Diagnosing borderline personality disorder

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Borderline personality disorder can be a difficult diagnosis because of similarities to other conditions, particularly mood disorders. It is a common presentation in both psychiatric and general practice, with accurately diagnosed cases seen in 10% of psychiatric outpatients, 20% of psychiatric inpatients and 6% of family medicine patients. These values are higher than would be expected given a prevalence of about 1% in the general population. Women account for 70% of patients with this disorder in clinical settings, and the most common age at first presentation is in late adolescence. Unfortunately, a large proportion of patients with the disorder are not identified in practice.

Patients with borderline personality disorder are frequently encountered in the emergency department, where they present following threatened suicide or a suicide attempt. More than 500 000 such visits to emergency departments occur each year in the United States. The incidence of suicide attempts among patients with borderline personality disorder is highest among those in their twenties, but mortality peaks in the thirties, with a 10% lifetime rate of completed suicide.

Retrospective studies have shown that symptoms resolve over time, with 75% of patients at 15-year follow-up and 92% of patients at 27-year follow-up no longer having the disorder. One large, well-conducted 10-year prospective study found that 93% of those with borderline personality disorder had at least a 2-year period of remission, but only 50% also attained good psychosocial functioning.

In this article, we focus on the current diagnostic criteria for borderline personality disorder, as presented in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition, text revision (DSM-IV-TR), and how these criteria can be used to differentiate it from other disorders that may share symptoms. A summary of the evidence used in this review is found in Box 1. We based our review primarily on findings from a relatively small body of experimental studies that used the very similar DSM-III and DSM-IV definitions of borderline personality disorder and its symptoms. Recent research, which was the focus of our review, was generally of high quality and used sophisticated assessment and measurement strategies to differentiate the disorder from other psychiatric disorders.

What is the origin of the term “borderline personality disorder”? The term “borderline” was first described by the psychoanalyst Adolf Stern in 1938. He used it to refer to a group of patients whose conditions worsened during therapy and who showed masochistic behaviour and psychic rigidity, indicating a protective mechanism against any perceived changes in the environment or within the individual. The term was later expanded in the late 1960s and 1970s by Otto Kernberg; this diagnosis was used in empirical studies conducted by Grinker and Werble. Gunderson and Singer reviewed the literature and listed several features that identify borderline personality disorder, and a diagnostic interview based on these features was later developed by Gunderson and colleagues. The diagnosis was included in the DSM-III and was slightly revised in the DSM-IV, with the addition of a ninth criterion for cognitive symptoms, but both sets of criteria were based primarily on clinical experience and the work of Gunderson and Singer. The definition in the DSM-IV-TR is unchanged, although important modifications have been proposed for DSM-5. In particular, the diagnostic system for personality disorders will become a hybrid model, with both categorical diagnoses, includ-

### Key points

- Borderline personality disorder is a clinically important psychiatric disorder that is distinct from major depressive disorder, bipolar disorder and posttraumatic stress disorder, despite overlapping symptoms.
- Symptoms of borderline personality disorder manifest in problems in affectivity, interpersonal functioning, impulse control and cognition.
- Borderline personality disorder can be distinguished from other disorders if a number of these symptoms occur together.
- When borderline personality disorder is recognized, patients should be informed of the diagnosis, and the treatment options and outcomes discussed.
Box 1: Evidence used in this review

We searched MEDLINE for articles published from 1950 to 2012 using the search terms “borderline personality disorder” and “diagnosis” or “diagnosis, differential.” Of the 393 studies identified, we excluded case reports, commentaries, editorials, letters and reviews, which left 210 articles in English. After reviewing the titles, we selected the abstracts of articles that focused on diagnostic issues. We retrieved the full-text versions if they were relevant to general clinical practice. The most recent articles were preferred for inclusion, particularly those that reflected the current diagnostic criteria and were applicable across multiple clinical settings. When necessary, specific diagnostic criteria, such as emptiness and affective instability, were used as search terms to provide further detail regarding the differential diagnosis.

How is borderline personality disorder diagnosed?

