

Chapter 1

INTRODUCTION TO BIPOLAR DISORDER

This book describes the use of cognitive behavioural therapy in the treatment of bipolar disorder. Although the terms 'manic depression' and 'bipolar disorder' have been used interchangeably in the past, the latter is now more commonly used in both the United States of America and Europe. Bipolar disorder is a mood disorder, characterized by mania and depression. The diagnostic criteria for bipolar disorder are taken from the current *Diagnostic and Statistical Manual IV* (American Psychiatric Association 1994) and will be described in more details below. This identifies that depression, mania, hypomania and mixed affective episodes can exist within a bipolar diagnosis. In our approach, it is accepted that bipolar disorder is a significant mental health problem. Bipolar disorder affects a substantial proportion of the adult population and usually strikes in early adulthood. The course of bipolar illness tends to be relatively severe with many people suffering from multiple episodes. Recurrence of illness can be associated with a range of factors, which include substance abuse, family and relationship difficulties, and persistence of subsyndromal symptoms between episodes. In addition to a pattern of recurrent episodes, there is a substantial risk of completed and attempted suicide associated with bipolar illness. These issues are highlighted in this introductory chapter to indicate the potential scale and severity of problems with which people with this diagnosis can be faced.

An important issue in approaching the psychological treatment of bipolar disorder is whether people can identify developing symptoms at relatively early (prodromal) stages. If such prodromes exist and can be identified then opportunities may exist for effective psychological intervention at those points. The ability of patients to detect and cope constructively with prodromes is therefore discussed in some detail as intervention in this area forms an important part of the therapeutic strategy discussed later in the book.

Individuals with a history of bipolar disorder will often have experienced periods of heightened creativity and increased productivity during periods of elevated moods. It is therefore not surprising that patients will report missing these periods when their bipolar disorder is stabilized by medication. Conversely, individuals with chronically unstable mood may tend to use substances or alcohol in an effort to self-medicate.

In addition to bipolar disorder, there are a range of bipolar spectrum conditions which do not meet full DSM-IV criteria. Angst *et al.* (2003) and Akiskal *et al.* (2000) have both investigated the nature of these conditions and reported on their clinical importance. Although the severity of mood symptoms is apparently less severe in these disorders, the clinical and functional outcomes for the individual can still be serious. These conditions will therefore be considered.

The social costs of bipolar illness are substantial. People tend to break down at what would usually be the beginning or early part of their careers, with very few sustaining their chosen line of work. Difficulties with family relationships are common and rates of divorce are high. Social functioning even between episodes tends to be impaired. These factors create a picture of multiple difficulties present throughout the course of the illness.

This introductory chapter identifies the above issues to highlight the nature, severity, frequency and impact of this illness. It underlines the urgency with which more effective treatment approaches, which acknowledge both the psychological and pharmacological aspects of the disorder, need to be identified. It is hoped that the approach described within this book will form one part of this endeavour. The topics covered in this chapter are diagnostic criteria, epidemiology, factors in recurrence of the illness, bipolar prodromes, cyclothymia/bipolar spectrum disorders and high social costs.

DIAGNOSTIC CRITERIA FOR BIPOLAR DISORDER

Kraepelin (1913) described manic-depressive illness as encompassing the categories then employed of circular psychosis, simple mania and melancholia. This overall category was distinguished from dementia praecox in terms of course and prognosis in particular. Manic-depressive illness was seen to be a disorder of fluctuating course in which periods of normality were interspersed with periods of illness and prognosis was thought to be less bleak than the inevitable ongoing decline in functioning attributed to dementia praecox. Leonhard (1957) distinguished between bipolar and monopolar forms of manic-depressive illness: the former identifying patients with a history of mania and the latter those who suffered depression only. The distinction between bipolar and unipolar depression as currently used was introduced into the *American Diagnostic and Statistical Manual III* (DSM-III: American Psychiatric Association 1980) and has more

recently been included in the *World Health Organization Classification of Diseases* (ICD-10: WHO 1992).

DSM-IV Criteria

The current DSM-IV (American Psychiatric Association 1994) is the diagnostic scheme which has been employed in our research into the role of psychological treatments in bipolar disorder and will therefore be referred to in some detail in this section.

Bipolar disorder is characterized as a mood disorder within DSM-IV. The criteria specify first the mood episodes that can be included within a diagnosis of bipolar disorder. These are (1) major depressive episode, (2) manic episode, (3) mixed episode and (4) hypomanic episode. The precise details of each episode type are described in the DSM-IV manual (American Psychiatric Association 1994). An indication of the relevant symptoms is provided below.

Major Depressive Episode

A major depressive episode is characterized by depressed mood or loss of interest or pleasure along with symptoms including changes in weight and sleep, problems with concentration and decision making, reduced energy, and either agitated or slowed psychomotor activation. Other possible symptoms include feelings of guilt and thoughts concerning death or suicide. At least five of these nine possible symptoms listed in DSM-IV must be present for a minimum of two weeks, always including either depressed mood or loss of interest or pleasure. Symptoms must be of sufficient severity to cause clinically significant distress or impairment in occupational, social or other important areas of functioning.

Manic Episode

In contrast, a manic episode mood is required to be 'abnormally and persistently elevated, expansive or irritable' for a period of at least a week. Additional possible symptoms experienced in mania include increased self-esteem even to the point of grandiosity, increases in activity including becoming more talkative and engaging in potentially risky behaviour and distractibility. Some individuals report racing thoughts and flights of ideas, whilst for many individuals reduced need for sleep is common during mania.

DSM-IV requires at least three (four if mood is only irritable) of the symptoms listed in the manual in addition to mood disturbance for a

period of at least a week to meet diagnostic criteria. Disturbance again has to be sufficiently severe to cause marked impairment in occupational functioning, usual social activities, or in relationships with others. It may require hospitalization and may include psychotic features in the symptom presentation.

Mixed Episode

A mixed episode is described as one in which symptom criteria for both manic and major depressive episodes (with the exception of the duration criterion) are met nearly every day over a period of a week at least. The disturbance of mood needs to be 'of sufficient severity to cause marked impairment in occupational functioning, in usual social activities or relationships with others'.

