

Functional Consequences of Excoriation (Skin-Picking) Disorder

Excoriation disorder is associated with distress as well as with social and occupational impairment. The majority of individuals with this condition spend at least 1 hour per day picking, thinking about picking, and resisting urges to pick. Many individuals report avoiding social or entertainment events as well as going out in public. A majority of individuals with the disorder also report experiencing work interference from skin picking on at least a daily or weekly basis. A significant proportion of students with excoriation disorder report having missed school, having experienced difficulties managing responsibilities at school, or having had difficulties studying because of skin picking. Medical complications of skin picking include tissue damage, scarring, and infection and can be life-threatening. Rarely, synovitis of the wrists due to chronic picking has been reported. Skin picking often results in significant tissue damage and scarring. It frequently requires antibiotic treatment for infection, and on occasion it may require surgery.

Differential Diagnosis

Psychotic disorder. Skin picking may occur in response to a delusion (i.e., parasitosis) or tactile hallucination (i.e., formication) in a psychotic disorder. In such cases, excoriation disorder should not be diagnosed.

Other obsessive-compulsive and related disorders. Excessive washing compulsions in response to contamination obsessions in individuals with OCD may lead to skin lesions, and skin picking may occur in individuals with body dysmorphic disorder who pick their skin solely because of appearance concerns; in such cases, excoriation disorder should not be diagnosed. The description of body-focused repetitive behavior disorder in other specified obsessive-compulsive and related disorder excludes individuals whose symptoms meet diagnostic criteria for excoriation disorder.

Neurodevelopmental disorders. While stereotypic movement disorder may be characterized by repetitive self-injurious behavior, onset is in the early developmental period. For example, individuals with the neurogenetic condition Prader-Willi syndrome may have early onset of skin picking, and their symptoms may meet criteria for stereotypic movement disorder. While tics in individuals with Tourette's disorder may lead to self-injury, the behavior is not tic-like in excoriation disorder.

Somatic symptom and related disorders. Excoriation disorder is not diagnosed if the skin lesion is primarily attributable to deceptive behaviors in factitious disorder.

Other disorders. Excoriation disorder is not diagnosed if the skin picking is primarily attributable to the intention to harm oneself that is characteristic of nonsuicidal self-injury.

Other medical conditions. Excoriation disorder is not diagnosed if the skin picking is primarily attributable to another medical condition. For example, scabies is a dermatological condition invariably associated with severe itching and scratching. However, excoriation disorder may be precipitated or exacerbated by an underlying dermatological condition. For example, acne may lead to some scratching and picking, which may also be associated with comorbid excoriation disorder. The differentiation between these two clinical situations (acne with some scratching and picking vs. acne with comorbid excoriation disorder) requires an assessment of the extent to which the individual's skin picking has become independent of the underlying dermatological condition.

Substance/medication-induced disorders. Skin-picking symptoms may also be induced by certain substances (e.g., cocaine), in which case excoriation disorder should not be diagnosed. If such skin picking is clinically significant, then a diagnosis of substance/medication-induced obsessive-compulsive and related disorder should be considered.

Comorbidity

Excoriation disorder is often accompanied by other mental disorders. Such disorders include OCD and trichotillomania (hair-pulling disorder), as well as major depressive disorder. Repetitive body-focused symptoms other than skin picking and hair pulling (e.g., nail biting) occur in many individuals with excoriation disorder and may deserve an additional diagnosis of other specified obsessive-compulsive and related disorder (i.e., body-focused repetitive behavior disorder).

Substance/Medication-Induced Obsessive-Compulsive and Related Disorder

Diagnostic Criteria

- A. Obsessions, compulsions, skin picking, hair pulling, other body-focused repetitive behaviors, or other symptoms characteristic of the obsessive-compulsive and related disorders predominate in the clinical picture.
- B. There is evidence from the history, physical examination, or laboratory findings of both (1) and (2):
 - 1. The symptoms in Criterion A developed during or soon after substance intoxication or withdrawal or after exposure to a medication.
 - 2. The involved substance/medication is capable of producing the symptoms in Criterion A.
- C. The disturbance is not better explained by an obsessive-compulsive and related disorder that is not substance/medication-induced. Such evidence of an independent obsessive-compulsive and related disorder could include the following:

The symptoms precede the onset of the substance/medication use; the symptoms persist for a substantial period of time (e.g., about 1 month) after the cessation of acute withdrawal or severe intoxication; or there is other evidence suggesting the existence of an independent non-substance/medication-induced obsessive-compulsive and related disorder (e.g., a history of recurrent non-substance/medication-related episodes).
- D. The disturbance does not occur exclusively during the course of a delirium.
- E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Note: This diagnosis should be made in addition to a diagnosis of substance intoxication or substance withdrawal only when the symptoms in Criterion A predominate in the clinical picture and are sufficiently severe to warrant clinical attention.

Coding note: The ICD-9-CM and ICD-10-CM codes for the [specific substance/medication]-induced obsessive-compulsive and related disorders are indicated in the table below. Note that the ICD-10-CM code depends on whether or not there is a comorbid substance use disorder present for the same class of substance. If a mild substance use disorder is comorbid with the substance-induced obsessive-compulsive and related disorder, the 4th position character is “1,” and the clinician should record “mild [substance] use disorder” before the substance-induced obsessive-compulsive and related disorder (e.g., “mild cocaine use disorder with cocaine-induced obsessive-compulsive and related disorder”). If a moderate or severe substance use disorder is comorbid with the substance-induced obsessive-compulsive and related disorder, the 4th position character is “2,” and the clinician should record “moderate [substance] use disorder” or “severe [substance] use disorder,” depending on the severity of the comorbid substance use disorder. If there is no comorbid

substance use disorder (e.g., after a one-time heavy use of the substance), then the 4th position character is “9,” and the clinician should record only the substance-induced obsessive-compulsive and related disorder.

		ICD-10-CM		
	ICD-9-CM	With use disorder, mild	With use disorder, moderate or severe	Without use disorder
Amphetamine (or other stimulant)	292.89	F15.188	F15.288	F15.988
Cocaine	292.89	F14.188	F14.288	F14.988
Other (or unknown) substance	292.89	F19.188	F19.288	F19.988

Specify if (see Table 1 in the chapter “Substance-Related and Addictive Disorders” for diagnoses associated with substance class):

With onset during intoxication: If the criteria are met for intoxication with the substance and the symptoms develop during intoxication.

