Understanding Bipolar Disorder and Its Treatment

By Ruth White (PhD, MPH, MSW, B.Soc.Sci, BSW)

presented by CEUSchool
Author Information

Ruth White, PhD, MPH, MSW is Assistant Professor of Social Work at Seattle University. Her major research areas are social determinants of health, maternal and child health, and HIV/AIDS. She has manic depression (aka bipolar disorder) and writes in academic and public about stigma, disclosure and other issues related to this illness.
Course summary

This course gives the student a broad overview of bipolar disorder including a history, symptoms, course of the illness, diagnosis, treatment and disease management. State of the art knowledge presented is gleaned from reliable sources such as NIMH, classic texts and current academic literature.

Course Objectives

After completion of this course, participants will be able to

1. Explain how bipolar disorder is diagnosed.
2. Discuss the ‘process’ or disease course of bipolar disorder.
3. Identify 5 depressive symptoms of bipolar disorder.
4. Identify 5 manic symptoms of bipolar disorder.
5. Identify 3 symptoms of a mixed state.
6. Classify symptoms into the different categories of bipolar disorder: mixed states, rapid cycling.
7. Articulate the difference between mania and depression.
8. Learn the current treatments including medications, education and psychotherapeutic methods.
9. Categorize medications used for bipolar disorder and their uses.
10. Identify strategies that people with bipolar disorder can use to manage the symptoms of their illness.
SECTION I: BACKGROUND

You may ask: What’s the difference between the blues, happiness, depression, and bipolar disorder?

Although everyone has shifts in mood – anger, sadness, happiness – that are related to their surroundings, people with Bipolar Disorder, also known as manic depressive illness experience unusual, and sometimes drastic, shifts in mood, energy, thoughts, behavior and functionality that are out of proportion, or unrelated to their environment.

These shifts in mood are called *episodes* and are chronic (i.e. recurrent over time) and severe (with regard to intensity of symptoms). Between 1 and 2.6 % of the American population, above 18 years of age, are considered to be afflicted with the illness. Onset of the disease usually occurs in late adolescence/early adulthood, but can develop later in life. Children can also be afflicted with disorder, particularly those who have a parent with the illness. Others are diagnosed later in life as many patients suffer for years before being correctly diagnosed.

Just as the cause of bipolar disorder is not fully understood, there is no ‘cure’ to the illness but it can be managed with medication(s), education and psychotherapy, which is the classic three-pronged method for treating the disease. Other strategies for managing the disease include stress reduction, exercise, good sleep hygiene and a diet high in omega 3 vitamins. As a result of the decreasing stigma of mental illness, more accurate diagnoses and the availability of better treatments many people with bipolar disorder (including the author of this course) can maintain stability and lead productive lives.
Why treat bipolar disorder?

Early diagnosis and appropriate treatment can help people avoid the following (NDMDA, 1996):

- **Suicide.** The risk is highest in the initial years of the illness

- **Alcohol/substance abuse:** More than 50% of those with bipolar disorder abuse alcohol or drugs during their illness

- **Marital and work problems.** Prompt treatment improves the prospects for a stable marriage and productive work

- **Treatment difficulties.** There is evidence that the more mood episodes a person has, the harder it is to treat each subsequent episode and the more frequent episodes may become. (This is sometimes referred to as ‘kindling’ i.e.. once the fire has started and spread, it is harder to put out.)

- **Incorrect, inappropriate, or partial treatment.** A person misdiagnosed as having depression alone instead of bipolar disorder may incorrectly receive only antidepressants without anti-manic medication. This can trigger manic episodes and make the overall course of the illness worse.
SECTION II: CAUSE OF THE ILLNESS

Does Bipolar Disorder Run In Families?

Because bipolar disorder tends to run in families researchers are looking for genetic markers for the disease but no one gene has yet been found to be the culprit. Twin studies have shown that several genes and other factors combine to trigger onset of the illness. Children with one parent having the illness have a one in seven chance of developing the disease (NDMDA, 1996).

The search for a cause

The use of new brain imaging technology such as magnetic resonance imaging (MRI), positron emission tomography (PET), and functional magnetic resonance imaging (fMRI), have begun to give clues to the process of bipolar disorder in the brain. These technologies have revealed differences in the brains of people with bipolar disorder and those of people without the disease.

