

## CHAPTER 1

# Introduction to Bipolar Disorder

Bipolar disorder (BD) is characterized by recurring episodes of depression and mania or hypomania. Although most people with BD experience both extremes of mood, the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013) requires only the presence of a single episode of mania to meet diagnostic criteria for BD Type I. There are different subtypes of BD, and these tend to be categorized according to the duration and intensity of the manic or hypomanic symptoms. Hence, in this chapter we first explain what constitutes a manic episode. Next, we discuss the different subtypes of BD in more detail and describe how depressive episodes fit within the diagnostic framework.

### MANIA: THE DEFINING DIAGNOSTIC FEATURE OF BD

“Mania” can be defined as a period of abnormally high mood. In a manic episode, individuals with BD experience an excessive sense of elation, excitement, or irritable mood, in conjunction with abnormally high energy levels or hyperactivity. They tend to demonstrate an increase in goal-directed activities that can escalate from being very productive (e.g., finishing a number of projects at work) to a state of constantly jumping between tasks. These two core features (elated/irritable mood and hyperactivity) are accompanied by a variety of other symptoms, including a subjective sense that one’s thoughts are racing; an unstoppable flow of ideas; feelings of overoptimism; and inflated self-esteem and grandiosity (a sense of superiority).

The high energy levels present in a manic episode are combined with a reduced need for sleep or even insomnia. Individuals often report sleeping little (e.g., fewer than 4 hours per night) without feeling tired. Other symptoms more likely to be noticed by others are distractibility, restlessness, and an accelerated speech rate, such that it can be difficult to interrupt a person in a conversation.

During a manic episode, an individual can appear more extroverted than usual or even disinhibited (e.g., being rude or lewd in a social situation). He or she may also engage in

pleasurable but risky activities, such as overspending, speeding, unwise promiscuity, or excessive drinking or drug taking. This can lead the person to damage close relationships, come into contact with the police or medical services, or incur significant debt. In addition, during an episode of mania individuals may experience psychotic symptoms, such as hallucinations or delusions, typically with a grandiose or paranoid content.

## **MANIA, HYPOMANIA, AND THE DIFFERENCE BETWEEN BD TYPES I AND II**

The presence of full-blown mania means that an individual meets the DSM-5 criteria for BD Type I (American Psychiatric Association, 2013). BD Type II is the diagnosis used in cases where individuals have experienced one or more hypomanic episodes, as well as at least one depressive episode. “Hypomania” refers to symptoms (lasting for at least 4 consecutive days) of abnormally high mood that are milder than the symptoms of full-blown mania; individuals’ usual mood and behavior may be altered, but they are still able to function in their everyday lives.

In reality, it is rare for individuals to experience mania only. Most individuals with BD also experience episodes of depression that alternate with episodes of mania or hypomania (in BD Type I) or of hypomania only (BD Type II). In fact, individuals with either type of BD tend to spend about three times longer in depressed than in manic or hypomanic mood states (Kupka et al., 2007).

## **DEPRESSIVE EPISODES**

Depressive episodes are characterized by depressed (low) mood, a lack of motivation, and an inability to enjoy or gain pleasure from usually enjoyed activities (“anhedonia”). Together with these core features, individuals with depression can experience: low energy levels; a disturbed pattern of sleep and appetite; difficulty making decisions; trouble concentrating; and memory problems. Individuals may appear to speak or move slowly, or alternatively may be restless and agitated. Moreover, a typical pattern of negative thinking is present, including feelings of guilt, hopelessness, and helplessness about the self, the world, and the future. Suicidal thinking and/or behavior may occur in more severe episodes of depression.

In comparison with unipolar depression, it has been suggested that in bipolar depression there may be an increased incidence of psychosis; more diurnal mood variation (typically, feeling worse in the morning but better as the day progresses); increased hypersomnia (excessive sleepiness); and a larger overall number of depressive episodes over time, but tending to have a shorter duration (Forty et al., 2008).