Hypomanic Episode

A hypomanic episode has the same symptoms as those of manic episode except delusions or hallucinations may not be present. Mood disturbance required is for *only four days* rather than a full week and has to be 'clearly different from usual undepressed mood' rather than 'abnormal', which suggests less severe disruption of mood. In contrast to mania disruption in social or occupational functioning is not marked, hospitalization is not required and psychotic features are absent.

Bipolar I Disorder

Bipolar I disorder requires the presence of at least one manic episode during the person's psychiatric history. A diagnosis of the first manic episode also falls within the bipolar I disorder heading. Other variants of bipolar I disorder are: (1) most recent episode hypomanic; (2) most recent episode manic; (3) most recent episode mixed; (4) most recent episode depressed or (5) most recent episode unspecified (in this category symptom, but not duration, criteria are met for at least one of the above disorders of mood).

Bipolar II Disorder

Bipolar II disorder describes individuals who experience recurrent major depressive episodes with hypomanic episodes, but without meeting manic episode criteria during their psychiatric history.

Rapid-Cycling Specifier

In both bipolar I and II disorders a rapid-cycling specifier is added when four or more episodes occur within a given year.

Cyclothymic Disorder

Cyclothymic disorder requires the chronic presence of 'numerous periods' of hypomanic and depressive symptoms over a two-year period which do not meet full criteria for either mania or a major depressive episode. At no time during the initial two-year period must criteria for major depression, mania or mixed state be met. Symptom-free intervals during this period must be of no longer than two months' duration. Mood disturbance must be sufficient to cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. This is differentiated from rapid-cycling bipolar disorder by not reaching full symptom criteria for any of the three categories above during the course of the disorder.

Although DSM IV includes this as a separate mood disorder, it is clear that there is the potential for diagnostic confusion between this and milder forms of bipolar disorder. Furthermore, whilst not included as a personality disorder within DSM IV, cyclothymia is described elsewhere as a personality type – this is discussed further later in the chapter.

EPIDEMIOLOGY

Recent epidemiological studies indicate lifetime prevalence rates of bipolar disorder I/II of around 2%, with rates rising to 5% when subthreshold bipolar conditions are included (Grant *et al.* 2005; Merikangas *et al.* 2007). Adolescence represents the period of greatest increase in risk of bipolar disorder with a peak onset between ages 15 and 20 years (Kupfer *et al.* 2002; Merikangas *et al.* 2007). Perlis also reported that individuals with an early onset (prepubertal-adolescent) experienced higher rates of comorbidity, self-harm, violence and recurrence of illness compared to those with later adult onset of bipolar disorder (Perlis *et al.* 2004; Perlis *et al.* 2005). Clearly, therefore, this indicates a disorder that usually develops within early adulthood, can be present in teenage years and is associated with worse clinical outcomes when onset is early. Studies are consistent in reporting similar prevalence rates for men and women.

For individuals with this disorder there appears to be a pattern of significant social disability and likely relapse in many cases. Winokur *et al.* (1969) estimated that 80% of individuals with an initial diagnosis of mania would go on to have further episodes. More recently, Bromet found that 35% of patients who had been hospitalized for a first episode of bipolar disorder relapsed within a year of achieving remission and 61% over the

four-year study period (Bromet *et al.* 2005). In spite of this pattern of recurrence, and in contrast with schizophrenia, there is little evidence of downward social drift associated with bipolar illness. Thus, most studies of social class in relationship to bipolar disorder suggest that either there is no association or that rates of disorder predominate in middle and upper social or professional groups (Weissman and Myers 1978; Coryell *et al.* 1989). There appears to be no consistent evidence to support elevated prevalence rates according to marital status or to city or rural locations.

COURSE OF BIPOLAR DISORDER

In a general population study of bipolar I disorder (in this case using DSM-III-R criteria) conducted in America it was found that there was a 0.4% lifetime prevalence of this disorder, with a similar 12-month prevalence rate (Kessler *et al.* 1997). All cases apparently reported at least one other DSM-III-R disorder and in almost 60% of cases these predated the onset of bipolar illness. This study indicates, therefore, that for many people with bipolar illness they may well have additional psychiatric difficulties beyond those associated with this specific diagnosis.

Interestingly, this general population study also identified that only 45% of those identified as currently experiencing bipolar illness were in treatment. Whilst this may in part be due to patchy availability of mental health services, so that some people who may have welcomed psychiatric help had difficulty accessing it, it is unlikely that this is a sufficient explanation. Additional factors are likely to include the limitations of currently available pharmacological treatments and limited availability of alternative or additional forms of treatment such as psychotherapy. Thus Prien and Potter (1990) estimated that lithium may be ineffective in up to 40% of cases whilst Miklowitz *et al.* (2003) recently reported relationships between medication and outcome for manic but not depressive episodes in individuals receiving family psycho-education. Thus, some people with a bipolar diagnosis may not significantly benefit from their particular medication regime either through lack of efficacy or non-adherence which would both be likely to be associated risk of dropping out of contact with mental health services in general. Those who have done so will tend not to appear in studies of the course of bipolar illness and hence there is some risk that the information currently available is skewed towards those patients who are responsive to and/or adherent with treatment.

Number of Episodes

Early estimates suggested that few patients experienced more than three episodes of mania or depression in total. However, this seems to have been

based partly on inappropriate criteria. Exclusion of episodes not requiring hospitalization led to underestimates of recurrence rates, as did failure to control for extended admissions during which several separate manic and depressive episodes may have occurred. Carlson *et al.* (1974) followed up 53 bipolar manic-depressive patients who at time of follow up, which was an average of 14.7 years after illness onset, had experienced an average of 3.7 manic episodes and 2.1 depressions. More recent studies have confirmed patterns of recurrence and also indicated the importance of sub-syndromal symptoms. In a two-year follow-up study of 61 individuals with a bipolar I diagnosis Miller reported that participants reported a mood episode every eight months on average (Miller, Uebelacker *et al.* 2004). Post and colleagues in a larger follow-up study of 258 bipolar outpatients found that 63% had four or more mood episodes per year (Post *et al.* 2003). Additionally, a study over a 20-year follow-up has shown that individuals with bipolar disorder are likely to experience mood symptoms for around half of weeks assessed (Judd, Schettler *et al.* 2003).

