

BMJ Best Practice

Personality disorders

Straight to the point of care



Last updated: Apr 02, 2025

Table of Contents

Overview	3
Summary	3
Definition	3
Theory	4
Epidemiology	4
Etiology	4
Pathophysiology	5
Classification	6
Case history	6
Diagnosis	8
Approach	8
History and exam	10
Risk factors	11
Tests	12
Differentials	15
Criteria	17
Management	21
Approach	21
Treatment algorithm overview	28
Treatment algorithm	31
Emerging	46
Secondary prevention	46
Patient discussions	46
Follow up	48
Monitoring	48
Complications	48
Prognosis	48
Guidelines	50
Treatment guidelines	50
Online resources	51
References	52
Disclaimer	65

Summary

Personality disorders are a relatively common, chronic pattern of perceptual and behavioral abnormalities. These manifest as problems in at least two of the following domains: cognitive-perceptual, affect regulation, interpersonal functioning, or impulse control.

Onset of symptoms in childhood/adolescence with stability over time.

Typical presentation involves comorbid disorders (more than one personality disorder or additional diagnoses of depression, anxiety, somatoform, or substance use disorder).

Ongoing relationship with a primary care physician is essential but may be challenging to maintain.

Potential for self-harm must be monitored. There is also potential for social withdrawal.

Psychotherapy is indicated in most cases. Selective use of pharmacotherapy can provide added benefit.

Definition

Personality disorders refer to enduring patterns of thinking and feeling about oneself and others that significantly and adversely affect how an individual functions in the various aspects of life.

In the Diagnostic and Statistical Manual of Mental Disorders, 5th edition text revision (DSM-5-TR), the personality disorders fall into 10 distinct types: paranoid, schizoid, schizotypal, antisocial, borderline, histrionic, narcissistic, avoidant, dependent, and obsessive-compulsive.[1] The International Classification of Diseases (ICD-11) states that personality disorder is characterized by disturbances in functioning aspects of the self (e.g., self-worth, accuracy of self-view) and/or interpersonal dysfunction. This disturbance manifests in patterns of cognition, emotional experience, and maladaptive behavior, across a range of personal and social situations, and is associated with significant distress or functional impairment.[2]

Personality disorders involve a chronic pattern of both internal perception and observable behavior in at least two of the following four symptom domains: cognitive-perceptual, affect, interpersonal functioning, and impulse control.[1] Personality disorders are associated with significant distress across these domains.

Personality disorders have been categorized into three general categories or clusters: cluster A (odd/eccentric); cluster B (dramatic); cluster C (anxious/fearful).[1]

In primary care settings, physicians are most likely to encounter patients with personality disorders in the context of treating the patient for a comorbid condition. Anxiety disorders, mood disorders, and substance use disorders are highly comorbid with personality disorders.[3]

Epidemiology

Across studies in the US, prevalence rates for personality disorders range from 9% to 11.2%.^{[4] [5]} One large-scale community study utilizing a structured interview administered by trained lay interviewers obtained a prevalence rate for any personality disorder of 14.79%.^[6] However, in the second wave of this study, with stricter criteria applied regarding level of distress or impairment, prevalence rate for any personality disorder was 9.1%.^[7] A 2018 systematic review looking at the prevalence of personality disorder in Western populations found the rate to be 12.2%, although the reviewers did not find any studies that used DSM-5 criteria.^[8]

Schizoid personality disorder is more common in men, with schizotypal personality disorder diagnosed equally between men and women.^[7] Antisocial personality disorder is more prevalent among men than women; men were also found to have higher rates of disorders in clusters A (odd/eccentric) and B (dramatic) compared with women.^{[4] [6] [9]} The prevalence of borderline personality disorder (BPD) for adults in the US is approximately 0.7% to 2.7%.^{[3] [10] [11]} European studies have found higher prevalence rates of cluster B disorders in the younger age group.^{[12] [13]} Prevalence rates for the various clusters range from 1.5% for cluster B to 6.0% for cluster C.^[9]

Research is limited and inconsistent in terms of differential prevalence rates between various ethnic groups.^{[6] [9]} Application of the impairment criteria prevalence rates for having any personality disorder were found to range from 5.31% for Asian/Native Hawaiian/other Pacific Islander, non-Hispanic people to 17.37% for American Indian/Alaska Native, non-Hispanic people.^[7] A review of 15 studies (with 5 considered to be high quality) concluded that prevalence of personality disorder is lower among African-Americans compared with white people, and that limited data preclude further conclusions.^[14]

Prevalence of most personality disorders decreases with age.^{[4] [5] [6] [9]}

People with personality disorders often have comorbid psychiatric disorders. Among patients with BPD, lifetime prevalence of mood and anxiety disorders exceeds 80%. The lifetime prevalence of substance use disorder is 78%.^[3] Bipolar II disorder has been reported in 37% of patients with BPD; attention deficit-hyperactivity disorder in 33%; post-traumatic stress disorder in 30%; and bipolar I disorder in 21%.^[15]

Etiology

There is evidence for both environmental and genetic effects on the development of personality disorders; however, the relative contribution of each is variable.^{[16] [17] [18] [19] [20] [21] [22]}

One line of research has looked into brain changes in patients with personality disorders. The neurobiological findings may be genetically determined, a direct cause of early emotional trauma, or a consequence of the elevated activity of stress-associated neurobiological systems. Research has suggested a linkage between early trauma and later neurobiological dysfunctions.^[23] There is evidence to support a combined genetic-environmental contribution to the development of specific aspects of personality disorders, such as emotional instability and suicidal behavior.^{[24] [25]}

A study of the genetic variants of the hypothalamus-pituitary-adrenal axis found a strong association between childhood trauma and genetic polymorphisms in men and women with borderline personality disorder (BPD).^[26] Genetic factors and adverse childhood experiences may interact to affect brain development via altered hormones and neuropeptides, increasing the risk of BPD.^{[11] [27] [28] [29] [30]} It has been postulated that adverse childhood experiences may modulate gene expression and lead to stable personality traits.^[28]

[29] [30] Although most clinicians believe that adverse childhood experiences such as physical, sexual, or emotional abuse and neglect are more common in people with BPD, not all people diagnosed with BPD have had such adverse childhood experiences.[31]

There is a familial predisposition of BPD with this disorder being more common in people with a family history of BPD.[32] In one population-based Swedish study that included 1,851,755 participants, of whom 11,665 (0.6%) had a diagnosis of BPD according to the International Classification of Diseases (ICD-10), it was estimated that the heritability of BPD was 46%; the remaining 54% of variance was explained by nonshared environmental factors.[33] No single-nucleotide variants have been identified for BPD.[34]

Individuals with schizotypal personality disorder are more likely to have a first-degree relative with schizophrenia or a schizophrenia-spectrum disorder. Schizotypal personality disorder has a stronger genetic link with schizophrenia than schizoid personality disorder.[35] [36]

In a longitudinal study of children followed over 4.5 years after birth, it was found that exposure to maternal stress in infancy sensitized the children's pituitary-adrenal responses to subsequent stress exposure.[37] Similarly, an investigation of exposure to prenatal adversities (i.e., tobacco use, alcohol consumption, anxiety, and depression) found that exposure to increased stress in utero was associated with BPD in children 11 to 12 years later.[38]

Environmental factors that have been linked to development of personality disorders include: childhood maltreatment, particularly a history of childhood physical abuse; sexual abuse; and neglect.[39] Individuals who have experienced childhood abuse or neglect were found to be more than 4 times as likely as those without such a history to be diagnosed with personality disorders.[39] However, results varied based on whether the source of information was self-report or documented records from a time concurrent with the events.[39] A cross-sectional study that compared self-reports of adults diagnosed with avoidant personality disorder to those with social phobia found that avoidant personality disorder was highly correlated with neglect and most pronounced for physical neglect.[40] A prospective study found higher rates of BPD in children with histories of physical abuse or neglect (but not sexual abuse) compared with controls.[41] However, when factors such as parental alcohol/drug use and employment status were considered, the relationship between abuse and BPD was no longer significant, demonstrating the multifactorial nature of this disorder.

Pathophysiology

Most studies of the biological bases of personality disorders have focused on schizotypal and BPD.[42] Schizotypal personality disorder has been associated with movement abnormalities and minor physical abnormalities not found in patients with other personality disorders or controls.[42] Studies also indicate differences in neurobiological measures that distinguish patients with schizotypal personality disorder from both control subjects and patients with schizophrenia.[42]

BPD has been associated with disruption in the serotonin (5-HT) system, disruption in the endogenous opiate pathway (implicated in repeated nonsuicidal self-mutilation behavior), and altered functioning in areas of the brain responsible for impulsive aggression and affective regulation.[42] Genetic studies have found abnormalities of the 5-HT transporter, the tryptophan hydroxylase, as well as the 5-HT_{2A} receptor gene.[43]

Connections between the prefrontal cortex and the amygdala are thought to play a key role in regulating emotional and behavioral responses. Emotional dysregulation and impulsivity, which are common manifestations of personality disorders, might be related to decreased prefrontal regulation and/or increased

amygdala activation.[44] In a neurobiologic model of BPD, the most consistent finding was hyperactivity of the amygdala but the role of the amygdala in this context remains unclear.[45] [46]

Dopaminergic activity is thought to be important in emotion, information processing, impulse control, and cognition; hence a dopamine dysfunction theory has been proposed, which is derived from the reduction of some symptoms in BPD with treatment of dopamine receptor antagonists.[47] The theory of dopamine system involvement in BPD is also supported by the results of provocative challenges with amphetamine and methylphenidate in people with the disorder.[47]

The role of the adrenergic nervous system has also been shown by dysfunction or dysregulations of the hypothalamic-pituitary-adrenal axis.[26] [43]

Oxytocin has been proposed as a factor in BPD psychopathology due to its effects on empathy and reward networks, affective regulation, and adaptive behavior.[48] The role of oxytocin in BPD is still under investigation. However, some studies suggest that low levels of endogenous oxytocin are a factor and dysregulations in the oxytocin system have been found in patients diagnosed with BPD.[49]

Classification

Diagnostic and statistical manual of mental disorders, 5th edition, text revision (DSM-5-TR) classification of personality disorders[1]

Three clusters: cluster A (odd/eccentric); cluster B (dramatic); cluster C (anxious/fearful).

- Cluster A: schizoid, schizotypal, paranoid
- Cluster B: borderline, histrionic, antisocial, narcissistic
- Cluster C: avoidant, dependent, obsessive-compulsive

International statistical classification of diseases and related health problems, 11th revision (ICD-11)[2]

- Mild personality disorders
- Moderate personality disorders
- Severe personality disorders

Personality difficulty refers to pronounced personality characteristics that may affect a patient's interaction with health services, but are not severe enough to warrant a diagnosis of personality disorder. Characteristics of personality difficulty are only manifested at low intensity, or intermittently.[2]

Case history

Case history #1

A 22-year-old man presents to a family medicine center because he is concerned about feelings of dizziness and weakness. His medical history is unremarkable and this is his first visit to the clinic. During the interview, the physician notices the man's despondent facial expression and inquires about other issues. He admits that he has not slept in 2 days because of tension in his relationship with his girlfriend, who is visiting her family in another part of the country. She had seemed somewhat distant on the phone with him, and he is concerned that she is spending time with her former boyfriend, who resides in the

same town as her family. He asks for medication to help him sleep and, after a few minutes, opens up to the physician about the mood swings that he has recently been experiencing. He admits that once before, when he liked a girl and discovered that she was not interested in him, he became hopeless and despondent. He acknowledged thinking that he did not want to live any more and that he would never be able to find anyone, but he did not have thoughts of ending his own life at that time. Instead, he took comfort from donating blood, as the sight of his own blood was extremely soothing to him, and he felt safe in the controlled environment of the blood donation center. However, he states that this time the intensity of his suffering is worse, and that he feels "alone in the world" and that even his friends are "out to get him."

Other presentations

The range of personality disorders is wide, and the various personality disorders differ markedly in their clinical presentations. Unlike other mental health conditions for which patients may seek assistance from a primary care physician, patients with personality difficulties are unlikely to report that their "personality" is the source of their suffering. Instead, patients with personality disorders may report symptoms of: unremitting mood or anxiety disorder; substance use disorder; multiple medically unexplained symptoms; or difficulties in interpersonal functioning. These may at times be manifest in challenging physician-patient interactions. Attention to nonverbal manifestations, such as scars from self-injurious behavior, must also be a focus of ongoing assessment. The primary care physician is unlikely to intervene directly to address personality issues, but, through the establishment of an effective therapeutic relationship, may assist the patient in improving the "index" symptoms that are causing him or her distress.

Maintaining contact with patients with a personality disorder may be challenging because of the nature of their difficulties, which undoubtedly will become salient in some way in the clinical encounter. These difficulties may include: aloofness; somewhat strange behaviors or patterns of thinking; demonstrations of affective dysregulation and self-mutilation; or clingy, anxious behavior with heavy reliance on the physician to make decisions. Over time, such an effective relationship will facilitate medical management of chronic conditions and potentially lead to improvements in health-related quality of life. It may also indirectly offer the patient the opportunity to develop different ways of relating with others and thus improve one of the core features of personality pathology.

Approach

People with personality disorders rarely present to a primary care physician seeking relief from their personality difficulties. They may have little or no insight into their personality issues. The comorbidity of more than one personality disorder is common. The approach to diagnosis is focused on broad symptom categories. These may be observable in physician-patient encounters or present in the patient's history, whether obtained from the patient him/herself or from collateral sources of information.

Presentation in primary care

By definition, personality disorders involve significant difficulties in interpersonal interactions, with various manifestations based on the disorder type or grouping. Thus the physician-patient relationship is likely to be affected by these issues. Repeated encounters that a physician considers “difficult” may warrant consideration of a personality disorder.[52] [53]

Additional presentations in primary care settings that may indicate the presence of significant personality issues include:[53][54][55]

- Acute stress, inappropriate demands, disproportionate anger, rapid mood changes
- Scars or other markings on the skin indicative of self-mutilation
- Frequent involvement in arguments or altercations
- Turbulent and volatile relationships
- Chronic and unremitting mood or anxiety disorder symptom complaints
- Poor response to evidence-based treatments for other mental health conditions
- Problematic substance use
- Presence of multiple medically unexplained symptoms
- Presenting issues in children that may suggest a traumatic home environment [CDC: Adverse Childhood Experiences (ACE) study] (<https://www.cdc.gov/violenceprevention/aces/about.html>)
- Clinical encounter elicits strong emotional reactions in the clinician, or departure from usual clinical practice (e.g., working outside expertise, change in prescribing practice).

Many of the symptoms of personality disorders can be grouped into the categories of:

- Cognitive-perceptual (rigidly held ideas, odd or strange thinking, misperceptions of others' intentions)
- Affective dysregulation (mood and anxiety symptoms)
- Impulse dyscontrol (aggressive or self-harm behaviors, sexual promiscuity, problematic substance use).

The various types of personality disorder are defined by the DSM-5-TR criteria. See Criteria .

Tests: screening interviews and self-report tools

Assessment of suicidality should be included in the clinical interview. Researchers have identified suicidal desire, capability, and intent, and presence of buffers as the key variables to assess.[56] Tools are available to assist primary care clinicians in the assessment of suicide. [Suicide Prevention Resource Center: suicide prevention toolkit for primary care practices] (<http://www.sprc.org/settings/primary-care/toolkit>)

A brief screening interview test for personality disorder, the Standardized Assessment of Personality-Abbreviated Scale (SAPAS) has been validated in psychiatric settings.[57] [58] It seems to be most useful for identifying patients within clusters A and C, but less so for identifying patients within cluster B.[58]

The SAPAS was used in a large-scale study examining factors related to response to antidepressant treatment, and personality dysfunction was found to have had a significant negative impact on treatment response.[59] However, the SAPAS is not recommended for routine screening in primary care settings, where prevalence of personality disorder is lower than in psychiatric settings.[57] Within the primary care setting, it may be appropriate for use with patients who have comorbid psychiatric conditions, such as anxiety or depression. The Structured Clinical Interview for DSM-5-TR Alternative Model for Personality Disorders Version (SCID-5-AMPD) is a semi-structured interview for use by trained clinicians with a basic knowledge of the concepts of personality disorders.

