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Bipolar Disorder

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Abstract

Bipolar Disorder has been a long-researched topic among medical professionals, dating back to the first century. According to studies done, due to the lack of education and the stigma that mental illness creates, over 40% of people diagnosed with Bipolar Disorder do not receive the proper treatment (Krans 2019). Research conducted will look at the different facets of Bipolar Disorder, how it is presented in various people, the proper diagnosis of bipolar disorder and how bipolar disorder can be treated.

Key Words: Bipolar Disorder, Manic, Mania, Major Depressive, Depressive, Hypomanic

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Introduction

There are two major psychoses in the world today, schizophrenia and bipolar disorder (Zarate & Manji, 2011). Bipolar Disorder has intrigued medical professionals for centuries due to the ever-changing concepts and terms that it has taken on over the years (Brock et al., 2014). According to a German psychiatrist dating back to 1845, Wilhelm Griesinger describes Bipolar Disorder as "a circular pattern of alternation between mania and depression in the same patient" (Brock et al., 2014, p.1). Someone with Bipolar Disorder may stay in a season of manic high or depressive low for a long period, short period, or alternating periods. Bipolar Disorder takes form in three main ways: Bipolar Type I, Bipolar Type II, and Cyclothymic. With each type, there are varying kinds of signs, symptoms, assessments, and treatments. While Bipolar Disorder is something that can be treated and easily managed, there are many people today that may either be misdiagnosed or not being properly treated for the correct disorder. Bipolar Disorder is often portrayed as a very singular form in the media but is a multifaceted disorder that does not receive the proper representation in the media. This mental health disorder can be hard for teens and children, even adults, to handle and cope with because "Bipolar disorder is often episodic, but it usually lasts a lifetime" (National Institute of Mental Health, 2020, p.2). The focus of this research paper is to look at the different facets of Bipolar Disorder, how it presents itself in various people, the differing types of bipolar disorder, ways in which bipolar disorder can be properly diagnosed and assessed, and the various ways bipolar disorder can be treated.

Causes of Bipolar Disorder

The cause of Bipolar Disorder has been highly debated and researched through the last several centuries. The famous Greek physician Areteaus argued that bipolar disorder was the result of a buildup of waste in the body, thus resulting in issues in the brain (Rothman-Kerr, 2018). Years later, in what would have been considered the Middle Ages, many believed that mental illnesses were caused by witches or even demons (Rothman-Kerr, 2018). Overtime, philosophers and physicians realized that it made more sense for mental illness to be a result from a physical abnormality than it would be for there to be supernatural forces to blame for this change in mood or behavior (Rothman-Kerr, 2018). Through different research, it has been determined that genetics does play a part but how big of a part is unknown (Rothman-Kerr, 2018). Some other possible causes could be chemical imbalances in the brain, such as hormonal imbalances of neurotransmitters, or one may have had traumatic experiences that causes triggers that result in bipolar disorder tendencies or symptoms (Rothman-Kerr, 2018). Even after hundreds of years of research and growth in medical advances, it is still unclear what exactly causes bipolar disorder.

Although the causes of bipolar disorder can vary, and may still not be very clear, research shows that bipolar disorder is because of the various interactions between environmental, social, or biological factors versus it just being one singular cause (Rothman-Kerr, 2018). While no one will ever be able to know the specific combination of these factors, research does show that a few contributing factors that may influence the development of bipolar disorder in an individual could be having someone in your immediate family that suffers from bipolar disorder, high stress levels or traumatic environments, the use and abuse of drugs and alcohol, and different brain structure developments (Rothman-Kerr, 2018). Possibly the highest risk factor or cause would be the presence of bipolar disorder in your family history or gene pool.

Scientific Findings and Research

One cause of bipolar disorder that is highly researched and discussed among professionals is the “genetic predisposition”. Genetic predisposition is when someone may have the genes that show up with bipolar disorder, but they may never actually know that they have it (Rothman-Kerr, 2018). With most of these cases, the symptoms or signs will not actually start presenting themselves unless they have experienced a triggering event or environment (Rothman-Kerr, 2018). Genetic predisposition seems to be a liable cause since most of the time, bipolar disorder runs in the family (Rothman-Kerr, 2018). Statistics show that a child that has a parent or sibling that has bipolar disorder is four to six times more likely to develop bipolar disorder compared to a child with no trace of bipolar disorder in their family (Rothman-Kerr, 2018). On the other hand, studies also show that someone that does have traces of bipolar disorder in their family will most likely never develop it (Rothman-Kerr, 2018). Research has shown that about 80% of the cases of bipolar disorder relate back to it being a genetic factor or similar "phenotypic variation" that attributes to the cause of the disorder in a patient (Zarate & Manji, 2011).

Another theory of certain causes is described as "an inborn vulnerability interacting with an environmental trigger" (Kahn et al., 2000, p.487). This description is often compared to the impact a heart condition/disease has on the human body. For example, if a patient is genetically at risk to have high blood pressure, that will eventually cause strain to different heart muscles, causing more stress to the heart, which in result could lead to a heart attack or chest pain (Kahn et al., 2000). All of this is a result of stress. Just like in bipolar disorder, it is an internal means that results in external consequences.

Family and Twin Studies

Many different research studies have been conducted to try and figure out some of the causes of bipolar disorder. One popular way of conducting research about this specific topic has been to conduct a family study, which usually results in usable results because of the close relation between bipolar disorder and heredity patterns. The way these kinds of studies are conducted is first determining whether the patient really does have bipolar disorder. This is always conducted, regardless of family history. Once they have validity and confirmation that the patient does in fact have bipolar disorder, they then proceed to test and study their family members to see if they have resembling phenotypes (Zarate & Manji, 2011).

Results from the family studies show that family members of the person that was diagnosed with bipolar disorder are at an increased chance of developing other mental health issues, such as anxiety or mood changes (Zarate & Manji, 2011). They may also be at risk for an increased use/abuse of alcohol or drugs/substances (Zarate & Manji, 2011). Another increased risk of the relatives of the bipolar disorder patient is a slight increased risk of schizophrenia. Overall, family studies have helped determine the risk factors associated with bipolar disorder and have helped explain the heredity patterns seen within bipolar disorder patients.

Another way that researchers have tested the theory of bipolar disorder being a genetic inheritance is by studying the risk increase it may have on twin siblings.

Stages of a Bipolar Episode

Mania/Manic Phase

Mania can often be very deceiving to a patient. It can create a false hope of happiness and pleasure, maybe even creativity and heightened energy, but these feelings will progress into "full-blown euphoria" (Kahn et al., 2000, p.487). Euphoria is described as a state in which a person feels overwhelmingly happy or excited, but not in a positive manner. Euphoria can also cause a heightened sense of irritability or frustration (Kahn et al., 2000). Mania is a large source of what defines bipolar disorder. Ken Duckworth, a medical chief at the *National Alliance on Mental Health*, says that "...you cannot have a bipolar diagnosis without mania" (Migala, 2021, p.1). In fact, for a patient to be diagnosed with bipolar disorder, one must experience a manic phase for at least a week and have symptoms mostly every day (Migala, 2021). To be diagnosed with bipolar disorder, a patient must have experienced these symptoms or a manic phase at least once, according to the *National Alliance on Mental Health* (Migala, 2021).

During a manic phase, there can be many different side effects that a patient may experience. A patient might make a highly ambitious plan to do a large portion of work in a small amount of time, often an unrealistic amount of time (Rothman-Kerr, 2018). If someone were to have an encounter with them, they may talk very fast, be all over the place in their thoughts and speech, and not make much sense in a conversation (Rothman-Kerr, 2018). Their sleep pattern is often interrupted, more like a lack thereof, and they often feel like they can conquer the world, meaning they lose sleep thinking they can accomplish anything and everything (Rothman-Kerr, 2018). It may cause a person to become very risky or impulsive, making them think that they can quit their job, have sexual intercourse with multiple partners, spend a large portion of money, go skydiving or other activities that may cause concern for the person (Rothman-Kerr, 2018). Someone in the manic phase may even feel invincible. While most of the time, the manic phase can seem “high” or “happy”, some people do experience an overwhelming amount of tension or anger, even violence (Rothman-Kerr, 2018). Although someone may experience the manic phase and seem very happy, they are not experiencing a true feeling of happiness, which makes seeking medical help nearly impossible because the patient does not think anything is wrong (Rothman-Kerr, 2018).

Many doctors and physicians have been very vocal about being self-aware in knowing the things that present themselves in a patient when they are experiencing a manic phase (Migala, 2021). Every patient’s manic phase is going to look different. Some examples of things that a patient may be able to point out about their own behavior during a manic phase would be being easily agitated or angered, driving faster than normal, using certain phrases or language they may not use on a regular basis, etc. (Migala, 2021). One suggested technique is to recognize those triggers in a patient is allowing family members and friends that are in close relation to the patient made aware of the symptoms they may experience, which then would allow them to help the patient be receptive to help during the time of manic phase (Migala, 2021). This can be proven difficult since the manic phase can seem “seductive” because it often makes the patient feel very good about themselves, so for a patient to receive constructive criticism or help from their family during this time might be harder for them to deal with (Migala, 2021).

Major Depressive Phase

Unlike a manic phase, a patient goes to an overwhelmingly sad, lonely, hopeless state during the major depressive phase (Rothman-Kerr, 2018). However, this does mean that patients are more likely to reach out for help during this phase due to the unsettled feelings they are experiencing (Rothman-Kerr, 2018). A patient’s energy level will be greatly decreased, and their spirit will be overall down when they are experiencing a depressive episode (Rothman-Kerr, 2018). One will most likely experience extreme tiredness and fatigue. This phase will cause a patient’s sleep patterns typically to be from one extreme or the other. One will either get no sleep at all or all they do is sleep (Rothman-Kerr, 2018). It can often make a patient not want to get out of bed at all, causing the depressive phase to last longer than it would have otherwise (Rothman-Kerr, 2018). Even the most mundane task like cleaning, going for a walk, cooking, going to work or just hanging out with a friend can seem exhausting to a patient (Rothman-Kerr, 2018).