## **“MIXED FEATURES” IN BD**

Some individuals with BD also experience both manic and depressive symptoms concurrently in the same episode, or they may have rapid (even hourly) swings between mania and

depression. These experiences are known as “mixed features.” For example, an individual may appear restless and agitated, with accelerated thoughts, speech, and actions, but may still experience depressive cognitions and low mood.

## OTHER TYPES OF BD

Besides the more common BD Types I and II, other types of BD as defined by DSM-5 include cyclothymic disorder; substance-induced (e.g., by stimulants) or medication-induced (e.g., by corticosteroids) BD; BD due to another medical condition (e.g., hyperthyroidism); and other specified or unspecified bipolar and related disorder.

Cyclothymic disorder is a chronic condition of fluctuating mood disturbance involving numerous periods of hypomanic symptoms and numerous periods of depressive symptoms over a period of at least 2 years. However, in this subtype neither the hypomanic nor the depressive symptoms are severe or pervasive enough to meet full criteria for a hypomanic or depressive episode.

The diagnosis of “other specified bipolar and related disorder” is applied when the symptoms of mood disturbance are characteristic of one of the above-described types of BD, but *do not* meet the full criteria for any of these disorders. Examples include hypomanic episodes of fewer than 4 days or with insufficient symptoms. All of these manifestations also fall into the category of “bipolar spectrum conditions” (Geddes & Miklowitz, 2013). The label “unspecified bipolar and related disorder” is used when bipolar symptoms are present but there is not enough information to make a more specific diagnosis, or when a clinician chooses not to give the reasons for not making a more specific diagnosis.

## A NOTE ON BD AND DSM-5

The symptoms and features of BD vary hugely from individual to individual (Nandi, Beard, & Galea, 2009). The recently introduced DSM-5 system emphasizes a dimensional approach to diagnosis (American Psychiatric Association, 2013), in which the different types of BD are no longer considered as separate disorders but as related conditions on a continuum of behaviors, with some conditions reflecting mild symptoms (e.g., cyclothymia) and others much more severe symptoms (e.g., BD Type I). DSM-5 has also included so-called “specifiers” that better account for the heterogeneous clinical presentations of BD. Clinicians can specify characteristics that may be prominent for some individuals and that can influence clinical management, such as a rapid-cycling course, postpartum onset, psychotic symptoms, or anxiety. This gives clinicians the potential to individualize treatment approaches further.

## EPIDEMIOLOGY

The prevalence of BD is estimated at 1–4% of the general population (Kroon et al., 2013), equally distributed between genders. The peak age at onset of BD spans adolescence and early adulthood (15–24 years) (Merikangas et al., 2011), and BD is usually a lifelong disorder,

with 50–60% of people relapsing within 1 year of recovery from an episode (Kessing, Hansen, & Andersen, 2004).

## **SUICIDALITY AND QUALITY OF LIFE IN BD**

The impact of BD can vary widely. One of the most sobering statistics related to BD concerns suicidality. Individuals with BD have the highest suicide rate of all the psychiatric disorders (Hawton, Sutton, Haw, Sinclair, & Harriss, 2005), with 10–20% of people diagnosed with BD taking their own lives, and nearly one-third admitting to at least one suicide attempt (Müller-Oerlinghausen, Berghöfer, & Bauer, 2002). Rates of self-harm are also high, with about 10–14% of this population presenting at hospitals after a self-inflicted injury (Webb, Lichtenstein, Larsson, Geddes, & Fazel, 2014).