The body of research on bipolar disorder does point to instability in the transmission of nerve impulses in the brain, which is related to the brain’s biochemistry. People with this biochemistry are more vulnerable to emotional and physical stresses. And stress has been found to impact treatment as well as onset of symptoms (Kleindienst, Engel & Griel, 2005).

Recent studies have also found that childhood trauma hastens the onset and severity of bipolar disorder. Children who had been abused were more likely to have early onset, in adolescence or earlier, of bipolar disorder (Leverich & Post, 2006; Garno, Goldberg, Ramirez et al, 2005).
Although there is no yet identified cause of the disease, there are known triggers for episodes, which are amenable to intervention and prevention. These major issues are lack of sleep and high levels of stress.
SECTION III: SYMPTOMS

Separating The Blues From Depression and Mania From Happiness

The most marked symptom of bipolar disorder are significant shifts in mood from a ‘high’ feeling that is sometimes associated with irritability to feelings of sadness and hopelessness.

These changes can occur over years or within weeks, days or even hours, depending on the rate of cycling; that is, the period between mood swings. Symptoms for episodes can be rated as mild, moderate or severe. The various mood states can be considered to be on a continuum and people living with bipolar disorder experience the extremes of the range.

*Psychosis may accompany severe episodes of either mania or depression.* The common symptoms of psychosis are delusions (passionate, yet erroneous beliefs no influenced by logical reasoning or explained by cultural concepts) and hallucinations (seeing, hearing, or sensing things that are not there).

Mania: The Manic ‘Pole’

A manic episode is diagnosed if there is elevated mood accompanied by three or more of the other symptoms most of the day, nearly every day, for one week or longer. If the mood is irritable, then four additional symptoms are required before a diagnosis can be made.

A mild or moderate level of mania is called *hypomania*. In this state, the person feels good and may have increased productivity and good functioning and will tend to
deny that anything is wrong, even when others around them learn to recognize the symptoms and confront the person with them. However, if hypomania is not treated it can develop into severe mania or change to depression. People often stop taking their medications during periods of hypomania because of the good feelings associated with this type of episode.

The signs and symptoms of mania are as follows (NDMDA, 1996; NIMH, 2006):

- Increased energy, activity, and restlessness
- Excessively ‘high’, overly good, euphoric mood
- Extreme irritability
- Racing thoughts and taking very fast, jumping from one idea to another, and others have difficulty following your thinking
- Distractibility, can’t concentrate well; attention shifts between many topics in just a few minutes.
- Little sleep needed but still have great energy
- Having an inflated feeling of power, greatness or importance; an unrealistic sense of one’s abilities
- Poor judgment
- Spending sprees
- A lasting period of behavior that is different from usual
- Increased sexual drive
- Abuse of drugs, particularly cocaine, alcohol and sleeping medications
- Provocative, intrusive, or aggressive behavior
• Reckless behavior such as spending sprees, inappropriate sexual activity, and making foolish business investments.

• Denial that anything is wrong

Depression: The Sad 'Pole'

For a diagnosis of depressive episode, five or more of the symptoms listed below must last most of the day, nearly every day, for a period of two weeks or longer (NIMH, 2006):

• Lasting sad, anxious, or empty mood

• Feelings of hopelessness or pessimism

• Feelings of guilt, worthlessness, or helplessness

• Loss of interest or pleasure in activities once enjoyed, including sex

• Decreased energy, a feeling of fatigue or of being ‘slowed down’

• Difficulty concentrating, remembering, making decisions

• Restlessness or irritability

• Sleeping too much, or can't sleep

• Change in appetite and/or unintended weight loss or gain

• Chronic pain or other persistent bodily symptoms that are not caused by physical illness or injury

• Thoughts of death or suicide, or suicide attempts

Although everyone has low feelings at times, depression can be severe, moderate or mild. When mild forms are chronic, it is called ‘dysthymia’. A depressive episode was described by one person with bipolar disorder as such:
I am tortured by my thoughts. Stuck on the theme of death. My death. I want to be dead…I’ve had three crying spells this evening. Triggered by nothing but overwhelming sadness.”