A patient going through the major depressive state might find no interest in things that used to bring great joy and satisfaction (Rothman-Kerr, 2018). This causes the patient to isolate themselves from family and friends, activities that were once enjoyable, or just everyday life (Rothman-Kerr, 2018). Some other symptoms a patient may experience while in a major depressive phase might include the inability or lack thereof of being able to make basic decisions or concentrate in simple tasks (Rothman-Kerr, 2018). Someone may lose their appetite or overeat as a coping mechanism to their sadness, maybe even self-pity (Rothman-Kerr, 2018). A patient may experience unexplained pain or have achy bones or muscles because of a major depressive state, which can cause concern for their health in the future (Rothman-Kerr, 2018).

Major depressive episodes or lower phases tend to last longer than the manic phase does for a bipolar patient (Frye, 2011). According to Frye (2011) who examined bipolar type 1 patients for a span of 12 years, it is shown that patient's show symptoms about 50% of the time, ⅓ of that time involving the major depressive state, while the manic stage only takes up about 10% and the mixed features phase at 6% of the time. Studies have shown that patient's experiencing the major depressive state have a higher chance of considering or attempting suicide. Research shows that among patients that have never been hospitalized, there is a 5% success rate of suicide attempts but can go up to 25% for patients early in the bipolar diagnosis stage (Frye, 2011).

Mixed Features

A patient experiencing a mixed features phase in feeling both manic and depressive features at the same time. One might feel energetic yet irritated, angry at the same time (Rothman-Kerr, 2018). Sometimes, depending on the patient, mixed features refer to the time in which one has been in one of the phases and is going to the other phase, yet still have feelings from the first phase that are prevalent and loud (Rothman-Kerr, 2018). For example, a patient has been in a depressive state, is starting to feel symptoms of a manic phase, but still has symptoms from the depressive state, they may be experiencing mixed features (Rothman-Kerr, 2018).

Just like in the other two phases, patients can tend to use or abuse alcohol or drugs to cover up feelings or feel nothing at all. This often causes bipolar disorder to be one of the leading causes of "dual diagnosis", meaning that a patient will suffer from bipolar disorder and a substance abuse disorder (Rothman-Kerr, 2018). This is the result of a bipolar patient not being able to control or navigate the act of self-control or the awareness needed to stop (Rothman-Kerr, 2018).

Delusions or hallucinations

Oftentimes, patients with bipolar disorder may also experience delusions or hallucinations because of the phase they are experiencing (Rothman-Kerr, 2018). A delusion is defined as, "a false belief, such as a belief that someone is trying to hurt them" (Rothman-Kerr, 2018, p. 24). There is no tangible evidence to determine a delusion, which can make treating this symptom in a patient difficult. Hallucinations are defined as, "a false sensory perception, such as hearing voices or seeing things" (Rothman-Kerr, 2018, p.24). Hallucinations cause a patient to have the inability to determine the difference between reality and fantasy (Rothman-Kerr, 2018). It depends on which stage a patient is in to determine whether they may experience a delusion or hallucination, but every patient is different and may experience different symptoms at different times.

Rapid Cycling

Within bipolar disorder type 1 and type 2, a patient may also suffer from "rapid cycling" (Rothman-Kerr, 2018). This term is used when a patient experiences at least four, and possibly more, episodes a year of major depression, hypomania, or mania (Rothman-Kerr, 2018). This cycle does not have to include mixed features, but it can, depending on the patient (Rothman-Kerr, 2018). Studies have shown that while most patients with bipolar disorders tend to have more major depressive episodes, patients that suffer from rapid cycling were more prone to having manic episodes (Kupka et al., 2005). Contrast to rapid cycling, a patient that is not treated for bipolar disorder, who does not have rapid cycling episodes, tend to have manic episodes that will last 3-6 months and depressive episodes that will last 6 months to a year (Rothman-Kerr, 2018). Rapid cycling is a common diagnosis in patients but is not as widely discussed as other topics that involve bipolar disorder.

Types of Bipolar Disorder

Bipolar Disorder Type 1

Bipolar Disorder (BD) Type 1 is the most severe out of the 4 main types of bipolar disorder. BD Type 1 is best described as the state in which episodes of mania or depression are interspersed. One will bounce back and forth between the stages of mania, major depression, hypomanic, and mixed features (Brock et al., 2014). In an episode of “mania” or sometimes referred to as “manic stage”, one might feel a high energy level, euphoric, over-excitement, extreme changing/shifting in mood lasting longer periods of time, etc. (Migala, 2021). In the stage of “major depression”, one might feel low energy, low activity drive, “sad”, “upset”, restlessness, irritability, anxiety, disinterests in regular activities, excessive crying, etc. One experiencing the stage of hypomania or “hypomanic” would feel a slightly lesser version of the “manic” stage, meaning that the “high” or increase in energy level is not as severe as the manic stage, yet one would still swing back and forth with the depressive stage (Pietrangelo, 2018).

If one experiences all these stages but not in the traditional order or trend, this would be considered the “mixed features”, meaning that one does not show a prominent enough pattern to determine the exact stage one might be experiencing. Oftentimes a manic episode or mixed features will occur, which would then lead into the depressive phase. Even if someone only experiences the manic stage and never gets to the depressive phase, they would be diagnosed with Type 1 BP (Kahn et al., 2000). It is very likely that over time, the patient will go into a depressive state after the mania unless there are preventative measures (treatment) taken in a timely manner (Kahn et al., 2000).

Bipolar Disorder Type 2

Bipolar Disorder Type 2 is the presence of one more episode of both major depression and hypomania (Brock et al., 2014). A patient must experience at least one episode of each to be considered type 2, unlike type 1 where a patient only experiences mania or major depression (Brock et al., 2014). Hypomania is the main difference between type 1 and type 2 in bipolar diagnosis. Hypomania is a less severe version of mania, mainly meaning that the patient will never reach a peak or the intensity of a manic phase but still experience a “high” that is unlike a normal phase. Others will often be able to tell if a patient is going through a hypomania episode because it is unlike normal behavior, since that most of the time normal behavior for a type 2 patient would be major depression (Pietrangelo, 2018).

Hypomania does not result in hospitalization, unlike mania where in some cases, depending on the severity, it can (Pietrangelo, 2018). Patients with type 2 tend to have other mental health issues, such as anxiety, or sometimes patients may also suffer with substance abuse disorder (Howland & Sehamy, 2021). Because a patient may use alcohol or substances, this often causes the hypomania or the depressive episode worse, heightening the effects of each stage (Howland & Sehamy, 2021). Studies show that bipolar type 2 is more common in women than in men, unlike bipolar type 1 which has an even diagnosis rate between genders (Arnold, 2003).

While type 2 is less severe than type 1, it is still treated with the same legitimacy and threat it could pose to the patient.

Cyclothymic Type

The cyclothymic stage is the mildest version of bipolar disorder, often referred to as the mood swings type (Howland & Sehamy, 2021). This means that a patient who is experiencing the cyclothymic type will have depressive and hypomania symptoms quite often on a regular basis (Howland & Sehamy, 2021). A patient will have varying feelings, causing a lot of ups and downs, but these symptoms will be less severe than bipolar disorder type 1 and type 2 (Howland & Sehamy, 2021). To be considered cyclothymic, a patient must have depressive symptoms or hypomania for at least 2 years, having different periods of depression or hypomania, but the symptoms experienced do not meet the certain criteria needed to diagnose bipolar disorder type 1 or type 2 (Howland & Sehamy, 2021).

Another requirement for the cyclothymic diagnosis is that a patient's symptoms over the two years will have lasted for at least half the time and did not stop for two months or more (Howland & Sehamy, 2021). For cyclothymic diagnosis in children, the required time for a patient is only a year, whereas for an adult it is two years (Rothman-Kerr, 2018). This type does not cause hospitalization and does not usually lead to difficulties at school or at home, relationally (Rothman-Kerr, 2018).

Substance-Induced Bipolar Disorder

Substance-induced bipolar disorder is a type of bipolar that is caused by a drug or substance (Rothman-Kerr, 2018). Although misconceptions may make it seem like it, it does not have to be an illegal substance, like cocaine, or a "recreational drug" such as alcohol or marijuana (Rothman-Kerr, 2018). Research has shown that some prescription drugs that people take daily or as needed can cause bipolar symptoms. This is a result of these medications reacting with different chemicals in your body that may produce “mood swings” or depression (Rothman-Kerr, 2018). When it comes to recreational drugs, in which most people do self-diagnosis of the amount allotted for intake, people hope that it will make them happier and feel better (Rothman-Kerr, 2018). What often happens is the drug or substance causes them to feel worse, thus making them think they need to keep taking it to feel better (Rothman-Kerr, 2018).

When someone is taking a drug, prescription or recreational, sometimes it causes difficulty in finding out what was the trigger because those things were not originally prescribed or taken to treat their bipolar (Rothman-Kerr, 2018). For example, if someone were to be on a prescribed medicine, say an antibiotic, they may not be able to distinguish that that antibiotic causes them to feel more depressed or have mood swings because it was not given with that intent (Rothman-Kerr, 2018). Once a patient can identify the medication or substance that is causing the bipolar disorder to appear, the use of the drug or substance is stopped or “discontinued”, and they stop having bipolar symptoms (Rothman-Kerr, 2018).

According to research that was done by medical professionals that investigated the effects of “substance-induced psychosis” among a crowd of people that were diagnosed with “substance-induced psychosis” between the years of 1994-2014, 32.2% of patients that were diagnosed with “substance-induced psychosis” were then diagnosed with schizophrenia or bipolar disorder (Starzer et al., 2018). Substance-induced psychosis is often associated with severe mental health issues and takes an extensive amount of time and research to see every effect it does have (Starzer et al., 2018).

Bipolar Disorder Associated with Other Medical Condition

Bipolar Disorder that is associated with another medical condition, like substance induced bipolar disorder, is because of something other than the chemical makeup or genetic feature that a patient inherited. It is considered an "outside cause" (Rothman-Kerr, 2018). A person that has had a stroke or heart attack may then develop bipolar disorder due to the sheer fact that those other diseases could have caused damage to parts of the brain that affect mood swings (Rothman-Kerr, 2018).