With onset during withdrawal: If criteria are met for withdrawal from the substance and the symptoms develop during, or shortly after, withdrawal.

With onset after medication use: Symptoms may appear either at initiation of medication or after a modification or change in use.

Recording Procedures

ICD-9-CM. The name of the substance/medication-induced obsessive-compulsive and related disorder begins with the specific substance (e.g., cocaine) that is presumed to be causing the obsessive-compulsive and related symptoms. The diagnostic code is selected from the table included in the criteria set, which is based on the drug class. For substances that do not fit into any of the classes, the code for “other substance” should be used; and in cases in which a substance is judged to be an etiological factor but the specific class of substance is unknown, the category “unknown substance” should be used.

The name of the disorder is followed by the specification of onset (i.e., onset during intoxication, onset during withdrawal, with onset after medication use). Unlike the recording procedures for ICD-10-CM, which combine the substance-induced disorder and substance use disorder into a single code, for ICD-9-CM a separate diagnostic code is given for the substance use disorder. For example, in the case of repetitive behaviors occurring during intoxication in a man with a severe cocaine use disorder, the diagnosis is 292.89 cocaine-induced obsessive-compulsive and related disorder, with onset during intoxication. An additional diagnosis of 304.20 severe cocaine use disorder is also given. When more than one substance is judged to play a significant role in the development of the obsessive-compulsive and related disorder, each should be listed separately.

ICD-10-CM. The name of the substance/medication-induced obsessive-compulsive and related disorder begins with the specific substance (e.g., cocaine) that is presumed to be causing the obsessive-compulsive and related symptoms. The diagnostic code is selected from the table included in the criteria set, which is based on the drug class and presence or absence of a comorbid substance use disorder. For substances that do not fit into any of the classes, the code for “other substance” with no comorbid substance use should be used; and in cases in which a substance is judged to be an etiological factor but the specific class of substance is unknown, the category “unknown substance” with no comorbid substance use should be used.

When recording the name of the disorder, the comorbid substance use disorder (if any) is listed first, followed by the word “with,” followed by the name of the substance-induced obsessive-compulsive and related disorder, followed by the specification of onset (i.e., onset during intoxication, onset during withdrawal, with onset after medication use). For example, in the case of repetitive behaviors occurring during intoxication in a man with a severe cocaine use disorder, the diagnosis is F14.288 severe cocaine use disorder with cocaine-induced obsessive-compulsive and related disorder, with onset during intoxication. A separate diagnosis of the comorbid severe cocaine use disorder is not given. If the substance-induced obsessive-compulsive and related disorder occurs without a comorbid substance use disorder (e.g., after a one-time heavy use of the substance), no accompanying substance use disorder is noted (e.g., F15.988 amphetamine-induced obsessive-compulsive and related disorder, with onset during intoxication). When more than one substance is judged to play a significant role in the development of the obsessive-compulsive and related disorder, each should be listed separately.

Diagnostic Features

The essential features of substance/medication-induced obsessive-compulsive and related disorder are prominent symptoms of an obsessive-compulsive and related disorder (Criterion A) that are judged to be attributable to the effects of a substance (e.g., drug of abuse, medication). The obsessive-compulsive and related disorder symptoms must have developed during or soon after substance intoxication or withdrawal or after exposure to a medication or toxin, and the substance/medication must be capable of producing the symptoms (Criterion B). Substance/medication-induced obsessive-compulsive and related disorder due to a prescribed treatment for a mental disorder or general medical condition must have its onset while the individual is receiving the medication. Once the treatment is discontinued, the obsessive-compulsive and related disorder symptoms will usually improve or remit within days to several weeks to 1 month (depending on the half-life of the substance/medication). The diagnosis of substance/medication-induced obsessive-compulsive and related disorder should not be given if onset of the obsessive-compulsive and related disorder symptoms precedes the substance intoxication or medication use, or if the symptoms persist for a substantial period of time, usually longer than 1 month, from the time of severe intoxication or withdrawal. If the obsessive-compulsive and related disorder symptoms persist for a substantial period of time, other causes for the symptoms should be considered. The substance/medication-induced obsessive-compulsive and related disorder diagnosis should be made in addition to a diagnosis of substance intoxication only when the symptoms in Criterion A predominate in the clinical picture and are sufficiently severe to warrant independent clinical attention.

Associated Features Supporting Diagnosis

Obsessions, compulsions, hair pulling, skin picking, or other body-focused repetitive behaviors can occur in association with intoxication with the following classes of substances: stimulants (including cocaine) and other (or unknown) substances. Heavy metals and toxins may also cause obsessive-compulsive and related disorder symptoms. Laboratory assessments (e.g., urine toxicology) may be useful to measure substance intoxication as part of an assessment for obsessive-compulsive and related disorders.

Prevalence

In the general population, the very limited data that are available indicate that substance-induced obsessive-compulsive and related disorder is very rare.

Differential Diagnosis

Substance intoxication. Obsessive-compulsive and related disorder symptoms may occur in substance intoxication. The diagnosis of the substance-specific intoxication will usu-

ally suffice to categorize the symptom presentation. A diagnosis of an obsessive-compulsive and related disorder should be made in addition to substance intoxication when the symptoms are judged to be in excess of those usually associated with intoxication and are sufficiently severe to warrant independent clinical attention.

Obsessive-compulsive and related disorder (i.e., not induced by a substance). Substance/medication-induced obsessive-compulsive and related disorder is judged to be etiologically related to the substance/medication. Substance/medication-induced obsessive-compulsive and related disorder is distinguished from a primary obsessive-compulsive and related disorder by considering the onset, course, and other factors with respect to substances/medications. For drugs of abuse, there must be evidence from the history, physical examination, or laboratory findings for use or intoxication. Substance/medication-induced obsessive-compulsive and related disorder arises only in association with intoxication, whereas a primary obsessive-compulsive and related disorder may precede the onset of substance/medication use. The presence of features that are atypical of a primary obsessive-compulsive and related disorder, such as atypical age at onset of symptoms, may suggest a substance-induced etiology. A primary obsessive-compulsive and related disorder diagnosis is warranted if the symptoms persist for a substantial period of time (about 1 month or longer) after the end of the substance intoxication or the individual has a history of an obsessive-compulsive and related disorder.