The diagnosis is based on symptoms that have been present since adolescence or early adulthood and appear in multiple contexts.11 There are no laboratory or imaging tests that can help with the diagnosis.20 A number of structured and semistructured interviews can assist in making the diagnosis, although they often require specialized training to administer.11,22 The Diagnostic Interview for Borderlines – Revised21 is a validated and frequently used tool that is generally considered the “gold standard”; however, it can take 30–60 minutes to administer. Several self-report measures have been developed within the past decade23–26 but are rarely used in routine clinical practice. One commonly used self-report questionnaire for mood disorders — the Mood Disorder Questionnaire — frequently misdiagnoses borderline personality disorder as bipolar disorder.27

When interviewing patients, different domains of symptoms must be explored. Symptoms in borderline personality disorder occur in 4 domains: affectivity, interpersonal functioning, impulse control and cognitive.11 The diagnosis requires that at least 5 of 9 specific criteria be met (Box 2).11

Affective symptoms

The first affective criterion is the presence of “affective instability due to a marked reactivity of mood … that lasts hours to rarely more than a few days.”11 These frequent mood changes may appear to overlap with bipolar disorder, but there are several clear distinctions. First, the duration of the fluctuations is shorter than in bipolar disorder. In bipolar disorder, mood changes must remain consistent and persist for at least 4 days to meet criteria for a hypomanic episode and 7 days for a manic episode.11

A second difference is the persistence of affective lability throughout life, rather than during a discrete mood episode.28 Moreover, symptoms of borderline personality disorder gradually improve with time.4,29–31 In contrast, bipolar disorder has discrete periods (lasting on average 3 months) for both mania and depression that cause patients to present and function distinctly differently from their baseline, and these episodes can occur at any point during a patient’s life.32

The third difference is reactivity of mood. The mood symptoms of patients with borderline personality disorder are triggered by external events33 and are particularly sensitive to perceived rejection, failure and abandonment.34 Moods usually shift between depression and anger, and euphoria is transient. Shifts between depression and euphoria are more frequently seen in bipolar disorder.35 Most of the data on affective lability are derived from ecological momentary assessment studies, in which patients are asked to record mood fluctuations and psychosocial stressors several times each day. This technique provides results that are consistent, different and more valid than when patients are asked at a later point to recall their experiences.36

Several characteristics may help distinguish mood fluctuations in patients with borderline personality disorder from those in healthy controls. Several studies suggest that negative emotions may persist for longer and be more intense in patients with the disorder than in healthy controls, although this is not true for positive emotions.34,37,38 A second discriminating characteristic is the quality of mood reported by patients with the disorder. Several high-quality observational studies that used ecological momentary assessment found that patients with borderline personality disorder described continuous dysphoria, high emotional variability31,39 and increased hostility40 compared with healthy controls.
Inappropriate and intense anger is the next affective symptom of borderline personality disorder and is related to affective instability, as described earlier. The final affective symptom is a chronic feeling of emptiness. This experience is hard to define and lacks specificity for the diagnosis compared with other diagnostic criteria. However, patients with the disorder have described it as feeling as if “something is missing,” and it overlaps with hopelessness, isolation and loneliness, as well as some symptoms of depression. One small study found that symptoms of emptiness, along with self-condemnation, hopelessness and other symptoms of the disorder, including fear of abandonment and self-destructiveness, help distinguish the disorder from major depression.

Impulsive symptoms
The impulsive symptoms of borderline personality disorder may be more recognizable to clinicians, but they can still pose diagnostic challenges. Patients with recurrent suicide attempts or threats or episodes of self-harm are commonly seen in the emergency department and in psychiatric assessments. Between 60% and 78% of patients with the disorder have shown suicidal behaviours, with more than 90% engaging in self-harm. Persistent cutting as a way of regulating emotions is a characteristic feature of the disorder, as are recurrent overdoses related to stressful events. Recurrent presentation to the emergency department because of suicidality is suggestive of the diagnosis, with almost half of such patients meeting the diagnostic criteria for borderline personality disorder.

Impulsivity and self-destructiveness in borderline personality disorder encompass many other behaviours, including gambling, spending, binge eating and sexual promiscuity. Substance abuse is also frequent: alcohol and substance abuse or dependence are seen in more than 50% of patients with the disorder. The combination of substance use and borderline personality disorder is associated with an increased risk of completed suicide.

Interpersonal symptoms
A pattern of unstable relationships, marked by extremes of idealization and devaluation, is one of the most important symptoms in making an accurate diagnosis of borderline personality disorder, with studies reporting a sensitivity of 74% and a specificity of 87%. Because of this interpersonal instability, less than half of women with the disorder marry, and even less have children. Patients with the disorder also make frantic efforts to avoid abandonment. Clinical experience suggests that, over time, some patients react to this fear by becoming socially isolated to protect themselves from potential abandonment.