A study was conducted where medical professionals examined patients who have bipolar disorder along with other underlying medical conditions. They looked at the following medical conditions in these categories: *vascular, cardiac, respiratory, hematopoietic, ear/nose/throat, hepatic, gastrointestinal, renal neurological, endocrine/metabolic, musculoskeletal, and genitourinary* (Salvi et al., 2012). They also examined variables that could affect the outcome of the results such as age at diagnosis, duration of untreated illness, duration of illness, psychaitric comorbidity, and lifetime suicide attempts (Salvi et al., 2012). According to the research conducted, 55% of the patients had at least one medical condition along with a bipolar disorder diagnosis (Salvi et al., 2012). The patients average age was about 50 years old, with about 63% of them being women, and 68% of them having type 2 bipolar disorder (Salvi et al., 2012). The three highest categories of medical conditions were *musculoskeletal* with 11%, *vascular* with 21%, and the highest number being *endocrine/metabolic* with 23% (Salvi et al., 2012). As research has shown, bipolar disorder can be present along with other medical conditions that may worsen the symptoms of bipolar depending on the patient.

Bipolar Disorder Not Classified

Bipolar disorder not classified or sometimes referred to "bipolar disorder not otherwise specified or bipolar NOS" is used to describe a patient that shows many symptoms and meets a bulk of the criteria for one of the types but not enough to definitively diagnosed with a specific type (Rothman-Kerr, 2018). A patient would have depressive or manic episodes, but they would not last long enough to meet the criteria needed for a proper type of diagnosis (Rothman-Kerr, 2018). Although this kind of diagnosis may not seem helpful to a patient since it is not specific, it allows a patient to seek medical treatment or other means of help even when “their mental illness does not fit neatly into one specific category” (Rothman-Kerr, 2018).

Bipolar Symptoms - Gender

Symptoms in Males

Most studies conducted show that there is an equal rate between males and females with bipolar disorder diagnosis. However, research does show some differences in the ways in which different bipolar side effects may occur between men and women. A specific study collected data from 211 adults, using the Diagnostic Interview for Genetic Studies, with supplemental items provided if needed, such as medical records or other information giving documents (Kawa et al., 2005). When looking at the symptoms that take effect in men, research shows that men, more than women, had more manic/mania episodes at the beginning of their diagnosis (Kawa et al., 2005). In patients with bipolar type 1, men (44%) were more likely to have a manic episode over women (22%) at the beginning of their diagnosis (Kawa et al., 2005).

Men also showed signs of higher alcohol or substance use/abuse, “pathological gambling”, and disorderly conduct (Kawa et al., 2005, p.119). This study shows that during a manic episode, men are more likely to have behavior issues or problems holding a conversation (Kawa et al., 2005). Specifically, the numbers of men that use alcohol or cannabis were two times higher than women’s numbers, and disorderly conduct issues were four times higher in men than in women (Kawa et al., 2005). Men took up full capacity of gambling numbers as no women had problems with this in this study (Kawa et al., 2005). Research has shown that men tend to experience bipolar symptoms earlier on in life, which they have determined can be linked to some social aspects such as a higher rate of singleness in these men (López-Zurbano et al., 2014). Since bipolar disorder is starting at a younger age in men than women, it can usually mean that men may experience hospitalization at an earlier stage than women (López-Zurbano et al., 2014).

Symptoms in Females

Females often experience bipolar in similar ways to men, but there are some very distinctive features women experience when suffering with bipolar disorder. Looking at the same study that was examined from the men's section, we are shown that women are the opposite of men in that they tend to experience a depressive episode at the beginning of their diagnosis (Kawa et al., 2005). Research shows that women are more likely to be hospitalized for a manic/mania episode compared to men (Kawa et al., 2005). Women are more likely to experience rapid cycling rather than men, meaning they may experience both depressive and manic episodes in quick cycles (Kawa et al., 2005). This study also suggests that women are diagnosed more often with bipolar 2 disorder than men (Kawa et al., 2005).

Research and studies show that women are "characterized by a predominance of depression" (López-Zurbano et al., 2014, p.641). Women tend to spend more time in the depressive stage than in the manic phase, causing hospitalization to last longer if needed (López-Zurbano et al., 2014). Women often have depressive phase symptoms while they are in a manic phase, making them more likely to take on mixed features (López-Zurbano et al., 2014). This also means that women have a higher likelihood of experiencing mood swings or seasonal episodes, also relating back to rapid cycling (López-Zurbano et al., 2014). Since women tend to stay in the depressive phase longer or more frequently, this means that they experience more suicidal tendencies or multiple suicide attempts, contrary to men who make less attempts but are often more aggressive in their tendencies (López-Zurbano et al., 2014).

Since women tend to stay in the depressive state of bipolar disorder, they often are more prone to taking medicines and seeking help more than men do (López-Zurbano et al., 2014). However, women do still experience manic phases and they experience more delusions, hallucinations, or paranoid thoughts than men do (López-Zurbano et al., 2014). Women are also known to have more issues with anxiety and eating disorders when they battle with bipolar disorder (López-Zurbano et al., 2014). Obsessive compulsive disorder, phobias, and panic disorder are a few other diagnoses that a woman with bipolar disorder may also struggle with (López-Zurbano et al., 2014). Since a high percentage of bipolar patients' diagnosis can be traced back to genetics and family history, women have a higher percentage of suffering from a multiple anxiety related disorder along with bipolar disorder (López-Zurbano et al., 2014).

Bipolar Symptoms - Age

Symptoms in Children and Teens

Children and teens go through many changes, challenges, and learning curves throughout the early stages of life. While each child may act out in different ways, bipolar disorder is not the “normal ups and downs every child goes through” (National Institute of Mental Health [NIH], 2020, p.1). Mood swings or changes in a child with bipolar disorder are going to present themselves often very aggressively, even times unprovoked, and could result in a child facing a messed-up sleep schedule, being clouded when trying to think, or uneven energy levels (NIH, 2020). This often leads to children and teens doing poorly in school, since they are struggling to pay attention or focus, distraction can be a huge source of stress for them (NIH, 2020). It may also cause a child to have a hard time relating to others or being close with their family, which can cause deeper issues in the long run, especially when examining the history behind self-harm or suicidal tendencies (NIH, 2020).

Since bipolar disorder is more frequently diagnosed in adulthood, it can be hard for children who may act out because they do not know how to properly explain how they are feeling. Children can experience many different disorders at a young age and often those diagnoses may overlap with bipolar disorder. Some of those disorders may include major depression, anxiety disorders, attention-deficit hyperactivity disorder (ADHD), or conduct problems (NIH, 2020). In a particular study conducted about pediatric bipolar disorder, 41% of the students they examined were having to be placed in a special class due to their diagnosis of bipolar disorder and ADHD (Hart et al., 2014).

Children will also turn to other things for help or relief during times of mania or depression. One thing that a child or teen may result in is the use/abuse of substances or alcohol (NIH, 2020). Children who are bipolar have a higher risk of doing unlawful acts or illegal things, because of not knowing how to handle what they are experiencing or even as a cry for help. How they act will be solely dependent on which phase they may be experiencing at the time and there is no way to tell how extreme their actions might be or the risks they may take.

Children with bipolar disorder will experience very extreme, maybe even intense, emotions that will affect every part of their lives. They will show symptoms of both manic phases and depressive stages. Some signs that a child is going through a manic episode include, but are not limited to having a short temper or being hard to handle due to irritability, having extended, abnormal amount of time of silliness or happiness, talking excessively or very quickly about multiple different topics, trouble sleeping but not tired, overly interesting in risk taking activities, having racing thought or issues staying focused, or not having sound judgment (NIH, 2020, p.3)

A child with bipolar disorder will not only experience the manic phase, but will also experience the major depressive stage. Some signs that a child is going through a depressive episode include, but are not limited to: increased anger or hostility towards friends and family members, frequent sadness that is often “unprovoked”, increase in the amount of sleep being had that is noticeable to others, experiencing pain such as a headache or stomach ache, having problems concentrating, having issues properly stating how they are feeling or communicating in general, feelings of worthlessness, eating too much or not eating enough, low energy, or suicidal thoughts (NIH, 2020, p.4).

Symptoms in Elderly Patients

Research is few and far between for “geriatric mania and depression” because most studies are done on middle aged adults and children. This is a result of the evidence from research that says that mania in elderly patients normally goes down as they get older, meaning there is not as large of a need for research to be done because it is not a sought-after subject (Arnold et al., 2021). One study looked at 35,000 patients and found that numbers compared to middle aged adults were not as dramatically different as one might think (Arnold et al., 2021). Research shows that the elderly population makes up 25% of the bipolar disorder diagnosis population and among those, 70% are women (Arnold et al., 2021). Some other diagnoses or illnesses that an elderly bipolar patient may suffer with are dementia, Alzheimer’s, cerebral disorders, head injuries, stroke, inflammation, etc. (Arnold et al., 2021). Studies show that around 60% of adults that have bipolar disorder will have at least one, maybe more, substance use disorders (Lehmann & Forester, 2017). Due to the lack of information and research done for the elderly bipolar community, the treatment for these patients is not well studied and not much time invested into educating elderly patients how to cope with bipolar disorder (Arnold et al., 2021)

Tests & Assessments

DSM-5

It is important to know that no matter the type of bipolar disorder a patient may be diagnosed with or even if they are not aware of which type, they may have, a person's symptoms can worsen over time. Making sure that a patient has the proper means of diagnosis and treatment for the correct type of bipolar, or any other mental illness, is a high priority. The United States has a set of criteria that aids in helping diagnose bipolar disorder called *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5) which is published and supplied by the American Psychiatric Association (Hart et al., 2014). While we have this resource as a tool to help diagnose and treat individuals with bipolar disorder, it can be challenging, especially in children and teens, to correctly diagnose, because this manual sometimes does not fit the symptoms that a child may experience (Hart et al., 2014). This can make it complicated to navigate assessing children with bipolar disorder symptoms.

Although there are challenges facing children and teens receiving the proper diagnosis, the American Psychiatric Association tries to make sure there are ways to get an individual, no matter their age, a proper diagnosis. Due to their commitment to ensuring proper diagnosis, they have made changes to the *Diagnostic and Statistical Manual of Mental Disorders.* The 5th Edition (DSM-5) now gives “bipolar and related disorders” their own category, versus in the previous editions they were lumped into the “mood disorders” category (Hart et al., 2014). The subtypes of the “Bipolar and Related Disorders” are as follows: Bipolar 1, Bipolar 2, Cyclothymic, Substance Induced, Bipolar due to another medical condition, Other, and Unspecified (Hart et al., 2014). Within those subtypes, it characterizes them into severity and the impacts it may have on an individual (Hart et al., 2014).