Duration of Episodes (Cycle Length)

Goodwin and Jamison (1990) summarized data which suggest that after first episodes a cycle length of around 40–60 months reduces with following episodes, so that following a third episode, cycle length is down to between 10 and 30 months. This decrease in cycle length does not continue indefinitely, seeming to reach a constant level around episode 5–7 at between 5 and 10 months, according to their figures. However, in their recent revision of this volume (Goodwin and Jamison 2007) they concluded that the evidence was less clear and that, in fact, this apparent reduction in cycle length is limited to only a subset of those with a bipolar diagnosis.

Factors in Recurrence of Illness

Recurrence of mood episodes in bipolar illness have been associated with many different factors. Life events have been associated with both the onset and recurrence of affective episodes in bipolar disorder (see Johnson 2005a for a review). This association will be discussed in detail in Chapter 3 and so will not be discussed further here. Tohen, Zarate *et al.*'s (2003) four-year follow-up study found that, previous psychosis, lower premorbid occupational status and an initial mania onset were predictive of mania recurrence. Depressive relapse was predicted by higher current occupational status, the presence of any other comorbid mental health problem and having had an initial mixed affective presentation. Otto and colleagues reported the important role of anxiety in increasing relapse risk in a sample

of 1000 bipolar outpatients (Otto *et al.* 2006). Other factors associated with relapse include substance abuse, family relationships and subsyndromal symptoms. These are considered in turn below.

Substance Abuse

Another factor in the course of bipolar disorders appears to be substance abuse. Sonne *et al.* (1994) interviewed 44 patients with bipolar illness. They found that current substance users reported twice as many previous hospitalizations, earlier onset of mood problems and were more likely to be experiencing dysphoric mania and to have comorbid axis I diagnoses. Regier *et al.* (1990) reported that more than 60% of bipolar I and 48% of bipolar II patients had a substance abuse history. Strakowski *et al.* (1996) studied 59 patients with first episodes of psychotic mania. It was found that 12 had abused alcohol and 19 had abused drugs prior to hospitalization for the index episode. More recently, Bauer and colleagues assessed 328 bipolar inpatients. They reported that 34% had a current substance use disorder and 72% had a lifetime history of substance user comorbidity (Bauer, Altshuler *et al.* 2005). Cassidy and colleagues (Cassidy *et al.* 2001) found a lower (but still high) lifetime rate of substance abuse in 60% of their inpatient bipolar sample. Additionally, Cassidy's study notes a significant relationship between substance use history and increased number of psychiatric hospitalizations. Goodwin and Jamison (1990) estimate an overall rate of alcohol abuse and alcoholism of 35% in people with bipolar disorder, based on their review of 20 studies dating from 1921 to 1990, which compares with a rate of between 3 and 15% in the general population. Reasons for substance use, and relationships between this and bipolar onset and recurrence are not clear currently. Strakowski and DelBello reviewed the evidence for four hypotheses regarding co-occurrence of substance use and bipolar disorder. These included substance use as a symptom or form of self-medication, substance use as a cause of bipolar or as a function of a shared risk factor (Strakowski and DelBello 2000). They concluded that each of these proposals had some research support but that was not sufficient to encompass all individuals with this comorbidity. Further understanding of substance uses is important as it is associated with worse outcomes in terms of response to treatment, course and outcome than for those with bipolar disorder alone (Strakowski *et al.* 1988; Salloum and Thase 2000). In clinical practice it is therefore important to be alert to the potential presence of substance use issues. Furthermore, an individualized approach to understanding substance use is indicated by Healey *et al.*'s (2008) qualitative study, which found that patterns of use and reason were idiosyncratic in their outpatient bipolar sample. As reasons for use seemed to develop from personal experience, the authors argue for the importance of efforts to understand substance use within the context of needs and history of the individuals.

Family Relationships

Although there have been more studies considering the impact of family relationships in outcome for schizophrenia compared to bipolar disorder there is accumulating evidence that family factors have an important role in both. Butzlaff and Hooley's review of the literature indicated that the effect sizes for the impact of family environment on outcome were in fact stronger for bipolar disorder than it was for schizophrenia (Butzlaff and Hooley 1998). Additionally, a large study has recently shown that subjective distress in relation to family criticism was predictive of clinical outcomes in an outpatient bipolar sample (Miklowitz *et al.* 2005). Such results as these suggest that bipolar patients may well be significantly sensitive to domestic atmosphere and that this could be an important variable in terms of both course and outcome. Issues of family and other social factors are returned to in Chapter 12.

Subsyndromal and Persisting Symptoms

In addition to relapses which require psychiatric attention, many patients suffer from subsyndromal symptoms in between episodes. These symptoms, which can cause significant distress and disruption, were observed in 50% of patients in one treatment study (Keller *et al.* 1992). Gitlin *et al.* (1995) reported that even for patients who did not relapse over an average follow-up of 4.3 years, 46% continued to report significant levels of affective symptomatology. Recent larger scale studies have confirmed the prevalence and importance of subsyndromal symptoms. As noted above, Judd and colleagues reported the presence of significant mood symptoms in around half of weeks assessed in a bipolar sample followed up over 20 years (Judd, Schettler *et al.* 2003), a pattern confirmed in another report of a 13-year follow-up of specifically bipolar II participants (Judd, Akiskal *et al.* 2003). In both studies the predominant mood experiences were depressive. The presence of such subsyndromal symptoms, as well as causing distress in its own right, would seem likely to predispose patients to greater risk of full 'relapse' during their illness course. Indeed, recent studies have indicated that both clinical and functional outcomes tend to be worse for individuals experiencing subsyndromal symptoms (Altshuler *et al.* 2002; MacQueen *et al.* 2003) and that risk of relapse is significantly increased (Tohen *et al.* 2006; Judd *et al.* 2008).