An analysis of three brief self-report tools concluded that the tools were strongly correlated with each other, and also were best when used with more severe levels of personality pathology in psychiatric samples.[60] The goal of a brief self-report screening tool for personality disorders may not be achievable given the factors involved (for example, overlap between personality disorders, as well as comorbidity with mood, anxiety, or psychotic disorders).[60]

Tests: screening for organic disorders

In cases when the patient presents with sudden personality changes, organic causes such as substance use disorder, malignancy, or other general medical conditions must be excluded before a diagnosis of personality disorder can be considered. Selective testing such as brain imaging (computed tomography [CT] or magnetic resonance imaging [MRI]) and urine drug testing may be helpful in initial investigation of these findings.

Tests: screening assessment for behaviors adversely affecting health and comorbid psychiatric conditions

Many personality features are stable over time but present more prominently on an intermittent basis and are considered the "target" symptoms for treatment efforts (e.g., the self-injurious behavior of an individual with borderline personality disorder). While a complete diagnostic assessment of specific personality disorders or traits typically occurs in specialty settings, primary care physicians can assess for behaviors adversely impacting health status, suicidal ideation and plan, as well as anxiety and affective symptoms that patients with personality disorders experience.[60] [61] Screening instruments that may be helpful in this regard include:

- Primary Care Evaluation of Mental Disorders (PRIME-MD), a screen for the presence of a variety of psychiatric disorders, including mood, anxiety, somatoform, and eating, as well as alcohol use/dependence[62]
- Patient Health Questionnaire-9 (PHQ-9), which provides information on the severity of depressive symptomatology including self-harm and suicidal ideation[63] [Patient Health Questionnaire PHQ-9] (<https://www.thenationalcouncil.org/resources/patient-health-questionnaire-phq-9>)
- Generalized Anxiety Disorder-7 (GAD-7), providing information on the severity of anxiety symptomatology[64] [65]
- Mood Disorders Questionnaire, which screens for the presence of elevated mood states, hypomania, and mania.[66]

Patients who screen positive for mood disorder, substance use disorder, history of deliberate self-harm, and/or prior suicide attempt may be at greater suicide risk.[67]

Specialist referrals

For a detailed assessment of personality disorder traits and their potential to impact the physician-patient relationship and approach to medical care, primary care physicians should consider referral to a mental health professional with specialty training in the assessment and treatment of people with personality disorders. Structured interviewing and specific diagnostic instrument administration, including the administration of psychological testing, may be carried out by such a professional. A consulting psychologist or psychiatrist may use the Millon Clinical Multiaxial Inventory-III (MCMI-III) and the Structured Clinical Interview for DSM-IV Axis II Personality Disorders instruments. Two disciplines, clinical health psychology and consultation-liaison psychiatry, are particularly concerned with the interface of mental and physical health and well-being, but many types of mental health providers are skilled in this particular field. When consulting with the evaluating clinician, it is important to obtain information on the evaluator's practice with regard to providing feedback to patients. This will allow the primary care physician to address further patient questions regarding the evaluation in a manner that avoids potential misunderstanding and miscommunication.

History and exam

Key diagnostic factors

paranoia (common)

- A cognitive-perceptual feature characteristic of personality disorders.
- Paranoid personality disorder patient: hidden meaning seen in neutral actions, may suspect harm or deception by clinician, suspects infidelity in partner.
- Borderline personality disorder: paranoid thinking can emerge in response to stress.

odd thinking (common)

- A cognitive-perceptual feature characteristic of personality disorders.
- Schizotypal personality disorder: experiences ideas of reference, magical thinking.

restricted range of emotions (common)

- A mood feature characteristic of the affective dysregulation of personality disorders.
- Obsessive-compulsive personality disorder: prefers rational to emotional expression.
- Schizoid personality disorder: restricted range of emotion displayed; may delay seeking medical care because of unwanted contact and may appear cold/indifferent.

anger and irritability (common)

- Mood symptoms characteristic of the affective dysregulation of personality disorders.
- Antisocial personality disorder: often appears irritable.
- Borderline personality disorder: episodic, intense anger states; may reflect history of trauma and mild dissociation.
- Paranoid personality disorder: often appears angry.

excessive emotionality and unstable mood states (common)

- Mood symptoms characteristic of the affective dysregulation of personality disorders.
- Borderline personality disorder: unstable and intense mood states often occurring in concert with idealization and devaluation of others; chronic dysphoria is common.
- Histrionic personality disorder: superficial and excessive emotionality.

anxiety and tension (common)

- Anxiety symptoms characteristic of the affective dysregulation of personality disorders.
- Avoidant personality disorder: fearful of rejection, unlikely to disagree with physician, socially anxious.
- Dependent personality disorder: experiences significant difficulty when asked to engage in decision making and tries to enlist others to take responsibility for health issues.
- Borderline personality disorder: fearful of rejection, separation, and abandonment.
- Histrionic personality disorder: becomes anxious with discussion of serious health issues or difficult feelings.
- Obsessive-compulsive personality disorder: extreme concern about providing the "right" answers to questions.
- Paranoid personality disorder: often appears tense, hypervigilant.
- Schizotypal and schizoid personality disorder: discomfort with social communication and physical examination.

impulsive behaviors (common)

- Indicators of the impulse dyscontrol characteristic of personality disorders.
- Antisocial personality disorder: may appear cooperative and charming at first in an effort to obtain desired outcome from clinician, but repeatedly acts with disregard for safety and rights of others with irresponsibility and lack of remorse; violence and substance use are common.
- Borderline personality disorder: impulsive, recurrent self-destructive behaviors such as cutting, substance use and drug overdose, sexual promiscuity.

grandiosity (common)

- A cognitive-perceptual feature characteristic of personality disorders.
- Narcissistic personality disorder: sense of self based on grandiosity and need for admiration, interpersonally exploitative, has difficulty accepting diagnoses that challenge sense of self as infallible. Often exists alongside intense degree of shame, rage in the face of humiliation.

evidence of self harm (e.g., scars, burns) (common)

- May be present.

Risk factors

Strong

history of abuse

- Childhood maltreatment, particularly a history of childhood physical abuse, sexual abuse, and neglect is associated with development of personality disorders.^[39] Individuals who have experienced childhood abuse or neglect were found to be more than four times as likely as those without such a history to be diagnosed with personality disorders.^[39] One cross-sectional study that compared self-

reports of adults diagnosed with avoidant personality disorder to those with social phobia found that avoidant personality disorder was highly correlated with neglect, especially physical neglect.[\[40\]](#)

family history of schizophrenia

- Individuals with schizotypal personality disorder are more likely to have a first-degree relative with schizophrenia or a schizophrenia-spectrum disorder. Schizotypal personality disorder has a stronger genetic link with schizophrenia than schizoid personality disorder.[\[35\]](#) [\[36\]](#)

family history of borderline personality disorder (BPD)

- One population-based Swedish study that included 1,851,755 participants, of whom 11,665 (0.6%) had a diagnosis of BPD according to the International Classification of Diseases (ICD-10), estimated that the heritability of BPD was 46%; the remaining 54% of variance was explained by nonshared environmental factors.[\[33\]](#)

negative parenting interactions

- Home environments characterized by harsh punishment and lack of parental affection are associated with personality disorder into adulthood.[\[50\]](#)

emotional/disruptive disorder in childhood

- Disruptive behavior disorder in childhood is associated with a higher likelihood of having a cluster B (dramatic) personality disorder than having another emotional disorder.
- For women, having an emotional disorder in childhood was associated with increased likelihood of having a cluster C (anxious/fearful) personality disorder.[\[51\]](#)

Tests

1st test to order

Test	Result
clinical interview <ul style="list-style-type: none"> • People with personality disorders do not present to a primary care physician seeking relief from their personality difficulties, and may have little or no insight into their personality issues. • Diagnosis will be focused on broad symptom categories that are observable in physician-patient encounters or present in the patient's history, whether obtained from the patient him/herself or from others who know the patient (collateral sources). • Further screening tests for the assessment of comorbid symptoms may be helpful. • Specialist referral is required for a detailed assessment of personality disorder traits. 	symptoms dating from adolescence/early adulthood; not occurring solely in the presence of another disorder such as depression or anxiety; significant difficulties in interpersonal interactions may lead to suspected diagnosis of personality disorder

Other tests to consider

Test	Result
suicide risk screening questions <ul style="list-style-type: none"> There is inconclusive evidence for routine assessment of suicide risk in primary care. Strongest suicide risk factors are: presence of mood disorder, comorbid substance abuse, history of deliberate self-harm, prior suicide attempt. Screening tools specific for suicide risk have not been validated in primary care settings.[67] 	positive or negative for factors that indicate increased suicide risk in this patient population
Standardized Assessment of Personality-Abbreviated Scale (SAPAS) <ul style="list-style-type: none"> A brief screening interview test for personality disorder, which has been validated in psychiatric settings.[57] [58] Within the primary care setting, it may be appropriate for use with patients who have comorbid psychiatric conditions, such as anxiety or depression. However, it is not recommended for routine screening in primary care settings, where prevalence of personality disorder is lower than in psychiatric settings.[57] 	may demonstrate positive ratings for personality disorder
Millon Clinical Multiaxial Inventory-III (MCMI-III) <ul style="list-style-type: none"> Commonly used instrument that may be used by a consulting psychologist or psychiatrist following referral from primary care. 	may demonstrate positive ratings for personality disorder
Structured Clinical Interview for DSM-5-TR Alternative Model for Personality Disorders Version (SCID-5-AMPD) <ul style="list-style-type: none"> Semi-structured interview for use by trained clinicians with a basic knowledge of the concepts of personality disorders. Formatted as three independent modules: self and interpersonal functioning, assessment of five pathological personality trait domains and their corresponding 25 trait facets, assessment of six specific personality disorders and Personality Disorder-Trait-Specified. 	may demonstrate positive ratings for components of personality pathology and/or personality disorder
Structured Clinical Interview for DSM-5-TR Personality Disorders <ul style="list-style-type: none"> Commonly used instrument that may be used by a consulting psychologist or psychiatrist following referral from primary care. Assesses the 10 DSM-5-TR Personality Disorders across Clusters A, B, and C as well as Other Specified Personality Disorder. There is also an optional self-report patient questionnaire. 	may demonstrate positive ratings for personality disorder
MRI/CT scan of brain <ul style="list-style-type: none"> Ordered in cases of sudden appearance of one or more of the following: cognitive-perceptual symptoms, affective dysregulation, atypical features, or impulsive behavioral dyscontrol. An abnormal result would indicate a need for further medical or neurologic testing. 	normal in personality disorder
urine drug screen <ul style="list-style-type: none"> Ordered in cases of one or more of the following: cognitive-perceptual symptoms, affective dysregulation, or impulsive behavioral dyscontrol. Personality disorder is not diagnosed if suggestive symptoms occur only during times of active substance use. 	positive result suggests comorbid substance use disorder diagnosis or substance use disorder in absence of personality disorder

Test	Result
The Primary Care Evaluation of Mental Disorders (PRIME-MD) <ul style="list-style-type: none"> Administered in primary care settings for patients with the possibility of comorbid axis I disorder(s). The test is comprised of a patient questionnaire followed by clinician evaluation. It assesses for the presence of mood, anxiety, somatoform, and eating disorders, as well as alcohol abuse/dependence.[62] 	normal or a result suggesting the presence of comorbid axis I disorder(s)
Patient Health Questionnaire-9 (PHQ-9) <ul style="list-style-type: none"> Administered in primary care setting in patients with symptoms of depression. Includes a question about suicide and self-harm. Test score interpretation: 5-9, minimal symptoms; 10-14, mild symptoms; 15-19, moderate symptoms; 20 or greater, severe symptoms.[63] [Patient Health Questionnaire PHQ-9] (https://www.thenationalcouncil.org/resources/patient-health-questionnaire-phq-9) Personality disorder should be considered in patients for whom depression scores do not improve with treatment. 	score indicative of depression severity
Mood Disorder Questionnaire <ul style="list-style-type: none"> Administered in primary care setting for patients with symptoms of affective dysregulation or impulsive behavioral dyscontrol. Mood disorder screening score of 7 or more yields sensitivity of 0.73 and specificity of 0.90.[66] 	normal or a result suggestive of manic or hypomanic symptoms
Generalized Anxiety Disorder-7 (GAD-7) and GAD-2 <ul style="list-style-type: none"> Administered in primary care setting for patients with symptoms of anxiety. A score of 8 on the GAD-7 or a score of 3 on the GAD-2 (first two items of GAD-7) are suggestive of anxiety disorder.[64] [65] 	score indicative of anxiety severity

Differentials

Condition	Differentiating signs / symptoms	Differentiating tests
Mood disorders	<ul style="list-style-type: none"> • Symptoms develop over much shorter periods of time and represent a change in functioning; include somatic symptoms, such as insomnia, weight loss, or psychomotor agitation.[1] In patients with a personality disorder, moods are usually reactive, in reaction to interpersonal events or internal experiences. • Consider personality disorder as a comorbid condition. 	<ul style="list-style-type: none"> • Clinical interview. • Use of DSM-5-TR criteria.[1] • The Primary Care Evaluation of Mental Disorders (PRIME-MD) may indicate presence of symptoms suggestive of mood disorders.[62] • Mood Disorder Questionnaire may indicate presence of symptoms indicative of elevated mood states (hypomania and mania).[66] • Patient Health Questionnaire-9 (PHQ-9) may indicate presence of self-harm, suicidal ideation.[63] [Patient Health Questionnaire PHQ-9] (https://www.thenationalcouncil.org/resources/patient-health-questionnaire-phq-9)
Psychotic disorders	<ul style="list-style-type: none"> • Absence of persistent delusions and hallucinations in personality disorder.[1] However, patients with borderline personality disorder may experience transient paranoid ideation in response to stress; patients with schizotypal personality disorder may experience ideas of reference (but not delusions), as well as odd beliefs or magical thinking.[1] • Consider personality disorder as a comorbid condition. 	<ul style="list-style-type: none"> • Clinical interview. • Use of DSM-5-TR criteria.[1]
Anxiety disorders	<ul style="list-style-type: none"> • Social anxiety disorder can be difficult to differentiate from avoidant personality disorder as many of the symptoms overlap, and there is controversy about whether the two disorders are in fact distinct. However, avoidant personality disorder appears to involve more generalized 	<ul style="list-style-type: none"> • Clinical interview. • Use of DSM-5-TR criteria.[1] • Generalized Anxiety Disorder-7 (GAD-7) or GAD-2 may indicate presence of symptoms suggestive of anxiety disorders.[64] [65]

Condition	Differentiating signs / symptoms	Differentiating tests
	<p>impairment in multiple spheres of functioning.</p> <ul style="list-style-type: none"> • Avoidance behavior in agoraphobia is circumscribed and in relation to occurrence of panic attacks (compared with avoidant personality disorder, in which avoidance behavior is evident in a variety of settings involving interpersonal contact). • Presence of obsessions and compulsions in obsessive-compulsive disorder (compared with obsessive-compulsive personality disorder, where perfectionistic traits are apparent). • Consider personality disorder as a comorbid condition. 	
Substance-use disorders	<ul style="list-style-type: none"> • For antisocial personality disorder diagnosis to be given in addition to a substance-related diagnosis, antisocial personality disorder symptoms must have been present in childhood (typically prior to the establishment of the substance-related disorder) and continued into adulthood.[1] • Consider personality disorder as a comorbid condition. 	<ul style="list-style-type: none"> • Urine drug screen. • Clinical interview. • Use of DSM-5-TR criteria.[1] • The Primary Care Evaluation of Mental Disorders (PRIME-MD) may indicate presence of symptoms suggestive of alcohol use/dependence.[62][68]
Personality change due to general medical condition	<ul style="list-style-type: none"> • Personality symptoms represent a change from baseline level of functioning and are due to a direct physiological cause (e.g., head trauma, endocrine condition, or other conditions involving the central nervous system).[1] 	<ul style="list-style-type: none"> • Physical or neurologic exam may reveal features suggestive of a specific medical condition. • Clinical interview with patient and, if possible, collateral source. • Use of DSM-5-TR criteria.[1] • Imaging (CT/MRI of brain), neuropsychological testing, or laboratory tests (e.g., thyroid function tests) may have suggestive findings.

