase in lithium levels.[53] Mixing alcohol with atypical antipsychotics may result in an extreme level of central nervous system depression and significantly impair psychomotor functioning.[54]

Psychosocial therapy

- ***Cognitive–behavioral therapy (CBT)***—CBT uses a process called *cognitive restructuring,* in which an individual learns to identify harmful or negative patterns of thoughts, behaviors, and beliefs and to modify them into more balanced patterns. The goal is to decrease the individual's degree of emotional distress over troubling situations.[1,55]
- ***Family-focused therapy (FFT)***—FFT helps families understand bipolar disorder, develop coping strategies, and learn to recognize when a new depressive or manic/hypomanic episode may be beginning. FFT also focuses on improving family communication and problem-solving skills.[1]
- ***Interpersonal and social rhythm therapy (IPSRT)***—IPSRT has three components:[56]
  - *Psychoeducation* focuses on information about bipolar disorder, treatment options (and possible side effects), and early warning signs of a new depressive or manic/hypomanic episode.

- *Social rhythm therapy* focuses on identifying situations that may upset life routines and developing ways to stabilize life routines, to reduce emotional distress.
- *Interpersonal psychotherapy* focuses on the ways that interpersonal problems (such as grief, role transitions, or disputes) may be related to changes in mood that may signal the beginning of new mood episodes, such as new or increased depression or mania/hypomania.

One study found that patients who received any one of these types of psychosocial treatment (CBT, FFT, or IPSRT) had higher levels of life satisfaction, better overall functioning, and better relationship functioning than patients who received a three-session psychoeducational intervention.[57]

> BD [bipolar disorder] is a uniquely challenging disorder to treat, with the most lethality, the most recurrences, and the most varied clinical presentations of any major psychiatric disorder.[58]

Treatment of Co-Occurring Bipolar Disorder and SUDs

Because SUDs are chronic and progressive illnesses and because SUDs (both past and current) tend to contribute to poorer treatment outcomes for individuals with bipolar disorder, early intervention can be an important part of improving treatment outcomes for individuals with co-occurring SUDs and bipolar disorder.[59]

Like treatment for bipolar disorder without a co-occurring SUD, treatment for co-occurring bipolar disorder and SUDs usually involves both pharmacological and psychosocial therapies.

Pharmacological therapy

Many of the medications for bipolar disorder are also used to treat individuals with co-occurring bipolar disorder and SUDs, but there has been limited research on regimens that might be efficacious for both disorders simultaneously. One such study found that divalproex sodium, an anticonvulsant mood stabilizer often used to treat manic episodes, was associated with a reduction in alcohol consumption when used as a maintenance treatment with lithium.[60]

Quetiapine is one of the atypical antipsychotics often prescribed for bipolar disorder that has been studied for its possible efficacy for alcohol use disorder. Although some studies have found that quetiapine helped decrease alcohol consumption and craving,[61,62] other studies have had negative or inconsistent results.[39,63,64,65] However, a clinical synthesis[66] concluded that there appears to be no evidence for avoiding the use of medication-assisted treatment medications (especially for alcohol use disorder and opioid use disorder) in the treatment of individuals with co-occurring bipolar disorder and SUDs.

Psychosocial therapy

Psychosocial therapy for co-occurring mental disorders and SUDs tends to involve three main treatment approaches: sequential, parallel, and integrated. With sequential treatment, providers tackle the more serious disorder first and, after that has been brought under control, then address the other disorder. In parallel treatment, the conditions are treated at the same time in different settings. Integrated treatment involves a provider or a team of providers addressing the disorders simultaneously.[67] However, integrated care is not simply simultaneously delivered interventions that have been developed for each individual disorder, as if co-occurring disorders were essentially unrelated to the physiology, emotions, and overall life of individuals.[39] Truly integrated treatment allows for the treatment of the whole person—including medical and medication issues, mental disorders, and SUD treatment as necessary

(see the Resources section for more information). In the absence of integrated treatment, collaboration between providers becomes even more important.