Mixed States: A Little Bit of This and a Little Bit of That

Some people with bipolar disorder experience a condition called a mixed state.

A mixed state is a condition where symptoms of both mania and depression occur at the same time. Feelings of sadness and hopelessness may occur at the same time with increased energy. Agitation, insomnia, appetite changes, suicidal thinking, and psychosis are symptoms of a mixed state.

One person with bipolar disorder described a mixed state as:

“I’d been having a lot of anxiety with marked periods of depression. I felt like I was on fast-forward in my brain. I couldn’t focus, I was not sleeping and I felt emotionally out of control.”

Suicide and Bipolar Disorder

Suicidal thoughts (ideations) and behaviors can accompany other symptoms of bipolar disorder, and is more likely to occur in the earlier stages of the illness. This is a major reason for early diagnosis and management of symptoms to reduce the likelihood of severe symptoms. The signs and symptoms that accompany suicidal feelings include (NIMH, 2006):
• Talking about feeling suicidal or wanting to die
• Feeling hopeless, that nothing will ever change or get better
• Feeling helpless, that nothing one does makes any difference
• Abusing alcohol or drugs
• Putting affairs in order (e.g. organizing finances or giving away possessions to prepare for one’s death)
• Writing a suicide note
• Putting oneself in harm’s way, or in situations where there is a danger of being killed.

One person experiencing suicidal thoughts while being in a mixed state stated the following:

“Two nights ago I put a knife to my wrist as my daughter slept. It’s like my brain is trying to destroy my body. I think of suicide all the time.”
Naming What’s Wrong

Because the symptoms of bipolar disorder are so mixed, and there is no blood test or brain scan to diagnose the disease, it can appear to be something other than itself. For example, someone experiencing a manic episode may seek treatment and be diagnosed with ADD or ADHD. Some people with bipolar disorder ‘self-medicate’ by using alcohol or drugs and present with symptoms related to an addiction to substances. Behavioral outcomes of the illness such as poor work or school performance may also be signs of an undiagnosed mood disorder.

The occurrence and history of symptoms, along with family history (if available) is used to diagnose bipolar disorder since there is not yet a physiological test for the presence of the illness.

Diagnostic Criteria and Categories

There are several diagnoses that describe bipolar disorder.

_Bipolar I Disorder_ is considered to be the classic form of the disease, which is marked by recurrent episodes of mania and depression or may have mixed episodes as well (NDMDA, 1996).

_Bipolar II Disorder_ is marked by milder episodes of hypomania that alternate with depression with no full manic or depressive episodes (NIMH, 2006).
Rapid Cycling Bipolar Disorder is the name given to four or more episodes of illness occur with a 12-month period.

As stated earlier, some people have multiple episodes in a single week or a single day. As a feature of the disease, rapid cycling is more likely to develop in women and in the late stages of the illness. Approximately 5-15% patients with bipolar disorder exhibit this form of the disease (NDMDA, 1996).
SECTION V: COURSE OF THE DISEASE

Manic depression is a chronic illness without a cure. This means that episodes can occur throughout the lifespan. In-between episodes most people are symptom free while others have residual symptoms, with a small percentage of people have frequently recurring and severe symptoms despite treatment.

Life Events

A summary of the literature in life events and affective disorders reported that life events (as discussed further in the Life Stress section of the Management of Symptoms chapter below) impact bipolar disorder but to a lesser extent than unipolar depression. However, onset of the illness is often triggered by major life events. Genetic factors also play a role in how these life events are experienced by an individual (Paykel, 2003).

Gender

Gender has been found to influence the course of the disease. A major exploratory study of gender and bipolar illness found that women had almost twice the rates of Bipolar Disorder II than men. Women were also much more likely to have bulimia and post traumatic stress disorder as co-occurring conditions (Baldassano, Marangell, Gyulai et al, 2005). The authors also found that women and men had equal likelihood of having a history of rapid cycling and depressive episodes. Other effects of the illness have been linked to gender. For example, a national Canadian study found a link between obesity and lifetime history of mood disorder (McIntyre et al, 2006) and this was for females only and not for males.

