Borderline personality disorder: Epidemiology, pathogenesis, clinical features, course, assessment, and diagnosis

AUTHOR: Andrew Skodol, MD
SECTION EDITOR: Murray B Stein, MD, MPH
DEPUTY EDITOR: Michael Friedman, MD

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INTRODUCTION

Borderline personality disorder (BPD) is characterized by instability of interpersonal relationships, self-image, and emotions, as well as by impulsivity across a wide range of situations, causing significant impairment or subjective distress.

BPD has a lifetime prevalence of approximately 6 percent. The disorder is associated with receiving extensive clinical attention and the disorder is more widely studied than any other personality disorder. Despite these efforts, patients with BPD continue to suffer considerable morbidity and increased mortality compared with the general population [1,2].

The epidemiology, pathogenesis, clinical features, course, assessment, and diagnosis of BPD are reviewed here. The treatment and prognosis of BPD are discussed separately. Other personality disorders are also discussed separately.

- (See "Borderline personality disorder: Psychotherapy".)
- (See "Overview of personality disorders".)
- (See "Antisocial personality disorder: Epidemiology, clinical manifestations, course, and diagnosis".)

- (See "Narcissistic personality disorder: Epidemiology, pathogenesis, clinical manifestations, course, assessment, and diagnosis".)
- (See "Schizotypal personality disorder: Epidemiology, pathogenesis, clinical manifestations, course, and diagnosis".)
- (See "Borderline personality disorder: Treatment overview".)

EPIDEMIOLOGY

Borderline personality disorder (BPD) is common in both the general population and in clinical settings. Large, nationally representative, nonclinical surveys of the United States general population estimate that the point prevalence of BPD is 1.6 percent and the lifetime prevalence is 5.9 percent [3,4]. Studies in clinical settings found BPD was present in 6.4 percent of urban primary care patients, 9.3 percent of psychiatric outpatients, and approximately 20 percent of psychiatric inpatients [5-7].

The ratio of females to males with the disorder is greater in clinical populations than it is in the general population. The ratio is 3:1 in clinical settings [8]. Two epidemiologic surveys of the United States general population, however, have found the lifetime prevalence of BPD does not differ significantly between males and females [3,4]. This discrepancy suggests that females with BPD are more likely to seek treatment than males. In a study of patients with BPD, males and females were found to have similar rates of childhood-trauma history and levels of current psychosocial functioning [9].

Study findings are mixed regarding the relationship between BPD and ethnicity. A study of patients presenting to clinical facilities found significantly higher rates of BPD in Hispanics compared with Caucasians and African Americans (64 versus 39 versus 40 percent) [10]. One United States epidemiologic study found the prevalence of BPD to be less frequent among Hispanic males and females [4], while another found that it was not significantly related to race and ethnicity [3].

Comorbidities — Co-occurring psychiatric disorders are common in patients with BPD, especially mood (depressive, bipolar), anxiety, substance-use, eating, and somatoform disorders (table 1) [11-13]. An epidemiologic survey found that 85 percent of individuals with BPD have at least one comorbid mental disorder [3]. The mean number of current comorbid disorders was 3.2 in the epidemiologic survey and 3.4 in a study of borderline outpatients [3,13]. Acute exacerbations of the comorbid mental disorders, sometimes accompanied by suicidal thoughts or attempts, often precipitate treatment seeking or hospitalization. (See 'Nonsuicidal self-injury' below.)

Patients with BPD frequently meet criteria for other personality disorders; however, studies have not been consistent regarding which personality disorders most frequently co-occur [3,14].

Females and males with BPD have been found to have similar rates of comorbid major depression, but differing rates of other co-occurring psychiatric disorders [9]:

- Posttraumatic stress disorder (females versus males, 51 versus 31 percent)
- Eating disorder (42 versus 19 percent)
- Identity disturbance (67 versus 48 percent)
- Substance use disorder (58 versus 85 percent)
- Antisocial personality disorder (10 versus 30 percent)
- Narcissistic personality disorder (5 versus 22 percent)
- Schizotypal personality disorder (10 versus 25 percent)

Data from the National Epidemiologic Survey on Alcohol and Related Conditions III [15,16] indicated significant associations between 12-month and lifetime alcohol use disorder across all levels of alcohol use disorder severity and 12-month drug use disorder and BPD.

PATHOGENESIS

The cause of borderline personality disorder (BPD) is not known. Most hypotheses suggest that BPD is due to a combination of genetic, neurobiologic, and psychosocial factors [17].