Condition	Differentiating signs / symptoms	Differentiating tests
Sub-threshold personality traits	<ul style="list-style-type: none"> Traits that are not considered rigid, maladaptive, stable, and linked to impairment. 	<ul style="list-style-type: none"> Clinical interview. Use of DSM-5-TR criteria to rule out personality disorder diagnosis.[1]

Criteria

Schizotypal personality disorder (DSM-5-TR)

Social and interpersonal deficits marked by acute discomfort with and reduced capacity for close relationships, accompanied by cognitive/perceptual distortions and eccentric behavior; may include ideas of reference, odd thinking or speech, unusual perceptual experiences, social anxiety regardless of familiarity with situation, suspiciousness or paranoid ideation, inappropriate or constricted affect.[1] This is classified with the schizophrenia-spectrum disorders in ICD-11.[2]

Schizoid personality disorder (DSM-5-TR)

Pattern of detachment in social relationships and restricted emotional expression in interpersonal interactions; solitary, indifferent toward others; affectively detached; little, if any, interest in having sexual experiences with another person; lacks close friends and confidants (other than first degree relatives).[1]

Paranoid personality disorder (DSM-5-TR)

Distrust and suspiciousness of others, whose motives are viewed as malevolent; suspicious and bears grudges; perceives threats in neutral events; preoccupied with unjustified doubts about the loyalty or trustworthiness of friends or associates; reluctant to confide in others; recurrent suspicions (without justification) about fidelity of a spouse/partner; perceives attacks on character/reputation that are not apparent to others and is quick to react angrily or counterattack.[1]

Avoidant personality disorder (DSM-5-TR)

Social inhibition, feelings of inadequacy, hypersensitivity to negative evaluation; interpersonally inhibited and extremely reluctant to take personal risks, even in occupational activities, due to fear of rejection; shows restraint in intimate relationships due to fear of being shamed or ridiculed, views self as socially inept, preoccupied with being criticized or rejected in social situations.[1]

Dependent personality disorder (DSM-5-TR)

Excessive need to be taken care of leading to submissive and clinging behavior; difficulty with decision making in the absence of advice; fears solitude due to fear of inability to care for self; has difficulty expressing disagreement with others; difficulty initiating projects or doing things on his or her own; urgently seeks another relationship as a source of care and support when a close relationship ends.[1]

Obsessive-compulsive personality disorder (DSM-5-TR)

Preoccupation with orderliness, perfectionism, and mental/interpersonal control (and subsequent lack of flexibility, openness, and efficiency); overconscientious, stubborn, and excessively devoted to work; scrupulous and inflexible about matters of morality, ethics, and values; reluctant to delegate tasks or work

with others; unless they conform to his/her style of doing things; rigid; unable to discard worthless or worn-out objects even when they have no sentimental value; adopts a miserly spending style towards self and others.[1]

Borderline personality disorder (DSM-5-TR)

Instability of interpersonal relationships, self-image, and affects, and impulsivity; intense anger and affective instability; recurrent suicidal behavior/gestures; impulsive behavior with potential for self-harm; frantic efforts to avoid real or imagined abandonment; chronic feelings of emptiness; affective instability due to a marked reactivity of mood; inappropriate, intense anger, or difficulty controlling anger.[1]

Histrionic personality disorder (DSM-5-TR)

Excessive emotionality and attention-seeking; discomfort when not center of attention; shifting and shallow expression of emotions; draws attention to self through physical appearance; superficial; style of speech is impressionistic and lacks details; considers relationships to be more intimate than they actually are; easily influenced by others or circumstances.[1]

Narcissistic personality disorder (DSM-5-TR)

Grandiosity (in fantasy and behavior), need for admiration, lack of empathy; views self as "special" and needs to be admired; unwilling to recognize feelings of others; is arrogant and interpersonally exploitative; lacks empathy; often envious of others and believes that others are envious of him or her.[1]

Antisocial personality disorder (DSM-5-TR)

Disregard for and violation of rights of others occurring since age 15; impulsivity; deceitfulness; lack of remorse; engages in acts that are illegal or show disrespect for social norms; irritability and aggressiveness, as indicated by repeated physical fights or assaults; reckless disregard for safety of others; fails to sustain consistent work behavior or honor financial obligations.[1]

Other specified personality disorder/unspecified personality disorder (DSM-5-TR)

Symptoms characteristic of a personality disorder are present and cause clinically significant distress or impairment in social, occupational, or other important areas, but do not meet the full criteria for any of the disorders in the personality disorders class. If the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for any specific personality disorder (e.g. "mixed personality features"), the diagnosis is other specific personality disorder. If the clinician does not choose to specify a reason that the criteria are not met for a specific personality disorder, the diagnosis is unspecified personality disorder. This may include presentations where there is insufficient information to make a more specific diagnosis.[1]

Alternative DSM-5-TR model for personality disorders

An alternative model has been proposed for diagnosis and classification of personality disorders. Using the alternative model, personality disorders are characterized by impairments in personality functioning and pathological personality traits. The alternative model was developed because, in the established model, symptoms frequently meet the criteria for more than one personality disorder, and individuals do not tend to present with patterns of symptoms that correspond to one, and only one, personality disorder.[1]

Antisocial, avoidant, borderline, narcissistic, obsessive compulsive, and schizotypal personality disorders may be derived from this model.[1]

Using the alternative model, the essential features of a personality disorder are:

- Moderate or greater impairment in personality (self/interpersonal) functioning
- One or more pathological personality traits
- The impairments in personality functioning and the individual's personality trait expression are relative inflexible and pervasive across a broad range of social situations
- The impairments in personality functioning and the individual's personality trait expression are relatively stable across time, with onsets that can be traced back to at least adolescence or early adulthood
- The impairments in personality functioning and the individual's personality trait expression are not better explained by another mental disorder
- The impairments in personality functioning and the individual's personality trait expression are not solely attributable to the physiological effects of a substance or another medical condition (e.g., severe head trauma)
- The impairments in personality functioning and the individual's personality trait expression are not better understood as normal for an individual's developmental stage or sociocultural environment.

Although the transition to an alternative model for diagnosing personality disorders is supported by the research, the literature regarding treatment is still predominantly focused on the categorical approach. The highest-quality evidence for various treatments concerns borderline personality disorder (BPD), which is the most frequently diagnosed personality disorder in clinical settings and the most extensively researched personality disorder. There is also support for the notion that BPD represents features of personality dysfunction that are shared across all manifestations of personality disorder.^[69] The categorical approach to the classification of personality disorders will be utilized in this monograph.

International Classification of Diseases (ICD-11)^[2]

ICD-11 departs from the categorical model of personality disorders. Diagnosis has three components:^[2] ^[53]

- Identify the presence of a core problem in self and interpersonal functioning
- Classify the level of severity
- Identify the main traits and whether a borderline pattern exists

A core problem in self and interpersonal functioning is indicated by:

- An enduring disturbance characterized by problems in functioning of aspects of the self (e.g., identity, self-worth, accuracy of self-view, self-direction), and/or interpersonal dysfunction (e.g., ability to develop and maintain close and mutually satisfying relationships, ability to understand others' perspectives and to manage conflict in relationships).
- The disturbance has persisted over an extended period of time (e.g., lasting 2 years or more).
- The disturbance is manifest in patterns of cognition, emotional experience, emotional expression, and behavior that are maladaptive (e.g., inflexible or poorly regulated).
- The disturbance is manifest across a range of personal and social situations (i.e., is not limited to specific relationships or social roles), though it may be consistently evoked by particular types of circumstances and not others.
- The symptoms are not due to the direct effects of a drug or substance, including withdrawal effects, and are not better accounted for by another mental disorder, a disease of the nervous system, or another medical condition.
- The disturbance is associated with substantial distress or significant impairment in personal, family, social, educational, occupational, or other important areas of functioning.
- Personality disorder should not be diagnosed if the patterns of behavior characterizing the personality disturbance are developmentally appropriate (e.g., problems related to establishing an independent

self-identity during adolescence) or can be explained primarily by social or cultural factors, including sociopolitical conflict.

Trait domain qualifiers describe the most prominent characteristics that contribute to the personality disturbance:

- Negative affectivity: experiences a broad range of negative emotions with a frequency and intensity out of proportion to the situation; emotional lability and poor emotion regulation; negativistic attitudes; low self-esteem and self-confidence; mistrustfulness
- Detachment: tendency to maintain interpersonal and social distance; social detachment; emotional detachment
- Dissociality: disregard for the rights and feelings of others; self-centeredness, lack of empathy
- Disinhibition: acts rashly based on immediate external or internal stimuli, without consideration of potential negative consequences; impulsivity; distractibility; irresponsibility; recklessness; lack of planning
- Anankastia: a narrow focus on own rigid standards of perfection and of rights and wrong, and on controlling own and others' behaviors and controlling situations to ensure these standards are met; perfectionism; emotional and behavioral constraint
- Borderline pattern: frantic efforts to avoid real or imagined abandonment; a pattern of unstable and intense interpersonal relationships, which may be characterized by vacillations between idealization and devaluation, typically associated with both strong desire for and fear of closeness and intimacy; identity disturbance, manifested in markedly and persistently unstable self-image or sense of self; a tendency to act rashly in states of high negative affect, leading to potentially self-damaging behaviors (e.g., risky sexual behavior, reckless driving, excessive alcohol or substance use, binge eating); recurrent episodes of self-harm (e.g., suicide attempts or gestures, self-mutilation); emotional instability due to marked reactivity of mood-fluctuations of mood may be triggered either internally (e.g., by one's own thoughts) or by external events and the individual experiences intense dysphoric mood states, which typically last for a few hours but may last for up to several days; chronic feelings of emptiness; inappropriate intense anger or difficulty controlling anger manifested in frequent displays of temper (e.g., yelling or screaming, throwing or breaking things, getting into physical fights); transient dissociative symptoms or psychotic-like features (e.g., brief hallucinations, paranoia) in situations of high affective arousal.

Approach

Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing patients with personality disorders in a primary care setting.[53] The use of techniques specific to the prominent personality traits demonstrated by the individual patient can assist in forming and maintaining such a relationship. Psychotherapy and other psychosocial interventions are useful treatment modalities for a great number of these patients. Such treatments can assist patients in working through relationship issues, confronting fears, coping with trauma, dealing with troubling and dysfunctional thoughts, and acquiring skills necessary to lead a more satisfying and healthy life.

Psychotropic medication treatment can be utilized selectively to address problematic thoughts, moods, and behaviors that significantly impair the patient or place those in their immediate environment at risk. Substance use disorder, particularly alcohol use, is fairly common in these patients. It needs to be identified early and addressed through specific treatment interventions, as it leads to further medical and psychiatric morbidity for these patients.

Relationship with primary care physician

Given the interpersonal concerns of patients with personality disorders, the establishment of a physician-patient relationship that is maintained over time poses a particular challenge. The primacy of the physician-patient relationship and how to establish and maintain it have been discussed in the literature.[70] [71] Allowing more time for consults and seeing one clinician consistently may be beneficial.[53]

The referral to a mental health provider should be made with great care and presented to the patient as a consultation for a symptom that he/she agrees is troubling, such as anxiety, depression, a lifestyle modification concern, or a functional impairment. The physician should emphasize that the patient will continue to follow up with him or her after the consultation, and that referral to the specialist does not suggest termination of care or abandonment. The importance of the therapeutic alliance between patient and physician, and the importance of collaboration in care between treatment providers, has been emphasized.[72] The referral decision is best approached in a collaborative manner with the patient, incorporating his/her motivation, preferences, and concerns into the resulting plan of care.

Acute management

A significant challenge confronting primary care physicians in the treatment of patients with personality disorders involves management of acute/emergent situations. There is very little randomized controlled trial (RCT)-based evidence to inform the management of acute crises in people diagnosed with borderline personality disorder (BPD).[73] However, there are general guidelines:

Self-harm, suicidal ideation, or potential for harm to children

- When patients express suicidal ideation or the wish to engage in self-harm, partial hospitalization, intensive day treatment, or, in cases where imminent risk is a concern, inpatient admission (either voluntary or involuntary) are the usual treatment options. Patients in need of this high-level, structured treatment may present with: severe disturbances of thinking, mood, and/or impulse control; aggression; hopelessness; extremely poor judgment. See Suicide risk mitigation .
- While most studies have focused on BPD and risk for suicide, suicidal behavior in other personality disorders has also been studied.[72] [74] [75] [76]

- It is imperative that close communication take place between providers of acute psychiatric services and the primary care physician.
- Suicide risk is much higher when personality disorder is comorbid with substance use disorder and/or major depression.
- Primary care providers may also be concerned about parenting skills in patients with personality disorders; significant support will be required for them to manage children. Steps must be taken within the primary care provider's legal jurisdiction in cases of suicidality and aggression to protect the children in such homes.

Substance use

- Patients with acute alcohol or other substance intoxication or highly problematic substance use may require inpatient hospitalization for detoxification and subsequent monitoring. This may be particularly necessary for patients with a history of self-injurious behavior or highly impulsive behavior.
- Those with histories of complicated substance withdrawal or serious comorbid medical conditions would also be considered for inpatient substance use treatment. This treatment can occur concurrently with psychiatric stabilization.
- Following the period of inpatient treatment, referral to a residential or intensive outpatient substance use disorder treatment program, including a 12-step program such as Alcoholics Anonymous (AA) or Narcotics Anonymous (NA), will provide for continuity of care.
- As with referral for acute psychiatric services, it is very important that clear and timely communication take place between the primary care physician and the substance use treatment program staff.

Ongoing management: physician-patient relationship

For all patients with personality disorders, the foundation of treatment is the physician-patient relationship. The interpersonal sensitivities of individuals with personality disorders varies substantially. However, all patients will benefit from a consistent and stable relationship, characterized by clear communication and well-established boundaries. Other communication strategies are recommended based on the identified personality disorder and are listed here. They can be applied in all patient interactions, whether focusing on management of disease or improvement in lifestyle.

- Cluster A: odd/eccentric
 - Paranoid, schizoid, schizotypal personality disorders: straightforward communication, unintrusive style; display interest in those concerns patient does share.
- Cluster B: dramatic
 - BPD: simple communication with clear and consistent boundaries, calm demeanor in response to inevitable crises, preparation of patient for any changes in care arrangements (such as coverage during vacation), coordination of care with other treatment providers in order to avoid patient use of splitting (a defense mechanism where the patient views others as all good or all bad; it can lead to disagreements among those treating the patient). In addition, consider having a practice protocol with regard to after-hours coverage and use of e-mail communication.
 - Antisocial personality disorder: simple, straightforward communication; clear and consistent boundaries; exercise caution when prescribing controlled substances due to the potential for

- illegal use. In addition, be aware of tendencies of these patients to be less than truthful and to disregard rules.
- Histrionic personality disorder: maintain professional distance, provide reassurance, address seductive behaviors in straightforward manner while maintaining a professional boundary.
- Narcissistic personality disorder: acknowledge the patient as special, convey self-confidence in interactions, avoid power struggles.
- Cluster C: anxious
 - Avoidant personality disorder: avoid critical comments, reinforce appropriate help-seeking behaviors.
 - Dependent personality disorder: tolerate repeated requests for reassurance; provide helpful resources and support patient self-efficacy; schedule primary care visits at regular, pre-established times (such as monthly) rather than as unscheduled visits prompted by the emergence of new symptom complaints.
 - Obsessive-compulsive personality disorder: provide information about conditions/treatments without extended discussion; avoid power struggles. In addition, encourage limited information-seeking on the internet and through other resources while reinforcing other interests (those that support functional, non-illness-related behaviors).

Ongoing management: psychotherapy

The other standard element of treatment for personality disorders, psychotherapy, has been demonstrated to reduce symptoms of personality disorder.[69] [77] Research on its effectiveness for this condition has been hampered by a number of factors, including: the use of multiple outcome measures with no recognized standard measure(s); the need to have treatment implemented by a provider other than the originator of the treatment intervention; the need for longer-term follow-up; and the primary focus on BPD.[78] [79]

The following forms of psychotherapy have had positive outcomes for patients with personality disorder.

