

Fast Facts



Fast Facts: Bipolar Disorder

Guy Goodwin and Gary Sachs

Second edition





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Declaration of Independence

This book is as balanced and as practical as we can make it.
Ideas for improvement are always welcome: feedback@fastfacts.com

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Glossary

Affective psychosis: mental illnesses that are psychotic in form (delusions and hallucinations) but arise in the course of mood disorder. The psychotic features are an expression of the severity of the depressive or manic episodes and their content is strongly colored by the mood.

Antipsychotic drugs: medicines that are primarily used to treat psychotic symptoms. Typical antipsychotics, of which the prototype was chlorpromazine, readily produce motor side effects – usually restlessness or rigidity. They are also sometimes called neuroleptics, or major tranquilizers. Atypical antipsychotics have been developed in recent years to reduce the burden of motor side effects. Antipsychotics all antagonize the actions of the neurotransmitter dopamine, and are also antimanic.

Axis I: in the recommended diagnostic scheme of the *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV), illnesses are classified on separate axes, which are independent of each other (as, for example, shape and color might be). Axis I diagnoses are the primary psychiatric disorders such as bipolar I disorder or schizophrenia.

Axis II: this other axis of the DSM-IV scheme classifies patients according to lifelong personality characteristics, if these are judged to be extreme – the so-called personality disorders. Personality diagnoses are not very reliable, but they capture something important about extreme personality styles.

Bipolar: this term is used to describe a range of illnesses in which there are disturbances of mood into both depression and elation – the poles of affective experience.

Bipolar I disorder: a diagnosis that requires a single episode of mania. However, it is the rule that patients who experience mania also experience major depression.

Bipolar II disorder: a diagnosis that requires a history of both major depression and hypomania, but no history of mania.

Bipolar NOS: bipolar disorder not otherwise specified

Cognitive-behavior therapy (CBT): a psychological treatment that derives from the idea that conscious thoughts and explicit beliefs may exacerbate mood or anxiety states. The therapy aims to elicit and question such thoughts and beliefs and to challenge patients to behave differently when they have them, or literally to restructure the way they think. It has a strong tradition of empirical measurement and a better evidence base than most ‘talking therapies’ or counseling.

Cognitive impairment: human cognition can be thought of as a collection of different domains such as attention, memory and executive function. Performance in these different domains can be measured more or less independently and compared with the average for individuals of a given age

and education. A person is said to show cognitive impairment when they perform poorly in one or more of these domains. Even small impairments are of interest because they predict difficulty at work, especially for able people.

Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV): published by the American Psychiatric Association, DSM-IV lays out simple rules for making psychiatric diagnoses that enable diagnostic reliability to be achieved. These rules – and hence the diagnostic categories – are arbitrary however. They should be thought of as working hypotheses (and may turn out to be false) but nevertheless provide an essential preliminary framework for scientific psychiatry.

Electroconvulsive therapy (ECT): a highly effective treatment for severe depression and, probably, for mania. Before the introduction of ECT in the 1930s, the induction of seizures to treat psychosis was performed chemically. The use of electricity was, and to some extent still is, controversial. It is now extremely safe when performed under a brief period of general anesthesia with a neuromuscular blockade to prevent musculoskeletal damage. The main disadvantage is the effects on memory, but some of the complaints made are so extreme that they should be viewed as unexplained medical symptoms.

Endogenous: originating from within the body.

Euthymia: interludes of normal mood between episodes of depression or mania.

Exogenous: having its origins from without (cf: endogenous).

Extrapyramidal side effects (EPS): antipsychotics block dopamine neurotransmission in the basal ganglia, which leads to EPS. Acute effects include motor restlessness (akathisia), stiffness/slowing and gait disturbance. These symptoms resemble those seen in Parkinson's disease – a degenerative disease of the dopamine neurons in the basal ganglia. More rarely, antipsychotics provoke acute dystonic reactions – abnormal postures often accompanied by upward staring of the eyes.

(functional) Magnetic resonance imaging ([f]MRI): a method based on the magnetization of complex molecules by a strong external magnetic field. The behavior of these molecules can be detected after a test field is briefly turned on. fMRI is a variant of the method that detects changes in the local balance between oxygenated and deoxygenated hemoglobin in the blood. Slightly paradoxically, increased brain activity results in relative hyperperfusion and a greater local concentration of oxygenated hemoglobin.

Hypomania: characterized by the presence of mood elevation, usually resulting in increased energy and confidence but without impairment of function (indeed, often the converse – improved attainment).