Genetic — There is at least moderate evidence for the genetic transmission and heritability of BPD. Two studies found the concordance rate for BPD was higher in monozygotic twins compared with dizygotic twins (35 and 36 percent versus 7 and 19 percent) [18,19]. A third twin study found the proportion of variance in BPD in the general community explained by environmental influences was greater than that explained by genetic influences (58 versus 42 percent of the variance) [20].

In over 2000 Norwegian twins, most of the genetic influence on individual BPD criteria derived from one highly heritable general BPD factor, while environmental influences were mostly criterion specific [21]. BPD criteria counts were moderately stable over 10 years from early to middle adulthood, decreasing 28 percent, mostly due to genetic risk factors that did not change over the follow-up period [22].

Pathologic personality trait domains included in the alternative American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision

(DSM-5-TR) model for personality disorders (see "Dimensional-categorical approach to assessing personality disorder pathology") were found to tap the same genetic risk factors as DSM-5-TR diagnoses for BPD and most other personality disorders [23]; however, five factor model normative personality traits had considerable genetic variance not shared by DSM-5-TR personality disorders [24]. Thus, from a genetic perspective, BPD may be better represented by pathologic than normative personality traits [25].

Single candidate gene association studies of BPD, for example of genes involved in the serotonin system involved in emotional regulation, have been disappointing, with small effect sizes, nonreplication, and no significant associations after meta-analyses of studies [26].

Another approach to studying the disorder's genetic basis has tried to identify the heritability of endophenotypes, such as certain psychopathologic traits or behaviors, which may map more closely onto neurobiologic pathways. There have been only two genome-wide association studies of BPD, one of which focused on the BPD symptom domains of affect instability, identity problems, negative relationships, and self-harm in a total of 8426 patients [27]. Genetic variance was substantially higher for the affective instability domain compared to the other three domains. Seven single nucleotide polymorphisms (of 6.6 million analyzed) showed significant association – all located on chromosome 5 serine incorporator 5 gene – which facilitates myelination in cells of the nervous system. Findings based on endophenotypes may not be specific for BPD because most are transdiagnostic (ie, cut across disorder categories) and have relevance for different types of mental disorders [28].

The first and only genome-wide association study of BPD patients involved 998 BPD patients (a small sample compared with the 10,000s in genome-wide association studies of schizophrenia) and 1545 controls [29]. Single marker analysis revealed no significant associations after correcting for multiple testing. Gene-based analyses yielded two significant genes and gene set analysis yielded a significant finding for exocytosis. All identified genes have been implicated in prior studies of bipolar disorder and schizophrenia. The most notable finding of the study was the genetic overlap of BPD with bipolar disorder, schizophrenia, and major depressive disorder, again raising the issue of heterogeneity within BPD and the relevance of transdiagnostic features.

Most theories about the etiology of BPD posit that the disorder results from a combination of a genetic predisposition and adverse environmental factors such a trauma [28]. There are very few studies, however, examining gene-environment interactions in BPD patients, and these are limited by small sample sizes and failure to replicate [30]. As an example, the largest study exploring gene x environment interactions and gene x environment correlations involved 5083 twin pairs and 1285 non-twin siblings in the general population and focused on the BPD-related

features of affect instability, identity problems, negative relationships, and self-harm [31]. Having experienced a traumatic life event was related to the severity of BPD traits. A gene x environment correlation was found for certain life events, meaning that the genes that put an individual at risk for developing BPD features also increase the likelihood of being exposed to some types of life events.

Future research on the genetics of BPD will likely focus increasingly on endophenotypes and on gene x environment interactions and correlations [32].

Neurobiologic — Preclinical research suggests that perhaps altered neuropeptide function underlies the interpersonal problems of these patients [33]. Attachment insecurity, leading to impairments in social cognition, including maladaptive representations of self, others, and self in relation to others, are believed to be at the core of the interpersonal difficulties of patients with BPD [34] and may be modulated by the oxytocinergic system [35]. In addition, numerous neurotransmitter and neuroimaging studies have compared patients with BPD to healthy controls and found abnormalities such as serotonin dysfunction and bilateral reductions in the hippocampus, amygdala, and other regions of the medial temporal lobe [36,37]. It is difficult to interpret such results because the studies enrolled and investigated adult patients who already met criteria for BPD. Thus, it is not clear whether the observed neurobiologic correlates represent etiologic causes or sequelae of the disorder. Making this distinction requires a longitudinal study that enrolls premorbid children or adolescents. The specificity of the neurotransmitter and neuroimaging findings to BPD is also unknown.