- Cluster A: odd/eccentric
 - Due to difficulties connecting with others, patients with this type of personality disorder may be reluctant to seek treatment for emotional concerns. For patients with symptoms of substance use disorder, referral for assessment may be indicated.
- Cluster B: dramatic
 - BPD: evidence-based treatments include (dialectical behavior therapy [DBT], mentalization-based therapy [MBT], and transference-focused psychotherapy [TFP]) and key components of effective treatment, including the need for a primary clinician who supports the patient, who addresses suicidal threats and acts, who is self-aware, and who provides a well-defined therapeutic structure.[80] [81] Borderline disorder is the only personality disorder for which there is one Cochrane review concluding that despite limitations, psychotherapy is considered an effective treatment for this condition.[77]
 - Other promising interventions include schema-focused therapy. This is a therapy that combines cognitive behavioral therapy (CBT) techniques with dynamic psychotherapy approaches (interpreting patient thoughts and behaviors) and mindfulness skills. Manual-assisted cognitive behavioral therapy (MACT) for self-harm and suicidal ideation is also used. This is a short-term (several session) approach combining CBT techniques with relevant informational booklets that reinforce these techniques and introduce the patient

to concepts used in DBT. One systematic review comparing the efficacy of four treatment models for BPD (MBT, TFP, DBT, and schema-focused therapy [SFT]) found all four models effective in treating BPD (or, at least, some aspects), with a level of efficacy that varies depending on the parameter considered. The study authors state "according to criteria of the American Psychiatric Association for empirically-validated treatments, TFP, DBT, and SFT can be considered well-established treatments for BPD, while MBT meets the criteria for probably-efficacious treatment".^[81] Psychoanalytically oriented partial hospitalization may also be used.^[78]

- Antisocial personality disorder: contingency management treatment (a behavioral therapy where adaptive behaviors are rewarded) may be used. There is also some evidence for schema-focused therapy and DBT. Research focusing on key symptoms is needed.^[82] A review concluded that cognitive behavioral therapy implemented in a residential setting was more effective at reducing criminal behavior than standard treatment, but was no more effective than other treatment modalities.^[83]
- For patients with symptoms of substance use disorder, referral for assessment may be indicated.
- Cluster C: anxious
 - Avoidant personality disorder: CBT is indicated.^[78]
 - Cognitive behavioral, psychodynamic, and social skills training are effective.^[84]
 - For patients with symptoms of substance use disorder, referral for assessment may be indicated.
- Personality disorder not otherwise specified (mixed personality disorder)
 - Short-term dynamic psychotherapy, short-term psychodynamic supportive psychotherapy plus antidepressants, or DBT may be used.^[85] ^[86]
 - Brief adaptive psychotherapy, a dynamic approach where a therapist works with the patient to identify and change maladaptive beliefs and behaviors in the context of the therapeutic relationship, may be indicated.
 - For patients with symptoms of substance use disorder, referral for assessment is indicated.

These treatments will typically be delivered by those with specialized training. The primary care physician can provide significant support for the patient participating in such treatments by maintaining a high level of interest in their progress and offering supportive comments and observations during the office visit. The back-and-forth dialogue with the provider of such care can be highly informative for both professionals and help each to adjust their patient approach over time.

Ongoing management: pharmacotherapy

Research in the area of pharmacotherapy for personality disorders is fraught with difficulties. These include (but are not limited to): almost exclusive focus on BPD, with little attention to the others; and substantial deficiencies in research designs, including lack of power and limited time frame for both treatment duration and follow-up.^[87] The situation is complicated by the fact that drugs are used very frequently in the treatment of BPD despite the scarcity of evidence for their use.^[88] ^[89] Many patients present with problems related to self-harm and suicidality, which makes prescribing problematic, and the side effects of drugs chosen can be substantial.

Cluster A: odd/eccentric

- Overall, there is a striking paucity of pharmacotherapy studies for schizoid and paranoid personality disorders.
- Similarities between schizotypal, schizoid, and paranoid personality disorders with schizophrenia-related disorders in regards to phenomenology and biology have provided the rationale for the use of antipsychotic medication in this cluster. Studies suggest that low-dose antipsychotics targeting psychotic-like symptoms and general functioning may be effective.[\[90\]](#) [\[91\]](#)
- An evidence-based practice requires weighing risk of extrapyramidal side effects or tardive dyskinesia with first-generation antipsychotics versus risk of metabolic syndrome with second-generation antipsychotics versus potential benefits.[\[89\]](#)
- The clinical trials for schizotypal disorder have been complicated by comorbidity with other psychiatric disorders as well as other personality disorders. Most early RCTs on BPD have included patients with schizotypal disorder due to conceptual issues.[\[90\]](#) [\[92\]](#) [\[93\]](#)
- Antidepressants may help self-injurious behavior and depressive and psychotic-like symptoms, as suggested by some open-label studies.[\[94\]](#) [\[95\]](#)

Cluster B: dramatic

- The majority of pharmacotherapy research on personality disorders has focused on BPD. Clinicians need to exercise caution in attempting to apply research findings to severely ill patients with BPD, because most of the studies recruit only outpatients, who were then further excluded if they were suicidal or had made a recent suicide attempt. In addition, most studies have small sample sizes and high dropout rates, particularly if the studies lasted for more than 6 months. In most of the studies, high placebo response rates occur. Therefore open-label trials need to be interpreted with great caution.
- One Cochrane review found that no pharmacologic therapy seems effective in specifically treating BPD pathology.[\[96\]](#)
- The UK NICE guidelines on BPD state that drug treatment should not be used specifically for BPD or for the individual symptoms or behavior associated with the disorder (e.g., repeated self-harm, marked emotional instability, risk-taking behavior, and transient psychotic symptoms).[\[97\]](#) However, the NICE guidelines also suggest that drug treatment may be considered in the overall treatment of comorbid conditions in patients with personality disorders.[\[97\]](#)
- Mood stabilizers, such as lithium, and anticonvulsants (e.g., topiramate, divalproex sodium, lamotrigine) may have some effectiveness in treating impulsivity and aggression in BPD. Mood stabilizers and anticonvulsants have demonstrated a moderate effect in treating depression in BPD.[\[98\]](#) [\[99\]](#) However, a 2018 two-arm, double-blind, placebo-controlled individually randomized trial of lamotrigine versus placebo showed that the addition of lamotrigine to the usual care of people with BPD was not clinically effective and did not provide a cost-effective use of resources.[\[100\]](#) Patients need to be closely monitored because many patients tolerate these medications poorly, which also limits the titration of the medications. Although impulsivity and aggression may be responsive to these treatments, there is a paucity of evidence that interpersonal and identity disturbances are improved.
- Many patients presenting to the primary care physician will have BPD, and may engage in risky sexual activity and may become pregnant. Therefore, the possibility of teratogenicity should be considered.
- For antisocial personality disorder, evidence-based pharmacotherapy is mostly restricted to treatment of impulsive aggression.[\[101\]](#) Lithium may improve serious rule infractions in prisoners.[\[102\]](#) Phenytoin has been associated with fewer aggressive acts and decreased tension-anxiety and depressive symptoms in prisoners.[\[103\]](#) Improvements in aggression appeared to

be limited to impulsive not instrumental aggression. Even though there is some evidence for the usefulness of these medications, the studies are too methodologically weak to base any recommendations upon.[101] The UK NICE guidelines on antisocial personality disorder state that pharmacologic interventions should not be routinely used for the treatment of antisocial personality disorder or associated behaviors of aggression, anger, and impulsivity.[104]

- There is no evidence to support any pharmacotherapy recommendations in narcissistic and histrionic personality disorders.

Cluster C: anxious

- Avoidant personality disorder is a common personality disorder, and it is the disorder most studied of the cluster C personality disorders.[105] However, no RCTs have been published of drug treatment of patients satisfying the full criteria of any cluster C personality disorder. Avoidant personality disorder is often a comorbid condition in patients with a variety of axis I anxiety disorders.[106] It has been recommended that clinicians should extrapolate from data that are primarily related to anxiety disorders to apply treatment strategies that have primarily been developed for social phobia.[107] Patients with avoidant personality disorder have shown a favorable response to venlafaxine and the selective serotonin-reuptake inhibitors (SSRIs). However, sertraline may have less effectiveness if the symptoms began in childhood.[108]
- Gabapentin and pregabalin have demonstrated some efficacy in social phobia and may benefit patients with avoidant personality disorder.[109] [110]
- Reversible monoamine oxidase inhibitors (MAOIs), such as moclobemide, have support for their use.
- Phenelzine, if used, requires great caution regarding serious risks and side effects.
- The other personality disorders in this cluster, obsessive-compulsive personality disorder and dependent personality disorder, have insufficient evidence to recommend any pharmacotherapy.

Multiple features of different personality disorders

- Patients with mixtures of significant symptoms (cognitive-perceptual, affective-dysregulation, impulse-dyscontrol, and substance use) are commonly encountered.
- Complex pharmacological interventions may be necessary to address these symptoms. Consultation with a psychiatrist is recommended if benzodiazepines, stimulants, opioids, or psychotropic drugs with lethal overdose potential (tricyclic and MAOI antidepressants, lithium) are being prescribed or considered for use.
- Psychiatric consultation may also be prudent for patients with poor symptom response to initial medication interventions, those whose psychiatric symptoms are escalating in severity, and those who are on a complicated regimen incorporating multiple psychotropic agents.

Symptom-targeted psychopharmacology

DSM-5-TR has a greater emphasis on a dimensional diagnostic approach to personality disorders than did DSM-IV. This translates into an emphasis on targeting pharmacotherapeutic interventions to symptom dimensions common to a variety of current axis I diagnoses. In addition, symptom-targeted psychopharmacology has been previously recommended for the treatment of personality disorders.[87] [111] [112] However, a meta-analysis raised significant questions regarding previously suggested algorithms for pharmacologic treatment of severe personality disorders. It found that antipsychotics had a moderate effect on cognitive-perceptual symptoms, and a moderate-to-large effect on anger.[99] Antidepressants, however, evidenced no significant effect on impulsive-behavioral dyscontrol and depressed mood, but had a small but significant effect on anxiety and anger. Mood stabilizers had a very large effect on impulsive-behavioral dyscontrol and anger, a large effect on anxiety, but a moderate effect

on depressed mood. The effect of antidepressants on global functioning was negligible.[99] One review has recommended that clinicians should use omega-3, anticonvulsants, and atypical antipsychotic agents in treating specific DSM-5 BPD traits, notably disinhibition, antagonism, and some aspects of negative affectivity.[113]

A meta-analysis found that many antidepressant agents have some evidence for effectiveness in the treatment of patients with BPD.[114] However, the available studies suffer from serious methodological limitations. Further controlled trials of antidepressant agents versus placebo or active agents are required, including larger samples and using longer durations of treatments, in order to confirm current indications for pharmacotherapy of patients with BPD.

Treatment providers should exercise caution in practicing polypharmacy and/or escalating treatment doses in patients with personality disorders due to insufficient evidence for efficacy and considerable risk of adverse effects.[79]

The possibility of teratogenicity should be considered for any of the drugs used. Of particular note, valproic acid and its derivatives may cause major congenital malformations, including neurodevelopmental disorders and neural tube defects, after in utero exposure.

- These agents must not be used in female patients of childbearing potential unless other options are unsuitable, there is a pregnancy prevention program in place, and certain conditions are met
- Precautionary measures may also be required in male patients owing to a potential risk that use in the 3 months leading up to conception may increase the likelihood of neurodevelopmental disorders in their children
- Regulations and precautionary measures for female and male patients may vary between countries, with some countries taking a more heightened precautionary stance, and you should consult your local guidance for more information.

In some countries, it is also recommended that topiramate should only be used in women of childbearing potential if there is a pregnancy prevention program in place.

Case consultation and physician self-care

Given the many challenges posed by working with personality-disordered patients, activities for physicians such as ongoing case consultation with a colleague, or participation in a Balint group [American Balint Society] (<http://americanbalintsociety.org>) or a similar forum for providers in which difficult cases can be discussed, are likely to maintain physician well-being, improve effectiveness in working with these patients, and enhance professional quality of life.

Treatment algorithm overview

Please note that formulations/routes and doses may differ between drug names and brands, drug formularies, or locations. Treatment recommendations are specific to patient groups: [see disclaimer](#)

Acute (summary)		
at risk for harming self or others, or unable to attend to basic self-needs		
	1st	partial hospitalization or inpatient hospitalization referral
■ with substance use disorder	plus	referral for assessment

Ongoing (summary)		
cluster A (odd/eccentric): non-life-threatening		
■ paranoid, schizoid, or schizotypal	1st	patient communication and relationship management strategies
	adjunct	low-dose antipsychotics
	adjunct	antidepressants
	adjunct	substance use disorder treatment program referral
cluster B (dramatic): non-life-threatening		
■ borderline	1st	patient communication and relationship management strategies
	plus	psychotherapy
	adjunct	mood stabilizers or anticonvulsants
	adjunct	substance use disorder treatment program referral
■ narcissistic	1st	patient communication and relationship management strategies
	adjunct	substance use disorder treatment program referral
■ histrionic	1st	patient communication and relationship management strategies
	adjunct	substance use disorder treatment program referral
■ antisocial	1st	patient communication and relationship management strategies
	adjunct	psychotherapy
	adjunct	substance use disorder treatment program referral
cluster C (anxious): non-life-threatening		
■ avoidant	1st	patient communication and relationship management strategies
	plus	psychotherapy
	adjunct	pharmacotherapy
	adjunct	substance use disorder treatment program referral

Ongoing (summary)			
<div><div><div>■ dependent</div></div><div><div>■ obsessive-compulsive</div></div></div>	1st	patient communication and relationship management strategies	
	plus	psychotherapy	
	adjunct	substance use disorder treatment program referral	
	1st	patient communication and relationship management strategies	
	plus	psychotherapy	
	adjunct	substance use disorder treatment program referral	
multiple features of different personality disorders: non-life-threatening			
	1st	complex pharmacotherapy + psychiatric referral	
	adjunct	substance use disorder treatment program referral	

Treatment algorithm

Please note that formulations/routes and doses may differ between drug names and brands, drug formularies, or locations. Treatment recommendations are specific to patient groups: [see disclaimer](#)

Acute

at risk for harming self or others, or unable to attend to basic self-needs

at risk for harming self or others, or unable to attend to basic self-needs

1st

partial hospitalization or inpatient hospitalization referral

» Patients in need of this high-level, structured treatment may present with: severe disturbances of thinking, mood, and/or impulse control; aggression; hopelessness; extremely poor judgment.

» Inpatient hospitalization may need to take place on an involuntary basis.

» It is imperative that close communication take place between providers of acute psychiatric services and the primary care physician. See Suicide risk mitigation .

■ **with substance use disorder**

plus

referral for assessment

Treatment recommended for ALL patients in selected patient group

» Patients with acute alcohol or other substance intoxication and/or highly problematic substance use patterns may require inpatient treatment for detoxification and subsequent monitoring. This may be particularly necessary for patients with a history of self-injurious behavior or impulsive behavioral dyscontrol. Those with histories of complicated substance withdrawal or serious comorbid medical conditions warrant consideration for inpatient treatment.

» This treatment can occur concurrently with psychiatric stabilization.

» Following the period of inpatient treatment, referral to a residential or intensive outpatient substance use disorder treatment program, including a 12-step program such as Alcoholics Anonymous or Narcotics Anonymous, will provide for continuity of care.

Ongoing

cluster A (odd/eccentric): non-life-threatening

■ paranoid, schizoid, or schizotypal

1st

patient communication and relationship management strategies

- » Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.
- » Communication that is straightforward with an unintrusive style is recommended in this group. The physician should display interest in those concerns that the patient is willing to share.
- » Dearth of research precludes conclusions about efficacy of psychotherapy; therefore, a trusting relationship with primary care physician can be particularly important.

adjunct

low-dose antipsychotics

Treatment recommended for SOME patients in selected patient group

Primary options

- » **aripiprazole**: 2.5 to 5 mg orally once daily initially, increase by 5-10 mg/day increments at weekly intervals according to response, maximum 30 mg/day

OR

- » **haloperidol**: 1-2 mg orally every 6-8 hours

OR

- » **perphenazine**: 2-4 mg orally every 6-8 hours

- » There is a striking paucity of pharmacotherapy studies for schizoid and paranoid personality disorders. Many patients with personality disorders present with problems related to self-harm and suicidality, which makes prescribing problematic, and the side effects can be substantial. These are important factors when pharmacotherapy is being considered.

- » Antipsychotics have some usefulness in reducing psychotic-like symptoms in the treatment of schizotypal personality disorder.^[90]
^[91]

Ongoing

» First-generation antipsychotic agents (e.g., haloperidol, perphenazine) are associated with hyperprolactinemia and early (akathisia and parkinsonism) and late (tardive dyskinesia) movement abnormalities, as well as the neuroleptic malignant syndrome. A careful consideration of the risks versus the benefits needs to be performed for individual patients.