Obsessive-compulsive and related disorder due to another medical condition. If the obsessive-compulsive and related disorder symptoms are attributable to another medical condition (i.e., rather than to the medication taken for the other medical condition), obsessive-compulsive and related disorder due to another medical condition should be diagnosed. The history often provides the basis for judgment. At times, a change in the treatment for the other medical condition (e.g., medication substitution or discontinuation) may be needed to determine whether or not the medication is the causative agent (in which case the symptoms may be better explained by substance/medication-induced obsessive-compulsive and related disorder). If the disturbance is attributable to both another medical condition and substance use, both diagnoses (i.e., obsessive-compulsive and related disorder due to another medical condition and substance/medication-induced obsessive-compulsive and related disorder) may be given. When there is insufficient evidence to determine whether the symptoms are attributable to either a substance/medication or another medical condition or are primary (i.e., attributable to neither a substance/medication nor another medical condition), a diagnosis of other specified or unspecified obsessive-compulsive and related disorder would be indicated.

Delirium. If obsessive-compulsive and related disorder symptoms occur exclusively during the course of delirium, they are considered to be an associated feature of the delirium and are not diagnosed separately.

Obsessive-Compulsive and Related Disorder Due to Another Medical Condition

Diagnostic Criteria	294.8 (F06.8)
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- A. Obsessions, compulsions, preoccupations with appearance, hoarding, skin picking, hair pulling, other body-focused repetitive behaviors, or other symptoms characteristic of obsessive-compulsive and related disorder predominate in the clinical picture.
- B. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct pathophysiological consequence of another medical condition.
- C. The disturbance is not better explained by another mental disorder.

- D. The disturbance does not occur exclusively during the course of a delirium.
- E. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify if:

With obsessive-compulsive disorder–like symptoms: If obsessive-compulsive disorder–like symptoms predominate in the clinical presentation.

With appearance preoccupations: If preoccupation with perceived appearance defects or flaws predominates in the clinical presentation.

With hoarding symptoms: If hoarding predominates in the clinical presentation.

With hair-pulling symptoms: If hair pulling predominates in the clinical presentation.

With skin-picking symptoms: If skin picking predominates in the clinical presentation.

Coding note: Include the name of the other medical condition in the name of the mental disorder (e.g., 294.8 [F06.8] obsessive-compulsive and related disorder due to cerebral infarction). The other medical condition should be coded and listed separately immediately before the obsessive-compulsive and related disorder due to the medical condition (e.g., 438.89 [I69.398] cerebral infarction; 294.8 [F06.8] obsessive-compulsive and related disorder due to cerebral infarction).

Diagnostic Features

The essential feature of obsessive-compulsive and related disorder due to another medical condition is clinically significant obsessive-compulsive and related symptoms that are judged to be best explained as the direct pathophysiological consequence of another medical condition. Symptoms can include prominent obsessions, compulsions, preoccupations with appearance, hoarding, hair pulling, skin picking, or other body-focused repetitive behaviors (Criterion A). The judgment that the symptoms are best explained by the associated medical condition must be based on evidence from the history, physical examination, or laboratory findings (Criterion B). Additionally, it must be judged that the symptoms are not better explained by another mental disorder (Criterion C). The diagnosis is not made if the obsessive-compulsive and related symptoms occur only during the course of a delirium (Criterion D). The obsessive-compulsive and related symptoms must cause clinically significant distress or impairment in social, occupational, or other important areas of functioning (Criterion E).

In determining whether the obsessive-compulsive and related symptoms are attributable to another medical condition, a relevant medical condition must be present. Furthermore, it must be established that obsessive-compulsive and related symptoms can be etiologically related to the medical condition through a pathophysiological mechanism and that this best explains the symptoms in the individual. Although there are no infallible guidelines for determining whether the relationship between the obsessive-compulsive and related symptoms and the medical condition is etiological, considerations that may provide some guidance in making this diagnosis include the presence of a clear temporal association between the onset, exacerbation, or remission of the medical condition and the obsessive-compulsive and related symptoms; the presence of features that are atypical of a primary obsessive-compulsive and related disorder (e.g., atypical age at onset or course); and evidence in the literature that a known physiological mechanism (e.g., striatal damage) causes obsessive-compulsive and related symptoms. In addition, the disturbance cannot be better explained by a primary obsessive-compulsive and related disorder, a substance/medication-induced obsessive-compulsive and related disorder, or another mental disorder.

There is some controversy about whether obsessive-compulsive and related disorders can be attributed to Group A streptococcal infection. Sydenham's chorea is the neurolog-

ical manifestation of rheumatic fever, which is in turn due to Group A streptococcal infection. Sydenham's chorea is characterized by a combination of motor and nonmotor features. Nonmotor features include obsessions, compulsions, attention deficit, and emotional lability. Although individuals with Sydenham's chorea may present with non-neuropsychiatric features of acute rheumatic fever, such as carditis and arthritis, they may present with obsessive-compulsive disorder-like symptoms; such individuals should be diagnosed with obsessive-compulsive and related disorder due to another medical condition.

Pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS) has been identified as another post-infectious autoimmune disorder characterized by the sudden onset of obsessions, compulsions, and/or tics accompanied by a variety of acute neuropsychiatric symptoms in the absence of chorea, carditis, or arthritis, after Group A streptococcal infection. Although there is a body of evidence that supports the existence of PANDAS, it remains a controversial diagnosis. Given this ongoing controversy, the description of PANDAS has been modified to eliminate etiological factors and to designate an expanded clinical entity: pediatric acute-onset neuropsychiatric syndrome (PANS) or idiopathic childhood acute neuropsychiatric symptoms (CANS), which deserves further study.

Associated Features Supporting Diagnosis

A number of other medical disorders are known to include obsessive-compulsive and related symptoms as a manifestation. Examples include disorders leading to striatal damage, such as cerebral infarction.