Co-Occurring Illnesses
Many people with bipolar illness also have co morbidity (i.e. co-occurring) with other mental disorders, such as anxiety, substance use and attention deficit disorders (Bauer, Altshuler, Evans et al, 2005) and posttraumatic stress disorder (Otto, M. W., Perlman, C. A. & Wernicke, R., 2004).
Without treatment, the tendency of bipolar disorder is to worsen over time (the ‘kindling effect’). As time progresses, people may have more frequent cycling and more severe manic and depressive episodes. But in most cases, treatment is effective in minimizing symptoms and increasing functionality and productivity in people living with bipolar disorder.

There are two stages of treatment: acute treatment phase, which is aimed at ending a current episode, and preventive treatment when medication is continued on a long term basis to prevent future episodes. Classic treatment for bipolar disorder includes three main strategies: medication, education, and psychotherapy.

Medication Regimens

The Canadian Network for Mood and Anxiety Treatments (CANMAT) set treatment guidelines for the treatment of various disorders. They propose that the linchpin of any treatment of a mood disorder is pharmacotherapy or medications with psychosocial interventions supporting compliance and the development of coping strategies and symptom management (Yatham, Kennedy, O'Donovan, et al, 2005). For acute mania they recommend lithium, valproate and some atypical antipsychotics, for depression they suggest lithium, lamotrigine and various combinations of mood-stabilizing agents and anti-depressants; and for maintenance treatment they recommend lithium, lamotrigine, valproate and olanzapine (Yatham, Kennedy, O'Donovan, et al, 2005)
The two primary types of medication used to control bipolar disorder are mood stabilizers such as lithium and antidepressants such as fluoxetine (Prozac). There are also newer medications on the market that are called atypical antipsychotics, because they are being used for bipolar disorder but were developed for use in treating psychosis.

**Mood stabilizers improve symptoms by getting rid of the low lows and the high highs.** The three main mood stabilizers utilized in the treatment of bipolar disorder are: Lithium (Lithoboid, Lithionate, Eskalith, and other brands); Valproate (usually used in the form of divalproex – Depakote); and Carvamazepine (Tegretol) (NDMDA, 1996).

Frequent blood tests are used to monitor the levels of these drugs in the body in order to prevent toxicity. Each of these drugs work differently in different people so if side effects are problematic or a drug fails to have the desired effect, then a person can try and find the drug that is most effective for them.

Lithium has the longest history of being used for bipolar disorder, dating back to the 1940’s. It is usually the first course of medication given to a new patient who presents with symptoms of bipolar disorder. Lithium is a naturally occurring substance. However, like any other medication, it does not work for everyone. Furthermore, the side effects in some people make it intolerable. For example, lithium may cause nausea, extreme drowsiness or slurred speech. It can also be passed to a nursing infant through breast milk and is known to be harmful to an unborn baby.
However, once a course of lithium has been started, stopping the treatment can lead to higher and earlier risk of recurrence, particularly of mania, and this is particularly true for rapid versus gradual discontinuation (Joffe, 2006). Some of the factors influencing lithium effectiveness include, social support, high social status and good compliance. Poor response to lithium is influenced by stress, unemployment and a high number of life events (Kleindienst, Engel & Griel, 2005).

Other drugs used to treat bipolar disorder are antidepressants and medications that treat insomnia and agitation. For the latter, antianxiety medicines such as lorazepam (Ativan) and clonazepam (Klonipin) are often prescribed. Sometimes antipsychotic medications such as olanzapine (ZyPrexa), haloperiol (Haldol) and perphenazine (Trilafon). These latter drugs are used for acute treatment of mania to reduce physical and mental agitation as well as reduce insomnia.

Other drugs discussed in this section also have a wide range of side effects or may be ineffective in some people. Drowsiness is a side effect to both anti-anxiety and anti-psychotic medications, among other side effects such as restlessness and muscle stiffness.

Aside from the stigma that accompanies mental illness it is often the challenge of medication adherence that sabotages treatment of bipolar disorder (Colom et al, 2005). People with bipolar disorder have a reputation for not taking their prescribed medications (Sajatovic et al, 2006) often get frustrated with medication adjustments that occur when an episode occurs or dislike the side effects and so they stop taking the
medications, with rapid weight gain being a particularly common reason to cease use of certain medications. The good feelings that often are a part of the experience of mania or hypomania lead some people to stop taking their medications which exacerbates the episode and may lead to increased severity of symptoms.