Research findings demonstrate widespread neuropsychologic deficits in patient with BPD linked largely to frontal lobe functioning, and support the idea that many symptoms of the disorder, such as affective instability and identity disturbance, are due to disrupted connections between the prefrontal cortex and other brain regions controlling higher cognitive functions [38].

Psychosocial — A history of childhood trauma is common in patients with BPD [39,40]. However, the relationship between trauma and BPD is not clear. Childhood trauma is not always present in patients with BPD, and many individuals who suffer abuse do not develop BPD.

The trauma that is often present in the history of patients with BPD can take many forms, including sexual abuse, physical abuse, verbal abuse, neglect, and early parental separation or loss. A systematic review found high rates of childhood sexual (16 to 71 percent) and physical (10 to 73 percent) abuse [39,41].

Clinical trials on the relationship between childhood trauma and BPD have been mixed:

- A prospective, community-based, longitudinal study of 639 children found that childhood abuse or neglect was eventually and significantly associated with BPD in young adulthood, after controlling for parental education and parental psychopathology (odds ratio 7.7, 95% CI 1.8-33.5) [42].

- A prospective study of 500 individuals with documented cases of childhood physical and sexual abuse and neglect found that more physically abused and/or neglected children met criteria for BPD as adults, compared with controls. Individuals with a history of childhood sexual abuse were not at increased risk for BPD. Having a parent with drug or alcohol problems, not being employed full-time, not being a high school graduate, and having a diagnosis of a drug use disorder, major depressive disorder, and posttraumatic stress disorder mediated the relationship between abuse and neglect and adult BPD, suggesting multiple pathways to BPD [43].

- Other studies have not found childhood sexual abuse to be a major risk factor or causal antecedent of BPD. Meta-analyses have found only small effect sizes for the association between childhood sexual abuse and BPD, as well as for the association between childhood sexual abuse and self-injurious behavior (a common manifestation of BPD) [44,45]. A meta-analysis found that college students with a history of childhood sexual abuse were only slightly less well-adjusted than control students [46]. Poorer adjustment could not be attributed to childhood sexual abuse because family environment was consistently confounded with childhood sexual abuse. A longitudinal study of over 1300 twin pairs followed from age 11 to 24 showed that the association between childhood abuse and BPD stemmed from common genetic influences, which were inherited vulnerabilities to internalizing and externalizing disorders in general [47].

CLINICAL MANIFESTATIONS

Core features — The core features of borderline personality disorder (BPD) are instability of interpersonal relationships, self-image, affect, and marked impulsivity.

A useful model organizes features of the disorder into three dimensions [48]:

- Impaired relatedness – Unstable relationships with others, identity disturbance, and chronic emptiness

- Affective dysregulation – Affective lability, excessive anger, and efforts to avoid abandonment

- Behavior dysregulation – Impulsivity, suicidality, and self-injurious behavior

Affective instability was shown to be the most sensitive and specific single manifestation of BPD (and thus a potentially useful screen) in a sample of 3674 psychiatric outpatients evaluated with a semi-structured interview [49]. All manifestations of BPD are associated with psychosocial impairment in this same population, even in the absence of the others. However, only chronic emptiness was found to be a marker of all types of morbidity, including suicidality, history of suicide attempts and hospitalizations, social and work dysfunction, axis I (symptom) disorder comorbidity, and global functioning [50].

Signs and behaviors

Suicidality — Suicidal threats, gestures, and attempts are common manifestations of BPD [8]. Approximately 8 to 12 percent of individuals with BPD have been found to commit suicide in retrospective studies [51,52]. However, data from a prospective longitudinal study of patients with BPD found a rate of suicide of 4 percent over a 10-year period [53]. A comparison of 2384 individuals who committed suicide matched to 46,899 living controls from the United Kingdom Clinical Practice Research Datalink, a primary care database, found a 37-fold increased risk of suicide among patients with BPD compared with patients with no psychiatric disorders [54].

Assessing the current risk of a patient's suicidal intent is difficult. Years of suicide threats and self-injurious behavior may precede a completed suicide [55]. The literature has identified numerous risk factors for suicidality, but none of these are consistent across studies. In a longitudinal study [56] and in an epidemiological cross-sectional study [57], chronic feelings of emptiness, identity disturbance, frantic efforts to avoid abandonment, and self-injurious behaviors were the diagnostic criteria for BPD that were independently associated with suicide attempts, with chronic feelings of emptiness found in both studies. Other factors suggesting a chronic risk include impulsivity, negative affectivity, and poor psychosocial functioning. Factors suggesting an acute risk include recent depression, adverse life events, substance misuse, and recent loss [14].