Research suggests that individuals with BD have a lower quality of life in all domains, compared to healthy individuals of the same age (Rademacher, DelBello, Adler, Stanford, & Strakowski, 2007). It has also been suggested that of all the mental disorders, BD is associated with the greatest reduction in potential personal and professional achievement, when pre- to postillness adjustment and functioning are compared (Scott, 2011). This impact on functioning is likely to be linked with the chronic mood instability that persists even when an individual has recovered from an episode of mania/hypomania or depression (Henry et al., 2008; Hirschfeld et al., 2007). Until recently, the traditional view has been that people with BD experience periods of “euthymia” (normal, nondepressed, stable mood) between mood episodes. However, studies carried out in the last few years have shown that the majority of individuals with BD experience mood fluctuations at subsyndromal levels for most of their lives (Birmaher et al., 2014; Judd et al., 2002), with these fluctuations being linked to a worse prognosis and overall level of functioning (Bopp, Miklowitz, Goodwin, Rendell, & Geddes, 2010; Strejilevich et al., 2013).

Another important factor that has a large impact on the lives of individuals with BD is the frequency of comorbid disorders: One large-scale survey showed that out of 9,000 people with a diagnosis of BD, 92% had at least one comorbidity (Merikangas et al., 2007). The most common comorbid diagnoses are substance misuse (rated at about 50% lifetime comorbidity; Cassidy, Ahearn, & Carroll, 2001) and anxiety. In the next section, we discuss the significance of anxiety disorder comorbidity, and examine how it intersects with another significant feature of BD: the presence of emotional mental imagery.

## **BIPOLAR ANXIETY: A TRACTABLE TARGET FOR PSYCHOLOGICAL INTERVENTION**

Lifetime rates of anxiety comorbidity in BD are extremely high: In the U.S. National Comorbidity Survey Replication, as many as 90% of individuals with BD Type I reported having had an anxiety disorder at some time (Freeman, Freeman, & McElroy, 2002; Merikangas et al., 2007). The most recent meta-analysis of 40 studies, including 14,914 individuals from North America, Europe, Australia, South America, and Asia, suggested a lifetime prevalence of anxiety disorders in BD of about 45% (Pavlova, Perlis, Alda, & Uher, 2015).

How does the presence of anxiety add to the impact of BD? We know that the presence of anxiety in BD is a major contributory factor to poor functioning (Kroon et al., 2013) and is closely linked to a worse prognosis (Otto et al., 2006). Anxiety comorbidity is also associated with a higher risk (and longer duration) of depressive relapses, with less time spent in euthymic mood between episodes, and higher rates of hospitalization and use of psychotropic medication (Fagiolini et al., 2007). It is also linked with increased rapid cycling of mood states and higher suicidal risk (Simon et al., 2007). Intriguingly, evidence also suggests that the presence of anxiety in young people at the prodromal stages of bipolar spectrum disorder predicts a longitudinal course toward the full-blown disorder (Skjelstad, Malt, & Holte, 2010). Therefore, it would seem clear that addressing anxiety symptoms in treatment may be critical to attaining full recovery.

Recently published treatment guidelines from the British Association of Psychopharmacology (BAP) (Goodwin et al., 2016) have highlighted the need for future research that will enable us to better understand and treat anxiety comorbidity within the BD population. Specifically, there is a need to understand whether there are bipolar-specific features of anxiety that go beyond simple comorbidity with other anxiety disorders. Because both anxiety symptoms and subsyndromal mood instability persist during periods of normal mood, and because we know that they have such a profound impact on functioning and prognosis, understanding the relationship between these two phenomena could be crucial to improving the well-being of individuals with BD.

## THE IMPACT OF EMOTIONAL MENTAL IMAGERY

The increased prevalence of anxiety in BD may be linked to the high levels of “emotional mental imagery” experienced by this population. Our research group has investigated many aspects of this phenomenon in BD, and we have proposed that vivid intrusive mental imagery may act as an “emotional amplifier” that may drive both anxiety and the escalation of mood states in BD (Holmes, Geddes, Colom, & Goodwin, 2008). For example, many people with BD experience anxiety-provoking vivid, negative, future-related mental imagery. These negative mental images may amplify the expectation of future threat, causing anxiety or low mood, and thereby contributing to mood instability (Holmes et al., 2011). Similarly, “flashforward” images of fantasy suicidal acts have been reported as more compelling in persons with BD than in individuals with unipolar depression (Hales, Deeprose, Goodwin, & Holmes, 2011). Conversely, vivid positive mental imagery is also rated as more exciting in BD than in unipolar depression and is associated with greater levels of behavioral activation (Ivins, Di Simplicio, Close, Goodwin, & Holmes, 2014). Thus we can see how, for people with BD, experiencing more intrusive and compelling mental images may act as a driver for mood instability.