» Second-generation antipsychotics (e.g., aripiprazole) are associated with the metabolic syndrome and are not free of the same risks as first-generation antipsychotics: acute and tardive movement disorders and neuroleptic malignant syndrome.

adjunct antidepressants

Treatment recommended for SOME patients in selected patient group

Primary options

» **fluoxetine**: 10 mg orally once daily initially, increase by 10 mg/day increments at weekly intervals according to response, maximum 80 mg/day

OR

» **sertraline**: 25 mg orally once daily initially, increase by 25 mg/day increments at weekly intervals according to response, maximum 200 mg/day

OR

» **venlafaxine**: 37.5 to 75 mg orally (extended-release) once daily initially, increase by 75 mg/day increments at weekly intervals according to response, maximum 225 mg/day

» There is a striking paucity of pharmacotherapy studies for schizoid and paranoid personality disorders. Many patients with personality disorders present with problems related to self-harm and suicidality, which makes prescribing problematic, and the side effects can be substantial. These are important factors when pharmacotherapy is being considered.

» Antidepressants may help self-injurious behavior and depressive and psychotic-like symptoms, as suggested by some open-label studies.^{[94] [95]}

adjunct substance use disorder treatment program referral

Ongoing

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.^{[68] [115]}

cluster B (dramatic): non-life-threatening

■ **borderline**

1st

patient communication and relationship management strategies

» Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.

» Simple communication with clear and consistent boundaries is recommended. Physicians should have a calm demeanor in response to inevitable crises, and prepare the patient for any changes in care arrangements (such as coverage during vacation). Agreement with the patient about crisis management (commitment to treatment) is important.^[116]

» There should be coordination of care with other treatment providers in order to avoid patient use of splitting (a defense mechanism where the patient views others as all good or all bad; it can lead to disagreements among those treating the patient).

» A practice protocol with regard to after-hours coverage and use of e-mail communication may be considered.

plus

psychotherapy

Treatment recommended for ALL patients in selected patient group

» Borderline disorder is the only personality disorder for which there is a Cochrane

Ongoing

review concluding that despite limitations, psychotherapy is considered an effective treatment for this condition.^[77]

» Evidence-based therapies for borderline personality disorder are: mentalization-based therapy; transference-focused therapy; dialectical behavior therapy; and general psychiatric management.^[80]

adjunct **mood stabilizers or anticonvulsants**

Treatment recommended for SOME patients in selected patient group

Primary options

» **topiramate**: 25 mg orally once or twice daily initially, increase by 25-50 mg/day increments at weekly intervals according to response, maximum 400 mg/day given in 2 divided doses

OR

» **divalproex sodium**: 250-500 mg/day orally (immediate-release) given in 2-3 divided doses initially, increase by 250-500 mg/day increments at weekly intervals according to response, maximum 2500 mg/day

OR

» **lithium**: 150 mg orally (immediate-release) twice daily initially, increase by 150-300 mg/day increments every 3-5 days according to response, maximum 1500 mg/day

Secondary options

» **lamotrigine**: 25 mg orally once daily for weeks 1 and 2, followed by 50 mg once daily for weeks 3 and 4, followed by 100 mg once daily for week 5, may increase to maximum of 200 mg/day given in 2 divided doses beginning week 6

» There is paucity of evidence concerning pharmacotherapy for personality disorder. Many patients with personality disorders present with problems related to self-harm and suicidality, which makes prescribing problematic, and the side effects can be substantial. These are important factors when pharmacotherapy is being considered. People with borderline personality disorder may also engage in risky sexual activity and may become pregnant.

Ongoing

Therefore, the possibility of teratogenicity should be considered for any drugs used.

» The UK National Institute for Health and Care Excellence (NICE) guidelines on borderline personality disorder state that drug treatment should not be used specifically for borderline personality disorder or for the individual symptoms or behavior associated with the disorder (e.g., repeated self-harm, marked emotional instability, risk-taking behavior, and transient psychotic symptoms).[97] However, the NICE guidelines also suggest that drug treatment may be considered in the overall treatment of comorbid conditions in patients with personality disorders.[97]

» Mood stabilizers, such as lithium, and anticonvulsants (e.g., topiramate, divalproex sodium, lamotrigine), may have some effectiveness in treating impulsivity and aggression in borderline personality disorder. Mood stabilizers and anticonvulsants have demonstrated a moderate effect in treating depression in borderline personality disorder.[98] [99] However, a 2018 two-arm, double-blind, placebo-controlled individually randomized trial of lamotrigine versus placebo showed that the addition of lamotrigine to the usual care of people with borderline personality disorder was not clinically effective and did not provide a cost-effective use of resources.[100]

» Patients need to be closely monitored because many patients tolerate these medications poorly, which also limits the titration of the medications. Although impulsivity and aggression may be responsive to these treatments, there is a paucity of evidence that interpersonal and identity disturbances are improved.

» The possibility of teratogenicity should be considered for any of the drugs used. Of particular note, valproic acid and its derivatives may cause major congenital malformations, including neurodevelopmental disorders and neural tube defects, after in utero exposure. These agents must not be used in female patients of childbearing potential unless other options are unsuitable, there is a pregnancy prevention program in place, and certain conditions are met. Precautionary measures may also be required in male patients owing to a potential risk that use in the 3 months leading up to conception may increase the likelihood of neurodevelopmental disorders in their children. Regulations and precautionary measures for female and male patients may

Ongoing

■ narcissistic

adjunct

vary between countries, with some countries taking a more heightened precautionary stance, and you should consult your local guidance for more information. In some countries, it is also recommended that topiramate should only be used in women of childbearing potential if there is a pregnancy prevention program in place.

substance use disorder treatment program referral

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.[68] [115]

1st

patient communication and relationship management strategies

» Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.

» Recommended communication between physician and patient includes acknowledging the patient as special, conveying self-confidence in interactions, and avoiding power struggles.

» Most psychotherapy studies focus on borderline personality disorder only, and this is an acknowledged weakness in the literature.

» There is no evidence to support any pharmacotherapy recommendations in narcissistic personality disorder.

adjunct

substance use disorder treatment program referral

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with

Ongoing

■ histrionic

1st

medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.[68] [115]

patient communication and relationship management strategies

» Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.

» Recommended communication between physician and patient includes maintaining professional distance, providing reassurance, addressing seductive behaviors in a straightforward manner while maintaining a professional boundary.

» Most psychotherapy studies focus on borderline personality disorder only, and this is an acknowledged weakness in the literature.

» There is no evidence to support any pharmacotherapy recommendations in histrionic personality disorder.

adjunct

substance use disorder treatment program referral

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral

Ongoing

■ antisocial

1st

counseling interventions and indicated pharmacotherapies.[\[68\]](#) [\[115\]](#)

patient communication and relationship management strategies

» Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.

» Simple, straightforward communication between physician and patient is recommended, with clear and consistent boundaries. Caution should be exercised when prescribing controlled substances due to the potential for illegal use. In addition, the physician should be aware of tendencies of these patients to be less than truthful and to disregard rules.

adjunct

psychotherapy

Treatment recommended for SOME patients in selected patient group

» Contingency management treatment (a behavioral therapy where adaptive behaviors are rewarded) may be used. Research focusing on key symptoms is needed.[\[117\]](#)

» A review concluded that cognitive behavioral therapy (CBT) implemented in a residential setting was more effective at reducing criminal behavior than standard treatment, but was no more effective than other treatment modalities.[\[83\]](#)

adjunct

substance use disorder treatment program referral

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.[\[68\]](#) [\[115\]](#)

Ongoing

cluster C (anxious): non-life-threatening

■ avoidant

1st **patient communication and relationship management strategies**

» Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.

» Physicians should take care to avoid critical comments and reinforce appropriate help-seeking behaviors.

plus **psychotherapy**

Treatment recommended for ALL patients in selected patient group

» Social skills training results in most improvement at follow-up.[84]

» There are conflictual results regarding the relative efficacy of other treatments. However, cognitive behavioral therapy (CBT) and psychodynamic approaches have also been found to be effective.[84]

adjunct **pharmacotherapy**

Treatment recommended for SOME patients in selected patient group

Primary options

» **fluoxetine**: 10 mg orally once daily initially, increase by 10 mg/day increments at weekly intervals according to response, maximum 80 mg/day

OR

» **sertraline**: 25 mg orally once daily initially, increase by 25 mg/day increments at weekly intervals according to response, maximum 200 mg/day

OR

» **venlafaxine**: 37.5 to 75 mg orally (extended-release) once daily initially, increase by 75 mg/day increments at weekly intervals according to response, maximum 225 mg/day

Secondary options

Ongoing

» **gabapentin**: 300 mg orally three times daily initially, increase according to response, maximum 1800 mg/day

OR

» **pregabalin**: 75 mg orally twice daily initially, increase according to response, maximum 600 mg/day

Tertiary options

» **phenelzine**: 15 mg orally three times daily initially, increase according to response, maximum 90 mg/day

» There is paucity of evidence concerning pharmacotherapy for personality disorder. Many patients with personality disorders present with problems related to self-harm and suicidality, which makes prescribing problematic, and the side effects can be substantial. These are important factors when pharmacotherapy is being considered.

» Patients with avoidant personality disorder have shown a favorable response to venlafaxine and the selective serotonin-reuptake inhibitors (SSRIs). However, sertraline may have less effectiveness if the symptoms began in childhood.^[108]

» The above listed medications would be first-line options due to their favorable side-effect profile. Gabapentin and pregabalin have demonstrated some efficacy in social phobia and may benefit patients with avoidant personality disorder.^{[109] [110]}

» Reversible monoamine oxidase inhibitors (MAOIs), such as moclobemide, have support for their use. Reversible MAOIs are not available in the US.

» Phenelzine, if used, requires great caution regarding serious risks and side effects.

» The use of any combination of these medications is not recommended due to potential dangerous drug interactions, such as serotonin syndrome, and also due to lack of efficacy data.

adjunct

substance use disorder treatment program referral

Treatment recommended for SOME patients in selected patient group

Ongoing

■ dependent

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.[68] [115]

1st patient communication and relationship management strategies

» Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.

» Physicians should tolerate repeated requests for reassurance; provide helpful resources and support patient self-efficacy; and schedule primary care visits at regular, pre-established times (such as monthly) rather than as unscheduled visits prompted by the emergence of new symptom complaints.

» There is insufficient evidence to recommend any pharmacotherapy for dependent personality disorder.

plus psychotherapy

Treatment recommended for ALL patients in selected patient group

» Social skills training results in most improvement at follow-up.[84]

» There are conflictual results regarding the relative efficacy of other treatments. However, cognitive behavioral therapy (CBT) and psychodynamic approaches have also been found to be effective.[84]

adjunct substance use disorder treatment program referral

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling,

Ongoing

■ obsessive-compulsive

1st

and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.[68] [115]

patient communication and relationship management strategies

» Establishment of a stable, supportive physician-patient relationship lies at the core of the approach to managing personality-disordered patients.

» Physicians should provide information about conditions/treatments without extended discussion; power struggles should be avoided.

» Limited information-seeking on the internet and through other resources while reinforcing other interests (those that support functional, non-illness-related behaviors) could be encouraged.

» There is insufficient evidence to recommend any pharmacotherapy for obsessive-compulsive personality disorder.

plus

psychotherapy

Treatment recommended for ALL patients in selected patient group

» Social skills training results in most improvement at follow-up.[84]

» There are conflictual results regarding the relative efficacy of other treatments. However, cognitive behavioral therapy (CBT) and psychodynamic approaches have also been found to be effective.[84]

adjunct

substance use disorder treatment program referral

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend

Ongoing

12-step program meetings (e.g., Alcoholics Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.[68] [115]

multiple features of different personality disorders: non-life-threatening

1st **complex pharmacotherapy + psychiatric referral**

» Patients with mixtures of significant symptoms (cognitive-perceptual, affective-dysregulation, impulse-dyscontrol, and substance abuse) are commonly encountered.

» Complex pharmacologic interventions may be necessary to address these symptoms. Many patients with personality disorders present with problems related to self-harm and suicidality, which makes prescribing problematic, and the side effects can be substantial. These are important factors when pharmacotherapy is being considered.

» Consultation with a psychiatrist is recommended if benzodiazepines, stimulants, opioids, or psychotropic drugs with lethal overdose potential (tricyclic and monoamine oxidase inhibitor [MAOI] antidepressants, lithium) are being prescribed or considered for use.

» Psychiatric consultation may also be prudent for patients with poor symptom response to initial medication interventions, those whose psychiatric symptoms are escalating in severity, and those who are on a complicated regimen incorporating multiple psychotropic agents.

adjunct **substance use disorder treatment program referral**

Treatment recommended for SOME patients in selected patient group

» Ideally, referral can be made to a treatment program that is multimodal in nature with medical, psychiatric, psychological, counseling, and skill-training components available, as indicated. Additionally, encouragement to attend 12-step program meetings (e.g., Alcoholics

Ongoing

Anonymous [AA] or Narcotics Anonymous [NA]) is indicated.

» For promotion of abstinence from substances, pharmacotherapy may be employed.

» Where access to specialty substance use disorder treatment is limited, primary care physicians can utilize behavioral counseling interventions and indicated pharmacotherapies.[\[68\]](#) [\[115\]](#)

Emerging

Repetitive transcranial magnetic stimulation (rTMS)

There are preliminary studies (mostly case series) on the use of rTMS over the right or left dorsolateral prefrontal cortex suggesting global improvement in severity and symptoms of borderline personality disorder, particularly in impulsiveness, affective instability, and anger.^[118] However, more systematic studies are needed.

Transcranial direct current stimulation (tDCS)

One study of tDCS compared excitatory stimulation of the right dorsolateral prefrontal cortex with sham stimulation. There was no difference in the cognitive control of negative stimuli in people with borderline personality disorder.^[119] Further research is needed to understand the specific role of tDCS in borderline personality disorder and in personality disorders in general.

New areas of research

Future research on the effects of oxytocin, vasopressin, and opioids with regard to social attachment and interpersonal trust may produce novel pharmacologic agents. More work is needed in order to further understand the neurobiology of these conditions and the underlying neural mechanisms for the various features within each disorder.

Secondary prevention

Physicians can provide effective behavioral counseling for conditions that are likely to be impacted by personality disorder symptoms, such as substance use or important lifestyle issues (diet and exercise, risk-taking behaviors, smoking). For patients with personality disorders who are also parents, counseling can be provided to enhance family communication and parenting; patients who see family physicians can be offered the opportunity to have a family counseling session in the context of routine medical care. Primary care physicians who offer integrated medical care with attention to psychosocial issues can assist patients in moderating the influence of personality disorder-related symptoms on their overall health status.

Patient discussions

In order to develop and maintain an effective treatment relationship, advise patients to select one primary care physician, who will be identified as their "PCP" in a facility that is considered a "medical home."

The parameters of the medical practice, such as hours of operation of the clinic site, contact information, and after-hours availability of their physician or his/her designated substitute, and protocol with regard to use of e-mail communication should be specified at the onset of the relationship. Regarding their health care, patients should be encouraged to be involved as active participants in establishing and achieving treatment goals, including those related to lifestyle modification and chronic disease management.

Patients and families should be assisted to locate support organizations within their communities.

[\[National Alliance on Mental Illness\] \(https://www.nami.org\)](https://www.nami.org) Poor social functioning is a complication of personality disorder, and the establishment of positive social supports is a desirable goal, particularly for patients with children and those who have chronic medical conditions.

The possibility of teratogenicity should be considered for any of the drugs used in the treatment of personality disorders, and the risks and benefits discussed with the patient. Of particular note, valproic acid and its derivatives may cause major congenital malformations, including neurodevelopmental disorders and neural tube defects, after in utero exposure.

- These agents must not be used in female patients of childbearing potential unless other options are unsuitable, there is a pregnancy prevention program in place, and certain conditions are met
- Precautionary measures may also be required in male patients owing to a potential risk that use in the 3 months leading up to conception may increase the likelihood of neurodevelopmental disorders in their children
- Regulations and precautionary measures for female and male patients may vary between countries, with some countries taking a more heightened precautionary stance, and you should consult your local guidance for more information.

In some countries, it is also recommended that topiramate should only be used in women of childbearing potential if there is a pregnancy prevention program in place.

Monitoring

Monitoring

It is important to establish and maintain a physician-patient relationship, which may prove to be challenging for treatment providers.^[53] In order to facilitate diagnosis and treatment, referral to a mental health professional with experience in treating patients with personality disorders will be necessary. Effective communication between treatment providers is essential in order to facilitate coordination of care and to prevent disruptions that result from poor communication. Ideally, patient follow-up visits are scheduled based on the management of comorbid conditions, either psychological or medical, and not based on personality disorder-related symptom exacerbation alone.