Hypothalamic–pituitary–adrenal (HPA) axis: the secretion of cortisol from the adrenal cortex is controlled by adrenocorticotrophic hormone from the pituitary gland; this, in turn, is controlled by corticotropin-releasing hormone, which is secreted by the hypothalamus into the portal pituitary system.

Index case: a primary subject in a clinical study. The features of this subject may define how a scale behaves or how heritable a condition is within the families of ‘index cases’.

Mania: a mental state of extreme mood elevation or irritability that is accompanied by characteristic changes in behavior and impairment of normal personal or social function. There may be associated psychotic features.

Pharmacokinetic: effects on drug action caused by changes in drug availability (or drug levels) – for example, because of changes in drug metabolism or absorption.

Placebo: inert tablets that are matched so that they appear identical to an active comparator. Positive placebo effects are common in trials of psychotropic medicines. In other words, groups of patients given placebo show large reductions in symptoms. These effects arise from a number of mechanisms that have nothing to do with the placebo, such as exaggerated baseline scores, regression to the mean and spontaneous recovery. The small effects literally due to the placebo may result from the positive attribution of change to the supposed action of the tablet – a cognitive mechanism.

Psychomotor retardation: the obvious slowing of speech, gesture and thought that accompanies severe depression.

Psychosis: the traditional term for mental states characterized by delusions and/or hallucinations. The loss of contact with reality makes patients more likely to be vulnerable or dangerous.

Randomized controlled trial: a clinical experiment in which patients are

assigned at random to two or more different treatment groups; the outcomes are compared with the control group (e.g. those receiving placebo or the current ‘gold standard’ therapy).

Rapid cycling: an illness course in which discrete episodes of depression or mood elevation occur four or more times per year (*also see* ultrarapid cycling).

Schizophrenia: a chronic relapsing illness characterized by bizarre delusions, auditory hallucinations, disorganized thinking and, frequently, social withdrawal/isolation; different from bipolar disorder because of the relative absence of extremes of mood and the worse social outcome.

Tardive dyskinesia: the abnormal involuntary movement disorder associated with long-term use of typical antipsychotic drugs. It generally involves spontaneous movement of the lips and face, and arises after prolonged treatment (usually years).

Ultrarapid cycling: unlike rapid cycling (above) there is no universally accepted definition for this term. It can be informally applied to an illness course in which episodes occur every few days (perhaps 12 or more times per year). Distinct abrupt mood shifts of less than 24 hours’ duration may be defined as ultra-ultra rapid or ultradian cycling.

Unipolar disorder: the experience of only one pole of mood disorder. In practice, this diagnosis can apply only to depression – major depressive disorder – because DSM-IV defines bipolar disorder with reference only to mania. Unipolar mania is, however, extremely rare.

Introduction

Bipolar disorder, formerly known as manic depression, is a disease with a long history. In antiquity, Greek clinicians described both the euphoria and psychosis associated with manic states, and the despair and suicidal inclinations associated with melancholia, the older word for depression. However, the great distinction between ‘manic-depressive insanity’ and the other major form of functional psychosis – dementia praecox or schizophrenia – was first made explicitly by Emil Kraepelin in the late 19th century. Like other psychiatrists at the time, his observations were confined to the clientele of asylums. Therefore, he saw the worst cases of affective disorder and its most extreme manifestations in psychotic depression or mania.

Kraepelin did not distinguish between patients with both elevation and depression of mood and those who showed only psychotic but unipolar depression. The emphasis on bipolarity is modern and arose from the work of Angst and Perris in the 1960s. It is the distinction that they drew between bipolar and unipolar cases that now highlights mania and mood elevation as the defining feature of bipolar disorder.

A central feature of the Kraepelinian dichotomy between affective psychosis and schizophrenia was the difference that he discerned in the



Figure 1 Emil Kraepelin (1856–1926) first made the distinction between ‘manic-depressive insanity’ and other forms of psychosis. Source: The Wellcome Library, London.

outcomes of the two conditions. The outcome in schizophrenia he saw as being consistent: often being poor with residual symptoms, cognitive impairments and social withdrawal. By contrast, bipolar disorder is compatible with complete recovery, although we also know that this is the exception rather than the rule. Outcomes, and the need to improve them, are one of the major reasons why the treatment of bipolar disorder must be moved forward.