Greater susceptibility to experiencing intrusive mental imagery (Malik, Goodwin, Hoppitt, & Holmes, 2014; Ng, Burnett Heyes, McManus, Kennerley, & Holmes, 2016; Ng, Di Simplicio, McManus, Kennerley, & Holmes, 2016), and a greater tendency for vivid mental imagery to escalate mood (O'Donnell, Di Simplicio, Brown, Holmes, & Burnett Heyes, 2018), have also been described in healthy samples with a high vulnerability to BD (i.e., persons scoring highly on trait measures of BD). These findings suggest that characteristics of mental imagery may be relevant for the whole BD spectrum, not just those

people meeting full criteria for a BD diagnosis. Moreover, in a recent experimental study, mental imagery characteristics (such as the vividness of negative future imagery and the impact of intrusive images) appeared to be associated with anxiety severity and mood variability across different diagnoses (Di Simplicio et al., 2016). This suggests that mental imagery could be a specific target for intervention in many diagnoses.

In BD, where anxiety and mood instability symptoms are frequently intertwined with vivid and compelling mental images, it would seem sensible to explore the potential of taking these experimental findings out of the laboratory and into the clinical field. The members of our group have done this, and we have shown in a clinical case series that an imagery-focused intervention, known as the Mood Action Psychology Program (MAPP), is able to reduce anxiety and mood instability in BD (Holmes, Bonsall, et al., 2016). More information about the development and implementation of this intervention can be found in Chapter 2 and beyond.

## CURRENT TREATMENT APPROACHES TO BD

Pharmacological approaches to treating BD have predominated for many years, but more recently, psychological treatments have been developed, tested, and shown to be effective. We briefly review the main drug treatments for BD before describing more recent psychological treatments.

### Pharmacological Approaches

All international guidelines for the treatment of BD recommend that BD be predominantly managed with medication such as mood stabilizers (American Psychiatric Association, 2002; Yatham et al., 2013; National Institute for Health and Care Excellence [NICE], 2014). Frequently prescribed medications include lithium, valproate, olanzapine, risperidone, quetiapine, and lamotrigine. However, these medications have varying degrees of success for the treatment of acute episodes and the prevention of relapses. For further information, see the BAP treatment guidelines for BD (Goodwin et al., 2016) and the International College of Neuro-Psychopharmacology (CINP) treatment guidelines for BD in adults (Fountoulakis et al., 2017).

While pharmacotherapy remains the mainstay of treatment for BD, frequent relapses remain common, with one study reporting that 37% of individuals with BD had a recurrence of depression or mania within 1 year and 60% within 2 years (Perlis et al., 2006). Furthermore, individuals with BD tend to experience residual depressive symptoms for one-third of their lives (Judd et al., 2002), with a corresponding impact on functioning and quality of life. Treating and preventing relapses of depression remain major treatment challenges, with only a handful of medications (lamotrigine, lithium, and quetiapine) showing convincing effects in this respect (Yatham et al., 2013; Goodwin et al., 2016). Moreover, the use of antidepressants to target depression in BD remains controversial, as these drugs may contribute to shifting individuals from a depressed state into mania; this phenomenon is often referred to as a “manic switch” (Baldessarini et al., 2013; Pacchiarotti et al., 2013).