Three significant changes were made to the criteria in the DSM-5 when it comes to assessing bipolar disorder diagnosis. First, a mixed episode, where an individual experiences both depressive and manic phases in the same episode, is now considered a “specifier”, which is an identifier for the subgroups of bipolar: manic, hypomanic, and depressive (Hart et al., 2014, p. 66). This allows them to improve original diagnosis and treatment options for patients (Hart et al., 2014). The second change that they made was making sure the material presented in the DSM-5 could assess children or adolescents, not just adults (Hart et al., 2014). With that came a third change and that was that individuals who do not present as severe symptoms will not necessarily be put under the umbrella of bipolar but could be considered for a new disorder called Disruptive Mood Dysregulation Disorder (Hart et al., 2014). This disorder will fall under the “Depressive Disorders” category in the book (Hart et al., 2014, p. 66). This could also mean that children with a current diagnosis of bipolar disorder could fall more into the category of Disruptive Mood Dysregulation Disorder (DMDD), causing more research to be conducted to make sure these individuals are treated correctly and properly (Hart et al., 2014).

DSM-5 Criteria based on Episode - Manic Episode

A manic episode is a “distinct period of time” in which an individual experiences an elevated or irritable mood, with “goal-directed activity or energy” (Hart et al., 2014, p.67-68). DSM-5 specifically added the “increased energy” part to its criteria for a manic episode (Hart et al., 2014, p.68). This is in hopes that a patient would be able to better understand their symptoms when going through a manic phase, easily recognizing the change in energy rather than trying to recognize “mood changes”, which is how it was previously worded (Hart et al., 2014, p.68).

According to the DSM-5, there are 4 main criteria given for a manic episode. The first criterion is the “distinct period of time” that was mentioned before, lasting at least one week, and presenting itself daily (Hart et al., 2014, p.67). The second criterion is during the period of time of increased energy or manic, a patient has to have presented at least three of these symptoms to a degree that is noticeable and strong enough to cause concern: lack of desire to sleep, high self-esteem or “grandiosity”, very talkative or long winded, easily distracted or stimulated towards distraction, racing thoughts, participate in “goal directed activity”, or increased involvement in risky behavior or “pleasurable” activities (Hart et al., 2014, p.69). The third criterion is that the change in mood or “mood disturbance” is severe enough to impact a patient's social ability and functioning that could cause hospitalization due thoughts of self-harm (Hart et al., 2014, p.69). The fourth criterion is that the manic episode is not a result from the use or abuse of a substance or is not a result from an additional medical condition (Hart et al., 2014).

With the updates to DSM-5, this allows them to see the true impact that bipolar disorder not only has on adults but also on children and teens. Since changing some of the criteria, they have been able to see that irritability is one of the main noticeable characteristics and changes that occurs in a child going through the manic phase (Hart et al., 2014). That specific criteria were not present in the previous editions, so by adding this in it has given them greater insight into how bipolar disorder affects children and how going forward, they can start looking at the diagnosis of Disruptive Mood Dysregulation Disorder (DMDD) for children versus bipolar disorder (Hart et al., 2014). The main reason for looking at DMDD as a possible diagnosis versus bipolar disorder is because irritability is a large indicator of DMDD but not of bipolar disorder

(Hart et al., 2014). “Elation” is very specific to bipolar disorder, whereas irritability is more specific for DMDD (Hart et al., 2014, p. 70).

It is important to note that the most “essential element” to diagnosing a manic episode is “impairment” which means that a patient has the “psychotic features” that are not caused by substance (Hart et al., 2014, p. 70). The symptoms of a manic episode are highly regarded as the most researched and studied characteristics of bipolar disorder (Hart et al., 2014). There are endless combinations of symptoms and no one patient is going to be like the other when experiencing a manic episode, causing difficulty in properly diagnosing based on criteria, yet the DSM-5 has given great insight in how to properly diagnose a patient suffering from a manic phase (Hart et al., 2014). While the manic phase is highly experienced by most bipolar patients, it is significantly lower in occurrence than the depressive state, as patients are much more likely to spend more time in that phase (Hart et al., 2014).

DSM-5 Criteria based on Episode - Hypomanic Episode

Hypomania is referred to as the milder version of a manic episode except when it compares to the severity of the impairment, the symptoms experienced, and the “exclusion of psychotic features” (Hart et al., 2014, p. 73). The mood experienced by an individual is visibly different from those of a “nondepressed mood” but not severe enough to cause impairment (Hart et al., 2014, p. 73). The criteria for a hypomanic episode are very similar to those of a manic, except there are a few more factors that play into the diagnosis of hypomania. The first criteria is that there must be a period of time in which an individual is experiencing an irritable, elevated mood that lasts at least “4 consecutive days and present most of the day, nearly every day” (Hart et al., 2014, p. 74). The second criterion is similar to a manic episode in that a patient has to have presented at least three of these symptoms to a degree that is noticeable and that there is a large enough change to be concerned: lack of desire to sleep, high self-esteem or “grandiosity”, very talkative or long winded, easily distracted or stimulated towards distraction, racing thoughts, participate in “goal directed activity”, or increased involvement in risky behavior or “pleasurable” activities (Hart et al., 2014, p.69). The third criteria are that a patient must experience an episode “with an unequivocal change in functioning that is uncharacteristic of the person when not symptomatic” (Hart et al., 2014, p.74). The fourth criteria are that the change in mood is easily visible by others (Hart et al., 2014). The fifth criteria are that the change in mood is not bad enough to cause impairment in a social setting or does not cause hospitalization, because if there were “psychotic features” it would be considered a manic episode (Hart et al., 2014, p.74). The sixth criteria are that the symptoms that a patient is experiencing is not due to the use of a substance (Hart et al., 2014).

If a patient is experiencing a hypomanic episode, it could affect their social interactions, making them closed off or wanting to keep to themselves (Hart et al., 2014). On the contrary, if a patient is not fully diagnosed with a hypomanic episode because their symptoms are not severe enough, but they are experiencing a small number of symptoms to make them change moods, they may be more prone to be more social and active in social environment (Hart et al., 2014). A patient that is experiencing less severe symptoms and then moves completely into a hypomanic episode does show significant impairment versus going from no symptoms or “asymptomatic” to less severe symptoms or “subsyndromal” (Hart et al., 2014).

When a hypomanic episode is not recorded or recognized, this causes a large portion of misdiagnosis of bipolar disorder (Hart et al., 2014). This happens because hypomanic symptoms are comparable to normal behavior in some individuals. Those behavior traits could be friendliness, happiness, high worth productivity, high energy, or being very outgoing (Hart et al., 2014). Since these symptoms may cause an individual to just think they are having a good day, it often means that they go untreated for hypomania, making it harder to diagnose (Hart et al., 2014). An individual with bipolar disorder that is experiencing a hypomanic phase may seem to be in “good mental health”, causing them to not seek help and causing their peers to not recognize their behavior as strange or irritable (Hart et al., 2014). Since hypomania can be so hard to diagnose based on just the individual’s symptoms, doctors are urged to look into more sectors other than their symptoms such as family history, peers’ observations, and different traits the individual may present (Hart et al., 2014).

DSM-5 Criteria based on Episode - Major Depressive Episode

A major depressive episode in a bipolar patient is described as a time of at least 2 weeks of being in a depressed state or markings of a depressed state which can also be referred to as “anhedonia” (Hart et al., 2014, p. 75). According to the American Psychiatric Association, a patient may seem “monotone” in their feelings or expressions, their desire for pleasure is lacking or non-existent, or they are very hopeless or discouraged in their attitude towards life (Hart et al., 2014).

The criteria for a major depressive episode is composed of four different things that an individual must be experiencing to be diagnosed. The first criteria is that the individual must experience five or more of the following symptoms during the 2 week period along with symptoms of either “depressed mood” or “loss of interest of pleasure”: depressed for a large majority of the day for most every day of the episode that is recognized either by the individual or people around them, recognizable disinterest in pleasurable activities for most of the day and nearly every day of episode, weight loss or loss of appetite/ weight gain for most of the day and nearly every day of the episode, insomnia (lack of sleep) or excessive daytime sleepiness nearly every day of the episode, “Psychomotor agitation” that is recognizable by others and lasts nearly every day of the episode, no energy or fatigue nearly every day of the episode, feelings of guilt or worthlessness (which could cause delusion) nearly every day of the episode, lack of being able to think clearly or concentrate nearly every day of the episode, suicidal tendencies or thoughts of death (Hart et al., 2014, p. 76). The second criteria are that the symptoms that the patient is having is causing recognizable social impairment (Hart et al., 2014). The third criteria are that the episode is due to the use of a substance or any other medical conditions (Hart et al., 2014). The fourth criteria are that the episode does not fall under jurisdiction of any related schizophrenia related disorder or other psychotic disorder that may not be classified under a particular area (Hart et al., 2014).

Symptoms for a major depressive episode may be easier to point out and recognize than those of mania or hypomania, since they do include many symptoms that can be visible to others (Hart et al., 2014). Studies show that most individuals that are diagnosed with bipolar disorder are often diagnosed based on a major depressive episode, meaning that was the episode they were experiencing versus being manic or hypomanic (Hart et al., 2014). This can cause issues in properly diagnosing a patient and can complicate treatment for the patient (Hart et al., 2014). Studies also show that individuals diagnosed with bipolar disorder spend more time in a major depressive state than in a manic/hypomanic state, four times more likely to be exact (Hart et al., 2014).

Global Assessments

Global Assessment of Functioning (GAF)

As mentioned previously, the DSM-5 gives us criteria to look for in patients with bipolar disorder to determine which phase or episode they may be going through. One of the main functions of the DSM-5 is to provide global assessments of a patient and their previous, current, and future functioning as related to their disorder or illness (Vieta, 2010). Global assessment can be hard and has been argued to not be effective due to the ever-changing state of mental disorder in patients, for the purposes of the research conducted, these scales are important to understand the kinds of functioning a bipolar patient may experience and can help determine the severity of the effects that this disorder is having on a patient.