Bipolar disorder has been a neglected disease, certainly by comparison with schizophrenia, although we believe that this is now changing. We have a better understanding of the prevalence and neurobiology of bipolar disorder, as the advances of the last 2 decades have been applied to psychiatric disorders. Bipolar disorder is no longer a rare disorder seen only by psychiatrists working with psychotic inpatients. Statements that may be true for more severe examples of the illness may not ring so true for the milder range of bipolar diagnoses. Furthermore, treatment has improved as researchers have explored the illness as a target for new classes of medicines, and interest in formal psychological interventions for bipolar disorder is growing. In parallel with these essentially scientific advances, there has been a much greater appreciation of the plight of patients with the illness, the impact it has on their lives and the many failures, big and small, of the services



Figure 2 Jules Angst has played a major role in increasing our understanding of the diagnosis and course of bipolar disorder.

provided to help them. The emphasis on patient self-management is more fundamental than for almost any other illness of which we have experience. The individual patient must become expert in their own condition. The need for a genuinely collaborative and mutually educative doctor–patient relationship in bipolar disorder has the potential to inform practice in many areas of medicine.

These relatively recent developments have paved the way for a much more unified view of the illness worldwide, and have facilitated clearer agreement on the vital research agenda for the next decade. We have had the privilege of participating in the development of this consensus and planning for future studies.

This book provides a brief synopsis of current understanding and strategies. We hope it will be of interest to anyone whose mission is to treat patients with bipolar disorder and to champion their cause. This includes primary care physicians with an interest in the disorder, psychiatrists, therapists, nurses and medical students, all of whom can provide so much help to individual patients in their care.

Finally, we hope that patients and their families will use this book. They can provide the ultimate stimulus to improve practice by directly challenging their doctors to keep up to date and alert to new developments. We hope they will also participate enthusiastically in research into the causes and nature of bipolar disorder, and the randomized trials that can improve its treatment.

The lasting contribution of investigators in the 20th century has been to formalize the criteria by which psychiatric diagnoses are made. The *Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV), which includes the latest revisions to these criteria, gives clear and explicit rules for diagnosing bipolar disorder. Such diagnoses are sometimes criticized for their lack of validity. In fact, their strength lies in their reliability, which allows us to be confident that when we describe bipolar disorder we are describing something that others could recognize in their own practice or experience.

Diagnosis is a fundamental activity for doctors. It implies that there has been application of a medical model. We believe that the medical model is useful in diagnosing bipolar disorder – indeed, we cannot see a viable or reliable alternative. However, by a medical model, we mean a unifying scientific discipline, not an exclusive reliance on medicines. This point is important to us and we return to it in Chapter 4.

Mania

The diagnosis of mania depends on the recognition of key symptoms (Table 1.1), which must either be present for at least 1 week or have resulted in hospital admission. Manic symptoms result in severe impairment of the normal ability to function; this is the additional criterion that defines mania in the absence of admission to hospital. Mania varies in severity from severe psychotic exhaustion to a mischievous state of elation accompanied by very bad judgment.

Manic states must always be taken seriously because of the potential for patients to do themselves irreparable physical harm by taking risks, especially when driving, or social harm from imprudence, excessive spending or sexual indiscretions. It is almost always essential to recognize the disorder and initiate treatment as soon as possible.

Psychotic features are relatively common in mania and, according to most surveys, are seen in about 50% of cases. Psychosis usually manifests as delusions that are mood congruent: they are often

TABLE 1.1

DSM-IV criteria for mania (mania defines bipolar I disorder)

The core symptoms must be present for 1 week and/or require hospital admission.

- 1 A distinct period of abnormally and persistently elevated, expansive or irritable mood, lasting at least 1 week (or any duration if hospitalization is necessary)
- 2 During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:
 - a inflated self-esteem or grandiosity
 - b decreased need for sleep (e.g. feels rested after only 3 hours of sleep)
 - c more talkative than usual or pressure to keep talking
 - d flight of ideas or subjective experience that thoughts are racing
 - e distractibility (i.e. attention too easily drawn to unimportant or irrelevant external stimuli)
 - f increase in goal-directed activity (socially, at work or school, or sexually) or psychomotor agitation
 - g excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g. engaging in unrestrained buying sprees, sexual indiscretions or foolish business investments)
- 3 The symptoms do not meet the criteria for a 'mixed episode'
- 4 The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalization to prevent harm to self or others, or there are psychotic features
- 5 The symptoms are not due to the direct physiological effects of a substance (e.g. a drug of misuse, a medication or other treatment) or a general medical condition (e.g. hyperthyroidism)

grandiose, reflecting the elevation of mood, and may, for example, overestimate the personal qualities of the patient with regard to their attractiveness, ability and power. Some patients with mania show