All suicidal ideation and threats should be taken seriously. The general principles of managing suicidality in patients with BPD are discussed elsewhere. Assessment, risk factors, evaluation, and management of suicidal ideation and behavior in a more generalized population are discussed elsewhere. (See "Borderline personality disorder: Treatment overview" and "Suicidal ideation and behavior in adults".)

Interpersonal difficulties — Patients with BPD usually have stormy relationships, especially with people to whom patients are close [58]. At one moment, a friend or romantic partner may be viewed not only as a trusted confidant but as an ideal, almost perfect person, and then this

same individual can suddenly be seen as cruel, betraying, very limited, and damaged. When the idealized person is present and supportive, the patient feels strong and solid. However, if the support person leaves (or is unable to meet the patient's needs), even for a limited time, or if the patient thinks that the support person is about to leave, the patient can immediately become angry, demeaning, demanding, depressed, hopeless, and suicidal.

Patients tend to view others as all good or all bad, a phenomenon that has been labeled "splitting" [59]. Rigidly classifying other people as good or bad can lead the patient to shift between extreme points of view and to selectively attend to information in a way that confirms their current opinion. This tendency to "split" can impact treatment. (See "Borderline personality disorder: Psychotherapy".)

Patients with BPD often interpret neutral events, words, or faces as "negative" [60,61]. Thus, the patient is prone to misinterpret relatively minor disagreements or adverse events as a sign that the caretaker wants to terminate the relationship. The patient often reacts with anger or threats of self-harm, which can alienate the support person, who then may really want to end the relationship. This heightened sensitivity to actual or perceived rejection most likely is what leads to patients often feeling more comfortable or secure with a “transitional object,” such as a pet or stuffed animal, than with other people.

Affective instability — Patients can experience repeated and marked mood changes throughout the course of a single day, with moment to moment fluctuations often triggered by environmental stressors. Periods of euthymia can alternate with intense, episodic dysphoria that includes depression, anxiety, and irritability. Angry outbursts triggered by dissatisfaction with a caregiver are often followed by feelings of shame, guilt, and worthlessness.

Impulsivity — Impetuous and self-damaging behavior is common and can take many forms. Patients abuse substances, binge eat, engage in unsafe sex, spend money irresponsibly, and drive recklessly. In addition, patients can suddenly quit a job that they need or end a relationship that has the potential to last, thereby sabotaging their own success. Impulsivity can also manifest with immature and regressive behavior and often takes the form of sexually acting out. (See 'Nonsuicidal self-injury' below.)

As in nonsuicidal self-injury (NSSI), impulsivity in the sexual realm can have important utility or meaning to the patient (eg, helping to relieve inner tension or feeling loved following a recent real or perceived interpersonal rejection). Although the patient may be regretful of their behavior afterwards and may even appreciate its potential dangerousness, they may find it very difficult, if not impossible to resist the urge to repeat the behavior.

Cognition — Neuropsychologic functioning in patients with BPD is impaired in many domains. A meta-analysis comparing patients with healthy controls found that cognitive functioning in patients was substantially and significantly poorer on tests of [38]:

- Attention
- Cognitive flexibility
- Learning and memory
- Planning
- Processing speed
- Visuospatial abilities

Nonsuicidal self-injury — Patients may engage in self-injurious behavior that is not intended as suicide, such as cutting or burning themselves [62]. The patient can usually acknowledge the behavior as a compulsive act that relieves tension, often described as "inner tension," and lacks suicidal intent. Nevertheless, self-injurious behavior should be evaluated to determine whether it involves suicidal intent.

Patients may feel that the relief of tension provided by NSSI prevents them from progressing to suicidal ideation, gestures, or acts. Patients who are told that their therapist will stop seeing them if they continue to self-injure may panic and become more suicidal, particularly if the patient is strongly attached to the therapist. This is not to suggest that the therapist should condone NSSI but rather its meaning to the patient should be explored and influence how action is taken.

COURSE

Limited epidemiologic [63] and clinical [64] data suggest that the onset of borderline personality disorder (BPD) occurs in adolescence or early adulthood. Diagnosis in adolescents has shown similar stability, reliability, and validity to diagnosis in adults [65]. In contrast to longstanding beliefs that BPD had a chronic, unchanging course over the lifespan, a review of 13 follow-up studies that evaluated BPD patients using semistructured interviews and explicit diagnostic criteria found that remission occurred in 45 percent of patients with BPD over a wide range of follow-up periods [66]. In the last two decades, more rigorous longitudinal prospective studies also found that most patients experience remission of the disorder [67-70].