Development and Course

The development and course of obsessive-compulsive and related disorder due to another medical condition generally follows the course of the underlying illness.

Diagnostic Markers

Laboratory assessments and/or medical examinations are necessary to confirm the diagnosis of another medical condition.

Differential Diagnosis

Delirium. A separate diagnosis of obsessive-compulsive and related disorder due to another medical condition is not given if the disturbance occurs exclusively during the course of a delirium. However, a diagnosis of obsessive-compulsive and related disorder due to another medical condition may be given in addition to a diagnosis of major neurocognitive disorder (dementia) if the etiology of the obsessive-compulsive symptoms is judged to be a physiological consequence of the pathological process causing the dementia and if obsessive-compulsive symptoms are a prominent part of the clinical presentation.

Mixed presentation of symptoms (e.g., mood and obsessive-compulsive and related disorder symptoms). If the presentation includes a mix of different types of symptoms, the specific mental disorder due to another medical condition depends on which symptoms predominate in the clinical picture.

Substance/medication-induced obsessive-compulsive and related disorders. If there is evidence of recent or prolonged substance use (including medications with psychoactive effects), withdrawal from a substance, or exposure to a toxin, a substance/medication-induced obsessive-compulsive and related disorder should be considered. When a substance/medication-induced obsessive-compulsive and related disorder is being diagnosed in relation to drugs of abuse, it may be useful to obtain a urine or blood drug screen

or other appropriate laboratory evaluation. Symptoms that occur during or shortly after (i.e., within 4 weeks of) substance intoxication or withdrawal or after medication use may be especially indicative of a substance/medication-induced obsessive-compulsive and related disorder, depending on the type, duration, or amount of the substance used.

Obsessive-compulsive and related disorders (primary). Obsessive-compulsive and related disorder due to another medical condition should be distinguished from a primary obsessive-compulsive and related disorder. In primary mental disorders, no specific and direct causative physiological mechanisms associated with a medical condition can be demonstrated. Late age at onset or atypical symptoms suggest the need for a thorough assessment to rule out the diagnosis of obsessive-compulsive and related disorder due to another medical condition.

Illness anxiety disorder. Illness anxiety disorder is characterized by a preoccupation with having or acquiring a serious illness. In the case of illness anxiety disorder, individuals may or may not have diagnosed medical conditions.

Associated feature of another mental disorder. Obsessive-compulsive and related symptoms may be an associated feature of another mental disorder (e.g., schizophrenia, anorexia nervosa).

Other specified obsessive-compulsive and related disorder or unspecified obsessive-compulsive and related disorder. These diagnoses are given if it is unclear whether the obsessive-compulsive and related symptoms are primary, substance-induced, or due to another medical condition.

Other Specified Obsessive-Compulsive and Related Disorder

300.3 (F42)

This category applies to presentations in which symptoms characteristic of an obsessive-compulsive and related disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the obsessive-compulsive and related disorders diagnostic class. The other specified obsessive-compulsive and related disorder category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for any specific obsessive-compulsive and related disorder. This is done by recording “other specified obsessive-compulsive and related disorder” followed by the specific reason (e.g., “body-focused repetitive behavior disorder”).

Examples of presentations that can be specified using the “other specified” designation include the following:

1. **Body dysmorphic–like disorder with actual flaws:** This is similar to body dysmorphic disorder except that the defects or flaws in physical appearance are clearly observable by others (i.e., they are more noticeable than “slight”). In such cases, the preoccupation with these flaws is clearly excessive and causes significant impairment or distress.
2. **Body dysmorphic–like disorder without repetitive behaviors:** Presentations that meet body dysmorphic disorder except that the individual has not performed repetitive behaviors or mental acts in response to the appearance concerns.
3. **Body-focused repetitive behavior disorder:** This is characterized by recurrent body-focused repetitive behaviors (e.g., nail biting, lip biting, cheek chewing) and repeated attempts to decrease or stop the behaviors. These symptoms cause clinically significant

distress or impairment in social, occupational, or other important areas of functioning and are not better explained by trichotillomania (hair-pulling disorder), excoriation (skin-picking) disorder, stereotypic movement disorder, or nonsuicidal self-injury.

4. **Obsessional jealousy:** This is characterized by nondelusional preoccupation with a partner's perceived infidelity. The preoccupations may lead to repetitive behaviors or mental acts in response to the infidelity concerns; they cause clinically significant distress or impairment in social, occupational, or other important areas of functioning; and they are not better explained by another mental disorder such as delusional disorder, jealous type, or paranoid personality disorder.
 5. **Shubo-kyofu:** A variant of *taijin kyofusho* (see "Glossary of Cultural Concepts of Distress" in the Appendix) that is similar to body dysmorphic disorder and is characterized by excessive fear of having a bodily deformity.
 6. **Koro:** Related to *dhat syndrome* (see "Glossary of Cultural Concepts of Distress" in the Appendix), an episode of sudden and intense anxiety that the penis (or the vulva and nipples in females) will recede into the body, possibly leading to death.
 7. **Jikoshu-kyofu:** A variant of *taijin kyofusho* (see "Glossary of Cultural Concepts of Distress" in the Appendix) characterized by fear of having an offensive body odor (also termed *olfactory reference syndrome*).
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Unspecified Obsessive-Compulsive and Related Disorder

300.3 (F42)

This category applies to presentations in which symptoms characteristic of an obsessive-compulsive and related disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the obsessive-compulsive and related disorders diagnostic class. The unspecified obsessive-compulsive and related disorder category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for a specific obsessive-compulsive and related disorder, and includes presentations in which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

Trauma- and Stressor-Related Disorders

Trauma- and stressor-related disorders include disorders in which exposure to a traumatic or stressful event is listed explicitly as a diagnostic criterion. These include reactive attachment disorder, disinhibited social engagement disorder, posttraumatic stress disorder (PTSD), acute stress disorder, and adjustment disorders. Placement of this chapter reflects the close relationship between these diagnoses and disorders in the surrounding chapters on anxiety disorders, obsessive-compulsive and related disorders, and dissociative disorders.