Complications

Complications	Timeframe	Likelihood
self-harm	long term	high
<p>Cutting and burning are common self-harm behaviors.</p> <p>May be present in more than 70% of patients with borderline personality disorder.</p> <p>Associated with psychiatric comorbidity, including depressive disorders and bulimia nervosa.</p>		
impairment in social functioning	long term	high
<p>The 10-year course of borderline personality disorder is characterized by severe and persistent impairment in social functioning.^[122]</p>		
suicide	long term	low
<p>Lifetime risk of completed suicide in patients with borderline personality disorder is 10%.^{[72] [123]}</p> <p>High lethality of suicide attempts is associated with comorbid post-traumatic stress disorder, affective disorders, phobia, antisocial personality disorder, substance use disorder, schizotypal personality disorder, and anorexia nervosa.^{[72] [123] [124]}</p> <p>History of neglect and abuse common.^[124]</p> <p>A review concluded that long-term psychotherapy, particularly dialectical behavior therapy and mentalization-based psychotherapy, has been demonstrated to be effective in reducing suicide attempts and parasuicidal behavior.^[125] Both treatments have several components in common, and future research is needed to assess their efficacy.^[125]</p>		

Prognosis

Prognosis

Longitudinal studies have questioned the stable nature of personality disorder symptoms over time. For example, in one study of 290 inpatients with borderline personality disorder, 88% achieved remission; factors were identified to predict an earlier time to remission, including the absence of childhood sexual abuse.^[120]

Some have suggested symptoms may attenuate with age. Symptoms are often exacerbated in response to stressors. Personality disorders have been shown to respond to treatment, particularly if relatively intensive treatment is provided over an extended time-frame.^[121] The 10-year course of borderline personality disorder is also characterized by severe and persistent impairment in social functioning.^[122]

Impact of diagnosis

Care must be exercised in both establishing and documenting personality disorder diagnosis, because of the meaning and social stigma associated with this diagnosis.

Treatment guidelines

International

World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for biological treatment of personality disorders (<https://www.wfsbp.org/educational-activities/wfsbp-treatment-guidelines-and-consensus-papers>) [107]

Published by: World Federation of Societies of Biological Psychiatry

Last published: 2007

Antisocial personality disorder: prevention and management (<https://www.nice.org.uk/guidance/CG77>) [104]

Published by: National Institute for Health and Care Excellence (UK)

Last published: 2013

Borderline personality disorder: recognition and management (<https://www.nice.org.uk/guidance/CG78>) [97]

Published by: National Institute for Health and Care Excellence (UK)

Last published: 2009

Online resources

1. [CDC: Adverse Childhood Experiences \(ACE\) study \(https://www.cdc.gov/violenceprevention/aces/about.html\)](https://www.cdc.gov/violenceprevention/aces/about.html) (*external link*)
2. [Suicide Prevention Resource Center: suicide prevention toolkit for primary care practices \(http://www.sprc.org/settings/primary-care/toolkit\)](http://www.sprc.org/settings/primary-care/toolkit) (*external link*)
3. [Patient Health Questionnaire PHQ-9 \(https://www.thenationalcouncil.org/resources/patient-health-questionnaire-phq-9\)](https://www.thenationalcouncil.org/resources/patient-health-questionnaire-phq-9) (*external link*)
4. [American Balint Society \(http://americanbalintsociety.org\)](http://americanbalintsociety.org) (*external link*)
5. [National Alliance on Mental Illness \(https://www.nami.org\)](https://www.nami.org) (*external link*)

Key articles

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed, text revision (DSM-5-TR). Washington, DC: American Psychiatric Association; 2022. [Full text \(https://ebooks.appi.org/product/diagnostic-statistical-manual-mental-disorders-fifth-edition-text-revision-dsm5tr\)](https://ebooks.appi.org/product/diagnostic-statistical-manual-mental-disorders-fifth-edition-text-revision-dsm5tr)
- Storebø OJ, Stoffers-Winterling JM, Völlm BA, et al. Psychological therapies for people with borderline personality disorder. *Cochrane Database Syst Rev*. 2020 May 4;5:CD012955. [Full text \(https://www.doi.org/10.1002/14651858.CD012955.pub2\)](https://www.doi.org/10.1002/14651858.CD012955.pub2) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/32368793?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/32368793?tool=bestpractice.bmj.com)
- Cristea IA, Gentili C, Cotet CD, et al. Efficacy of psychotherapies for borderline personality disorder: a systematic review and meta-analysis. *JAMA Psychiatry*. 2017 Apr 1;74(4):319-28. [Full text \(https://www.doi.org/10.1001/jamapsychiatry.2016.4287\)](https://www.doi.org/10.1001/jamapsychiatry.2016.4287) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/28249086?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/28249086?tool=bestpractice.bmj.com)
- Abbass AA, Kisely SR, Town JM, et al. Short-term psychodynamic psychotherapies for common mental disorders. *Cochrane Database Syst Rev*. 2014 Jul 1;(7):CD004687. [Full text \(https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004687.pub4/full\)](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004687.pub4/full) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/24984083?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/24984083?tool=bestpractice.bmj.com)
- Herpertz SC, Zanarini M, Schulz CS, et al. World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for biological treatment of personality disorders. *World J Biol Psychiatry*. 2007;8(4):212-44. [Full text \(https://www.wfsbp.org/fileadmin/user_upload/Treatment_Guidelines/Guidelines_Personality_Disorders.pdf\)](https://www.wfsbp.org/fileadmin/user_upload/Treatment_Guidelines/Guidelines_Personality_Disorders.pdf) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/17963189?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/17963189?tool=bestpractice.bmj.com)

References

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed, text revision (DSM-5-TR). Washington, DC: American Psychiatric Association; 2022. [Full text \(https://ebooks.appi.org/product/diagnostic-statistical-manual-mental-disorders-fifth-edition-text-revision-dsm5tr\)](https://ebooks.appi.org/product/diagnostic-statistical-manual-mental-disorders-fifth-edition-text-revision-dsm5tr)
- World Health Organization. ICD-11 for mortality and morbidity statistics. 2022 [internet publication]. [Full text \(https://icd.who.int/browse11/l-m/en\)](https://icd.who.int/browse11/l-m/en)
- Tomko RL, Trull TJ, Wood PK, et al. Characteristics of borderline personality disorder in a community sample: comorbidity, treatment utilization, and general functioning. *J Pers Disord*. 2014 Oct;28(5):734-50. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/25248122?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/25248122?tool=bestpractice.bmj.com)
- Samuels J, Eaton WW, Bienvenu OJ 3rd, et al. Prevalence and correlates of personality disorders in a community sample. *Br J Psychiatry*. 2002 Jun;180(6):536-42. [Full text \(https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/prevalence-and-correlates-of-personality-](https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/prevalence-and-correlates-of-personality-)

- disorders-in-a-community-sample/AC92D57C0EAE3C701EE57B5F7FBC9DAB/core-reader) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/12042233?tool=bestpractice.bmj.com>)
5. Crawford T, Cohen P, Johnson J, et al. Self-reported personality disorder in the children in the community sample: convergent and prospective validity in late adolescence and adulthood. *J Pers Disord*. 2005 Feb;19(1):30-52. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/15899719?tool=bestpractice.bmj.com>)
 6. Grant B, Hasin D, Stinson F, et al. Prevalence, correlates, and disability of personality disorders in the United States: results from the national epidemiologic survey on alcohol and related conditions. *J Clin Psychiatry*. 2004 Jul;65(7):948-58. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/15291684?tool=bestpractice.bmj.com>)
 7. Trull TJ, Jahng S, Tomko RL, et al. Revised NESARC personality disorder diagnoses: gender, prevalence, and comorbidity with substance dependence disorders. *J Pers Disord*. 2010 Aug;24(4):412-26. Full text (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3771514>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/20695803?tool=bestpractice.bmj.com>)
 8. Volkert J, Gablonski TC, Rabung S. Prevalence of personality disorders in the general adult population in Western countries: systematic review and meta-analysis. *Br J Psychiatry*. 2018 Dec;213(6):709-15. Full text (<https://www.doi.org/10.1192/bjp.2018.202>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/30261937?tool=bestpractice.bmj.com>)
 9. Lenzenweger MF, Lane MC, Loranger AW, et al. DSM-IV personality disorders in the National Comorbidity Survey Replication. *Biol Psychiatry*. 2007 Sep 15;62(6):553-64. Full text (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2044500>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/17217923?tool=bestpractice.bmj.com>)
 10. Eaton NR, Greene AL. Personality disorders: community prevalence and socio-demographic correlates. *Curr Opin Psychol*. 2018 Jun;21:28-32. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/28961462?tool=bestpractice.bmj.com>)
 11. Leichsenring F, Heim N, Leweke F, et al. Borderline personality disorder: a review. *JAMA*. 2023 Feb 28;329(8):670-9. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/36853245?tool=bestpractice.bmj.com>)
 12. Torgersen S, Kringlen E, Cramer V. The prevalence of personality disorders in a community sample. *Arch Gen Psychiatry*. 2001 Jun;58(6):590-6. Full text (<https://jamanetwork.com/journals/jamapsychiatry/fullarticle/481789>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/11386989?tool=bestpractice.bmj.com>)
 13. Coid J, Yang M, Tyrer P, et al. Prevalence and correlates of personality disorder in Great Britain. *Br J Psychiatry*. 2006 May;188(5):423-31. Full text (<https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/prevalence-and-correlates-of-personality-disorder-in-great-britain/A9F8F2585369857C24C2C46672EECF6E/core-reader>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/16648528?tool=bestpractice.bmj.com>)
 14. McGilloway A, Hall RE, Lee T, et al. A systematic review of personality disorder, race and ethnicity: prevalence, aetiology and treatment. *BMC Psychiatry*. 2010 May 11;10:33. Full text (<https://>)

- www.ncbi.nlm.nih.gov/pmc/articles/PMC2882360) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/20459788?tool=bestpractice.bmj.com>)
15. Bohus M, Stoffers-Winterling J, Sharp C, et al. Borderline personality disorder. *Lancet*. 2021 Oct 23;398(10310):1528-40. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/34688371?tool=bestpractice.bmj.com>)
 16. Reichborn-Kjennerud T. Genetics of personality disorders. *Psychiatr Clin North Am*. 2008 Sep;31(3):421-40. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/18638644?tool=bestpractice.bmj.com>)
 17. Rhee S, Waldman I. Genetic and environmental influences on antisocial behavior: a meta-analysis of twin and adoption studies. *Psychol Bull*. 2002 May;128(3):490-529. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/12002699?tool=bestpractice.bmj.com>)
 18. Torgersen S, Lygren S, Oien PA, et al. A twin study of personality disorders. *Compr Psychiatry*. 2000 Nov-Dec;41(6):416-25. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/11086146?tool=bestpractice.bmj.com>)
 19. Bradley R, Jenei J, Westen D. Etiology of borderline personality disorder: disentangling the contributions of intercorrelated antecedents. *J Nerv Ment Dis*. 2005 Jan;193(1):24-31. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/15674131?tool=bestpractice.bmj.com>)
 20. Coolidge F, Thede L, Jang K. Heritability of personality disorders in childhood: a preliminary investigation. *J Pers Disord*. 2001 Feb;15(1):33-40. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/11236813?tool=bestpractice.bmj.com>)
 21. Reichborn-Kjennerud T, Czajkowski N, Neale MC, et al. Genetic and environmental influences on dimensional representations of DSM-IV cluster C personality disorders: a population-based multivariate twin study. *Psychol Med*. 2007 May;37(5):645-53. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/17134532?tool=bestpractice.bmj.com>)
 22. Reichborn-Kjennerud T, Czajkowski N, Ystrøm E, et al. A longitudinal twin study of borderline and antisocial personality disorder traits in early to middle adulthood. *Psychol Med*. 2015 Oct;45(14):3121-31. Full text (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4589465>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/26050739?tool=bestpractice.bmj.com>)
 23. Kaffman A, Meaney MJ. Neurodevelopmental sequelae of postnatal maternal care in rodents: clinical and research implications of molecular insights. *J Child Psychol Psychiatry*. 2007 Mar-Apr;48(3-4):224-44. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/17355397?tool=bestpractice.bmj.com>)
 24. Jang K, Dick D, Wolf H, et al. Psychosocial adversity and emotional instability: an application of gene-environment interaction models. *Eur J Pers*. 2005 Jun;19(4):359-72. Full text (<http://onlinelibrary.wiley.com/doi/10.1002/per.561/full>)

25. Brent DA, Melhem N. Familial transmission of suicidal behavior. *Psychiatr Clin North Am.* 2008 Jun;31(2):157-77. [Full text \(https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2440417\)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2440417) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/18439442?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/18439442?tool=bestpractice.bmj.com)
26. Martín-Blanco A, Ferrer M, Soler J, et al. The role of hypothalamus-pituitary-adrenal genes and childhood trauma in borderline personality disorder. *Eur Arch Psychiatry Clin Neurosci.* 2016 Jun;266(4):307-16. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/26182893?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/26182893?tool=bestpractice.bmj.com)
27. Torgersen S, Czajkowski N, Jacobson K, et al. Dimensional representations of DSM-IV cluster B personality disorders in a population-based sample of Norwegian twins: a multivariate study. *Psychol Med.* 2008 Nov;38(11):1617-25. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/18275631?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/18275631?tool=bestpractice.bmj.com)
28. Cattane N, Rossi R, Lanfredi M, et al. Borderline personality disorder and childhood trauma: exploring the affected biological systems and mechanisms. *BMC Psychiatry.* 2017 Jun 15;17(1):221. [Full text \(https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-017-1383-2\)](https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-017-1383-2) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/28619017?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/28619017?tool=bestpractice.bmj.com)
29. Perez-Rodriguez MM, Bulbena-Cabré A, Bassir Nia A, et al. The neurobiology of borderline personality disorder. *Psychiatr Clin North Am.* 2018 Dec;41(4):633-50. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/30447729?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/30447729?tool=bestpractice.bmj.com)
30. Anderson G. Pathoetiology and pathophysiology of borderline personality: role of prenatal factors, gut microbiome, mu- and kappa-opioid receptors in amygdala-PFC interactions. *Prog Neuropsychopharmacol Biol Psychiatry.* 2020 Mar 2;98:109782. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/31689444?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/31689444?tool=bestpractice.bmj.com)
31. Stepp SD, Lazarus SA, Byrd AL. A systematic review of risk factors prospectively associated with borderline personality disorder: taking stock and moving forward. *Personal Disord.* 2016 Oct;7(4):316-23. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/27709988?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/27709988?tool=bestpractice.bmj.com)
32. Belsky DW, Caspi A, Arseneault L, et al. Etiological features of borderline personality related characteristics in a birth cohort of 12-year-old children. *Dev Psychopathol.* 2012 Feb;24(1):251-65. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/22293008?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/22293008?tool=bestpractice.bmj.com)
33. Skoglund C, Tiger A, Rück C, et al. Familial risk and heritability of diagnosed borderline personality disorder: a register study of the Swedish population. *Mol Psychiatry.* 2021 Mar;26(3):999-1008. [Full text \(https://www.nature.com/articles/s41380-019-0442-0\)](https://www.nature.com/articles/s41380-019-0442-0) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/31160693?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/31160693?tool=bestpractice.bmj.com)
34. Witt SH, Streit F, Jungkunz M, et al. Genome-wide association study of borderline personality disorder reveals genetic overlap with bipolar disorder, major depression and schizophrenia. *Transl Psychiatry.* 2017 Jun 20;7(6):e1155. [Full text \(https://www.nature.com/articles/tp2017115\)](https://www.nature.com/articles/tp2017115) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/28632202?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/28632202?tool=bestpractice.bmj.com)
35. Kendler K, Czajkowski N, Tambs K, et al. Dimensional representations of DSM-IV cluster A personality disorders in a population-based sample of Norwegian twins: a multivariate study.