Suicide Risk

Risk of suicide and suicide attempts are significant features of the course of bipolar disorder (Angst *et al.* 2005). Tondo estimated in a review that

suicide rates of 0.4% per year in individuals with bipolar disorder were 20 times higher than those of the general population (Tondo *et al.* 2003). Goodwin and Jamison (1990) reviewed 30 studies in which rates of suicide of manic-depressive patients ranged from 9 to 60% of the studied sample. The average rate in this review was approximately 19%, substantially higher than the figure of 10% reported by Winokur and Tsuang (1975) for completed suicide in bipolar patients followed up over 30 years.

Regier *et al.* (1988) reported that 25% of bipolar patients make suicide attempts. Goodwin and Jamison (1990) found that rates of attempted suicide in 15 studies reviewed ranged from 20 to 56% in bipolar patients, rates being higher in women than in men. In a more recent study, Dittman and colleagues reported that 37% of their sample of 152 bipolar participants had made at least one suicide attempt (Dittmann *et al.* 2002). Goodwin and Jamison (1990) suggest that it is common for suicidal intent to be communicated in quite a direct way before such attempts are made and that such attempts often follow on from disrupted sleep patterns and following (not so much during) extreme depression. Mixed affective states are also identified as high risk for suicide attempts and completed suicide. Additionally, Oquendo and colleagues found in their prospective study that pessimism, levels of trait impulsivity and comorbid substance use disorders were all significant predictors of suicide attempts in the two years after assessment (Oquendo *et al.* 2004). A psychological autopsy study of completed suicide by individuals with bipolar disorder in Finland found that suicides predominantly occurred during depression, that they were related to comorbid alcohol disorders and commonly followed a negative life event (Isometsa 2005). Studies, therefore, seem to be consistent in identifying a disproportionate risk of both attempted and completed suicide in people with bipolar disorder as compared with other psychiatric disorders including major depression. Information on higher risk states within bipolar disorder in conjunction with good outpatient follow up and appropriately responsive treatment delivery would therefore be important in helping to reduce suicide rates within this group.

Summary

The preceding discussion indicates that bipolar disorder is potentially associated with multiple challenges. Whilst Kraepelin's distinction between manic-depressive psychosis and dementia praecox, with the latter being distinguished at least in part by its more benign course, has been clinically important in many ways, the currently available evidence supports the view that whilst some people with this diagnosis do very

well, for the majority it has a severe impact on most areas of their lives with substantially increased risk of future episodes, substance abuse and mortality.

PRODROMES

Another issue in the course of bipolar illness is that of prodromes. This use of information related to prodromes in the psychological treatment of bipolar illness is discussed in detail in Chapter 10. This section will therefore confine itself to the following questions: (1) Can individuals with bipolar disorder detect prodromes? (2) What are the common prodromes of both mania and depression? (3) Are the individual patterns of prodromes idiosyncratic? (4) What are the prodromes that are consistently detected by patients? (5) How long is the prodromal stage? (6) How do patients cope with prodromes? (7) What difference does coping make to the course of the illness? Each of these questions will be discussed in turn.

Can Individuals with Bipolar Disorder Detect Prodromes?

Five studies have addressed this issue. The studies on prodromes in bipolar affective disorder were either retrospective studies in which subjects were asked about their past experiences (Molnar *et al.* 1988; Smith and TARRIER 1992; Joyce 1985; Lam and Wong 1997) or a single longitudinal study in which subjects were seen regularly for assessment (Altman *et al.* 1992). These studies tended to be small in sample size. Three out of five studies reviewed (Molnar *et al.* 1988; Smith and TARRIER 1992 and Altman *et al.* 1992) had a sample size of around 20. However, despite this small sample size, the finding that individuals with a bipolar diagnosis can detect prodromes seems robust as all five studies concurred that participants could report prodromes. Interestingly, bipolar patients seem to be better at spontaneously reporting manic prodromes than depression prodromes. Lam and Wong (1997) reported that 25% (10/40) of the manic-depressive patients could not detect prodromes of depression in their study. Only 7.5% (3/40) of their sample reported that they could not detect prodromes of mania. Similarly, in Molnar *et al.*'s study, 30% (6/20) of participants could not report depression prodromes spontaneously but all twenty could report mania prodromes spontaneously. The high proportion of individuals who could not detect depression prodromes could be due to the insidious onset of bipolar depression. Some people even said that depression was like a virus and that you wake up with it. This makes the detection of depression prodromes more difficult.

What are the Common Prodromes Reported by Manic Depressive Patients?

As studies used different instruments for prodromes of bipolar patients, comparison across studies is not straight forward. For example, Joyce (1985) used a semi-structured interview and rated participants' ability to recognize and respond appropriately to early symptoms of relapse on a 6-point scale ranging from very poor to very good. There was a problem with inter-rater reliability on this item and no details on the early symptoms of relapse were reported. Altman *et al.* (1992) reported that the BPRS-rated conceptual disorganization was elevated during the four months prior to a depressive episode.

Table 1.1 shows the most common prodromes of mania in Molnar *et al.*'s (1988), Smith and Tarrier's (1992) and Lam and Wong's (1997) studies. Across the three studies that listed individual prodromes, there was strong agreement about prodromes of mania. With the exception of irritability, the six most often reported prodromes of mania (sleeping less, more goal-directed behaviour, irritability, increased sociability, thoughts start to race and increased optimism) are also among the most frequently reported prodromal symptoms by Smith and Tarrier's (1992) and Molnar *et al.*'s (1988) studies. Irritability was not one of the most common prodromes reported by Smith and Tarrier and Molnar *et al.*'s studies. Even so, it was reported spontaneously by 33% of Smith and Tarrier's sample.

Table 1.2 shows the common prodromes of depression reported in Molnar *et al.*'s (1988); Smith and Tarrier's (1992) and Lam and Wong's (1997) studies. Subjects' reports of their prodromes of depression between the three studies, though agreeing less with Molnar *et al.*'s and Smith and Tarrier's studies, are quite similar. The top four most common prodromes reported spontaneously by the subjects in Lam and Wong's study (loss of interest in activities or people, not able to put worries or anxieties aside, interrupted sleep, feeling sad or wanting to cry) were also reported by 71 to 82% of participants in Smith and Tarrier's study. They were also among the top six most commonly reported prodromal symptoms in Molnar *et al.*'s study. However, taken as a whole, there seems to be more diversity in prodromes of depression. Across three studies, subjects reported fewer depression prodromes and there seemed to be diversity in the report of prodromal signs and symptoms of depression.