One rating scale used is called the *Global Assessment of Functioning* (GAF;Vieta, 2010). GAF mainly uses the social, psychological, and occupational functioning of an individual, excluding the disabilities (physical) or impairments that a patient may suffer from, to determine the functioning of the individual and helps determine treatment options for the patient (Vieta, 2010). One thing that the GAF examines is the previous "levels of functioning", meaning they assess the highest point of functioning in the past year (Vieta, 2010, p.4). This assessment can also be used to look at previous functioning versus present functioning, such as when a patient was hospitalized and then again when they were discharged, to help them figure out the best strategy to treat the patient (Vieta, 2010).

The GAF has an assessment score (point system) of 0-100 to determine the level of functioning that a patient is at (Vieta, 2010). With this point system, the higher the points, the higher level of healthy functioning is seen in a patient dealing with said disorder; the lower the points, the more severe the patient is functioning with their diagnosis with said disorder (Vieta, 2010). The score is recorded on an axis, with the total score followed with the time-period in which this score was recorded (Vieta, 2010). For example, if a patient has a score of 47 for the current functioning, it would be reported as: GAF = 47 [current]. If one wanted to record a previous functioning score, say from the past year, it would be reported as: GAF = 89 [median level of past year].

This test can be a bit tricky and often may cause limitations in the information it can provide when looking at it from the lens of bipolar disorder. If a patient's functioning is interrupted from mania, hypomania, or a depressive phase, the GAF cannot give any indication of that cause (Vieta, 2010). That is why testing over a long period of time can be difficult to determine progress, or the lack thereof, in bipolar patients, especially those experiencing rapid cycling, because a patient's functioning levels can fluctuate so much in the time span of one year that it can cause misleading information or non-accurate findings (Vieta, 2010). Although the testing and assessing of patients with bipolar disorder can be challenging, the GAF does provide a basic functioning assessment that can help determine more "pure and sensitive measurement of functioning outcomes" (Vieta, 2010, p.5)

Clinical Global Impression (CGI)

Another highly used and integrated assessment test is called the *Clinical Global Impression of Guy [4]* (CGI of Guy [4]; Vieta, 2010). This test is composed of three assessment scales: the severity of the disease, change within the patient, and the "therapeutic index" of the patient which is described as the effectiveness of the treatment of a particular drug that the patient has been prescribed and any side effects experienced by the patient at the time of use (Vieta, 2010, p. 3). Some felt as though the normal CGI was too broad or generalized, and not reliable or valid for the proper assessment of bipolar patients. In response, they developed a *CGI for Bipolar Disorder (CGI-BP)* that is specifically used to assess patients with bipolar disorder. CGI-BP was developed in order to accurately assess bipolar disorder by assessing depression, mania, and bipolar disorder as a whole, while also examining the effectiveness and efficiency of short-term treatment and actions taken to prevent the disorder (Vieta, 2010).

The CGI-BP is made up of three rating scales: the severity of the disorder, the change in the severity of the disorder when compared with previous factors, and the changing in the severity of the disorder when compared to the more severe phase of the disorder in the patient's history (Vieta, 2010). Each of these scales have seven categories, with a rate in which determines the severity of the patient's functioning, 1 being "normal, not ill" and 7 being "very severely ill" (Vieta, 2010, p. 5). There is also an improvement scale with 7 categories, 1 being "very much improved", 7 being "very much worse", and 4 being the mid-range with "no change" (Vieta, 2010, p.5).

While the CGI-BP was an improvement from the previous CGI in terms of examining bipolar disorder, they have since made a new version called *Clinical Global Impressions for Bipolar Disorder, Modified Version* (CGI-BP-M; Vieta, 2010). This new modified version is made up of three assessment rates which look at the severity "over time" of: the short-term symptoms of mania, the short-term effects of depression, and bipolar disorder in general (Vieta, 2010, p. 6). The CGI-BP-M provides a more accurate assessment of the change in a bipolar patient compared to the original CGI, allowing for more reliable information to come from the assessment (Vieta, 2010). CGI-BP-M also uses a seven-point category system to determine the severity of the disorder (Vieta, 2010). If a patient is experiencing a mixed state, the test would take the highest two scores recorded during the manic and depressive state to make a median number to provide for the assessment (Vieta, 2010).

The assessment criteria are broken down into seven numbers that a doctor or physician would fill out based on their assessment of the patient. There are three different categories to fill out a number for: general, mania, depression (Vieta, 2010). For each category, they would select a number 1-7 to determine the severity of the functioning of the patient. Each number is a degree of seriousness and the doctor or physician would simply check the box of the number that best describes their assessment of the patient. The question asked at the top of the questionnaire is "Considering your experience with bipolar patients, how serious is this patient's disease?", with each number that they could select as the following: 1 is "Normal", 2 is "Minimum", 3 is "Mild", 4 is "Moderate", 5 is "Pronounced", 6 is "Serious" and 7 is "Very serious" (Vieta, 2010, p. 7).

Detection and Rating Scales Based on Type of Bipolar

Bipolar 1 - Detection and Determination: Mood Disorder Questionnaire

The prevalence of bipolar disorder has drastically changed over time, going from an average of 1-2% to now an average of 5-7% (Vieta, 2010). There are a few reasons that this has occurred. One, there is an increase in recognition and awareness of bipolar disorder and the effects it has on patients. Second, bipolar disorder as a whole is more accepted as a broad term, meaning there can be different variations of bipolar disorder, which is known as the "bipolar disorder spectrum" (Vieta, 2010, p. 9). Since using a broader range of criteria, the prevalence rate has increased, meaning that the percentage of bipolar patients would increase (Vieta, 2010).

With the increase of prevalence can also come the increase in misdiagnosis or the lack of diagnosis in a patient. To accurately diagnose a patient with bipolar disorder, there is a tedious process that helps distinguish a patient with major depressive disorder (unipolar) and bipolar depression disorder. A thorough search and examination of family history, the onset of diagnosis, frequency of occurrences, history of depression or mania, presence of psychosis of any form, and the duration of symptoms are just a few things that should be looked at in a patient (Vieta, 2010, p. 11). The reality is though that the likelihood of all those things being examined and properly assessed is slim, if at all, due to the business of physicians or limited time they can offer. Due to these circumstances, there are resources available to help assess, that takes a small amount of time but with high accuracy.

One of the resources that provide results in a timely manner and high accuracy rate is the *Mood Disorder Questionnaire* (MDQ; Vieta, 2010). The MDQ is a screening test to help diagnose bipolar disorder, but cannot distinguish between the types of bipolar disorder, but is often "most sensitive at detecting bipolar disorder (Vieta, 2010, p. 12). This test should not be used as the primary source of diagnosis but as a starting point for correctly diagnosing a patient. It typically only takes 5 or so minutes to complete and should be completed by a clinic or physician (Vieta, 2010). The MDQ has three components: a checklist of symptoms, questions to determine if any symptoms occurred within a specific time frame, and an evaluation of impairments that may have caused certain functioning (Vieta, 2010, p.12).

The checklist is 13 "yes" or "no" questions that stem from the criteria of the DSM-4 (Vieta, 2010). The checklist of questions starts off with the main questions being, "Has there ever been a period of time when you were not your usual self and…", followed by 13 questions that revolved around manic or depressive stages of bipolar disorder (Vieta, 2010, p. 15). Some examples of the questions asked are: "...you felt much more self-confident than usual", "...thoughts raced through your head, or you couldn't slow your mind down?", or "...spending money got you or your family in trouble?" (Vieta, 2010, p.15). The results from the questionnaire provide statistics that help determine the accuracy of this test and if the information collected was sufficient to give an initial diagnosis, as it has been used all over the world to help properly diagnose a patient who shows symptoms of bipolar disorder. While this is not the only test used, it is highly recommended and rated among the best.

Bipolar 2 - Detection and Determination: Bipolar Spectrum Diagnostic Scale

Bipolar 2 disorder is often viewed as the less severe version of “manic-depressive illness” due to the less frequent episodes, functionality of the impairments, and milder suicide tendencies (Vieta, 2010, p.17). Since bipolar 2 tends to have more hypomanic features, it uses a different scale to help diagnose patients that may suffer from bipolar 2 versus bipolar 2 (Vieta, 2010). Instead of using the MDQ, they use a scale called the *Bipolar Spectrum Diagnostic Scale* (BSDS; Vieta, 2010). This kind of evaluation is used in order to “capture the more subtle features of bipolar 2 disorder” (Vieta, 2010, p. 18). This scale looks at 19 features of a “narrative” that could occur in a patient that has bipolar disorder (Vieta, 2010, p.17). The patient will read all 19 features before making any markings or ratings (Vieta, 2010). They will then choose between 4 phrases that best identify how the narrative made them feel. For example, a patient may choose to check the box that says “This story fits me very well, or almost perfect” if they felt like the narrative described them well (Vieta, 2010). Once the patient has read and evaluated their answers those can be used to evaluate the likelihood that a patient is dealing with bipolar spectrum disorder (Vieta, 2010).

The scoring systems of the BSDS is what helps a patient determine how severe their phases and symptoms are to help navigate a diagnosis. The scores for bipolar spectrum disorder in the BSDS are as follows: 0-6 is “highly unlikely”, 7-12 is “low probability”, 13-19 is “moderate probability”, and 20-25 is “high probability” (Vieta, 2010, p. 18). The optimal score for cut off is 13, meaning that there is “balance of sensitivity and specificity”. This number is used to identify the “caseness” of the patient and figure out how to best treat a patient below or above this number (Vieta, 2010, p.18). This test should be used as a preliminary source of diagnosis, not the primary source, which could be the DSM-5 or full diagnostic testing and family history studies on a patient (Vieta, 2010).

Detection and Rating Scales Based on Phase of Bipolar - Depression

Patients tend to show depressive symptoms as a sign of bipolar disorder before they show manic symptoms. Research shows that 60% of patients that have bipolar disorder originally presented signs of depression at onset (Vieta, 2010). Since major depressive phases can have such a large impact on a patient's life, rating scales are often used to help aid in correct diagnosis, recognition of symptoms, and proper treatment (Vieta, 2010). Depression phase scales are often much easier to come by and easily recognized in their work with unipolar disorder (Vieta, 2010). Research shows us that there are two main scales used when trying to evaluate a depression phase of bipolar disorder.