- Psychol Med. 2006 Nov;36(11):1583-91. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/16893481?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/16893481?tool=bestpractice.bmj.com)
36. Tienari P, Wynne LC, Läksy K, et al. Genetic boundaries of the schizophrenia spectrum: evidence from the Finnish Adoptive Family Study of Schizophrenia. *Am J Psychiatry* 2003 Sep;160(9):1587-94. [Full text \(https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.160.9.1587\)](https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.160.9.1587) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/12944332?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/12944332?tool=bestpractice.bmj.com)
 37. Essex MJ, Klein MH, Cho E, et al. Maternal stress beginning in infancy may sensitize children to later stress exposure: effects on cortisol and behavior. *Biol Psychiatry*. 2002 Oct 15;52(8):776-84. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/12372649?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/12372649?tool=bestpractice.bmj.com)
 38. Winsper C, Wolke D, Lereya T. Prospective associations between prenatal adversities and borderline personality disorder at 11-12 years. *Psychol Med*. 2015 Apr;45(5):1025-37. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/25171495?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/25171495?tool=bestpractice.bmj.com)
 39. Johnson JG, Cohen P, Brown J, et al. Childhood maltreatment increases risk for personality disorders during early adulthood. *Arch Gen Psychiatry*. 1999 Jul;56(7):600-6. [Full text \(https://jamanetwork.com/journals/jamapsychiatry/fullarticle/205066\)](https://jamanetwork.com/journals/jamapsychiatry/fullarticle/205066) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/10401504?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/10401504?tool=bestpractice.bmj.com)
 40. Eikenaar I, Egeland J, Hummelen B, et al. Avoidant personality disorder versus social phobia: the significance of childhood neglect. *PLoS One*. 2015 Mar 27;10(3):e0122846. [Full text \(http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0122846\)](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0122846) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/25815817?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/25815817?tool=bestpractice.bmj.com)
 41. Spatz Widom C, Czaja SJ, Paris J. A prospective investigation of borderline personality disorder in abused and neglected children followed up into adulthood. *J Pers Disord*. 2009 Oct;23(5):433-46. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/19817626?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/19817626?tool=bestpractice.bmj.com)
 42. Mittal VA, Dhruv S, Tessner KD, et al. The relations among putative biorisk markers in schizotypal adolescents: minor physical anomalies, movement abnormalities, and salivary cortisol. *Biol Psychiatry*. 2007 May 15;61(10):1179-86. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/17188254?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/17188254?tool=bestpractice.bmj.com)
 43. New AS, Goodman M, Tribwasser J, et al. Recent advances in the biological study of personality disorders. *Psychiatr Clin North Am*. 2008 Sep;31(3):441-61, vii. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/18638645?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/18638645?tool=bestpractice.bmj.com)
 44. Johnson PA, Hurley RA, Benkelfat C, et al. Understanding emotion regulation in borderline personality disorder: contributions of neuroimaging. *J Neuropsychiatry Clin Neurosci*. 2003 Fall;15(4):397-402. [Full text \(https://neuro.psychiatryonline.org/doi/10.1176/jnp.15.4.397\)](https://neuro.psychiatryonline.org/doi/10.1176/jnp.15.4.397) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/14627765?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/14627765?tool=bestpractice.bmj.com)
 45. Schulze L, Schulze A, Renneberg B, et al. Neural correlates of affective disturbances: a comparative meta-analysis of negative affect processing in borderline personality disorder, major depressive disorder, and posttraumatic stress disorder. *Biol Psychiatry Cogn Neurosci Neuroimaging*. 2019 Mar;4(3):220-32. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/30581154?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/30581154?tool=bestpractice.bmj.com)

46. Degasperi G, Cristea IA, Di Rosa E, et al. Parsing variability in borderline personality disorder: a meta-analysis of neuroimaging studies. *Transl Psychiatry*. 2021 May 24;11(1):314. [Full text \(https://www.nature.com/articles/s41398-021-01446-z\)](https://www.nature.com/articles/s41398-021-01446-z) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/34031363?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/34031363?tool=bestpractice.bmj.com)
47. Friedel RO. Dopamine dysfunction in borderline personality disorder: a hypothesis. *Neuropsychopharmacol*. 2004 Jun;29(6):1029-39. [Full text \(https://www.nature.com/articles/1300424\)](https://www.nature.com/articles/1300424) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/15039763?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/15039763?tool=bestpractice.bmj.com)
48. Herpertz SC, Bertsch K. A new perspective on the pathophysiology of borderline personality disorder: a model of the role of oxytocin. *Am J Psychiatry*. 2015 Sep 1;172(9):840-51. [Full text \(https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2015.15020216\)](https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.2015.15020216) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/26324303?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/26324303?tool=bestpractice.bmj.com)
49. Bertsch K, Schmidinger I, Neumann ID, et al. Reduced plasma oxytocin levels in female patients with borderline personality disorder. *Horm Behav*. 2013 Mar;63(3):424-9. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/23201337?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/23201337?tool=bestpractice.bmj.com)
50. Johnson JG, Cohen P, Chen H, et al. Parenting behaviors associated with risk for offspring personality disorder during adulthood. *Arch Gen Psychiatry*. 2006 May;63(5):579-87. [Full text \(https://jamanetwork.com/journals/jamapsychiatry/fullarticle/209587\)](https://jamanetwork.com/journals/jamapsychiatry/fullarticle/209587) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/16651515?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/16651515?tool=bestpractice.bmj.com)
51. Helgeland MI, Kjelsberg E, Torgersen S. Continuities between emotional and disruptive behavior disorders in adolescence and personality disorders in adulthood. *Am J Psychiatry*. 2005 Oct;162(10):1941-7. [Full text \(https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.162.10.1941\)](https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.162.10.1941) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/16199842?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/16199842?tool=bestpractice.bmj.com)
52. Hahn SR, Thompson KS, Wills TA, et al. The difficult doctor-patient relationship: somatization, personality and psychopathology. *J Clin Epidemiol*. 1994 Jun;47(6):647-57. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/7722577?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/7722577?tool=bestpractice.bmj.com)
53. Bax OK, Chartonas D, Parker J, et al. Personality disorder. *BMJ*. 2023 Sep 4;382:e050290.
54. Oldham JM, Skodol AE, Kellman HD, et al. Comorbidity of axis I and axis II disorders. *Am J Psychiatry*. 1995 Apr;152(4):571-8. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/7694906?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/7694906?tool=bestpractice.bmj.com)
55. Rost KM, Akins RN, Brown FW, et al. The comorbidity of DSM-III-R personality disorders in somatization disorder. *Gen Hosp Psychiatry*. 1992 Sep;14(5):322-6. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/1521787?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/1521787?tool=bestpractice.bmj.com)
56. Joiner T, Kalafat J, Draper J, et al. Establishing standards for the assessment of suicide risk among callers to the National Suicide Prevention Lifeline. *Suicide Life Threat Behav*. 2007 Jun;37(3):353-65. [Full text \(https://onlinelibrary.wiley.com/doi/10.1521/suli.2007.37.3.353\)](https://onlinelibrary.wiley.com/doi/10.1521/suli.2007.37.3.353) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/17579546?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/17579546?tool=bestpractice.bmj.com)
57. Moran P, Leese M, Lee T, et al. Standardised Assessment of Personality - Abbreviated Scale (SAPAS): preliminary validation of a brief screen for personality disorder. *Br J Psychiatry*. 2003

- Sep;183:228-32. Full text (<https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/standardised-assessment-of-personality-abbreviated-scale-sapas-preliminary-validation-of-a-brief-screen-for-personality-disorder/26FB730F35F54B952381AA9C662FF8C2>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/12948996?tool=bestpractice.bmj.com>)
58. Hesse M, Moran P. Screening for personality disorder with the Standardised Assessment of Personality - Abbreviated Scale (SAPAS): further evidence of concurrent validity. *BMC Psychiatry*. 2010 Jan 28;10:10. Full text (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2824652>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/20109169?tool=bestpractice.bmj.com>)
 59. Gorwood P, Rouillon F, Even C, et al. Treatment response in major depression: effects of personality dysfunction and prior depression. *Br J Psychiatry*. 2010 Feb;196(2):139-42. Full text (<https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/treatment-response-in-major-depression-effects-of-personality-dysfunction-and-prior-depression/615D6DFA728D81D6E91CE59B18D9DEA9>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/20118460?tool=bestpractice.bmj.com>)
 60. Morse JQ, Pilkonis PA. Screening for personality disorders. *J Pers Disord*. 2007 Apr;21(2):179-98. Full text (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2842099>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/17492920?tool=bestpractice.bmj.com>)
 61. Walters P, Moran P, Choudhury P, et al. Screening for personality disorder: a comparison of personality disorder assessment by patients and informants. *Int J Methods Psychiatr Res*. 2004;13(1):34-9. Full text (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6878308>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/15181485?tool=bestpractice.bmj.com>)
 62. Spitzer RL, Williams JB, Kroenke K, et al. Utility of a new procedure for diagnosing mental disorders in primary care: the PRIME-MD 1000 study. *JAMA*. 1994 Dec 14;272(22):1749-56. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/7966923?tool=bestpractice.bmj.com>)
 63. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med*. 2001 Sep;16(9):606-13. Full text (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1495268>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/11556941?tool=bestpractice.bmj.com>)
 64. Kroenke K, Spitzer RL, Williams JB, et al. Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. *Ann Intern Med*. 2007 Mar 6;146(5):317-25. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/17339617?tool=bestpractice.bmj.com>)
 65. Spitzer RL, Kroenke K, Williams JB, et al. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med*. 2006 May 22;166(10):1092-7. Full text (<https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/410326>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/16717171?tool=bestpractice.bmj.com>)
 66. Hirschfeld RM, Williams JB, Spitzer RL, et al. Development and validation of a screening instrument for bipolar spectrum disorder: the Mood Disorder Questionnaire. *Am J Psychiatry*. 2000 Nov;157(11):1873-5. Full text (<https://ajp.psychiatryonline.org/doi/full/10.1176/appi.ajp.157.11.1873>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/11058490?tool=bestpractice.bmj.com>)

67. LeFevre ML; US Preventive Services Task Force. Screening for suicide risk in adolescents, adults, and older adults in primary care: US Preventive Services Task Force recommendation statement. *Ann Intern Med*. 2014 May 20;160(10):719-26. [Full text \(http://annals.org/aim/fullarticle/1872851/screening-suicide-risk-adolescents-adults-older-adults-primary-care-u\)](http://annals.org/aim/fullarticle/1872851/screening-suicide-risk-adolescents-adults-older-adults-primary-care-u) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/24842417?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/24842417?tool=bestpractice.bmj.com)
68. Whitlock EP, Polen MR, Green CA, et al. Behavioral counseling interventions in primary care to reduce risky/harmful alcohol use by adults: a summary of the evidence for the U.S. Preventive Services Task Force. *Ann Intern Med*. 2004 Apr 6;140(7):557-68. [Full text \(http://annals.org/aim/fullarticle/717333/behavioral-counseling-interventions-primary-care-reduce-risky-harmful-alcohol-use\)](http://annals.org/aim/fullarticle/717333/behavioral-counseling-interventions-primary-care-reduce-risky-harmful-alcohol-use) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/15068985?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/15068985?tool=bestpractice.bmj.com)
69. Sharp C. Personality disorders. *N Engl J Med*. 2022 Sep 8;387(10):916-23.
70. Balint M. The doctor, his patient, and the illness. New York, NY: International Universities Press; 1957.
71. Devens M. Personality disorders. *Prim Care*. 2007 Sep;34(3):623-40. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/17868763?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/17868763?tool=bestpractice.bmj.com)
72. Zaheer J, Links PS, Liu E. Assessment and emergency management of suicidality in personality disorders. *Psychiatr Clin North Am*. 2008 Sep;31(3):527-43. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/18638651?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/18638651?tool=bestpractice.bmj.com)
73. Monk-Cunliffe J, Borschmann R, Monk A, et al. Crisis interventions for adults with borderline personality disorder. *Cochrane Database Syst Rev*. 2022 Sep 26;9(9):CD009353. [Full text \(https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009353.pub3/full\)](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009353.pub3/full) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/36161394?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/36161394?tool=bestpractice.bmj.com)
74. Soloff PH, Lynch KG, Kelly TM, et al. Characteristics of suicide attempts of patients with major depressive episode and borderline personality disorder: a comparative study. *Am J Psychiatry*. 2000 Apr;157(4):601-8. [Full text \(https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.157.4.601\)](https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.157.4.601) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/10739420?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/10739420?tool=bestpractice.bmj.com)
75. Apter A, Bleich A, King RA, et al. Death without warning? A clinical postmortem study of suicide in 43 Israeli adolescent males. *Arch Gen Psychiatry*. 1993 Feb;50(2):138-42. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/8427554?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/8427554?tool=bestpractice.bmj.com)
76. Fenton WS, McGlashan TH, Victor BJ, et al. Symptoms, subtype and suicidality in patients with schizophrenia spectrum disorders. *Am J Psychiatry*. 1997 Feb;154(2):199-204. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/9016268?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/9016268?tool=bestpractice.bmj.com)
77. Storebø OJ, Stoffers-Winterling JM, Völlm BA, et al. Psychological therapies for people with borderline personality disorder. *Cochrane Database Syst Rev*. 2020 May 4;5:CD012955. [Full text \(https://www.doi.org/10.1002/14651858.CD012955.pub2\)](https://www.doi.org/10.1002/14651858.CD012955.pub2) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/32368793?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/32368793?tool=bestpractice.bmj.com)

78. Duggan C, Huband N, Smailagic N, et al. The use of psychological treatments for people with personality disorder: a systematic review of randomized controlled trials. *Pers Ment Health*. 2007 Nov;1(2):95-125. [Full text \(https://onlinelibrary.wiley.com/doi/abs/10.1002/pmh.22\)](https://onlinelibrary.wiley.com/doi/abs/10.1002/pmh.22)
79. Paris J. Clinical trials of treatment for personality disorders. *Psychiatr Clin North Am*. 2008 Sep;31(3):517-26. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/18638650?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/18638650?tool=bestpractice.bmj.com)
80. Gunderson JG. Clinical practice. Borderline personality disorder. *N Engl J Med*. 2011 May 26;364(21):2037-42. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/21612472?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/21612472?tool=bestpractice.bmj.com)
81. Cristea IA, Gentili C, Cotet CD, et al. Efficacy of psychotherapies for borderline personality disorder: a systematic review and meta-analysis. *JAMA Psychiatry*. 2017 Apr 1;74(4):319-28. [Full text \(https://www.doi.org/10.1001/jamapsychiatry.2016.4287\)](https://www.doi.org/10.1001/jamapsychiatry.2016.4287) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/28249086?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/28249086?tool=bestpractice.bmj.com)
82. Gibbon S, Khalifa NR, Cheung NH, et al. Psychological interventions for antisocial personality disorder. *Cochrane Database Syst Rev*. 2020 Sep 3;9:CD007668. [Full text \(https://www.doi.org/10.1002/14651858.CD007668.pub3\)](https://www.doi.org/10.1002/14651858.CD007668.pub3) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/32880104?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/32880104?tool=bestpractice.bmj.com)
83. Armelius BA, Andreassen TH. Cognitive-behavioral treatment for antisocial behavior in youth in residential treatment. *Cochrane Database Syst Rev*. 2007 Oct 17;(4):CD005650. [Full text \(https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005650.pub2/full\)](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD005650.pub2/full) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/17943869?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/17943869?tool=bestpractice.bmj.com)
84. Simon W. Follow-up psychotherapy outcome of patients with dependent, avoidant and obsessive-compulsive personality disorders: a meta-analytic review. *Int J Psychiatry Clin Pract*. 2009;13(2):153-65. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/24916735?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/24916735?tool=bestpractice.bmj.com)
85. Abbass AA, Kisely SR, Town JM, et al. Short-term psychodynamic psychotherapies for common mental disorders. *Cochrane Database Syst Rev*. 2014 Jul 1;(7):CD004687. [Full text \(https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004687.pub4/full\)](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD004687.pub4/full) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/24984083?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/24984083?tool=bestpractice.bmj.com)
86. Dimeff LA, Koerner K, eds. *Dialectical behavior therapy in clinical practice*. New York, NY: The Guilford Press; 2007.
87. Duggan C, Huband N, Smailagic N, et al. The use of pharmacological treatments for people with personality disorder: a systematic review of randomized controlled trials. *Pers Ment Health*. 2008 Jul;2(3):119-70. [Full text \(https://onlinelibrary.wiley.com/doi/abs/10.1002/pmh.41\)](https://onlinelibrary.wiley.com/doi/abs/10.1002/pmh.41)
88. Bateman AW, Gunderson J, Mulder R, et al. Treatment of personality disorder. *Lancet*. 2015 Feb 21;385(9969):735-43. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/25706219?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/25706219?tool=bestpractice.bmj.com)