Are the Individual Patterns of Prodromes Idiosyncratic?

Molnar *et al.* (1988) reported that bipolar patients had considerable inter-individual variability but very little intra-individual variability of prodromes. Smith and Tarrier (1992) also commented on the idiosyncratic 'relapse signature' of the individual. Hence, there is a consensus that each

Table 1.1. Common prodromes of mania across studies

Molnar <i>et al.</i> (1988) – spontaneous recall (<i>n</i> = 20)	Smith and Tarrier (1992) – 40-item checklist (<i>n</i> = 20)	Lam and Wong (1997) – spontaneous recall (<i>n</i> = 37)
increased activity (100%)	emotionally high (100%)	not interested in sleep or sleeping less (58%)
elevated mood (90%)	energetic/very active (87%)	more goal directed behaviour (56%)
decreased need for sleep (90%)	don't need much sleep (80%)	irritable (25%)
more talkative (85%)	ideas flowing too fast (80%)	increased sociability (25%)
racing thoughts (80%)	more talkative (80%)	thoughts racing (19%)
increased self-worth (75%)	senses seem sharper (80%)	increased optimism (14%)
distractibility (65%)	feels creative (80%)	over-excited (14%)

Table 1.2. Common depression prodromes across studies

Molnar <i>et al.</i> (1988) – spontaneous recall of prodromes (<i>n</i> = 14)	Smith and Tarrrier (1992) – 40-item checklist (<i>n</i> = 20)	Lam and Wong (1997) – spontaneous recall of prodromes (<i>n</i> = 28)
depressed mood (86%)	low in self-confidence (88%)	loss of interest in people or activity (45%)
loss of energy (86%)	can't face normal tasks (82%)	feeling sad or want to cry (20%)
concentration difficulties (79%)	nothing seems enjoyable (82%)	interrupted sleep (17%)
morbid thoughts (64%)	can't get up in the morning (71%)	not able to put worries or anxiety aside (17%)
decreased sleep (57%)	not feeling like seeing people (71%)	low motivation (14%)
loss of interest (57%)	feeling sad (71%)	low self-esteem (10%)
weight loss (43%)	difficulty concentrating (71%)	negative thinking (10%)

patient's pattern or combination of signs and symptoms may be unique. Asking for spontaneous reports of prodromes has the advantage of personalizing the prodromes in the individual's context. For example, a minority of participants were able to report some idiosyncratic prodromes such as 'people scheming to get rid of me', 'feel more capable and wanting to get involved in other people's problems', 'posters seem more vivid and carry special and subtle messages that normally I would not notice' as clear prodromes of mania. Another individual was able to report getting irritated with her husband 'and not enjoying reading to my children' as prodromes of depression.

What are the Prodromes that are Consistently Detected by Patients?

Lam *et al.* (2001) followed up their sample of 40 depressive patients and asked them about prodromes 18 months later. Mania prodromes were reported reliably at both T1 (at recruitment) and at T2 (follow-up 18 months later). Furthermore, participants reported behaviourally orientated mania prodromes more frequently and more reliably: sleep less (55.3% at T1 and 55.3% at T2), more goal directed behaviour (44.7% at T1 and 55.3% at T2), increased sociability (18.4% at T1 and 21.1% at T2). Mood-orientated mania prodromes and cognitive-orientated mania prodromes were reported less frequently and less reliably: thoughts started to race (15.8% at both T1 and T2), increased optimism (26.3% at T1 and 10.5% at T2), irritability (10.5% at T1 and 13.2% at T2), increased optimism (26.3% at T1 and 10.5% at T2). Similarly, depression prodromes were reported reliably at T1 and T2: loss of interest in activity or people (28.9% at T1 and 36.8% at T2), interrupted sleep (13.2% at T1 and 26.3% at T2) and not able to put aside worries (15.8% at T1 and 18.4% at T2). At both times, patients reported fewer and less frequent depression prodromes. Furthermore, there was no difference in the frequency and reliability of behavioural and cognitive prodromes in depression.

How Long is the Prodromal Stage?

The duration of the manic or depression prodromal stages also varies from individual to individual. Molnar *et al.* (1988) reported that for his sample the mania prodromes lasted on average 20.5 days. However, the range is enormous: from 1 to 84 days. Similarly, Molnar *et al.* reported that the average length of depression prodromes was 11 days, ranging from 2 to 31 days. Smith and Tarrier (1992) reported that in their study, the average duration of prodromes of depression was 19 (SD 19) days and the average duration of mania prodromes was 29 (SD 28) days.

How do Patients Cope with Prodromes?

Only one study by Lam and Wong (1997) addressed this issue. Joyce (1985) rated how patients 'seek treatment at an early stage of future relapse' but published no details. Lam and Wong (1997) rated independently their subjects' coping on a 7-point scale, ranging from poor to adequate to extremely well. Good inter-rater reliability was reported. The sample was then divided into good (from adequate to extremely well) to poor (below adequate to poor) groups. Table 1.3 shows the coping strategies for prodromes of mania in Lam and Wong's (1997) study. The most common coping strategies for prodromes of mania employed by subjects in the good coping group were modifying high activities and restrain themselves, 'engage in calming activities', 'take extra time to rest or sleep' and 'seeing a doctor'. In the poor coping group, the most common coping strategies for prodromes of mania were continue to move about and take on more tasks, 'enjoy the feeling of high', 'go out more and spend money', 'find more to fill out the extra minutes of the day' and 'doing nothing special'. It is

Table 1.3. Subjects' coping with mania prodromes in the good and poor coping group

Coping strategies for mania prodromes	Good coping Group (n = 21)	Poor coping Group (n = 15)
modify my excessive behaviour and restrain myself	61.9%	0%
engage in calming activities	47.6%	13.3%
take extra time to rest and sleep	42.9%	0%
see a doctor	28.6%	6.7%
take extra medication	19.0%	6.7%
prioritise and reduce the number of tasks	14.3%	0%
take time off work	14.3%	0%
continue to move about and take on more	0%	26.7%
nothing special	0%	26.7%
enjoy the feeling of high	4.8%	20.0%
go out more and spend money	0%	20.0%
find more to do to fill out extra minute of the day	0%	20.0%
drink to keep going	0%	13.3%
Lose my temper over small things	0%	13.3%