Beck Depression Inventory (BDI) [4]

The first scale that is widely known and used is the *Beck Depression Inventory* (BDI [4]; Vieta, 2010). Originally debuted in 1961, the BDI is the "oldest depression-rating scale" still used today, mainly in clinical trials (Vieta, 2010, p. 23). Originally created to help evaluate depressive symptoms in "psychotherapy patients", the BDI highly relates to cognitive symptoms as 33% of the material evaluated has to do with cognitive, compared to only 14% relates to mood symptoms Vieta, 2010, p.23). It has been proven effective in determining a patient's depressive symptoms, helping diagnose a patient as "depressed or nondepressed" (Vieta, 2010, p. 23). While it is highly recommended to use to determine treatment, it is not as effective in determining how severe a certain depressive episode is (Vieta, 2010).

The BDI contains 21 questions that a patient can self-examine, that takes about 10 minutes to finish (Vieta, 2010). Each category contains four statements that describe the severity of the symptom that would be experienced during a depressive state, with each "subsequent statement" becoming more severe in nature (Vieta, 2010, p. 23). The patient then chooses the most accurate statement out of the four choices that best relates to how they have felt in the past week (Vieta, 2010). The statements are rated on a scale of 0 (normal) to 3 (highest severity), which means that the highest score that can be attained is a 63 (Vieta, 2010). A score of an 18 or higher is a telling statement of present depression or a depressive phase (Vieta, 2010). Each score category has its own comment. For example, the scoring category of 11-16 would be considered "mild mood disturbance" but a scoring category of 31-40 would be considered "severe depression (Vieta, 2010, p.24). Through research, it was found that patients who scored higher on the BDI suffered with more frequent depressed episodes, compared to patients that have more mixed or manic episodes (Vieta, 2010).

Montgomery and Asberg Depression Rating Scale (MADRS) [9]

The second rating scale that is highly recommended and reliable is the *Montogomery and Asberg Depression Rating Scale* (MADRS [9]; Vieta, 2010). The MADRS is a scale of 10 items that is given by a trained professional that will take anywhere from 15-20 minutes (Vieta, 2010). It has been used in a variety of ways, whether it be in studies for treatment or clinical trials of medication and the assessment of symptoms over time (Vieta, 2010). The scale includes these 10 items;" reported sadness, apparent sadness, reduced sleep, inner tension, concentration difficulties, reduced appetite, inability to feel, lassitude, pessimistic thoughts, and suicidal thoughts" (Vieta, 2010, p24). Each item has a score of 0-6, with the maximum score being 60 (Vieta, 2010). This test is easily administered and navigated by physicians and professionals, so it makes it an attractive tool to use in order to properly diagnose and treat someone who is suffering from depression or a bipolar depression disorder (Vieta, 2010).

Detection and Rating Scales Based on Phase of Bipolar - Mania

It is important to properly screen patients when trying to determine if they have bipolar disorder. Once a patient has received a proper diagnosis and has been identified as having bipolar disorder, it is a necessary step to confirm the diagnosis by using reliable and recognizable criteria (Vieta, 2010). If a patient shows symptoms of a hypomanic or manic phase, using a rating scale can help confirm the diagnosis and look at how severe the symptoms are that the patient is experiencing (Vieta, 2010). Another way that rating scales help assist in a bipolar patient's diagnosis and aid is it helps determine the effectiveness of "therapeutic interventions" (Vieta, 2010, p.27). There are a few scales that are highly recommended and widely used by medical professionals to help assist in diagnosis of bipolar disorder.

Clinician-Administered Rating Scale for Mania (CARS-M) [4]

One rating scale that is used with patients that show signs of mania is the *Clinician-Administered Rating Scale for Mania* (CARS-M [4]; Vieta, 2010). This scale has many uses: assisting in diagnosing by "identifying the presence of manic symptoms", assessing how severe the manic episode is/was, and examining the response that the patient has to "antimanic treatment in clinical trials" (Vieta, 2010, p. 27). The CARS-M is made up of 15 items that are assessed using information from the past 7 days of the patient's life, taking anywhere from 15-30 minutes to complete (Vieta, 2010). Most of the items are rated on a scale from 0 to 5, except the subscales of mania and psychosis, which are scored separately (Vieta, 2010). This rating scale has high reliability and validity and is used across all "major diagnostic categories" such as schizophrenia, major depression or bipolar disorder (Vieta, 2010, p. 28).

Young Mania Rating Scale [4]

The most common and usable rating scale for patients experiencing manic episodes is called the *Young Mania Rating Scale* (YMRS [4]; Vieta, 2010). This rating scale has been used in various clinical settings, making it a valuable source to use while also making the longevity of this test reliable (Vieta, 2010). This scale is composed of 11 items that examine the severity of the manic symptoms presented in the patient. The responses of the patient should be their experiences in the last 48 hours of the test being administered (Vieta, 2010). An “interviewer” administers the test to the patient and makes a score for each item based on the subjective response of the patient and the observations made by the interviewer (Vieta, 2010). The YMRS takes approximately 15-30 minutes, and each item is usually scored on a scale of 0 to 4 (Vieta, 2010). The 11 items include: “elevated mood, increased motor activity energy, sexual interest, sleep, irritability, speech, language-thought disorder, content, disruptive-aggressive behavior, appearance, and insight” (Vieta, 2010, p.30-32). There are 4 of the 11 items that are given “twice the weight of the other seven in an attempt to compensate for poor cooperation for severely ill patients” (Vieta, 2010, p. 29). These 4 items include: “speech, irritability, disruptive behavior, and speech” (Vieta, 2010, p.29).

The scoring of this scale is all determined by the patient's answers and the observations of the interviewer. The highest score that can be attained is 60 and the lowest score is a 0 (Vieta, 2010). Patients that score below 12 or below are “in remission” (Vieta, 2010, p.29). Although a score of a 12 is also in remission, it can also be used as a cut off for the diagnosis of hypomania, so “the absence of hypomania should not be considered the same as remission” (Vieta, 2010, p.29). In fact, more strict criteria have been used in previous studies, making the scoring a 7 or less to be considered “in remission” (Vieta, 2010, p.29). If a patient has a score of 20 or higher, they are usually recommended for more study and thorough diagnosis or treatment (Vieta, 2010).

One of the major setbacks of this scale is that it only examines manic symptoms, meaning there is nothing in this test examining depression, which can cause unrealistic numbers to an extent (Vieta, 2010). This test can also be very drawn towards the more severe kinds of cases of mania, so for a person experiencing hypomania, it could be non-educational to them (Vieta, 2010). This rating scale is very thought provoking and material heavy so that could also cause issues in a patient that is having racing thoughts or “disordered thoughts” (Vieta, 2010).

Detection and Rating Scales Based on Phase of Bipolar - Hypomania

Hypomania affects about 50% of bipolar depressive patients (Vieta, 2010). It can often go undiagnosed, resulting in overdiagnosis of major depressive disorder, meaning that patients are not receiving proper treatment and care needed to successfully treat their symptoms (Vieta, 2010). Research shows that all patients that are bipolar depressive should be screened for hypomania and that hypomania should be added as a specifier or more criteria in the DSM-5 (Vieta, 2010). Hypomania can be only one singular episode or can be a “fluctuating state”, meaning that testing can be hard depending on the patient and the severity of their symptoms (Vieta, 2010, p.33).

The Hypomania Checklist

There is a scale in which researchers have seen great success and validity in information obtained from the results. The scale is called *The Hypomania Checklist* (HLC; Vieta, 2010). This checklist is made up of 32 items that are self-administered that help detect bipolar 2 more easily and determine “components of depressive episodes” (Vieta, 2010, p.33). It is composed of 9 questions that help identify these things: usual mood when compared to others, current mood, the symptoms that occur when there is “higher” mood and examining the frequency and impacts it has on the individual (Vieta, 2010, p.34). It usually takes 5-10 minutes to complete (Vieta, 2010). This checklist helps keep the misdiagnosis of major depressive disorder to a minimum and it can also aid in helping diagnose patients who may suffer from minor versions of bipolar disorder, such as minor depression (Vieta, 2010).

Health Related Assessments

According to the *World Health Organization*, the sixth highest cause of disability in the world is bipolar disorder (Vieta, 2010). Bipolar disorder can have a very strong impact on a patient’s “quality of life” whether that be physically, socially, or in a work environment (Vieta, 2010, p.41). Research shows that bipolar disorder patients use more healthcare services than other patients suffering from depression or mental illness in general (Vieta, 2010). With the correct diagnosis, treatment, and oftentimes long-term aid, a patient will be able to function well as an individual in society, in a work environment, and have a greater quality of life in all areas directly or indirectly related to bipolar disorder (Vieta, 2010).

Quality of Life Index (QLI) [9]

Assessing a patient’s quality of life can be difficult, depending on all different kinds of circumstances and the “complex nature of the disease” (Vieta, 2010, p. 41). However, there have been some successful scales or assessments that have done and are being used today to help progress proper diagnosis and treatment. One of those is called *The Quality of Life Index* (QLI [9]; Vieta, 2010). This assessment is broken down into two sections. Part 1 of the assessment looks at the satisfaction factor of 33 different items (Vieta, 2010). Part 2 of the assessment looks at the “importance of each item to the individual” (Vieta, 2010, p.42). The scores are calculated by 5 different aspects: “family, psychological/spiritual, social and economic, quality of life overall, and health and functioning" (Vieta, 2010, p.42-43). The QLI is a self-given assessment that takes roughly 5-10 minutes to complete (Vieta, 2010). The QLI is a reliable and valid source to be used and has been used to produce multiple other assessments for other disorders (Vieta, 2010).

32-Item Behavioral and Symptom Identification Scale

Another highly used assessment is the *32-item Behavioral and Symptom Identification Scale* (BASIS-32 [11]; Vieta, 2010). This scale is "self-reported questionnaire that evaluates change in symptoms and problems over the course of treatment" (Vieta, 2010, p. 43). This test is typically used in patients that have been hospitalized, administered to them at check in and again at discharge (Vieta, 2010). However, it can be used to help with both inpatient and outpatient cases (Vieta, 2010). This assessment is made up of 32 items that examine the severity of symptoms and "degree of difficulty" that patients may have experienced certain symptoms in the previous week (Vieta, 2010, p. 43). The category of items would relate to the following: "depression and anxiety, relation to self or others, daily living, psychosis, and compulsive or addictive behavior" (Vieta, 2010, p.43). Each item is then put on a five-point scale to be measured to the degree of severity to the patient (Vieta, 2010).