Psychosocial Interventions

Psychotherapy has been found to enhance the impact of medication in people living with bipolar disorder (Miklowitz & Otto, 2006), reduce relapse (Scott & Guttierez, 2004; Scott, 2003) and hospitalization (Scott, 2003), and is now an unquestionable form of appropriate treatment (Colom & Lam, 2005).

From a review of treatment outcome studies, Scott (2006) concluded that, in conjunction with medication, psychotherapy reduces the overall rates of relapse but are more effective for depression than for mania. In one study, the use of cognitive behavior therapy had a moderate to large positive impact on sleep, which the authors suggest is likely to improve other medical and psychiatric measures due to the impact of sleep on well-being (Smith, Huang & Manber, 2005). Some of the issues that are the focus of psychotherapy include: exploration of patients’ health beliefs and illness awareness (Colom & Lam).

In their review of the literature, Miklowitz and Otto (2006) found empirical support for four different psychosocial interventions: cognitive-behavioral therapy (CBT), interpersonal and social rhythm therapy (IPSRT), family focused psychoeducational treatment (FFT) and group psychoeducation. There appears to be no particular model was more effective than any others nor did they have any unique intervention process (Scott, 2006; Jan & Guttierez, 2004; Jones, 2004).
Gutierrez and Scott (2004) reviewed the literature of controlled trials of psychological treatment for bipolar disorders and found that the acceptance of stress-vulnerability models and evidence-based interventions have led to an increase in interest in psychotherapeutic interventions with people living with bipolar disorder. The evidence from their review showed that psychological treatment has been linked to a reduction in symptoms, relapses and hospitalizations and enhance social adjustment and functioning. However, because of the wide variety of variables studied some therapies were found to be more effective with mania than with depression while others had the opposite effect. They suggest that further studies be done to find standardized interventions that would apply to everyday practice.

Education

Education strategies are usually integrated into psychotherapy or is delivered in a psychoeducational model. Psychoeducation has been found to increase adherence to treatment and improves outcome of bipolar disorder (Gonzalez-Pinto, Gonzalez, Enjuto et al, 2004). The goal is to educate the person living with the illness so they can become better at symptom management and increase awareness of the process of their own illness. Done in groups there is also the support gained from sharing with others going through similar struggles. A literature review of psychotherapeutic models used around the world found that most included education, which focused on treatment adherence and early identification of symptoms focusing on the development of routines (Colom & Lam, 2005).
SECTION VII: MANAGEMENT OF SYMPTOMS

Because of the vulnerability of people living with bipolar disorder to lack of sleep, substance use, excessive stimulation, irregular schedules (Frank, Gonzalez, & Fagiolini, 2006) and high levels of stress, management of the disease focus on management of these triggers. Disease management also focuses on adherence to treatment protocols, which as previously stated in this paper, is a significant issue in bipolar disease management (Colom, Vieta, Tacchi et al, 2005).

An Australian study of coping strategies and symptom management found the following factors were used by patients to stay well: acceptance of diagnosis, mindfulness of their illness, educations, identification of triggers and warning signals, management of sleep and stress, lifestyle changes, treatment, and access to social support. The sample of 100 ranged in age from 18 – 83 years with most of the sample being above 30 (Russell & Browne, 2005).

Life Stress and Bipolar Disorder Symptoms

A Swedish twin study found that the relationship between stressful life events and affective disorders were a combination of environment and genes. They found that people with affective disorders self-selected into high-risk environments (Brostedt & Pedersen, 2003).

High levels of stress and limited access to social support are linked with recurrence of bipolar episodes, particularly in the cases of people diagnosed with bipolar disorder I. However, social support was not found to mediate the impact of stress on the illness (Cohen, Hammen, Henry, & Daley, 2004). A Danish study found that suicide of a mother or sibling was highly correlated to first time admission to
hospital with mania or a mixed episode. Death of a relative by other causes was not associated with hospitalization. General death in the family and the experience of major life events were found to be associated with increased risk of first admission with bipolar disorder (Kessing, Agerbo and Mortensen, 2004).