Psychological distress following exposure to a traumatic or stressful event is quite variable. In some cases, symptoms can be well understood within an anxiety- or fear-based context. It is clear, however, that many individuals who have been exposed to a traumatic or stressful event exhibit a phenotype in which, rather than anxiety- or fear-based symptoms, the most prominent clinical characteristics are anhedonic and dysphoric symptoms, externalizing angry and aggressive symptoms, or dissociative symptoms. Because of these variable expressions of clinical distress following exposure to catastrophic or aversive events, the aforementioned disorders have been grouped under a separate category: *trauma- and stressor-related disorders*. Furthermore, it is not uncommon for the clinical picture to include some combination of the above symptoms (with or without anxiety- or fear-based symptoms). Such a heterogeneous picture has long been recognized in adjustment disorders, as well. Social neglect—that is, the absence of adequate caregiving during childhood—is a diagnostic requirement of both reactive attachment disorder and disinhibited social engagement disorder. Although the two disorders share a common etiology, the former is expressed as an internalizing disorder with depressive symptoms and withdrawn behavior, while the latter is marked by disinhibition and externalizing behavior.

Reactive Attachment Disorder

Diagnostic Criteria

313.89 (F94.1)

- A. A consistent pattern of inhibited, emotionally withdrawn behavior toward adult caregivers, manifested by both of the following:
 - 1. The child rarely or minimally seeks comfort when distressed.
 - 2. The child rarely or minimally responds to comfort when distressed.
- B. A persistent social and emotional disturbance characterized by at least two of the following:
 - 1. Minimal social and emotional responsiveness to others.
 - 2. Limited positive affect.
 - 3. Episodes of unexplained irritability, sadness, or fearfulness that are evident even during nonthreatening interactions with adult caregivers.
- C. The child has experienced a pattern of extremes of insufficient care as evidenced by at least one of the following:
 - 1. Social neglect or deprivation in the form of persistent lack of having basic emotional needs for comfort, stimulation, and affection met by caregiving adults.

2. Repeated changes of primary caregivers that limit opportunities to form stable attachments (e.g., frequent changes in foster care).
 3. Rearing in unusual settings that severely limit opportunities to form selective attachments (e.g., institutions with high child-to-caregiver ratios).
- D. The care in Criterion C is presumed to be responsible for the disturbed behavior in Criterion A (e.g., the disturbances in Criterion A began following the lack of adequate care in Criterion C).
- E. The criteria are not met for autism spectrum disorder.
- F. The disturbance is evident before age 5 years.
- G. The child has a developmental age of at least 9 months.

Specify if:

Persistent: The disorder has been present for more than 12 months.

Specify current severity:

Reactive attachment disorder is specified as **severe** when a child exhibits all symptoms of the disorder, with each symptom manifesting at relatively high levels.

Diagnostic Features

Reactive attachment disorder of infancy or early childhood is characterized by a pattern of markedly disturbed and developmentally inappropriate attachment behaviors, in which a child rarely or minimally turns preferentially to an attachment figure for comfort, support, protection, and nurturance. The essential feature is absent or grossly underdeveloped attachment between the child and putative caregiving adults. Children with reactive attachment disorder are believed to have the capacity to form selective attachments. However, because of limited opportunities during early development, they fail to show the behavioral manifestations of selective attachments. That is, when distressed, they show no consistent effort to obtain comfort, support, nurturance, or protection from caregivers. Furthermore, when distressed, children with this disorder do not respond more than minimally to comforting efforts of caregivers. Thus, the disorder is associated with the absence of expected comfort seeking and response to comforting behaviors. As such, children with reactive attachment disorder show diminished or absent expression of positive emotions during routine interactions with caregivers. In addition, their emotion regulation capacity is compromised, and they display episodes of negative emotions of fear, sadness, or irritability that are not readily explained. A diagnosis of reactive attachment disorder should not be made in children who are developmentally unable to form selective attachments. For this reason, the child must have a developmental age of at least 9 months.

Associated Features Supporting Diagnosis

Because of the shared etiological association with social neglect, reactive attachment disorder often co-occurs with developmental delays, especially in delays in cognition and language. Other associated features include stereotypies and other signs of severe neglect (e.g., malnutrition or signs of poor care).

Prevalence

The prevalence of reactive attachment disorder is unknown, but the disorder is seen relatively rarely in clinical settings. The disorder has been found in young children exposed to severe neglect before being placed in foster care or raised in institutions. However, even in populations of severely neglected children, the disorder is uncommon, occurring in less than 10% of such children.

Development and Course

Conditions of social neglect are often present in the first months of life in children diagnosed with reactive attachment disorder, even before the disorder is diagnosed. The clinical features of the disorder manifest in a similar fashion between the ages of 9 months and 5 years. That is, signs of absent-to-minimal attachment behaviors and associated emotionally aberrant behaviors are evident in children throughout this age range, although differing cognitive and motor abilities may affect how these behaviors are expressed. Without remediation and recovery through normative caregiving environments, it appears that signs of the disorder may persist, at least for several years.

It is unclear whether reactive attachment disorder occurs in older children and, if so, how it differs from its presentation in young children. Because of this, the diagnosis should be made with caution in children older than 5 years.

Risk and Prognostic Factors

Environmental. Serious social neglect is a diagnostic requirement for reactive attachment disorder and is also the only known risk factor for the disorder. However, the majority of severely neglected children do not develop the disorder. Prognosis appears to depend on the quality of the caregiving environment following serious neglect.

Culture-Related Diagnostic Issues

Similar attachment behaviors have been described in young children in many different cultures around the world. However, caution should be exercised in making the diagnosis of reactive attachment disorder in cultures in which attachment has not been studied.

Functional Consequences of Reactive Attachment Disorder

Reactive attachment disorder significantly impairs young children's abilities to relate interpersonally to adults or peers and is associated with functional impairment across many domains of early childhood.