Identity disturbance is the second interpersonal symptom. This symptom has not been clearly defined, but it generally refers to frequent and suddenly changing goals, beliefs, vocational aspirations and sexual identity, as well as a painful sense of incoherence. Patients may also feel as if they are assuming the identity of other people to whom they are close. The identity disturbance seen in this disorder should be differentiated from the normal identity issues one sees in adolescents. Being unable to define an identity on one’s own and instead being dependent on interpersonal relationships to define one’s identity, as well as frequent fluctuations or a sense of incoherence in one’s identity, are more strongly associated with borderline personality disorder than with typical adolescent identity issues.

Cognitive symptoms
Few studies of cognitive symptoms in borderline personality disorder have been conducted. What is known is that about 40%–50% of patients with the disorder have brief periods of psychotic symptoms or dissociation. Typical symptoms include paranoid thoughts and auditory hallucinations, but their course is much shorter than in schizophrenia, often lasting only hours to days, and the presence of symptoms is related to stress.

Box 2: Diagnostic criteria of borderline personality disorder*
A pervasive pattern of instability of interpersonal relationships, self-image and affects, and marked impulsivity beginning by early adulthood and present in a variety of contexts, as indicated by 5 (or more) of the following:

1) Frantic efforts to avoid real or imagined abandonment. Note: Do not include suicidal or self-mutilating behaviour covered in criterion 5.

2) A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation.

3) Identity disturbance: markedly and persistently unstable self-image or sense of self.

4) Impulsivity in at least 2 areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). Note: Do not include suicidal or self-mutilating behaviour covered in criterion 5.

5) Recurrent suicidal behaviour, gestures or threats, or self-mutilating behaviour.

6) Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability or anxiety usually lasting a few hours and only rarely more than a few days).

7) Chronic feelings of emptiness.

8) Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights).

9) Transient, stress-related paranoid ideation or severe dissociative symptoms.

sors. Compared with psychotic experiences of patients with schizophrenia, those of patients with borderline personality disorder are much more likely to be short, circumscribed, and either based in reality or totally fantastic.

Other cognitive features that are common include depersonalization (i.e., the sensation that a person’s body or self is unreal or altered in a strange way), derealization (i.e., the experience that the external world is bizarre and unreal) and illusions, which are misperceptions of existing stimuli. These symptoms can also occur in posttraumatic stress disorder, but the presence of suicide proneness, impulsivity, disturbed relationships and affective dysregulation are all more commonly seen in borderline personality disorder.

What are the challenges in making the diagnosis?

The current diagnostic criteria for borderline personality disorder allow for 256 different combinations of symptoms that could lead to a diagnosis. Clinicians thus may find it challenging to make a diagnosis of borderline personality disorder. Because of their limited time to spend with patients, clinicians can look for several key factors to help them decide whether further assessment for the disorder is necessary.

The most important factor is whether the difficulties have been long standing or, for adolescents, present for at least 1 year. If there is a sudden change in functioning or new symptoms, a diagnosis of borderline personality disorder is less likely according to the DSM-IV-TR definition.

Having difficulties in multiple areas is another important factor. For example, suicidality or self-harm without problems with mood or relationships is less likely to be borderline personality disorder, whereas a history of suicide attempts along with impulsive substance use and problems with chronic feelings of emptiness and anger is more suggestive of a diagnosis.

If the diagnosis of borderline personality disorder is not made, an affected person may end up

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Box 3: Resources for patients and clinicians

For patients

- National Institute of Mental Health: www.nimh.nih.gov/health/topics/borderline-personality-disorder/index.shtml
- Borderline Personality Disorder Resource Center: http://bpdresourcCenter.org/
- National Education Alliance for Borderline Personality Disorder: www.borderlinepersonalitydisorder.com/index.html

For clinicians

- National Education Alliance for Borderline Personality Disorder: www.borderlinepersonalitydisorder.com/index.html
- Behavioural Tech, LLC (for clinicians interested in dialectical behaviour therapy): www.behavioralttech.org/index.cfm

Box 4: Applying the results of this review in clinical practice (fictional case)