As examples:

- In a prospective study of 290 patients with BPD interviewed every two years for up to 16 years found the following rates of remission (defined as no longer meeting BPD diagnostic

criteria for at least two years) [68-70]:

- 35 percent after 2 years
- 91 percent after 10 years
- 99 percent after 16 years

The duration of remission was prolonged for many patients [70]. Seventy-eight percent achieved a remission that lasted for at least eight years. Factors associated with a shorter time to remission [68]:

- Age 25 or younger (odds ratio 1.46)
- Good functioning at work or school in the two years prior to study (odds ratio 1.61)
- No history of childhood sexual abuse (odds ratio 1.43)
- No family history of substance abuse (odds ratio 1.40)
- Absence of comorbid anxious cluster Axis II disorder (odds ratio 1.49)
- Low neuroticism (odds ratio 0.97)
- High agreeableness and affiliating tendencies (odds ratio 1.04)

- In a study of 175 patients followed for 10 years that employed somewhat stricter definitions of symptomatic remission, 91 percent of patients with BPD had a period of two months or more with only two or fewer criteria of BPD manifest, and 85 percent had a period of 12 months or more with two or fewer criteria [71].

Psychosocial functioning improved more slowly than other BPD symptoms in these studies [71,72]. Improvement on the Global Assessment of Functioning Scale, while statistically significant, remained small – an average of 4 points on the 100-point scale over 10 years [71]. The proportion of patients achieving good psychosocial functioning increased steadily over study periods ranging from 6 to 15 years [14,73].

Recurrence was common in patients who remitted and attained good levels of functioning. In the longitudinal study of 290 BPD patients, 34 percent of the patients who remitted, later experienced symptoms and functional impairment once again meeting BPD diagnostic criteria [70].

High rates of remission and recurrence in prospective studies have challenged the traditional conceptualization of BPD as a stable and enduring pattern of maladaptive traits. One reconceptualization that has been proposed is BPD as a hybrid of stable personality traits and intermittently expressed symptomatic behaviors [74]. In the 16-year follow-up of patients with BPD, acute symptoms such as self-mutilation were more likely to remit over two years and for a period of four years than were temperamental symptoms (traits) such as chronic anger [75].

Another view is that BPD may be better classified as a mental state or what was called in the past an axis I disorder [76], although this belies the observation that there is little difference between the stability/instability of most mental disorders.

ASSESSMENT

The clinical diagnosis of borderline personality disorder (BPD) should be based on a comprehensive psychiatric assessment. Clinicians should use all available sources of information to make the diagnosis, including the patient's self-reported clinical history, the clinician's observations during interviews, and information from family, friends, and medical records when available and legitimately accessible.

Patients should be carefully evaluated for co-occurring mental disorders and substance use disorders, along with suicidality and other self-injurious behavior. (See "Suicidal ideation and behavior in adults".)

Instruments for diagnosis and severity rating — A self-report measure called the McLean Screening Instrument for Borderline Personality Disorder is available to screen patients for the disorder [77]. Each of the 10 items is dichotomous, and the instrument has good psychometric properties (sensitivity 0.81 and specificity 0.85). This tool is intended only for screening and not for rendering a final diagnosis.

Several validated personality disorder assessment instruments are available to diagnose any of the personality disorders, including BPD. These instruments systematically assess each criterion for every personality disorder. Self-report instruments such as the Personality Diagnostic Questionnaire [78] have the advantage of saving interviewer time, but often yield false positive diagnoses.

Some interview instruments are designed specifically for the assessment of BPD, such as the Revised Diagnostic Interview for Borderlines [28]. The Structured Clinical Interview for the DSM-5 Alternative Model for Personality Disorders [79] is a new interview for the assessment of the dimensional and categorical components of the alternative model for personality disorder, including BPD. (See "Dimensional-categorical approach to assessing personality disorder pathology".)

DIAGNOSIS

DSM-5-TR criteria — The DSM-5-TR diagnostic criteria for borderline personality disorder (BPD) are found on a table (table 2) [80]:

All nine of the DSM-5-TR diagnostic criteria are common in patients with BPD. The frequency of each diagnostic criterion in a group of 201 patients with BPD was [81]:

- Affective instability (95 percent)
- Inappropriate anger (87 percent)
- Impulsivity (81 percent)
- Unstable relationships (79 percent)
- Feelings of emptiness (71 percent)
- Paranoia or dissociation (68 percent)
- Identity disturbance (61 percent)
- Abandonment fears (60 percent)
- Suicidality or self-injury (60 percent)

BPD can be overdiagnosed, with indiscriminate or pejorative application of the term to angry, irritating, demanding, difficult, or self-destructive patients [82]. In many clinicians' minds, angry, irritating behavior becomes equivalent to the diagnosis of BPD. Yet many other diagnostic entities and conditions can lead to these types of behaviors, such as bipolar disorder manic, chronic substance misuse, chronic pain, chronic marital or work related stress, and chronic paranoid states. The clinician needs to see beyond their reaction to annoying aspects of a patient's behavior to collect and evaluate the data needed to make an accurate diagnosis.