Table 1.4. Subjects' coping with depression prodromes in the good and poor coping group

Coping strategies for depression prodromes	Good coping group (n = 17)	Poor coping group (n = 12)
get myself organised and keep busy	52.9%	0%
get social support and meet people	29.4%	0%
distract myself from negative thoughts by doing things	23.5%	8.3%
recognise unrealistic thoughts and evaluate if things are worth worrying	23.5%	0%
maintain a routine	17.6%	0%
exercise or keep fit	17.6%	0%
see a doctor	11.8%	0%
stay in bed and hope it would go away	5.9%	58.3%
do nothing	0%	25.0%
take extra drug e.g. lithium or sleeping pills	5.9%	16.7%
avoid social contact	5.9%	8.3%

interesting to note that the spontaneous coping strategies reported by patients are behavioural.

Table 1.4 shows the coping strategies of depression prodromes from Lam and Wong's (1997) study. The most common ones employed by subjects in the good coping group were 'get myself organized and keep busy', 'get social support and meet people', 'distract from negative thoughts by doing more', 'recognize realistic thoughts and evaluate if things are worth worrying about'. In the poor coping group, subjects' most common coping strategies were to 'stay in bed and hope it would go away', 'do nothing' and take extra medication such as lithium or sleeping pills. Subjects in the good coping group for prodromes of mania reported the spontaneous use of behavioural techniques, for example, restraining themselves from excessive behaviour, engaging in calming activities and taking extra time to rest or sleep when they detected prodromes of mania. Similarly, subjects in the good coping group for prodromes of depression used behavioural techniques such as keeping busy. However, some subjects also reported cognitive techniques of distraction from negative thoughts and recognizing unrealistic thoughts and evaluating if these thoughts were worth worrying about.

What Difference does Coping Make to the Course of the Illness?

Since the evidence is that bipolar patients can report prodromes, the next question is how recognizing and coping with prodromes can affect how patients fare. Only two studies addressed this question. Joyce (1985) found that, in addition to non-compliance with medication, inability to recognize and respond to early symptoms of relapse were important factors in the management of bipolar illness. However, in Joyce's study the rating of response to early symptoms focused mainly on being 'able to seek treatment at an early stage of future relapse'. There was no investigation of patients' natural cognitive or behavioural ways of coping. Furthermore the subscale on 'ability to recognize and to respond to early symptoms' had poor inter-rater reliability. In Lam and Wong's (1997) study there were significantly more high functioning subjects in the good coping group for prodromes of mania. More high functioning subjects were also present in the good coping group for prodromes of depression but the difference just failed to reach statistical significance. Participants' current levels of depression, coping with prodromes of mania, insight and ability to recognize early warnings for depression made significant contributions independently to their levels of social functioning. Hence, participants' coping with prodromes of mania appears to be an important factor in determining their level of social functioning whereas coping with prodromes of depression was not. The possible explanation is that being in a stage of early mania is much more public and perhaps immediately destructive whereas the early stage of depression can be more private. For those who are less able to cope with their prodromes of mania, the effect on their social functioning can be more detrimental. At their 18-month follow up (Lam *et al.* 2001), how individuals coped with mania prodromes and the number of life events patients experienced during the eighteen months predicted bipolar relapses during that eighteen months. These two variables made a significant contribution in a regression analysis to predict the number of bipolar relapses, with the effect of number of previous episodes, level of depression and mania at recruitment being controlled. Furthermore, individuals' coping with mania prodromes at baseline predicted the participants' level of manic symptoms eighteen months later, with the level of mania symptoms at baseline being controlled.

Joyce (1985) reported that most readmissions within a year were due to mania. Clinical experience suggests that early mania symptoms can fuel themselves into a full-blown episode. Gitlin *et al.* (1995) reported that subjects' social functioning was important as it can in turn affect the duration between episodes. Coupled with Lam and Wong's (1997) and Lam, *et al.*'s (2001) findings that coping with prodromes of mania is an important determinant of subjects' levels of functioning and subsequent

relapses, it is particularly important to teach bipolar affective disorder patients to tackle prodromes of mania.

Summary

Most individuals with bipolar disorder can report prodromes. There are significantly more individuals who could not report spontaneously on depression prodromes than was the case with manic prodromes. This is probably because the onset of a manic episode is more acute and less insidious. Furthermore, the individual's pattern of prodromes can be very idiosyncratic. However, there are prodromes that are frequently reported for mania (e.g. sleeping less, more goal-directed behaviour, increased sociability, thoughts start to race) and for depression (e.g. loss of interest, not able to put worries aside, interrupted sleep, feeling sad and want to cry). Prodromes can also be reliably reported over time and most patients report spontaneous coping during the prodromal stages. There is evidence that how well individuals cope with mania prodromes can predict the level of social functioning, which in turn predicts less frequent relapses.

CYCLOTHYMIA

Cyclothymia was used as a diagnostic category within DSM-III-R criteria. It was very similar to cyclothymic disorder as defined by DSM-IV criteria, both highlighting the persistent presence of numerous hypomanic and depressive symptoms over at least a two-year period. Prior to these specific criteria the terms cyclothymia/cyclothymic personality usually implied the presence of manic and depressive symptoms that did not reach sufficient severity to indicate a full psychiatric diagnosis of mania or depression and which had been recurrent usually over many years.

Jamison (1993) described the association between cyclothymic personality and subsequent onset of manic-depressive illness as fundamental. Cyclothymic personality is identified as the presence of a consistent pattern of cyclothymia over a period of many years, which may or may not have received psychiatric treatment. Whilst she recognizes that it is possible to have characteristics of cyclothymia without developing manic depression, it is noted that one third of people in this category do just that. This contrasts starkly with a rate of illness of 1% observed in general population samples. In addition to this, it is noted that people with milder symptomatology respond similarly to lithium. There is also some evidence for genetic concordance in that the presence of a cyclothymic individual in a family pedigree substantially increases the likelihood of finding other individuals within that pedigree with bipolar illness.