Sleep Hygiene and the Importance of Routine

People living with bipolar disorder need to maintain a regular sleep/wake schedule (Srinivisan et al, 2006). Routine has been found to be an important factor in preventing recurrence of bipolar disorder (Frank, Gonzalez, & Fagiolini, 2006). Because mania and depression often interrupt sleep and sleep deficit has been found to be a risk factor or warning sign for future mood episodes (Bauer et al, 2006; Umlauf & Shattel, 2005), consistent sleep patterns are an important feature of management of symptoms. This has also been found to be true in children diagnosed with bipolar disorder (Mehl et al, 2006). One study found that sleep deficit predicted depressive symptoms and the authors recommended that sleep management provides an opportunity for intervention (Perlman, Johson & Mellman, 2006). Low sleep has even been found to be a predictor of suicide in people without mental illness (Goodwin & Marusic, 2006).

Good sleep hygiene includes the following:

- Got to bed only when sleepy
- Establish a good sleep environment with limited distractions (low noise, dim light, cool temperature)
- Avoid foods, beverages, and medications that may contain stimulants
- Avoid alcohol and nicotine before going to bed
- Consume less or no caffeine
• Exercise regularly, around midday or early afternoon.
• Try behavioral/relaxation techniques to assist with physical and mental relaxations
• Avoid naps in late afternoon or evening
• Avoid heavy meals close to bedtime
• Avoid fluids before going to sleep
• Use the bed only for sleep and intimacy. (Do not eat, read or watch TV in bed).
• Establish a regular waketime schedule (Canadian Sleep Society, 2004).

Exercise Prevents and Treats

Regular exercise has multiple benefits for people regardless of their mental state. Exercise increases cognitive functioning, fights depression and improves overall mental health (Williams & Strean, 2006). For those living with bipolar disorder, exercise not only increases the length and quality of sleep but also has a positive impact on depressive symptoms and takes ‘the edge off’ mania. It also helps to counteract the weight gain that is a side effect of many medications for treating bipolar disorder (McDevitt & Wilbur, 2006). One review of the literature found a strong association between weight gain and bipolar disorder (Keck and McElroy, 2006). A review of the literature conducted by Poulin et al (2005), found that patients with mood disorders have an increased risk for Type 2 diabetes and some atypical antipsychotics such as olanzapine increase risk for diabetes and weight gain. Exercise could stave off some of these symptoms related both to the disorder and to the medications.
Eating For Mental Health

Omega 3 polyunsaturated fatty acids have been found to have a positive effect on mood in people living with bipolar disorder and so the corollary is that a deficit in these biochemicals are related to onset of unipolar and bipolar depressive episodes (Parker et al, 2006). They have been found to be more effective with depressive symptoms than with mania (Chiu et al, 2006). Although the studies in this area are in the early stages of knowledge development, the existing body of research in this area shows promise of omega-3 fatty acids being included in a comprehensive treatment plan for bipolar disorder.

SECTION VIII: SUMMARY

Bipolar Disorder is a complex illness that can have very severe consequences. Of all the mental illnesses, people with bipolar disorder have the highest rate of suicide. Bipolar disorder is marked by swings in mood from one extreme to another. These swings are unusual, and sometimes drastic, shifts in mood, energy, thoughts, behavior and functionality that are out of proportion, or unrelated to their environment. These shifts, are called ‘episodes’, and they can last a few days or for weeks or months. Diagnosis is done through an analysis of symptom history and family history, if available. Treatment is three-pronged: medication, education and psychotherapy. Because bipolar disorder is a chronic and often severe illness, people living with bipolar disorder need to learn to manage symptoms and to comply with medical regimens as prescribed.

Despite its chronic nature and severe symptoms, with appropriate treatment and good management of symptoms, bipolar disorder can be an illness that brings some
blessings along with its challenges. Kay Redfield Jamieson writes about all the creative and highly successful people who were “Touched With Fire”. The task of people working with people living with bipolar disorder is to provide counseling and support, educate the client about their illness, help them monitor symptoms and develop strategies for managing them. People living with bipolar disorder who work hard at doing the things that help them manage their symptoms can lead healthy productive lives.
REFERENCES