## The Enhanced Care Approach

Alongside medication, another mainstay of BD management is a model of “enhanced care,” whereby clinicians aim to establish a good therapeutic alliance with clients and to involve caregivers or significant others in their care. Both strategies aim to ensure that individuals with BD engage in long-term monitoring of their mood and (often) a long-term medication regimen. This approach was also endorsed in the BAP treatment guidelines (Goodwin et al., 2016) as follows: “Partners, families and carers can contribute significantly to the assessment process, the management of acute episodes, the promotion of long-term recovery and the prevention of relapse.”

Enhanced care also involves clinicians’ providing psychoeducation to both clients and caregivers about important factors affecting the course of BD. The topics covered tend to include the impact of stressors on mood, ways to manage sleep disturbance, the early signs of relapse, and the importance of regular activity patterns (NICE, 2014). While structured manualized protocols of group psychoeducation have been proven effective at reducing depressive relapses (Colom et al., 2009), it is also recommended that psychoeducation become part of good clinical practice for all people diagnosed with BD (Goodwin et al., 2016; NICE, 2014).

## Psychological Approaches

The American Psychiatric Association (2002) guidelines highlight that specific forms of psychotherapy are critical components of the treatment plan for many patients with BD, alongside medication. In particular, these guidelines advocate psychological treatments aimed at reducing distress, improving the patient’s functioning between episodes and decreasing the likelihood of relapse. However, they conclude that the choice of psychological intervention will vary, depending on clinicians’ expertise and patients’ preferences. Similarly, in the United Kingdom, NICE (2014) recommends specific psychological treatments for people with BD, either to (1) prevent relapse or (2) treat persisting symptoms between episodes of mania or bipolar depression. In these cases, the advice is to “offer a structured psychological intervention (individual, group or family), which has been designed for bipolar disorder and has a published evidence-based manual describing how it should be delivered.”

The main psychological treatment approaches tested in clinical trials so far have been family therapy interventions, interpersonal and social rhythms therapy (IPSRT), and cognitive-behavioral therapy (CBT). However, the evidence for the effectiveness of various psychological interventions for BD is mixed and sometimes contested (Jauhar, McKenna, & Laws, 2016). Recent attempts at comparing different interventions have also highlighted that the evidence is too scarce and heterogeneous for reliable conclusions to be drawn (Chatterton et al., 2017; Miklowitz, Cipriani, & Goodwin, 2017).

A possible reason for this lack of efficacy is that many treatments and models used for BD have been adjusted from those provided for depression and psychosis, rather than developed specifically for BD and its unique features and challenges. This is particularly true for CBT protocols.

Family therapy protocols are based on the use of psychoeducation and some CBT principles for people with BD and their caregivers. There is an additional focus on improving

communication within the family and on problem-solving skills. Family therapy (when compared with usual care) has been found to be effective in reducing depressive relapses and improving social functioning over a 30-month follow-up (Miklowitz, Goodwin, Bauer, & Geddes, 2008). However, a family-based approach may not be suited to all individuals, nor is it necessarily superior to good-quality pharmacological care (Miklowitz et al., 2014).

IPSRT for acute depressive episodes also includes psychoeducation but has an additional emphasis on modifying interpersonal factors, promoting good sleep schedules, and encouraging regular daily activities. It has been shown to reduce relapse over a 2-year follow-up (Frank et al., 2005). However, a recent systematic review concluded that it was not clear whether IPSRT was of greater benefit than an intensive supportive care intervention of similar duration (Crowe, Beaglehole, & Inder, 2016).

A large randomized controlled trial reported that CBT for BD was effective in reducing depressive relapses and enhancing social functioning in clients over a 24-month follow-up period (Lam, Hayward, Watkins, Wright, & Sham, 2005). However, subsequent trials disappointingly failed to replicate the results (Scott et al., 2006; Zaretsky, Lancee, Miller, Harris, & Parikh, 2008). Still, there are indications that the CBT approach may yet be useful for individuals with a more recent onset and fewer mood episodes (Scott et al., 2006). More recent studies have also highlighted the importance of focusing on more personalized recovery goals (Jones et al., 2015), in addition to traditional outcomes such as mood relapse.