One type of integrated treatment uses a cognitive–behavioral relapse prevention model that also incorporates elements of individualized interpersonal therapy, the use of psychoeducational materials and group sessions, and involvement with mutual-help groups (such as Alcoholics Anonymous and Dual Recovery Anonymous).[67] Another model for integrated treatment follows basic principles that are represented by the acronym FIRESIDE (Exhibit 2).[68]

Proponents of a form of integrated treatment called Integrated Group Therapy (IGT) believe that clients with co-occurring bipolar disorder and SUDs should be encouraged to view co-occurrence as a single disorder—"bipolar substance abuse." Clients are also advised that substance use will worsen their bipolar disorder and that not taking bipolar medication will increase the risk of SUD relapse.[67]

One study found that the likelihood of achieving at least 1 month of abstinence during treatment was almost twice as high for individuals who participated in IGT compared with individuals who participated in group drug counseling (71.0 percent and 40.0 percent, respectively), and IGT participants were almost three times as likely to remain abstinent during all 3 months of treatment when compared with individuals who participated in group drug counseling (35.5 percent and 13.3 percent, respectively).[69] In addition, the IGT participants were more than twice as likely to be both abstinent and free of mood episodes during the last month of treatment when compared with individuals who participated in group drug counseling (45.2 percent and 20.0 percent, respectively).

It is also important for clients and professionals to shift the focus from primarily illness and disease to wellness and recovery. An approach focusing on wellness and recovery is strengths based and includes interventions to help clients become proactive in managing their overall health and well-being.[70] It focuses on reclaiming important aspects of life that were lost when a mental or substance use disorder began, or on discovering these aspects for the first time. The Substance Abuse and Mental

Exhibit 2. The FIRESIDE Principles for an Integrated Treatment of Bipolar Disorder and Alcohol Use Disorder[68]

- **F**ollow-up. The importance of aftercare strongly emphasized.
- **I**nterrelationship of diagnoses. Can't improve in one without treating the other.
- **R**elapse Prevention. The main addiction therapeutic intervention.
- **E**ducation. Use of lectures, videos, and discussions.
- **S**tabilization of withdrawal and mood. Pharmacotherapy used aggressively during and after the program.
- **I**ndividuation of program. Flexibility of program to aid retention.
- **D**iagnostic equivalence. Both diagnoses emphasized equally.
- **E**mpowerment. Individual responsibility encouraged and demanded.

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Exhibit 3. Dimensions of Recovery and Dimensions of Wellness[71,72,73]

Dimensions of Recovery	Dimensions of Wellness
Health	• *Physical:* Recognizing the need for physical activity, healthy foods, and sleep; managing chronic illnesses • *Emotional:* Coping effectively with life and creating satisfying relationships
Home	• *Environmental:* Occupying pleasant, safe, stimulating environments that support well-being • *Financial:* Obtaining satisfaction with current and future financial situations
Purpose	• *Intellectual:* Recognizing creative abilities and finding ways to expand knowledge and skills • *Occupational:* Obtaining personal satisfaction and enrichment from one's work or daily activity • *Spiritual:* Expanding one's sense of purpose and meaning in life
Community	• *Social:* Building a sense of connection and belonging; building a well-developed support system

Health Services Administration has identified several essential dimensions of a holistic approach to recovery and wellness (see Exhibit 3).

Conclusion

Bipolar disorder can be difficult to diagnose and treat. When bipolar disorder co-occurs with SUDs, the complexities only increase. These complexities reinforce the importance of collaboration between the medical and behavioral health services professionals who provide treatment to individuals with these co-occurring disorders. For example, clients may see behavioral health professionals more frequently than they see medical providers; consequently, behavioral health professionals may become aware first of new symptoms, medication side effects, or other problems requiring medical attention. Integrated treatment, collaboration between professionals and the client, and attention to the various aspects of recovery can all work together to facilitate the management of these co-occurring disorders.

Resources

Behavioral Health Treatment Services Locator
https://findtreatment.samhsa.gov

Bipolar Network News
www.bipolarnews.org

Depression and Bipolar Support Alliance
www.dbsalliance.org

National Alliance on Mental Illness
www.nami.org/Learn-More/Mental-Health-Conditions/Bipolar-Disorder

National Institute of Mental Health
www.nimh.nih.gov/health/topics/bipolar-disorder

National Institute on Drug Abuse
www.drugabuse.gov/news-events/nida-notes/2010/04/attention-to-bipolar-disorder-strengthens-substance-abuse-treatment

SAMHSA-HRSA Center for Integrated Health Solutions
www.integration.samhsa.gov/integrated-care-models

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