Akiskal *et al.* (1979) describe cyclothymia as presenting initially in early adulthood usually as a personality disorder, with the patient often unaware at first of mood changes. The changes in mood will be of short duration and may usually not meet full criteria for depression or hypomania. The course of cyclothymia is noted to be biphasic with alternation of hyper- and hyposomnia, low self-esteem and then overconfidence, mental confusion and apathy and then increased focus and creativity, uneven quality and quantity of work output, introversion and extroversion. The individuals who are cyclothymic can be prone to irritable and angry outbursts of a severity that can distance them from their partner. Sexual behaviour can be episodically promiscuous, with consequent relationship effects. Work patterns can be variable with periods of enthusiasm for particular career paths alternating with changes of direct and altering of plans. There is a significant risk of drug and alcohol abuse, as is observed in bipolar illness itself. However, the presence of a cyclothymic personality may well have predisposed the individual to both substance abuse and bipolar affective disorder. Hence, this may fail to recognize the importance of subsyndromal symptoms in this pattern.

In addition to cyclothymia, Angst has validated a series of threshold and subthreshold bipolar conditions. These include depressive mood symptoms identified by the presence of minor depressive disorder, brief intermittent disorder, dysthymia, hypomanic mood symptoms identified by Zurich criteria for hard or soft hypomania. These symptoms groups were considered by the Zurich group in addition to the standard, DSM-IV hypomania, mania or mixed affective episode and major depression criteria (Angst *et al.* 2003). Individuals with softer bipolar signs had similar features in relation to family history, recurrent illness course and clinical comorbidities to those with strictly defined bipolar disorder. It may therefore be helpful to explore the relevance of approaches outlined in this book for such individuals although as yet the research base is founded on samples meeting stricter bipolar I criteria.

BENEFITS ASSOCIATED WITH BIPOLAR DISORDER

Although the problems associated with bipolar disorder and related conditions have been enumerated above it is important to note that there are also positive aspects associated with aspects of bipolar spectrum experiences. Individuals with high levels of hypomanic personality are at increased risk of bipolar disorder, both concurrently and over a 10 year follow-up (Eckblad and Chapman 1986; Kwapil *et al.* 2000). However hypomanic personality is also associated with increased experiences of positive mood, sociability and increased energy (Eckblad and Chapman 1986; Akiskal 1996) and with setting of more ambitious achievement related life goals for fame, wealth and political influence (Johnson and

Carver 2006). Potential benefits are not limited to individuals who have yet to meet bipolar diagnostic criteria. Both Jamison (1993) and Goodwin and Jamison (1990) report that there are many individuals amongst high achievers in the arts, science and business who would meet bipolar criteria. Indeed, Jamison described her own bipolar illness in a later book and she is quite clear that some of her academic creativity and output was associated in particular with periods of hypomania. Furthermore, Johnson (2005) has reviewed evidence for the association of history of mania with experiences of high levels of achievement, ambition and confidence. Goodwin and Jamison (1990) list among others: Samuel Taylor Coleridge, Gerald Manley Hopkins, John Ruskin, Robert Schumann, Oliver Cromwell, Winston Churchill and Benito Mussolini as having had likely bipolar or cyclothymic disorders.

These reports underscore the importance of clinicians being aware that many individuals presenting for treatment will have had these experiences of increased effectiveness and creativity either premorbidly or as part of their illness course. Any formulation of their experience with bipolar disorder will therefore need to consider these issues alongside the problems that individuals will also report to provide a complete picture. Concerns about successful treatment robbing them of this positive side must be treated with respect, even if the clinician's views diverge from those of the patient. Indeed, Jamison reports that many creative individuals have tried, for instance, to reduce their intake of lithium with a view to achieving a moderately controlled state of hypomania.

Interestingly, Jamison also reported on findings from two studies in which artists rated their own creative productivity following lithium: 57% reported increases in productivity whilst 20% remained the same. However, in spite of these positive outcomes, 17% of people reported that they stopped their lithium because of its effects on creativity, hence the importance of assessing its impact in an individualized manner (Marshall *et al.* 1970; Schou 1979).

HIGH SOCIAL COSTS

Bipolar illness can have multiple impacts across many areas of psychosocial functioning. Education can be interrupted or impaired, career progression halted, jobs lost, marriages put under strain or ended due to the illness itself or behaviour associated with it. Sexual activity patterns can be radically changed during illness leading to effects on interpersonal relationships, which can in themselves be under strain from other effects. Even the ability to live alone or enjoy and profit from non-work activity can be impaired in some people with this diagnosis. Physical health effects can also be observed in some sufferers sometimes as a consequence of comorbid substance abuse, as a side effect of chronic drug taking and also as a

consequence of reckless behaviour during manic or hypomanic states. Indeed Das Gupta and Guest estimated that the combined costs to society for bipolar disorder were £2 billion per annum six years ago (Das Gupta and Guest 2002).

Social Functioning

Bellack *et al.* (1989) assessed social competence in a group of schizoaffective ($n = 16$), schizophrenic ($n = 58$) and bipolar ($n = 29$) inpatients by means of a structured role-play test and interview measures including Weissman and Bothwell's (1976) Social Adjustment Scale II (SAS). It was found that all three groups exhibited significant levels of impairment on both role-play and SAS measures. When the schizophrenic group was subdivided into those with a negative syndrome and those without, the former group performed worse than all other groups. However, the non-negative syndrome schizophrenics did not differ from either schizoaffective or bipolar patients. Such data indicate that substantial social impairments can be observed within bipolar disorder especially when comparison between diagnostic groups do not confound diagnostic differences with differences in symptom severity at time of testing.

Romans and McPherson (1992) compared a group of 64 patients with bipolar disorder with a random community sample of 232 women. Social networks for both groups were assessed using the Interview Schedule for Social Interaction (Henderson *et al.* 1981) which indicates availability and adequacy of both intimate and more diffuse social interactions. Results were that the bipolar patients had lower scores (worse) across all measures of social interaction. These were associated with age, length of illness and number of manic episodes. This pattern was suggestive of greater deterioration in social networks the longer the illness continues with especial damage to social contact being associated with recurrent manic episodes.