Differential Diagnosis

Autism spectrum disorder. Aberrant social behaviors manifest in young children with reactive attachment disorder, but they also are key features of autism spectrum disorder. Specifically, young children with either condition can manifest dampened expression of positive emotions, cognitive and language delays, and impairments in social reciprocity. As a result, reactive attachment disorder must be differentiated from autism spectrum disorder. These two disorders can be distinguished based on differential histories of neglect and on the presence of restricted interests or ritualized behaviors, specific deficit in social communication, and selective attachment behaviors. Children with reactive attachment disorder have experienced a history of severe social neglect, although it is not always possible to obtain detailed histories about the precise nature of their experiences, especially in initial evaluations. Children with autistic spectrum disorder will only rarely have a history of social neglect. The restricted interests and repetitive behaviors characteristic of autism spectrum disorder are not a feature of reactive attachment disorder. These clinical features manifest as excessive adherence to rituals and routines; restricted, fixated interests; and unusual sensory reactions. However, it is important to note that children with either condition can exhibit stereotypic behaviors such as rocking or flapping. Children with either disorder also may exhibit a range of intellectual functioning, but only children with autis-

tic spectrum disorder exhibit selective impairments in social communicative behaviors, such as intentional communication (i.e., impairment in communication that is deliberate, goal-directed, and aimed at influencing the behavior of the recipient). Children with reactive attachment disorder show social communicative functioning comparable to their overall level of intellectual functioning. Finally, children with autistic spectrum disorder regularly show attachment behavior typical for their developmental level. In contrast, children with reactive attachment disorder do so only rarely or inconsistently, if at all.

Intellectual disability (intellectual developmental disorder). Developmental delays often accompany reactive attachment disorder, but they should not be confused with the disorder. Children with intellectual disability should exhibit social and emotional skills comparable to their cognitive skills and do not demonstrate the profound reduction in positive affect and emotion regulation difficulties evident in children with reactive attachment disorder. In addition, developmentally delayed children who have reached a cognitive age of 7–9 months should demonstrate selective attachments regardless of their chronological age. In contrast, children with reactive attachment disorder show lack of preferred attachment despite having attained a developmental age of at least 9 months.

Depressive disorders. Depression in young children is also associated with reductions in positive affect. There is limited evidence, however, to suggest that children with depressive disorders have impairments in attachment. That is, young children who have been diagnosed with depressive disorders still should seek and respond to comforting efforts by caregivers.

Comorbidity

Conditions associated with neglect, including cognitive delays, language delays, and stereotypies, often co-occur with reactive attachment disorder. Medical conditions, such as severe malnutrition, may accompany signs of the disorder. Depressive symptoms also may co-occur with reactive attachment disorder.

Disinhibited Social Engagement Disorder

Diagnostic Criteria 313.89 (F94.2)

- A. A pattern of behavior in which a child actively approaches and interacts with unfamiliar adults and exhibits at least two of the following:
 - 1. Reduced or absent reticence in approaching and interacting with unfamiliar adults.
 - 2. Overly familiar verbal or physical behavior (that is not consistent with culturally sanctioned and with age-appropriate social boundaries).
 - 3. Diminished or absent checking back with adult caregiver after venturing away, even in unfamiliar settings.
 - 4. Willingness to go off with an unfamiliar adult with minimal or no hesitation.
- B. The behaviors in Criterion A are not limited to impulsivity (as in attention-deficit/hyperactivity disorder) but include socially disinhibited behavior.
- C. The child has experienced a pattern of extremes of insufficient care as evidenced by at least one of the following:
 - 1. Social neglect or deprivation in the form of persistent lack of having basic emotional needs for comfort, stimulation, and affection met by caregiving adults.
 - 2. Repeated changes of primary caregivers that limit opportunities to form stable attachments (e.g., frequent changes in foster care).
 - 3. Rearing in unusual settings that severely limit opportunities to form selective attachments (e.g., institutions with high child-to-caregiver ratios).

- D. The care in Criterion C is presumed to be responsible for the disturbed behavior in Criterion A (e.g., the disturbances in Criterion A began following the pathogenic care in Criterion C).
- E. The child has a developmental age of at least 9 months.

Specify if:

Persistent: The disorder has been present for more than 12 months.

Specify current severity:

Disinhibited social engagement disorder is specified as **severe** when the child exhibits all symptoms of the disorder, with each symptom manifesting at relatively high levels.

Diagnostic Features

The essential feature of disinhibited social engagement disorder is a pattern of behavior that involves culturally inappropriate, overly familiar behavior with relative strangers (Criterion A). This overly familiar behavior violates the social boundaries of the culture. A diagnosis of disinhibited social engagement disorder should not be made before children are developmentally able to form selective attachments. For this reason, the child must have a developmental age of at least 9 months.

Associated Features Supporting Diagnosis

Because of the shared etiological association with social neglect, disinhibited social engagement disorder may co-occur with developmental delays, especially cognitive and language delays, stereotypies, and other signs of severe neglect, such as malnutrition or poor care. However, signs of the disorder often persist even after these other signs of neglect are no longer present. Therefore, it is not uncommon for children with the disorder to present with no current signs of neglect. Moreover, the condition can present in children who show no signs of disordered attachment. Thus, disinhibited social engagement disorder may be seen in children with a history of neglect who lack attachments or whose attachments to their caregivers range from disturbed to secure.

Prevalence

The prevalence of disinhibited social attachment disorder is unknown. Nevertheless, the disorder appears to be rare, occurring in a minority of children, even those who have been severely neglected and subsequently placed in foster care or raised in institutions. In such high-risk populations, the condition occurs in only about 20% of children. The condition is seen rarely in other clinical settings.

Development and Course

Conditions of social neglect are often present in the first months of life in children diagnosed with disinhibited social engagement disorder, even before the disorder is diagnosed. However, there is no evidence that neglect beginning after age 2 years is associated with manifestations of the disorder. If neglect occurs early and signs of the disorder appear, clinical features of the disorder are moderately stable over time, particularly if conditions of neglect persist. Indiscriminate social behavior and lack of reticence with unfamiliar adults in toddlerhood are accompanied by attention-seeking behaviors in preschoolers. When the disorder persists into middle childhood, clinical features manifest as verbal and physical overfamiliarity as well as inauthentic expression of emotions. These signs appear particularly apparent when the child interacts with adults. Peer relationships are most affected in adolescence, with both indiscriminate behavior and conflicts apparent. The disorder has not been described in adults.