20-Item Short Form Health Survey

Another resource that was highly suggested and a condensed version of a longer assessment was the *20-Item Short Form Health Survey* (SF-20 [8]; Vieta, 2010). The SF-20 is the "self-rated" assessment with the intent to not feel as "heavy" or "burdensome", but more of a comparison of different areas of life that could be affected due to the fact of their bipolar diagnosis, while giving insight to "health dimensions" (Vieta, 2010, p. 42). There are six main areas of life that are examined: "social functioning, physical functioning, role functioning, current mental health, mental health, and pain" (Vieta, 2010, p.42). This test can be done over the phone and is typically done within 5-10 minutes (Vieta, 2010).

Assessment based on pediatric bipolar disorder

When looking at the importance of proper assessment in patients with bipolar disorder, it is important to look at the assessments taking place in pediatric patients. Research shows that children are severely under diagnosed and under-represented in research statistics (Vieta, 2010). Statistics show that 20% of patients that are diagnosed with bipolar disorder had their first episode at 19 years old or younger, meaning that most of these people were most likely not properly diagnosed and assessed until later in life (Vieta, 2010).

However, there can be many hurdles when trying to assess this age range due to the ever-changing mood swings in children, but also taking into consideration other disorders that a child may be diagnosed with, such as attention deficit hyperactivity disorder (ADHD; Vieta, 2010). According to research done on both bipolar disorder and ADHD, many children are misdiagnosed with ADHD that are actually bipolar due to the similar symptoms of an episode (Vieta, 2010). That is why there is a large emphasis on properly diagnosing and assessing children or adolescents that suffer from bipolar disorder, especially from a clinical perspective (Vieta, 2010). There are some screening tests and scales that are helping "distinguish bipolar disorder from other psychiatric conditions frequently encountered in this age group" (Vieta, 2010, p.47).

The Child Behavior Checklist (CBCL) [6,7]

One of the scales that is used in screening patients on their behavior, emotions, and any psychiatric functioning is the *The Child Behavior Checklist (CBCL) [6,7]*, which also serves as an assessment tool to analyze a child's social functioning and behavior (Vieta, 2010). This test has been proven to be reliable and has a high validity rating, especially from parents who suffer from bipolar disorder (Vieta, 2010). This assessment has given parents an ease of knowing if their child may one day encounter issues with bipolar disorder and having the resource readily available has been very useful in creating a culture of assessment and proper diagnosis (Vieta, 2010).

The checklist can involve the parents by allowing them to assist their child, or they can choose to have a professional assist in administering the assessment (Vieta, 2010). This test takes about 15 minutes to complete and has 2 main components: competence of the child and emotional/behavioral problems that the child has shown in the past 6 months (Vieta, 2010). This test has a total of 140 questions, each one being worth 0,1, or 2 points depending on how much that question relates to the symptoms the child is showing (Vieta, 2010). The CBCL helps determine emotional/behavior issues in 8 different categories: “delinquent behavior, somatic complaints, attention problems, social problems, aggressive problems, anxiety/depression, withdrawn, and social problems” (Vieta, 2010, p.48). This scale is often used to try and diagnose bipolar but does serve more of a role to assess the behavior changes in a child, thus resulting in more extensive testing (Vieta, 2010).

Some other tests and scales do exist to help assess young patients with bipolar disorder, but the resources compared to those of adults are very discouraging to most families and patients. Research is ever changing and the use of technology to help improve testing is ever growing, but families can still become discouraged in the attempt to get help for their child. Bipolar disorder in a child or adolescent can look very different than that of an adult, making it seemingly more difficult for research to accurately show tangible ways of helping a child. However, with continued research and willing participants, more resources can be available to patients of all ages, but especially at the vulnerable ages that children and adolescents face.

Assessment of suicidality

Unfortunately, suicide attempts and suicidal tendencies play a major role in bipolar patients and are often not assessed enough to help patients realize their need for help or the severity of their symptoms. Approximately, anywhere from 21%-54% of patients that have bipolar disorder have or will attempt suicide or have suicidal tendencies (Vieta, 2010). Research also shows that patients who suffer from suicidal idealization have an increased rate of death from suicide (Vieta, 2010). Research shows that suicidal tendencies tend to be much worse during a depressive episode than in a manic or mixed episode, due to the nature of the depression that is occurring during this phase (Vieta, 2010). Statistically, men with bipolar disorder have lower rates of suicidal attempts than women do but a higher rate of suicidal success than women do (Vieta, 2010). Research also shows that suicidal death rates of bipolar disorder patients were highly related to substance use/abuse (Vieta, 2010). Therefore, it is vital that patients be properly assessed, in order to reduce the rates of suicidal deaths and promote healthy lifestyles and boundaries (Vieta, 2010).

Columbia Classification Algorithm of Suicide Assessment (C-CASA)

One assessment that is often used to help determine the severity of suicidal idealization in a patient is the *Columbia Classification Algorithm of Suicide Assessment (*C-CASA; Vieta, 2010). The C-CASA helps determine if actions or events that a patient is experiencing or has experienced in the past that are considered “non-suicidal, indeterminate, or potentially suicidal” fall within any of these 8 categories: “not enough information, intent unknown, no deliberate self-harm, suicidal ideation, preparatory acts, suicide attempt, or completed suicide” Vieta, 2010,

p. 78). This assessment has been used in various pharmaceutical clinical trials and has been used to better gage the events that are resulting in suicidality (Vieta, 2010). With this test and its explanation of each category, it provides accurate and reliable information for research (Vieta, 2010).

Treatments

We have seen the importance of understanding what bipolar disorder is, how it affects a patient depending on what stage they may be experiencing, and how vital it is that a patient is correctly diagnosed. The next step in making sure the patient is being properly taken care of is correctly treating them in the most effective way for them. Finding the proper treatment can, however, be complex in nature and that can cause issues figuring out the correct method to pursue when trying to help a patient. Research has shown various outcomes of different methods taken but the ones that have worked the best for most patients are medications, therapy, and when necessary, hospitalization.

Medication - Drug Treatment

Patients with bipolar disorder have a chemical imbalance in their brain that causes them to experience life differently from most (Abramovitz, 2012). This means that often drugs are used to correct those imbalances and create a healthy way of life (Abramovitz, 2012). Depending on the patient, it could only take one medication, or it could be a combination of medicines that help achieve success when trying to treat bipolar disorder (Abramovitz, 2012). It can be tricky in that a patient’s body can change in how it reacts to a medicine over time, so it is important that medication be monitored and controlled throughout the patient’s life (Abramovitz, 2012). Medicine or drug treatment is an ongoing process that a bipolar patient will deal with for most of their life (Abramovitz, 2012).

Types of Medication - Mood Stabilizers

Mood stabilizers are the most used drug for bipolar patients, both short term and long term (Abramovitz, 2012). The most common mood stabilizer, also known to be the oldest and most effective, is "lithium" (Abramovitz, 2012, p.47). Some brand name drugs that are commonly prescribed that contain "lithium" are *Eskalith* or *Lithobid* (Abramovitz, 2012, p.47). Lithium is taken by approximately 60% of bipolar patients (Abramovitz, 2012). The way mood stabilizers work is that they slow down certain neuron receptors in the brain to allow "stabilization of the biological clock" (Abramovitz, 2012). Lithium is most used in patients that experience more manic phases or even just manic phase symptoms in general (Abramovitz, 2012). Lithium is also not normally used in patients that experience more mixed phases or rapid cycling, or consistent substance use related to bipolar disorder (Abramovitz, 2012). Even though lithium is used in a stricter sense than other medications, it is the only bipolar disorder related drug that has been proven by research to reduce suicide risks (Abramovitz, 2012).

One very controversial fact about lithium and mood stabilizers in general is that most of them have very unpleasant side-effects, such as hallucinations, bloating, tremors, memory issues, and many more (Abramovitz, 2012). It has also been known to cause issues in pregnant women but has recently been deemed as "the safest bipolar medication to use during pregnancy if medication is essential in a given case" (Abramovitz, 2012, p.49). While the side effects do steer patients away from lithium, physicians do urge the fact that the side effects will wear off and the amount that the patient is taking can be adjusted if the side effects do not ease up before the patient completely stops taking the medication altogether (Abramovitz, 2012).

Other commonly used mood stabilizers that are used to treat patients with bipolar disorder are often actually medications that are meant to treat epilepsy called "anticonvulsant drugs" (Abramovitz, 2012, p.49). The most used form of an anticonvulsant drug is called "valproic acid" or sometimes also called "valproate or divalproex" (Abramovitz, 2012, p.49). This drug works in a way that reduces the activity of one enzyme and increases the activity of another enzyme, causing "neuron firing" to slow down (Abramovitz, 2012, p.49). It has been proven that most patients say they can tolerate valproate better than lithium, and even some patients have had success with the combination of the two medicines taken together (Abramovitz, 2012). There are side effects that have caused concern to patients, such as "an increase in testosterone", causing other medical problems down the road, but most patients have found success in these drugs (Abramovitz, 2012).

Other widely known anticonvulsants that has been approved to treat bipolar disorder are: "*Lamictal* (lamotrigine), *Neurontin* (gabapentin), *Topamax* (topiramate), *Tegretol* (carbamazepine)*, and Trileptal* (oxcarbazepine)*"* (Abramovitz, 2012, p.50). These mood stabilizers are known for not being as effective or aggressive as "lithium" or "valproate", but they are provided for patients that cannot handle those other medications (Abramovitz, 2012, p.50). In a study completed in 3 separate years (2003, 2004, and 2009), *lamotrigine* was seen to be more effective than lithium when looking at it as a drug to help prevent a relapse of a depressive phase or rapid cycling (Abramovitz, 2012). The drugs mentioned can cause drowsiness and other side effects that are all properly labeled (Abramovitz, 2012). These medicines can also cause an increase in suicidal thoughts coincidentally, so they are also advised on treatment bottles to consult with a medical professional about stopping medicine if that were to occur (Abramovitz, 2012).