89. Hardoon S, Hayes J, Viding E, et al. Prescribing of antipsychotics among people with recorded personality disorder in primary care: a retrospective nationwide cohort study using The Health Improvement Network primary care database. *BMJ Open*. 2022 Mar 9;12(3):e053943. [Full text \(https://bmjopen.bmj.com/content/12/3/e053943\)](https://bmjopen.bmj.com/content/12/3/e053943) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/35264346?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/35264346?tool=bestpractice.bmj.com)
90. Goldberg SC, Schulz SC, Schulz PM, et al. Borderline and schizotypal personality disorders treated with low-dose thiothixene vs placebo. *Arch Gen Psychiatry*. 1986 Jul;43(7):680-6. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/3521531?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/3521531?tool=bestpractice.bmj.com)
91. Koenigsberg HW, Reynolds D, Goodman M, et al. Risperidone in the treatment of schizotypal personality disorder. *J Clinical Psychiatry*. 2003 Jun;64(6):628-34. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/12823075?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/12823075?tool=bestpractice.bmj.com)
92. Soloff PH, George A, Nathan RS, et al. Progress in pharmacotherapy of borderline disorders. A double-blind study of amitriptyline, haloperidol, and placebo. *Arch Gen Psychiatry*. 1986 Jul;43(7):691-7. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/3521532?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/3521532?tool=bestpractice.bmj.com)
93. Serban G, Siegel S. Response of borderline and schizotypal patients to small doses of thiothixene and haloperidol. *Am J Psychiatry*. 1984 Nov;141(11):1455-8. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/6388363?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/6388363?tool=bestpractice.bmj.com)
94. Markovitz PJ, Calabrese JR, Schulz SC, et al. Fluoxetine in the treatment of borderline and schizotypal personality disorders. *Am J Psychiatry*. 1991 Aug;148(8):1064-7. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/1853957?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/1853957?tool=bestpractice.bmj.com)
95. Jensen HV, Andersen J. An open, noncomparative study of amoxapine in borderline disorders. *Acta Psychiatrica Scandinavica*. 1989 Jan;79(1):89-93. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/2648768?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/2648768?tool=bestpractice.bmj.com)
96. Stoffers-Winterling JM, Storebø OJ, Pereira Ribeiro J, et al. Pharmacological interventions for people with borderline personality disorder. *Cochrane Database Syst Rev*. 2022 Nov 14;11(11):CD012956. [Full text \(https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012956.pub2/full\)](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD012956.pub2/full) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/36375174?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/36375174?tool=bestpractice.bmj.com)
97. National Institute for Health and Care Excellence. Borderline personality disorder: recognition and management. Jan 2009 [internet publication]. [Full text \(https://www.nice.org.uk/guidance/CG78\)](https://www.nice.org.uk/guidance/CG78)
98. Mercer D, Douglass AB, Links PS, et al. Meta-analyses of mood stabilizers, antidepressants and antipsychotics in the treatment of borderline personality disorder: effectiveness for depression and anger symptoms. *J Pers Disord*. 2009 Apr;23(2):156-74. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/19379093?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/19379093?tool=bestpractice.bmj.com)
99. Ingenhoven T, Lafay P, Rinne T, et al. Effectiveness of pharmacotherapy for severe personality disorders: meta-analyses of randomized controlled trials. *J Clin Psychiatry*. 2010 Jan;71(1):14-25. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/19778496?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/19778496?tool=bestpractice.bmj.com)
100. Crawford MJ, Sanatinia R, Barrett B, et al. Lamotrigine for people with borderline personality disorder: a RCT. *Health Technol Assess*. 2018 Apr;22(17):1-68. [Full text \(https://www.journalslibrary.nihr.ac.uk/\)](https://www.journalslibrary.nihr.ac.uk/)

hta/hta22170#/full-report) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/29651981?tool=bestpractice.bmj.com>)

101. Khalifa NR, Gibbon S, Völm BA, et al. Pharmacological interventions for antisocial personality disorder. *Cochrane Database Syst Rev*. 2020 Sep 3;9:CD007667. Full text (<https://www.doi.org/10.1002/14651858.CD007667.pub3>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/32880105?tool=bestpractice.bmj.com>)
102. Sheard MH, Marini JL, Bridges CI, et al. The effect of lithium on impulsive aggressive behavior in man. *Am J Psychiatry*. 1976 Dec;133(12):1409-13. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/984241?tool=bestpractice.bmj.com>)
103. Barratt ES, Kent TA, Bryant SG, et al. Controlled trial of phenytoin in impulsive aggression. *J Clinical Psychopharmacol*. 1991 Dec;11(6):388-9. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/1770157?tool=bestpractice.bmj.com>)
104. National Institute for Health and Care Excellence. Antisocial personality disorder: prevention and management. Mar 2013 [internet publication]. Full text (<https://www.nice.org.uk/guidance/CG77>)
105. Loranger AW, Sartorius N, Andreoli A, et al. The International Personality Disorder Examination. The World Health Organization/Alcohol, Drug Abuse, and Mental Health Administration international pilot study of personality disorders. *Arch Gen Psychiatry*. 1994 Mar;51(3):215-24. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/8122958?tool=bestpractice.bmj.com>)
106. Alden LE, Laposa JM, Taylor CT, et al. Avoidant personality disorder: current status and future directions. *J Pers Disord*. 2002 Feb;16(1):1-29. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/11881158?tool=bestpractice.bmj.com>)
107. Herpertz SC, Zanarini M, Schulz CS, et al. World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for biological treatment of personality disorders. *World J Biol Psychiatry*. 2007;8(4):212-44. Full text (https://www.wfsbp.org/fileadmin/user_upload/Treatment_Guidelines/Guidelines_Personality_Disorders.pdf) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/17963189?tool=bestpractice.bmj.com>)
108. Van Ameringen MA, Lane RM, Walker JR, et al. Sertraline treatment of generalized social phobia: a 20-week, double-blind, placebo-controlled study. *Am J Psychiatry*. 2001 Feb;158(2):275-81. Full text (<https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.158.2.275>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/11156811?tool=bestpractice.bmj.com>)
109. Pande AC, Feltner DE, Jefferson JW, et al. Efficacy of the novel anxiolytic pregabalin in social anxiety disorder: a placebo-controlled, multicenter study. *J Clinical Psychopharmacol*. 2004 Apr;24(2):141-9. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/15206660?tool=bestpractice.bmj.com>)
110. Pande AC, Davidson JR, Jefferson JW, et al. Treatment of social phobia with gabapentin: a placebo-controlled study. *J Clin Psychopharmacol*. 1999 Aug;19(4):341-8. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/10440462?tool=bestpractice.bmj.com>)

111. Soloff PH. Symptom-oriented psychopharmacology for personality disorders. *J Psych Prac.* 1998 Jan;4(1):3-11. [Full text \(https://journals.lww.com/practicalpsychiatry/Abstract/1998/01000/Symptom_Oriented_Psychopharmacology_for.2.aspx\)](https://journals.lww.com/practicalpsychiatry/Abstract/1998/01000/Symptom_Oriented_Psychopharmacology_for.2.aspx)
112. Soloff PH. Algorithms for pharmacological treatment of personality dimensions: symptom-specific treatments for cognitive-perceptual, affective, and impulse-behavioral dysregulation. *Bull Menninger Clin.* 1998 Spring;62(2):195-214. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/9604516?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/9604516?tool=bestpractice.bmj.com)
113. Ripoll LH. Clinical psychopharmacology of borderline personality disorder: an update on the available evidence in light of the Diagnostic and Statistical Manual of Mental Disorders - 5. *Curr Opin Psychiatry.* 2012 Jan;25(1):52-8. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/22037092?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/22037092?tool=bestpractice.bmj.com)
114. Bellino S, Bozzatello P, Blandamura A, et al. Antidepressants in the treatment of borderline personality disorder: a review of literature data [in Italian]. *J Psychopathol.* 2009;15(2):163-76. [Full text \(http://www.jpsychopathol.it/wp-content/uploads/2015/08/Bellino1.pdf\)](http://www.jpsychopathol.it/wp-content/uploads/2015/08/Bellino1.pdf)
115. Kleber HD, Weiss RD, Anton RF Jr, et al; Work Group on Substance Use Disorders. Treatment of patients with substance use disorders: second edition. *Am J Psychiatry.* 2006 Aug;163(8 Suppl):5-82. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/16981488?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/16981488?tool=bestpractice.bmj.com)
116. Rudd MD, Mandrusiak M, Joiner Jr TE. The case against no-suicide contracts: the commitment to treatment statement as a practice alternative. *J Clin Psychol.* 2006 Feb;62(2):243-51. [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/16342293?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/16342293?tool=bestpractice.bmj.com)
117. Gibbon S, Duggan C, Stoffers J, et al. Psychological interventions for antisocial personality disorder. *Cochrane Database Syst Rev.* 2010 Jun 16;(6):CD007668. [Full text \(https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007668.pub2/full\)](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007668.pub2/full) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/20556783?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/20556783?tool=bestpractice.bmj.com)
118. Reyes-López J, Ricardo-Garcell J, Armas-Castañeda G, et al. Clinical improvement in patients with borderline personality disorder after treatment with repetitive transcranial magnetic stimulation: preliminary results. *Braz J Psychiatry.* 2018 Jan-Mar;40(1):97-104. [Full text \(https://www.doi.org/10.1590/1516-4446-2016-2112\)](https://www.doi.org/10.1590/1516-4446-2016-2112) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/28614492?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/28614492?tool=bestpractice.bmj.com)
119. Schulze L, Grove M, Tamm S, et al. Effects of transcranial direct current stimulation on the cognitive control of negative stimuli in borderline personality disorder. *Sci Rep.* 2019 Jan 23;9(1):332. [Full text \(https://www.doi.org/10.1038/s41598-018-37315-x\)](https://www.doi.org/10.1038/s41598-018-37315-x) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/30674987?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/30674987?tool=bestpractice.bmj.com)
120. Zanarini MC, Frankenburg FR, Hennen J, et al. Prediction of the 10-year course of borderline personality disorder. *Am J Psychiatry.* 2006 May;163(5):827-32. [Full text \(https://ajp.psychiatryonline.org/doi/10.1176/ajp.2006.163.5.827\)](https://ajp.psychiatryonline.org/doi/10.1176/ajp.2006.163.5.827) [Abstract \(http://www.ncbi.nlm.nih.gov/pubmed/16648323?tool=bestpractice.bmj.com\)](http://www.ncbi.nlm.nih.gov/pubmed/16648323?tool=bestpractice.bmj.com)
121. Bateman A, Fonagy P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. *Am J Psychiatry.* 1999 Oct;156(10):1563-9. [Full text \(https://](https://)

ajp.psychiatryonline.org/doi/10.1176/ajp.156.10.1563) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/10518167?tool=bestpractice.bmj.com>)

122. Gunderson JG, Stout RL, McGlashan TH, et al. Ten-year course of borderline personality disorder: psychopathology and function from the Collaborative Longitudinal Personality Disorders study. Arch Gen Psychiatry. 2011 Aug;68(8):827-37. Full text (<https://jamanetwork.com/journals/jamapsychiatry/fullarticle/1107231>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/21464343?tool=bestpractice.bmj.com>)
123. Soloff PH, Fabio A, Kelly TM, et al. High-lethality status in patients with borderline personality disorder. J Pers Disord. 2005 Aug;19(4):386-99. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/16178681?tool=bestpractice.bmj.com>)
124. Oldham JM. Borderline personality disorder and suicidality. Am J Psychiatry. 2006 Jan;163(1):20-6. Full text (<https://ajp.psychiatryonline.org/doi/10.1176/appi.ajp.163.1.20>) Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/16390884?tool=bestpractice.bmj.com>)
125. McMain S. Effectiveness of psychosocial treatments on suicidality in personality disorders. Can J Psychiatry. 2007 Jun;52(6 Suppl 1):103S-14S. Abstract (<http://www.ncbi.nlm.nih.gov/pubmed/17824356?tool=bestpractice.bmj.com>)

Disclaimer

BMJ Best Practice is intended for licensed medical professionals. BMJ Publishing Group Ltd (BMJ) does not advocate or endorse the use of any drug or therapy contained within this publication nor does it diagnose patients. As a medical professional you retain full responsibility for the care and treatment of your patients and you should use your own clinical judgement and expertise when using this product.

This content is not intended to cover all possible diagnosis methods, treatments, follow up, drugs and any contraindications or side effects. In addition, since such standards and practices in medicine change as new data become available, you should consult a variety of sources. We strongly recommend that you independently verify specified diagnosis, treatments and follow-up and ensure it is appropriate for your patient within your region. In addition, with respect to prescription medication, you are advised to check the product information sheet accompanying each drug to verify conditions of use and identify any changes in dosage schedule or contraindications, particularly if the drug to be administered is new, infrequently used, or has a narrow therapeutic range. You must always check that drugs referenced are licensed for the specified use and at the specified doses in your region.

Information included in BMJ Best Practice is provided on an “as is” basis without any representations, conditions or warranties that it is accurate and up to date. BMJ and its licensors and licensees assume no responsibility for any aspect of treatment administered to any patients with the aid of this information. To the fullest extent permitted by law, BMJ and its licensors and licensees shall not incur any liability, including without limitation, liability for damages, arising from the content. All conditions, warranties and other terms which might otherwise be implied by the law including, without limitation, the warranties of satisfactory quality, fitness for a particular purpose, use of reasonable care and skill and non-infringement of proprietary rights are excluded.

Where BMJ Best Practice has been translated into a language other than English, BMJ does not warrant the accuracy and reliability of the translations or the content provided by third parties (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages). BMJ is not responsible for any errors and omissions arising from translation and adaptation or otherwise. Where BMJ Best Practice lists drug names, it does so by recommended International Nonproprietary Names (rINNs) only. It is possible that certain drug formularies might refer to the same drugs using different names.

Please note that recommended formulations and doses may differ between drug databases drug names and brands, drug formularies, or locations. A local drug formulary should always be consulted for full prescribing information.

Treatment recommendations in BMJ Best Practice are specific to patient groups. Care is advised when selecting the integrated drug formulary as some treatment recommendations are for adults only, and external links to a paediatric formulary do not necessarily advocate use in children (and vice-versa). Always check that you have selected the correct drug formulary for your patient.

Where your version of BMJ Best Practice does not integrate with a local drug formulary, you should consult a local pharmaceutical database for comprehensive drug information including contraindications, drug interactions, and alternative dosing before prescribing.

Interpretation of numbers

Regardless of the language in which the content is displayed, numerals are displayed according to the original English-language numerical separator standard. For example 4 digit numbers shall not include a comma nor a decimal point; numbers of 5 or more digits shall include commas; and numbers stated to be less than 1 shall be depicted using decimal points. See Figure 1 below for an explanatory table.

BMJ accepts no responsibility for misinterpretation of numbers which comply with this stated numerical separator standard.

This approach is in line with the guidance of the [International Bureau of Weights and Measures Service](#).

Figure 1 – BMJ Best Practice Numeral Style

5-digit numerals: 10,000

4-digit numerals: 1000

numerals < 1: 0.25

Our full website and application terms and conditions can be found here: [Website Terms and Conditions](#).

Contact us

+ 44 (0) 207 111 1105

support@bmj.com

BMJ

BMA House

Tavistock Square

London

WC1H 9JR

UK

BMJ Best Practice

Contributors:

// Authors:

Michael J. Schrift, DO, MA

Professor

Department of Psychiatry and Behavioral Sciences, University of Washington, Seattle, WA

DISCLOSURES: MJS declares he has no competing interests.

// Acknowledgements:

Dr Michael J. Schrift would like to gratefully acknowledge Dr Crystal T. Clark, and the late Dr Maria Devens, previous contributors to this topic. He would also like to acknowledge Dr Eric Gausche, who contributed the psychopharmacology sections for the initial version, and Dr Richard Stringham, who reviewed and approved information on the use of imaging and laboratory tests in the diagnosis section in the initial version. MD was an author of references cited in this topic. CTC, EG, and RS declare that they have no competing interests.

// Peer Reviewers:

Anthony W. Bateman, FRCPsych

Consultant Psychiatrist and Visiting Professor

Halliwick Psychotherapy Unit, St Ann's Hospital, London, UK

DISCLOSURES: AWB declares that he has a bias towards the use of mentalization in the treatment of personality disorder.

Robin L. Kissell, MD

Director

Borderline Personality Disorder Initiative, Semel Institute, UCLA, Los Angeles, CA

DISCLOSURES: RLK declares that she has no competing interests.

Justin Trevino, MD

Medical Director

Opioid Treatment Program, Dayton Veterans Affairs Medical Center, Dayton, OH

DISCLOSURES: JT declares that he has no competing interests.

Dietmar Winkler, MD

Department of Psychiatry and Psychotherapy

Medical University of Vienna, Vienna, Austria

DISCLOSURES: DW has received lecture fees from CSC Pharmaceuticals, GlaxoSmithKline, and Pfizer, and has served as a consultant for GlaxoSmithKline.