BPD can also be underdiagnosed; the stigma that continues to be attached to the diagnosis makes some clinicians reluctant to apply it to a patient, a perspective that may impact their attitudes during a patient's treatment [83,84].

Making the diagnosis of BPD can be difficult in the presence of co-occurring psychiatric disorders, especially when confounded by countertransference reactions. Symptoms of other disorders, such as an episodic mood disorder, can overlap with and overshadow the more stable psychopathology of BPD. A study found, however, that personality disorders diagnosed during a major depressive episode were as valid as those diagnosed in the absence of depression, indicating that it is possible to tease out significant personality psychopathology when a patient is depressed [85]. (See 'Comorbidities' above.)

Discussing the diagnosis — To have a frank and open discussion about treatment options with a patient, most clinicians agree that the diagnosis should be discussed with them [86]. This subject is discussed separately. (See "Overview of personality disorders", section on 'Discussing the diagnosis'.)

A patient with BPD needs to know that BPD is a recognized psychiatric disorder with both genetic (biologic) and psychosocial underpinnings. The diagnosis does not render the patient's prognosis hopeless – there are effective forms of treatment, especially in the psychotherapeutic realm, and remission is relatively common. (See 'Course' above.)

Adolescents — Although traits of BPD may appear as early as childhood, the diagnosis is generally not given to children or young adolescents. Traits of the disorder that appear in childhood may be specific to a particular developmental stage and change as the individual reaches adulthood. Some adolescents meeting criteria for the disorder will "mature out" of the symptoms and behaviors without treatment.

We are not currently able to predict which children will experience persistence of the disorder into adulthood. However, older adolescents with highly severe and pervasive manifestations of the disorder may be most likely to benefit from diagnosis accompanied by early intervention. Some studies suggest that youth with more manifestations of personality disorders in adolescence may be at greater risk for the disorders as adults (ie, there may be a rank-order stability of manifestations, even if there is the possibility of "maturing out") [87,88]. Additionally, symptoms of BPD in early adolescence are associated with increased risk of interpersonal difficulties, poor mental health (eg, increased suicidal and self-harming behavior), poor functional outcomes (eg, no training or job opportunities), and higher likelihood of being a victim of violence by age 18 [89].

ICD-10 — The World Health Organization International Classification of Diseases, 10th revision (ICD-10) uses the term "emotionally unstable personality disorder, borderline type" to classify these patients (table 3) [90].

Diagnostic instruments — Interviewer-administered instruments such as the Structured Clinical Interview for DSM-5 Personality Disorders [91] enable the interviewer to clarify contradictory or ambiguous patient responses, but are labor intensive and generally reserved for specialized evaluation, treatment, or research settings.

There are also validated instruments specifically designed for diagnosing only BPD. Examples are the self-report Borderline Symptom List [92], the Minnesota Borderline Personality Disorder Scale [93], and the Personality Assessment Inventory Borderline Features Scale [94-96]. A trait-based assessment can be done with the NEO Five-Factor Inventory-BPD [97].

Inter-rater and test-retest reliabilities among different semistructured interviews used to diagnose BPD are good to excellent (kappa = 0.68 to 0.96 for inter-rater and kappa = 0.40 to 0.85 for test-retest) [98]. Reliability is mostly a function of interviewer training and experience.

DIFFERENTIAL DIAGNOSIS

In addition to the comorbidity that can occur in the presence of borderline personality disorder (BPD), described above, BPD needs to be discriminated from other psychiatric disorders as part of a systematic differential diagnosis. These disorders include both symptom disorders and other personality disorders, in particular (see 'Comorbidities' above and 'Diagnosis' above):

- **Bipolar disorder** – The alternating mood syndromes ("mood swings") of bipolar I, bipolar II, or cyclothymic disorder can resemble the affective instability of BPD. The distinguishing feature is that the depressive or mood elevated syndromes in bipolar disorder are longer in duration compared with the labile affective states of BPD. (See 'Affective instability' above.)

  Mood syndromes in bipolar disorder are less connected to events in the environment, compared with the affective instability of BPD that is often triggered by stressors such as perceived rejection or failure. (See "Bipolar disorder in adults: Clinical features", section on 'Clinical presentation'.)