Disinhibited social engagement disorder has been described from the second year of life through adolescence. There are some differences in manifestations of the disorder from early childhood through adolescence. At the youngest ages, across many cultures, children show reticence when interacting with strangers. Young children with the disorder fail to show reticence to approach, engage with, and even accompany adults. In preschool children, verbal and social intrusiveness appear most prominent, often accompanied by attention-seeking behavior. Verbal and physical overfamiliarity continue through middle childhood, accompanied by inauthentic expressions of emotion. In adolescence, indiscriminate behavior extends to peers. Relative to healthy adolescents, adolescents with the disorder have more “superficial” peer relationships and more peer conflicts. Adult manifestations of the disorder are unknown.

Risk and Prognostic Factors

Environmental. Serious social neglect is a diagnostic requirement for disinhibited social engagement disorder and is also the only known risk factor for the disorder. However, the majority of severely neglected children do not develop the disorder. Neurobiological vulnerability may differentiate neglected children who do and do not develop the disorder. However, no clear link with any specific neurobiological factors has been established. The disorder has not been identified in children who experience social neglect only after age 2 years. Prognosis is only modestly associated with quality of the caregiving environment following serious neglect. In many cases, the disorder persists, even in children whose caregiving environment becomes markedly improved.

Course modifiers. Caregiving quality seems to moderate the course of disinhibited social engagement disorder. Nevertheless, even after placement in normative caregiving environments, some children show persistent signs of the disorder, at least through adolescence.

Functional Consequences of Disinhibited Social Engagement Disorder

Disinhibited social engagement disorder significantly impairs young children’s abilities to relate interpersonally to adults and peers.

Differential Diagnosis

Attention-deficit/hyperactivity disorder. Because of social impulsivity that sometimes accompanies attention-deficit/hyperactivity disorder (ADHD), it is necessary to differentiate the two disorders. Children with disinhibited social engagement disorder may be distinguished from those with ADHD because the former do not show difficulties with attention or hyperactivity.

Comorbidity

Limited research has examined the issue of disorders comorbid with disinhibited social engagement disorder. Conditions associated with neglect, including cognitive delays, language delays, and stereotypies, may co-occur with disinhibited social engagement disorder. In addition, children may be diagnosed with ADHD and disinhibited social engagement disorder concurrently.

Posttraumatic Stress Disorder

Diagnostic Criteria

309.81 (F43.10)

Posttraumatic Stress Disorder

Note: The following criteria apply to adults, adolescents, and children older than 6 years. For children 6 years and younger, see corresponding criteria below.

- A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:
 1. Directly experiencing the traumatic event(s).
 2. Witnessing, in person, the event(s) as it occurred to others.
 3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
 4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

Note: Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

- B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:
 1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).
Note: In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.
 2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).
Note: In children, there may be frightening dreams without recognizable content.
 3. Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)
Note: In children, trauma-specific reenactment may occur in play.
 4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
 5. Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
- C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:
 1. Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
 2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
- D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
 1. Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

2. Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," "The world is completely dangerous," "My whole nervous system is permanently ruined").
 3. Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.
 4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).
 5. Markedly diminished interest or participation in significant activities.
 6. Feelings of detachment or estrangement from others.
 7. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).
- E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.
 2. Reckless or self-destructive behavior.
 3. Hypervigilance.
 4. Exaggerated startle response.
 5. Problems with concentration.
 6. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).
- F. Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.
- G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.

Specify whether:

With dissociative symptoms: The individual's symptoms meet the criteria for post-traumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:

1. **Depersonalization:** Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. **Derealization:** Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts, behavior during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

Specify if:

With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

Posttraumatic Stress Disorder for Children 6 Years and Younger

- A. In children 6 years and younger, exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways:
1. Directly experiencing the traumatic event(s).
 2. Witnessing, in person, the event(s) as it occurred to others, especially primary caregivers.

Note: Witnessing does not include events that are witnessed only in electronic media, television, movies, or pictures.

3. Learning that the traumatic event(s) occurred to a parent or caregiving figure.
- B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:
 1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).

Note: Spontaneous and intrusive memories may not necessarily appear distressing and may be expressed as play reenactment.
 2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).

Note: It may not be possible to ascertain that the frightening content is related to the traumatic event.
 3. Dissociative reactions (e.g., flashbacks) in which the child feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.) Such trauma-specific reenactment may occur in play.
 4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
 5. Marked physiological reactions to reminders of the traumatic event(s).
- C. One (or more) of the following symptoms, representing either persistent avoidance of stimuli associated with the traumatic event(s) or negative alterations in cognitions and mood associated with the traumatic event(s), must be present, beginning after the event(s) or worsening after the event(s):

Persistent Avoidance of Stimuli

1. Avoidance of or efforts to avoid activities, places, or physical reminders that arouse recollections of the traumatic event(s).
2. Avoidance of or efforts to avoid people, conversations, or interpersonal situations that arouse recollections of the traumatic event(s).

Negative Alterations in Cognitions

3. Substantially increased frequency of negative emotional states (e.g., fear, guilt, sadness, shame, confusion).
4. Markedly diminished interest or participation in significant activities, including restriction of play.
5. Socially withdrawn behavior.
6. Persistent reduction in expression of positive emotions.
- D. Alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
 1. Irritable behavior and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects (including extreme temper tantrums).
 2. Hypervigilance.
 3. Exaggerated startle response.
 4. Problems with concentration.
 5. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).
- E. The duration of the disturbance is more than 1 month.

- F. The disturbance causes clinically significant distress or impairment in relationships with parents, siblings, peers, or other caregivers or with school behavior.
- G. The disturbance is not attributable to the physiological effects of a substance (e.g., medication or alcohol) or another medical condition.

Specify whether:

With dissociative symptoms: The individual's symptoms meet the criteria for post-traumatic stress disorder, and the individual experiences persistent or recurrent symptoms of either of the following:

1. **Depersonalization:** Persistent or recurrent experiences of feeling detached from, and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. **Derealization:** Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts) or another medical condition (e.g., complex partial seizures).

Specify if:

With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

Diagnostic Features

The essential feature of posttraumatic stress disorder (PTSD) is the development of characteristic symptoms following exposure to one or more traumatic events. Emotional reactions to the traumatic event (e.g., fear, helplessness, horror) are no longer a part of Criterion A. The clinical presentation of PTSD varies. In some individuals, fear-based re-experiencing, emotional, and behavioral symptoms may predominate. In others, anhedonic or dysphoric mood states and negative cognitions may be most distressing. In some other individuals, arousal and reactive-externalizing symptoms are prominent, while in others, dissociative symptoms predominate. Finally, some individuals exhibit combinations of these symptom patterns.

