The spectra of major and minor mood disorders

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Abstract

There is growing evidence supporting the concept of a diagnostic spectrum reaching from depression via bipolar II and bipolar I disorders to mania and of a severity spectrum from psychotic via major and minor syndromes to normal mood swings. By nature, lows in mood are more distressful than highs; as a consequence, bipolar disorders and mania/hypomania are under-reported and underdiagnosed. An early diagnosis of bipolarity is essential for correct treatment and can help reduce secondary substance use, prolong life, improve quality of life and reduce costs.

Key words: spectrum, mania, depression, bipolar disorders, diagnosis, comorbidity, mortality

Introduction

Because depression is very distressing, a depressed person is motivated to seek treatment and to describe their symptoms, which makes the condition relatively easy to diagnose. Hypomania, by contrast, is often experienced as a heightened state of well-being (enhanced mood, increased energy/activity) and is far less likely to be mentioned spontaneously in a consultation with the doctor. As a result bipolar disorder tends to be underdiagnosed; this is especially the case for bipolar II and minor bipolar disorders. It has been found that 8 to 10 years may intervene before patients with bipolar depression receive a correct diagnosis of their disorder. Moreover, recurrent unipolar depression (i.e. without hypomania or mania) remains an uncertain diagnosis lifelong. Each new episode carries the risk of a switch into hypomania; in a 25-year prospective study, the risk of a diagnostic change from depression to bipolar disorder was found to be 1.25% per year and to remain constant with age (1).

In terms of consequences, bipolar affective disorder is more severe than major depression, as measured by lifelong recurrence and comorbidity with other psychiatric disorders (especially anxiety and secondary substance use disorders), and the risk of developing dementia in old age. It is also more associated with certain somatic disorders, such as diabetes, hypertension and cardiovascular disease. Finally, mortality rates are higher in patients with bipolar disorder compared to those with depression, although the suicide risk is lower among patients with type I bipolar disorder (2).

Depressed patients are diagnosed as having bipolar disorder if they have experienced hypomania or mania at some time in their lives. In population studies, lifetime prevalence rates rise markedly with repeated interviews. In three large epidemiological investigations (NCS-NCS-R, EDSP and NEMESIS) (3-5) the first interview wave found lifetime rates of depression of between 11.8% and 17.1% and of bipolar disorder between 1.6% and 1.9% in the general population. At the second or third interviews, five to ten years later, the rates for depression had increased to between 21.2% and 28.1% and those for bipolar disorder to between 2.6% and 5.2% (6-8). These figures may well still be too low: a New Zealand study (five interviews up to age 32) reports a lifetime prevalence rate for depression of 41.4%. The authors found forgetting to be an enormous source of error in the reporting of lifetime rates (9). We are all forgetful, but the longer we know our patients the safer is the diagnosis. Re-analyses of the EDSP and NCS-R studies referred to earlier showed that about 40% of persons with DSM-IV MDD manifested signs of subthreshold bipolarity (10,11).

The correct diagnosis of bipolar illness is essential if we are to provide appropriate treatment, including long-term secondary prophylaxis; early diagnosis and treatment can also contribute significantly towards limiting the high human and economic costs arising from the non-recognition of these serious and highly comorbid disorders (12).

The spectra of mood disorders

The development of a validated bipolar spectrum concept, combining dimensional and categorical principles, can provide more precise diagnoses (including subthreshold groups), allow differential treatment of affective disorders, stimulate research and help reduce the under-recognition of bipolarity.

Today the term 'bipolar spectrum' is used in two complementary senses:

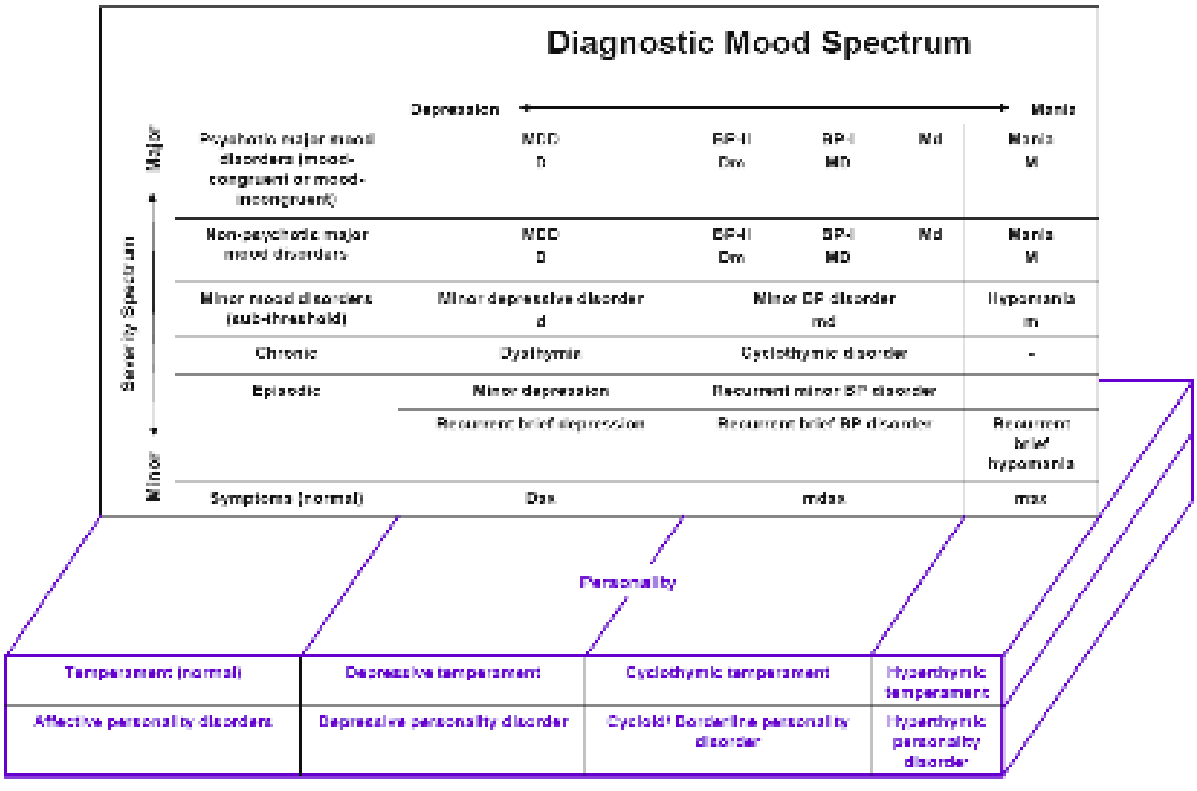
(a) a spectrum of severity, which embraces psychotic and non-psychotic major and minor bipolar disorders (including bipolar dysthymia, recurrent brief and minor depressions), cyclothymic disorders, hypomania and, at its problematic broadest, even borderline personality disorders and cyclothymic temperament;

(b) a proportional diagnostic spectrum, which considers the two components, mania and depression, first on the level of major mood disorders – major depression (D) bipolar II disorder (Dm), bipolar I disorder (MD), mania with mild depression (Md) and pure mania (M) (13) – and second on the level of minor mood disorders: minor depression and its chronic form dysthymia (d), minor bipolar disorder (md) and hypomania (m).
This proportional model is an extension of Kleist's concept of bipolar disorder as a combination of the two monopolar disorders, depression and mania (14,15). This model has proved fruitful not only in incorporating bipolar I and bipolar II disorders but also in differentiating mania with or without mild depression (Md/M) from bipolar I disorder (MD). Mania with and without mild depression are especially found in adolescents (16). Mania differs from bipolar I disorder in terms of family history, course and suicide risk just as, on the subthreshold level, hypomania differs from minor bipolar disorder or cyclothymic disorder in terms of family history and temperament.

Both the severity and the proportional bipolar spectrum concepts are dimensional in nature, having no natural categorical subgroups. Diagnostic concepts of psychiatric syndromes are purely descriptive and cannot constitute diseases (17). Categories are obviously necessary for communication purposes and for treatment decisions, but epidemiological and clinical studies have demonstrated that depressive and hypomanic/manic symptoms and syndromes manifest on a continuous distribution from normal to pathological. Moreover, in a 20-year follow-up, patients with type I and type II bipolar disorders were found to spend about half the time in subthreshold affective conditions, and these were dimensional, involving the full range of symptom severity of depression and hypomania (18).

To this we should add a third dimension consisting of personality. Most healthy people experience depressive and hypomanic symptoms and many can be characterised by normal temperaments (depressive, hypomanic or cyclothymic) or the corresponding abnormal affective personality disorders (PD) as conceptualised by Kretschmer 1921 (19). Temperament and affective PD are basically inborn and, although closely associated with phasic or chronic affective disorders, should be clearly distinguished from them. Temperament and affective personality disorders are depicted as the basis of the two-dimensional spectrum (see Fig. 1).