- **Major depressive disorder** – The dysphoria that characterizes major depressive disorder is present most of the day, nearly every day, for at least two weeks, whereas BPD is marked by affective states that fluctuate within a single day. (See 'Affective instability' above.)

  Major depressive disorder also involves sustained neurovegetative symptoms related to sleep, appetite, and energy, which are not features of BPD. In addition, BPD is marked by symptoms such as identity disturbance and frantic efforts to avoid abandonment, which are not part of major depressive disorder or other mental disorders. (See "Unipolar depression in adults: Assessment and diagnosis", section on 'Unipolar major depression'.)

- **Persistent depressive disorder** – Chronic dysphoria, overeating, and low self-esteem are symptoms of persistent depressive disorder (formerly dysthymia), and can also occur in BPD. Persistent depressive disorder involves sustained symptoms related to sleep and energy, which are not part of BPD. (See "Unipolar depression in adults: Assessment and diagnosis", section on 'Persistent depressive disorder (dysthymia)'.)

- **Posttraumatic stress disorder** – A history of trauma, which is central to the diagnosis of posttraumatic stress disorder, is often seen in patients with BPD. Posttraumatic stress disorder is characterized by symptoms of reexperiencing the traumatic event, avoidance and numbing, and increased arousal, which are not part of BPD. Problems with self-image

and interpersonal relationships characteristic of BPD are not typically part of posttraumatic stress disorder in the absence of personality pathology. In addition, exacerbation of symptoms in posttraumatic stress disorder is due to specific environmental triggers, whereas symptoms of BPD are exacerbated by more general stressors and frustrations or perceived interpersonal slights. (See "Posttraumatic stress disorder in adults: Epidemiology, pathophysiology, clinical features, assessment, and diagnosis".)

- **Dissociative identity disorder** – Disturbance of identity is common to both BPD and dissociative identity disorder. The distinguishing feature is that dissociative identity disorder is characterized by two or more distinct identities or personality states, each with its own enduring pattern of behavior, whereas the identity disturbance in BPD consists of an unstable and fluctuating sense of self, with sudden changes in self-image, goals, and values. (See "Dissociative identity disorder: Epidemiology, pathogenesis, clinical manifestations, course, assessment, and diagnosis".)

- **Attention deficit hyperactivity disorder (ADHD)** – Impulsivity may characterize both ADHD and BPD. Affective lability is also a frequently associated feature of ADHD. BPD is not typically characterized by inattention and ADHD is not characterized by fears of abandonment, a tendency toward self-injury, or interpersonal relationships characterized by alterations between extremes of idealization and devaluation.

BPD shares certain features with other personality disorders [7]. The greatest amount of overlap occurs with the other cluster B (dramatic, emotional, erratic) personality disorders.

- **Antisocial personality disorder** – The manipulative behavior characteristic of antisocial personality disorder is directed at gaining power or material gratification, whereas patients with BPD are manipulative for the purpose of gaining the concern of caretakers. Patients with antisocial personality disorder are also more emotionally stable and aggressive compared with patients with BPD. (See "Antisocial personality disorder: Epidemiology, clinical manifestations, course, and diagnosis".)

- **Histrionic personality disorder** – Affective instability as well as manipulative and attention-seeking behavior can occur in both histrionic personality disorder and BPD. The two disorders can be distinguished by symptoms that occur only in BPD, such as self-destructive behavior, frequent angry disruptions in relationships, and chronic feelings of emptiness. (See "Overview of personality disorders", section on 'Histrionic'.)

- **Narcissistic personality disorder** – Angry reactions to relatively minor provocations characterize both narcissistic personality disorder and BPD. In narcissistic personality

disorder, this behavior occurs in the context of a stable, grandiose self-image and without the self-destructive behavior, impulsivity, and fear of abandonment that mark BPD. (See "Narcissistic personality disorder: Epidemiology, pathogenesis, clinical manifestations, course, assessment, and diagnosis".)

- **Paranoid personality disorder** – Suspiciousness or paranoia, as well as angry reactions to minor stimuli, can occur in both paranoid personality disorder and BPD. Paranoid personality disorder is distinguished by a more pervasive suspiciousness and stable self-image, and lacks the self-destructive behavior, impulsivity, and fear of abandonment that characterize BPD. (See "Overview of personality disorders", section on 'Paranoid'.)

- **Schizotypal personality disorder** – Both schizotypal personality disorder and BPD share psychotic-like symptoms and difficulty with relationships. Patients with schizotypal personality disorder are more emotionally stable and less impulsive, and their difficulty with relationships stems from odd thinking and strange behavior. In BPD, the psychotic-like episodes are more transient, and the difficulty with relationships is due to affective instability and angry outbursts resulting from abandonment fears and impairments in social cognition. (See "Schizotypal personality disorder: Epidemiology, pathogenesis, clinical manifestations, course, and diagnosis".)