A 39-year-old woman with a long psychiatric history presented for assessment in a specialized personality disorder clinic. She was first seen at age 19 with depression in the context of an abusive relationship. At the time, she was prescribed an antidepressant and gradually felt somewhat better, but she continued to have problems with mood fluctuations. The patient was seen again at age 25 for elevated mood accompanied by decreased sleep and increased energy in the context of an exciting new relationship. Although she reported that these symptoms were present “all the time,” her diagnosis was changed to bipolar disorder and the antidepressant switched to lithium. Her mood quickly became depressed, coinciding with the breakup of the relationship. Three months later, the patient became increasingly isolated with anxiety about further “emotional trauma” induced by her last breakup. After a particularly stressful day at work, she threatened to overdose on medications, because “the voice of my dead grandmother told me to.” These symptoms were new, and the patient also reported feeling as if she was not real and that she was in a television program. The diagnosis was revised to schizoaffective disorder, and the patient was admitted to hospital and given antipsychotic drug treatment. The psychotic symptoms resolved in a matter of days, but the patient remained suicidal with depression that fluctuated with episodes of anger. A pattern of impulsive suicide attempts, psychotic symptoms and psychiatric admissions persisted for the next 10 years, despite numerous medications. Throughout this period, the patient continued to attend school and began a job as a child care worker in a special education environment.

During the current assessment at the clinic, the patient reported that her elevated mood was present only for several hours at a time. During these periods, she experienced symptoms of irritability and affective lability that remained unchanged from baseline, which indicated that she did not experience discrete hypomanic episodes. The patient reported that, even during periods of elevated mood, she was able to attend work and concentrate. These mood fluctuations were usually brought on by conflicts with partners or family. When at work or in low stress situations, she would feel euthymic. Her psychotic symptoms would also occur during episodes of high stress and persisted only for several hours. At times, symptoms would resolve within days, even without seeking medical treatment. With a revised diagnosis of borderline personality disorder, the patient began a long-term program of specialized individual and group psychotherapy, during which most of her medications were gradually removed. This focused approach to treatment led to a decrease in symptoms and improvements in her interpersonal relationships.
with several diagnoses of comorbid disorders, none of which responds to common treatments. For example, patients who have major depressive disorder and comorbid borderline personality disorder generally do not respond as well to antidepressant medications as patients who have major depressive disorder alone.53

How should patients be informed of their diagnosis?

Once a diagnosis of borderline personality disorder has been established, it is important to inform the patient of the diagnosis and discuss the implications for treatment options and outcomes. There is no evidence to indicate that informing patients of the diagnosis causes problems, so it is unfortunate that this important step is often omitted.56

When informing a patient about a suspected diagnosis of borderline personality disorder, clinical experience suggests that it is helpful to show the patient the list of diagnostic criteria and explain why the diagnosis is being considered. Educating patients about the increasing number of specific treatments and the good prognosis with gradually resolving symptoms can also help reduce their anxiety about a diagnosis that is highly stigmatized in the medical system and the general population. Even a single psychoeducation session could help to reduce symptoms, as was found in a randomized trial in which 30 of 50 late adolescent women found to have borderline personality disorder were randomly assigned to attend such a session within a week after being told about their diagnosis.57 Patients can also be directed to specific resources that can provide more information (Box 3).

Beyond the ethical implications of informing patients of their diagnosis, patients benefit from improved understanding about their disorder and often feel as if the clinical picture “finally makes sense.”20,58 Informing patients may also help to prevent misunderstandings about the diagnosis and to avoid improper treatments in the future.

Overlap of symptoms with those of other psychiatric disorders makes diagnosis of borderline personality disorder a challenge. Careful evaluation can usually clarify the clinical picture. Box 4 gives an example of how the diagnostic criteria can be applied in practice.

Gaps in knowledge

Accurate diagnosis of borderline personality disorder remains challenging. It is easy to miss the forest for the trees by identifying a single symptom and making an incorrect diagnosis based on that symptom alone. Borderline personality disorder is a clinical diagnosis, with no supporting laboratory or imaging tests. Even the core pathological features remain in debate,46,59 but there is a broad consensus supporting the current criteria.

One area that is receiving increasing attention is the presentation, course and treatment of the disorder in adolescents.60-62 Research in this area will allow for earlier diagnosis and treatment, which may lead to improved long-term outcomes.

Another major issue is how the change to a trait-based diagnostic system in the upcoming DSM-5 will affect the diagnosis of borderline personality disorder, with debate over how clinically useful such a system will be.63,64

Management

Once a diagnosis is made and the patient informed, a discussion about treatment can follow. In the past, treatment of borderline personality disorder was considered challenging, but some interventions have been developed over the past 2 decades that have dramatically changed the lives of patients with this disorder. In a forthcoming article in CMAJ,65 we will review the literature on the treatment of borderline personality disorder and provide some general suggestions on how to manage patients with the disorder.

References


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