In summary, there is some limited evidence to suggest that psychological therapies in their current form benefit individuals with BD in preventing relapses. The key ingredients of all psychotherapies so far found useful for BD are summarized in the BAP guidelines as follows (after Miklowitz et al., 2008):

1. Monitor moods and early warning signs.
2. Recognize and manage stress triggers and interpersonal conflicts.
3. Develop relapse prevention plans.
4. Stabilize sleep-wake rhythms and daily routines.
5. Encourage medication adherence.
6. Reduce self-stigmatization.
7. Reduce alcohol or drug use (including caffeine use in sensitive individuals).

### **A NOTE ON THE TREATMENT OF ANXIETY IN THE CONTEXT OF BD**

As we have discussed, anxiety comorbidity may be a significant characteristic of BD. International guidelines disagree on the preferred treatment approach for anxiety comorbidity, with some indicating pharmacological approaches alongside mindfulness-based interventions (Fountoulakis et al., 2017), and others focusing more on psychological therapies (Yatham et al., 2013). Pharmacological approaches to treating anxiety comorbidity are limited by the need for extreme caution in using antidepressants (which are often prescribed as anti-anxiety agents), due to the risk of “manic switch.” Therefore, psychological interventions may be particularly helpful in this regard.

The current NICE (2014) guidelines for BD treatment recommend that when anxiety is present, the psychological intervention indicated for the specific comorbid anxiety disorder identified (e.g., social anxiety disorder/social phobia) should be offered. Similarly, the American Psychiatric Association (2002) guidelines indicate that treatment for anxiety and for BD should proceed concurrently. A few studies have specifically looked at the efficacy of psychological interventions for anxiety within BD, with some indication of positive effects of CBT. Nevertheless, tailored approaches for anxiety in BD are lacking (Stratford, Blackwell, Di Simplicio, Cooper, & Holmes, 2014). Moreover, not all people with BD will meet full criteria for an anxiety disorder. This, together with the fact that BD is typically an exclusion criterion in the trials of psychological treatments for anxiety, suggests that the NICE recommendations at best “represent extrapolation” (Goodwin et al., 2016).

Nevertheless, clinical experience suggests that individuals with BD experience pervasive anxiety, which is distressing and has a significant impact on functioning, but which manifests as subclinical symptoms of multiple different anxiety diagnoses. Identifying the “correct” anxiety intervention protocol to apply can be problematic. Thus it may be more sensible to identify specific psychological treatment components that can reduce anxiety in BD. The BAP guidelines suggest that one such component might be strategies that are known to reduce the intensity of mental imagery. However, these guidelines conclude that further research and development are required (Goodwin et al., 2016).

## CONCLUDING COMMENTS

In summary, despite a huge amount of research activity in the field of BD, the potential benefits of combining medication and psychotherapy need to be more closely examined. To quote the BAP guidelines, there is a “widely perceived need for closer integration between psychological and pharmacological interventions” (Goodwin et al., 2016). Furthermore, the treatment of anxiety within BD is currently a neglected target for intervention, but one that will likely prove particularly fruitful to pursue and evaluate, given the impact of anxiety on other facets of BD.

In this manual, we describe how our group developed MAPP, a psychological treatment for BD (to be used alongside any pharmacological intervention) that targets intrusive and emotional mental imagery. Our general goal has been to minimize the mood-destabilizing effects of intrusive imagery and equip clients with a potent tool that they can use now and in the future. In the next chapter, we delineate the science behind our understanding of mental imagery, its role in the etiology of psychopathology, and its use in treating psychological difficulties. The remainder of the book explains the various components of the treatment and illustrates its clinical implementation. Our aim is to provide the reader with background knowledge about mental imagery; a clear idea of MAPP’s structure; guidance regarding how to assess and formulate mental images and then choose an intervention strategy; and, finally, direction on precisely how to undertake each of the strategies.