- **Dependent personality disorder** – The excessive need to be taken care of and fear of abandonment seen in dependent personality disorder leads to increasing appeasement and submissiveness when relationships are threatened, whereas the patient with BPD reacts with rage and feelings of emptiness. In addition, interpersonal relationships of people with dependent personality disorder are more stable than those of people with BPD. (See "Overview of personality disorders", section on 'Dependent'.)

SOCIETY GUIDELINE LINKS

Links to society and government-sponsored guidelines from selected countries and regions around the world are provided separately. (See "Society guideline links: Personality disorders".)

INFORMATION FOR PATIENTS

UpToDate offers two types of patient education materials, “The Basics” and “Beyond the Basics.” The Basics patient education pieces are written in plain language, at the 5th to 6th grade reading level, and they answer the four or five key questions a patient might have about a given condition. These articles are best for patients who want a general overview and who prefer

short, easy-to-read materials. Beyond the Basics patient education pieces are longer, more sophisticated, and more detailed. These articles are written at the 10th to 12th grade reading level and are best for patients who want in-depth information and are comfortable with some medical jargon.

Here are the patient education articles that are relevant to this topic. We encourage you to print or e-mail these topics to your patients. (You can also locate patient education articles on a variety of subjects by searching on “patient info” and the keyword(s) of interest.)

- Basics topic (see "Patient education: Borderline personality disorder (The Basics)")

SUMMARY AND RECOMMENDATIONS

- **Epidemiology** – Borderline personality disorder (BPD) is a common illness. The point prevalence in the United States general population is estimated to be 1.6 percent with a lifetime prevalence of approximately 6 percent. Prevalence rates in the general population to be comparable between females and males; however, the prevalence of BPD in clinical samples is higher in females compared with males. (See 'Epidemiology' above.)

  Co-occurring psychiatric disorders such as mood disorders, anxiety disorders, substance use, eating, and somatoform disorders are common in BPD. (See 'Comorbidities' above.)

- **Core features** – The core features of BPD are instability of interpersonal relationships, self-image, and affect, as well as marked impulsivity. Other signs and behaviors include (see 'Clinical manifestations' above):

  - Suicidality – We closely monitor individuals with suicidality in the form of threats, gestures, attempts, and nonsuicidal self-injury closely. We take all threats of self-harm seriously and do a full assessment of suicide risk. Predicting suicide is very difficult. (See 'Suicidality' above.)

  - Interpersonal difficulty – (See 'Interpersonal difficulties' above.)

  - Affective instability – (See 'Affective instability' above.)

  - Impulsivity – (See 'Impulsivity' above.)

  - Neuropsychological impairment – (See 'Cognition' above.)

  - Nonsuicidal self-injury – (See 'Nonsuicidal self-injury' above.)

- **Course** – The onset of BPD occurs in adolescence or early adulthood. Diagnosis in adolescents has shown stability, reliability, and validity similar to that of diagnosis in adults.

  High rates of remission and recurrence have challenged the traditional conceptualization of BPD as a stable and enduring pattern of maladaptive traits. One reconceptualization that has been proposed is BPD as a hybrid of stable personality traits and intermittently expressed symptomatic behaviors. (See 'Course' above.)

- **Assessment** – We diagnose BPD based on comprehensive psychiatric assessment. We obtain information from family, friends, prior treatment and medical records when available. Validated personality disorder assessment instruments (eg, McLean Screening Instrument for Borderline Personality Disorder) may be useful as screening tools.

- **Diagnosis** – The diagnosis of BPD is based on the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR) criteria. Diagnosis may be complicated by the presence of co-occurring mood, anxiety, and/or substance use disorders, which are seen at higher rates in patients with BPD. (See 'Diagnosis' above.)

  - **Children and adolescents** – Children or young adolescents are generally not diagnosed with BPD. Traits of the disorder that may appear in childhood can change as these patients reach adulthood. Adolescents with highly severe and pervasive manifestations of the disorder may be most likely to benefit from diagnosis accompanied by early intervention. (See 'Diagnosis' above.)

  - **Differential diagnosis** – BPD needs to be discriminated from other psychiatric disorders as part of a systematic differential diagnosis. These include: bipolar disorder, depressive disorders, posttraumatic stress disorder, dissociative identity disorder, attention deficit hyperactivity disorder, as well as other personality disorders.

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