Bauwens *et al.* (1991) meanwhile investigated social adjustment in remitted bipolar and unipolar patients. Remission was defined as at least six months free of any significant symptoms and at least two months free of probable minor depressive or hypomanic episodes. The measure used to assess social adjustment was the social adjustment scale of Weissman *et al.* (1971). Controls had no psychiatric history and they were matched for age and sex with the patient groups. Patients, not surprisingly, showed worse overall adjustment than controls in particular in terms of social and leisure activities, with diminished contact with friends the most prominent feature for bipolar patients. Higher rates of social adjustment problems were also confirmed in a multicentre study conducted by Blairy and colleagues of 144 remitted bipolar participants (Blairy *et al.* 2004). Indeed Cannon *et al.* (1997) has investigated premorbid social functioning

impairment in schizophrenic ($n = 100$) and bipolar ($n = 49$) patients compared to a group of 100 controls subjects with minor medical problems. Their study used maternal interviews to obtain retrospective interview data on Premorbid Social Adjustment Scale scores (Foerster *et al.* 1991). These indicated that, compared to normal controls, social functioning in bipolar patients deteriorated in adolescence, although school performance was relatively preserved, indicating the possibly long-term nature of social functioning pattern difficulties even prior to the first psychiatric episode.

Work Outcomes

Of 53 bipolar patients with a mean illness duration of 14.7 years followed up by Carlson *et al.* (1974), (59)% were either not working or were working in lower status positions than premorbidly. Gitlin *et al.* (1995) studied 82 patients with a diagnosis of bipolar disorder over a mean period of 4.3 years. They reported good occupational outcome in only 28% of subjects. These findings are underscored by Kupfer's case registry report from almost 3000 individuals with bipolar disorder of which over 64% were unemployed despite 60% having attended college (Kupfer *et al.* 2002). Prien and Potter (1990) reported on a US Department of Health Education and Welfare study (1979) which estimates that an average woman experiencing bipolar disorder with onset at 25 years might expect to lose 14 years of major effective activity (which would relate to both work and family responsibilities).

Family Burden and Marital Issues

Although divorce is not uncommon in general population studies, running at around 20%, in bipolar illness it is disproportionately high. Speer (1992), in a study of 407 patients over the age of 55 years, found that the highest rates of divorce were in bipolar (55.6%) and schizophrenic (56.4%) patients; patients being treated for medical conditions not associated with mental health difficulties had a comparison divorce rate of 15.6%. Lam, Donaldson, *et al.* (2005) investigated the marital and sexual satisfactions of spouses with a partner suffering from bipolar I disorder. The authors reported that spouses' marital and sexual satisfaction were significantly lower when their partners were in a manic episode compared to when the partners were either depressed or out of a bipolar episode. The spouses' ratings of marital and sexual satisfaction were also significantly lower than when their partners were depressed compared to when their partners were out of a bipolar episode. Mitchell and colleagues also reported higher rates of divorce and separation in individuals with bipolar disorder than those with unipolar major depression, based on an Australian National Survey

data (Mitchell *et al.* 2004). Chakrabarti *et al.* (1992) investigated family burden using the Family Burden Interview (Pai and Kapur 1981) with relatives of 90 patients meeting DSM-III criteria for major affective disorder. Of the 90 relatives interviewed only 1 denied burden. Of the 29 relatives identifying severe burden, 27 were relatives of patients with bipolar illness; this same rating was given by only 2 of the relatives of major depressive patients. More recently, Reinares *et al.* investigated carer burden in the families of 86 individuals with a bipolar diagnosis who were currently euthymic and found that most relatives reported moderate burden (Reinares *et al.* 2006). Detailed discussion on family burden and marital issues will be found in Chapter 12.

Summary

Prien and Potter (1990) estimated, in addition to decline in effective activity referred to above, that bipolar disorder is associated with dying 9 years younger and losing around 12 years of normal health. Gitlin *et al.* (1995) concluded that even with appropriate pharmacological intervention many patients continued to relapse repeatedly and that significant symptoms were often present even in the absence of relapse. This is therefore clearly an illness that has significant impact on the individual sufferer, often across their life span and also on family and society, in terms of inability in many sufferers to function at their premorbid levels once the illness has begun its course.

CONCLUSION

This introductory chapter has set out to indicate that bipolar disorder is a mental health problem with significant consequences that is only partially treated by pharmacological interventions. People with this diagnosis are likely to have significant and persistent difficulties across important areas of social and psychological functioning. Furthermore, aspects of bipolar relevant symptoms are also apparent within the even larger group of people with bipolar spectrum conditions and individuals with cyclothymic/hypomanic personality who are themselves at elevated risk of developing this disorder. The remainder of this book sets out in more detail the currently available treatment options with respect to bipolar disorder and provides information on the strengths and weaknesses of these approaches. These lead on to an introduction to our cognitive therapy approach to the treatment of bipolar disorder. It is emphasized throughout this volume that this form of treatment is seen as adjunctive to appropriate pharmacological interventions rather than being in conflict with a medical approach.

In terms of the general form of the cognitive approach described it draws upon the extensive work on cognitive therapy for depression but includes elements developed specifically for this patient group to address coping with manic and hypomanic symptoms and prodromes of both mania and depression with a view to reduction of relapse risk and enhancement of psychological functioning. In a disorder whose effects can be profound both for the individual and those around them it is also felt to be important to include within this approach support for the individual in dealing with the psychological and social consequences of behaviour engaged in during acute episodes (especially (hypo)mania).

An important principle throughout is that cognitive therapy should be collaborative. Patients work with their therapist through a process of guided discovery to develop more adaptive coping skills. These new skills are not presented didactically and the possible feelings of loss associated with changing behaviour and thought patterns are addressed within this approach. This allows patients, who are usually independently minded individuals when well, to feel satisfied that any changes through therapy are not imposed on them from an external agency, but have developed from a balanced assessment of how best to act for their own greater benefit. It is our view that this type of approach is essential in maintaining engagement with the treatment process itself and that more proscriptive approaches would likely be associated with high dropout rates and inefficient therapeutic interventions.