Figure 1: Three-dimensional spectrum of mood disorders and temperament



Difficulties in diagnosing bipolarity

The dimensional nature of the mood spectrum raises the question of the correct cut-off levels for caseness (20). All human beings experience diurnal and seasonal mood changes. As with blood pressure, abnormality is difficult to define and changes with the advance of the frontiers of knowledge. It is generally agreed that the DSM-IV criteria for hypomania (21) are too strict (not sensitive enough) and not based on empirical evidence (not validated). All aspects of the definition of hypomania/mania are therefore under discussion in the preparation of DSM-5. For instance it is now proposed that the exclusion criterion of antidepressant-induced hypomania should be dropped. Furthermore increased activity/energy (hitherto restricted to elevated and irritable mood) is to be added to criterion A. For the diagnoses of subthreshold bipolar disorders, a reduced number of required symptoms as well as a minimum duration of 2 days are being considered. As with depression, brief spells of hypomania (1–3 days) are far more common than manifestations lasting 4 days or 1 week. In order to improve the recognition of bipolarity, we have proposed a subdiagnostic concept consisting of a few hypomanic symptoms of brief duration associated with a lifetime diagnosis of depression.

Today, psychiatry still lacks empirically validated definitions of hypomania and minor depression, which will allow early recognition of major and minor bipolar disorders. Up to half of all patients treated for depression were found to have "minor" or "subthreshold" conditions not meeting full DSM-IV criteria (22). Fortunately, DSM-5 will introduce operationally defined subthreshold conditions.

The promising bipolar severity spectrum concept can be discredited, however, by uncritical generalisations and over-inclusiveness. Nevertheless, we can safely assume that the prevalence of bipolar disorders is seriously under-reported and that the burden of bipolar disorder, which the World Health Organisation ranks far lower than that of depression, will, as a consequence, have to be reassessed. The treatment of subthreshold bipolar disorders is a future topic of research; no controlled studies on drug treatment in this field have yet been performed. It would be unscientific to apply the

results from drug trials in major mood disorders to the treatment of minor disorders without new testing.

Finally, the mood spectrum is also embedded in the spectrum of functional psychoses, including schizophrenia, schizoaffective and affective disorders. Mood-incongruent affective psychotic disorders are the bridge to the schizophrenic spectrum. Moreover, in agreement with clinical genetic studies (23), modern molecular genetic studies demonstrate that there is no clear-cut distinction between schizophrenia and bipolar affective disorder; they share many clinical and genetic features (24).

Conclusions

There is growing clinical evidence that the spectrum approach, with its dimensional nature, offers a real alternative to the traditional Kraepelinian dichotomy of schizophrenia v. manic-depressive insanity (25) and the unipolar–bipolar dichotomy.

The proposed three-dimensional mood spectrum model unifies categorical classification, which is essential, with a dimensional view, which is true to nature; both are needed and both are empirically testable. Patients with minor mood disorders (minor bipolar disorder, minor depression, hypomania), many of whom seek treatment, deserve much more attention.

GP Comments

What have I learned from this paper?

Comment 1.

There is good evidence that there is a 'spectrum' of mood disorders from unipolar depression to forms of bipolar disorder. A three-dimensional model incorporating mood spectrum severity and personality is a helpful way of understanding this complexity. It is also interesting that some features overlap with schizophrenia.

It is important to appreciate that Bipolar II – of which there may be a number of undiagnosed patients on a GPs list - is not 'bipolar lite' and carries a higher suicide rate than Bipolar I. However, an important issue around diagnosing 'milder' bipolar spectrum illness (not Bipolar I or II) is that there is insufficient evidence to guide us in treatment.

Thus, the challenge for GP's is recognising those patients with 'depression' who may be on the bipolar spectrum – being alert for hypomania and mania – whilst being cautious not to medicalise normal personality traits and reactions to stressful life events. In this respect, GPs are uniquely placed to re-evaluate our patients over time.

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Comment 2.

In terms of consequences, BPD is more severe than major depression as measured by lifelong recurrence and comorbidity. I also learned that mortality is higher in patients with BPD than in unipolar depression. This highlights the importance, as a GP, of being vigilant for symptoms of bipolar in patients with depression, as correct diagnosis and management is of major importance.

Dr Damandeep Kochhar, FY II GP Trainee.

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