Types of Medication - Atypical Antipsychotics

Atypical Antipsychotics are usually used to treat schizophrenia but have become an option for treatment of bipolar disorder, used both as a primary treatment and as a mood stabilizer depending on the severity of symptoms (Swartz & Suppes, 2019). Normally, these drugs are most effective for patients experiencing a manic phase, but recent developments have proven to show that these drugs can also be effective as being a “maintenance treatment for bipolar disorder” (Swartz & Suppes, 2019, p.170). Atypical antipsychotics have changed the way that bipolar disorder can be managed in a variety of ways. First, it has allowed for safe drugs to be used to properly treat bipolar disorder (Swartz & Suppes, 2019). Second, there have been many successful experiences with these drugs used in schizophrenia patients, resulting in “short-term and long-term results, suggesting that they constitute a safer alternative to typical drugs used” (Swartz & Suppes, 2019, p.171). Third, these drugs create more positive therapeutic responses than other typical drugs used (Swartz & Suppes, 2019). Fourth, some atypical medicines have shown mood stabilizing properties, thus making it a safe option for bipolar patients to try (Swartz & Suppes, 2019). Although these drugs do have a high success rate, they are mainly used to treat bipolar 2 disorder, as results for treating bipolar 1 disorder were not successful (Swartz & Suppes, 2019).

One of the proven atypical antipsychotics to help treat bipolar 2 disorder is called *quetiapine* (Swartz & Suppes, 2019). *Quetiapine* was the very first atypical drug that was FDA approved to help treat bipolar 2 disorder, especially bipolar depression (Swartz & Suppes, 2019). Research shows that even though there have no specific facts that *quetiapine* is more effective in bipolar 2 disorder, many clinical trials have seen that bipolar 2 patients respond better and have greater results than bipolar 1 patient (Swartz & Suppes, 2019). The FDA approved this drug to be a “maintenance treatment for bipolar 2 disorder” and has been proven to help patients avoid “depressive relapses over the long term in patients with bipolar depression” (Swartz & Suppes, 2019, p.173). With every drug comes side effects and/or concerns. *Quetiapine* could cause weight gain, sedation, or other “extrapyramidal symptoms” (Swartz & Suppes, 2019, p.172). However, this drug is the only drug that has significant success and shows great efficiency in treating bipolar 2 disorder.

Another highly reliable atypical drug used for treatment for manic phases or manic patients is *risperidone* (Swartz & Suppes, 2019). This drug has been used more for patients experiencing the hypomanic phase more than a depressive stage (Swartz & Suppes, 2019). It also has shown greater results in long-term treatment in preventing manic episodes but not necessarily depressive episodes (Swartz & Suppes, 2019). One other drug that has been FDA approved and is used in treating bipolar 1 disorder is *Lurasidone* (Swartz & Suppes, 2019). This drug has been used to treat bipolar 2 disorder, due to the lower risk in side effects, making it a “very reasonable option” for treatment (Swartz & Suppes, 2019, p.174).

Types of Medication - Antidepressants

Research shows that antidepressants are not reliable, nor effective, in treating bipolar disorder (Swartz & Suppes, 2019). They are known for making a patient go into a hypomanic or manic phase, resulting in more issues for the patient (Swartz & Suppes, 2019). No clinical trials have shown significant success in using antidepressants to treat bipolar disorder (Hart et al., 2014). However, some studies have shown that antidepressants can “help manage depressive episodes far better than mood stabilizers” which causes question whether a patient should be prescribed an antidepressant to treat bipolar disorder (Abramovitz, 2012).

Concerns with Drug Therapy

There are concerns with using drugs as the main source of treatment in bipolar patients. One of the largest concerning factors is that not all bipolar approved medications are necessarily approved for all ages (Abramovitz, 2012). For example, no drug is approved for children under the age of ten, and most medicines are going to affect a child differently than they would an adult, resulting in mixed reviews of medications (Abramovitz, 2012). Another large concern for using medications for treatment is that there are not any bipolar disorder drugs that are approved for pregnant women (Abramovitz, 2012). This is in result to the fact that these medications can cause birth defects or make the women become considered “high-risk” (Abramovitz, 2012, p.54). Although these medications could cause complications in pregnancy, most women choose to stay on their medications because they believe that the effects from going into a manic or depressive phase could have harsher consequences (Abramovitz, 2012). Another concern that medical professionals are facing is that drugs take a while to get into a patient's system, causing long-term care to not seem as effective to patients (Abramovitz, 2012). Most drugs take weeks to get into a patient's system, which can often result in a patient to stop taking their medication because they feel like it is not working (Abramovitz, 2012).

One of the largest concerns with drug therapy is that studies show that 50% of patients stop taking their medication at some point of treatment due to a variety of reasons (Abramovitz, 2012). The most likely to stop taking their medication are young men who abuse drugs or alcohol (Abramovitz, 2012). Research has shown that someone who stops taking their medications and eventually starts taking them again will not respond as well the second time (Abramovitz, 2012). Many patients have been known to take matter into their own hands and try more “natural” forms of medicine, such as herbal products (Abramovitz, 2012, p.56). Medical professionals have advised against this since some of these products could be “harmful, dangerous, and not effective” (Abramovitz, 2012, p.56). These kinds of drugs can cause a person to experience more cycling between phases, causing more health issues such as high blood pressure or headaches (Abramovitz, 2012). Many studies have shown that drug therapy may not be as effective as other options, resulting in patients and medical professionals working together to find the best solution regarding treatment.

Psychotherapy

Medications are often thought of as the first source of treatment for bipolar patients, but studies have shown that psychotherapy has been proven to be more effective, especially if combined with medication for treatment (Abramovitz, 2012). Psychotherapy can involve a variety of things. One of the main sources of psychotherapy is talk therapy. This involves a patient seeking help from a medical professional such a “psychiatrist, psychologist, one is licensed to provide psychotherapy, but not to prescribe medication, counselor, social worker, or a psychiatric nurse” (Abramovitz, 2012, p.56). One form of talk therapy is called “cognitive behavior therapy” and it is one of the most common forms of psychotherapy used in bipolar patients (Abramovitz, 2012, p.56). Cognitive behavior therapy is a form of therapy that helps a patient examine “negative thoughts and behavior patterns” and helps them see how those things can be harmful to them and their treatment (Abramovitz, 2012, p.56).

Another form of therapy includes “psychoeducation” (Abramovitz, 2012, p.57). This form of therapy helps educate the patient about bipolar disorder, while helping them understand every aspect of how this disorder may affect them or their families and loved ones, and the various areas it affects their daily life (Abramovitz, 2012). This helps them “better manage the disorder and recognize impending signs of relapse” (Abramovitz, 2012, p.57). One largely used program of psychoeducation is called *Bipolar Care Model* (Abramovitz, 2012). This combines the use of psychoeducation that is provided by a medical professional and medication that is provided by a psychiatrist to help the patient “take an active role in managing their illness” (Abramovitz, 2012, p.57).

One form of psychotherapy that is more specific to bipolar patients that suffer with drug use is outpatient counseling or rehabilitation (Abramovitz, 2012). Patients can benefit from a therapy group setting within a clinic, such as “Alcoholics Anonymous” (Abramovitz, 2012, p.58). The Depression and Bipolar Support Alliance has provided information that highly suggests that not treating substance abuse issues can reduce how effective any treatment could be for a bipolar patient (Abramovitz, 2012). However, they do recommend that patients be very guarded and choose wisely the program they choose to be involved in, because some of the programs can encourage patients to stop taking all medications, even those that have been prescribed by a medical professional (Abramovitz, 2012). This can cause long-term effects for a patient, such as withdrawal or harsher side effects (Abramovitz, 2012).

Another form of therapy that has been proven to be effective and reliable is called “electroconvulsive therapy” (Abramovitz, 2012). This type of therapy is often the result of psychotherapy and medication not working (Abramovitz, 2012). Electroconvulsive therapy is when a patient is lightly sedated by general anesthesia and a muscle relaxer. They then have a headband placed around their head that has electrodes placed on the inside that will administer an electric shock that will last approximately 60-90 seconds (Abramovitz, 2012). This will cause the patient to have a seizure that will last for approximately 60 seconds and then will recover within 15 minutes (Abramovitz, 2012). This type of therapy is usually administered 3 times a week, for up to 4 weeks (Abramovitz, 2012). This type of therapy is recommended by medical professionals because it “changes brain chemistry” (Abramovitz, 2012, p.60). This kind of therapy can be controversial due to the way the therapy is given, but research and medical professionals have proven that this kind of therapy is safe, effective, and “fast-acting” (Abramovitz, 2012, p.60). It does have side effects that may draw patients away from this form of therapy, such as memory loss or muscle spasms, but most of these side effects are short-term and subside quickly (Abramovitz, 2012).

Another form of therapy is referred to as “family focused treatment” which is a type of therapy that focuses on the effects that bipolar disorder in a patient can have on their family and how to best create stability within the family dynamic (Swartz & Suppes, 2019). This kind of therapy looks at the emotional impact that a bipolar patient may have on their family, and vice versa, while examining the link between the environment in which it is created for the patient and how that plays into their behavior (Swartz & Suppes, 2019). This kind of therapy is typically used in adults, but more studies are showing positive results among children as well (Swartz & Suppes, 2019).

Although there are many positive results of treatment, it can be hard to know the most effective kind for patients. This normally results in 50 % of people diagnosed with bipolar disorder not receiving any kind of treatment at all (Abramovitz, 2012). This can result in more severe manic or depression, cause more health issues in the long run and can cause higher suicide rates (Abramovitz, 2012). That is why finding a proper treatment plan is so important for a bipolar patient’s health and well-being. It is possible to have a “fulfilling life” while also living with bipolar disorder, the patient just must be proactive in taking the correct steps needed to achieve that (Abramovitz, 2012).

Conclusion

Bipolar disorder is a challenging disorder to understand and treat, especially when looking at the initial diagnosis, making sure it is correct and timely (Swartz & Suppes, 2019). Research plays a vital role in the further development of proper treatment for bipolar patients. The reality is this disease is real, raw, and very present to children, adolescents, adults, and elderly people across the world. The National Institute of Mental Health is actively trying to improve and call more attention to the development of research, support groups, problem solving, and many other forms of education to bring awareness to such a highly affective disorder (Abramovitz, 2012). It is important that research continues, educational resources stay available, therapy be provided, medication be available, and patients feel heard.

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