The directly experienced traumatic events in Criterion A include, but are not limited to, exposure to war as a combatant or civilian, threatened or actual physical assault (e.g., physical attack, robbery, mugging, childhood physical abuse), threatened or actual sexual violence (e.g., forced sexual penetration, alcohol/drug-facilitated sexual penetration, abusive sexual contact, noncontact sexual abuse, sexual trafficking), being kidnapped, being taken hostage, terrorist attack, torture, incarceration as a prisoner of war, natural or human-made disasters, and severe motor vehicle accidents. For children, sexually violent events may include developmentally inappropriate sexual experiences without physical violence or injury. A life-threatening illness or debilitating medical condition is not necessarily considered a traumatic event. Medical incidents that qualify as traumatic events involve sudden, catastrophic events (e.g., waking during surgery, anaphylactic shock). Witnessed events include, but are not limited to, observing threatened or serious injury, unnatural death, physical or sexual abuse of another person due to violent assault, domestic violence, accident, war or disaster, or a medical catastrophe in one's child (e.g., a life-threatening hemorrhage). Indirect exposure through learning about an event is limited to experiences affecting close relatives or friends and experiences that are violent or accidental (e.g., death due to natural causes does not qualify). Such events include violent per-

sonal assault, suicide, serious accident, and serious injury. The disorder may be especially severe or long-lasting when the stressor is interpersonal and intentional (e.g., torture, sexual violence).

The traumatic event can be reexperienced in various ways. Commonly, the individual has recurrent, involuntary, and intrusive recollections of the event (Criterion B1). Intrusive recollections in PTSD are distinguished from depressive rumination in that they apply only to involuntary and intrusive distressing memories. The emphasis is on recurrent memories of the event that usually include sensory, emotional, or physiological behavioral components. A common reexperiencing symptom is distressing dreams that replay the event itself or that are representative or thematically related to the major threats involved in the traumatic event (Criterion B2). The individual may experience dissociative states that last from a few seconds to several hours or even days, during which components of the event are relived and the individual behaves as if the event were occurring at that moment (Criterion B3). Such events occur on a continuum from brief visual or other sensory intrusions about part of the traumatic event without loss of reality orientation, to complete loss of awareness of present surroundings. These episodes, often referred to as "flashbacks," are typically brief but can be associated with prolonged distress and heightened arousal. For young children, reenactment of events related to trauma may appear in play or in dissociative states. Intense psychological distress (Criterion B4) or physiological reactivity (Criterion B5) often occurs when the individual is exposed to triggering events that resemble or symbolize an aspect of the traumatic event (e.g., windy days after a hurricane; seeing someone who resembles one's perpetrator). The triggering cue could be a physical sensation (e.g., dizziness for survivors of head trauma; rapid heartbeat for a previously traumatized child), particularly for individuals with highly somatic presentations.

Stimuli associated with the trauma are persistently (e.g., always or almost always) avoided. The individual commonly makes deliberate efforts to avoid thoughts, memories, feelings, or talking about the traumatic event (e.g., utilizing distraction techniques to avoid internal reminders) (Criterion C1) and to avoid activities, objects, situations, or people who arouse recollections of it (Criterion C2).

Negative alterations in cognitions or mood associated with the event begin or worsen after exposure to the event. These negative alterations can take various forms, including an inability to remember an important aspect of the traumatic event; such amnesia is typically due to dissociative amnesia and is not due to head injury, alcohol, or drugs (Criterion D1). Another form is persistent (i.e., always or almost always) and exaggerated negative expectations regarding important aspects of life applied to oneself, others, or the future (e.g., "I have always had bad judgment"; "People in authority can't be trusted") that may manifest as a negative change in perceived identity since the trauma (e.g., "I can't trust anyone ever again"; Criterion D2). Individuals with PTSD may have persistent erroneous cognitions about the causes of the traumatic event that lead them to blame themselves or others (e.g., "It's all my fault that my uncle abused me") (Criterion D3). A persistent negative mood state (e.g., fear, horror, anger, guilt, shame) either began or worsened after exposure to the event (Criterion D4). The individual may experience markedly diminished interest or participation in previously enjoyed activities (Criterion D5), feeling detached or estranged from other people (Criterion D6), or a persistent inability to feel positive emotions (especially happiness, joy, satisfaction, or emotions associated with intimacy, tenderness, and sexuality) (Criterion D7).

Individuals with PTSD may be quick tempered and may even engage in aggressive verbal and/or physical behavior with little or no provocation (e.g., yelling at people, getting into fights, destroying objects) (Criterion E1). They may also engage in reckless or self-destructive behavior such as dangerous driving, excessive alcohol or drug use, or self-injurious or suicidal behavior (Criterion E2). PTSD is often characterized by a heightened sensitivity to potential threats, including those that are related to the traumatic experience (e.g., following a motor vehicle accident, being especially sensitive to the threat potentially

caused by cars or trucks) and those not related to the traumatic event (e.g., being fearful of suffering a heart attack) (Criterion E3). Individuals with PTSD may be very reactive to unexpected stimuli, displaying a heightened startle response, or jumpiness, to loud noises or unexpected movements (e.g., jumping markedly in response to a telephone ringing) (Criterion E4). Concentration difficulties, including difficulty remembering daily events (e.g., forgetting one's telephone number) or attending to focused tasks (e.g., following a conversation for a sustained period of time), are commonly reported (Criterion E5). Problems with sleep onset and maintenance are common and may be associated with nightmares and safety concerns or with generalized elevated arousal that interferes with adequate sleep (Criterion E6). Some individuals also experience persistent dissociative symptoms of detachment from their bodies (depersonalization) or the world around them (derealization); this is reflected in the "with dissociative symptoms" specifier.

Associated Features Supporting Diagnosis

Developmental regression, such as loss of language in young children, may occur. Auditory pseudo-hallucinations, such as having the sensory experience of hearing one's thoughts spoken in one or more different voices, as well as paranoid ideation, can be present. Following prolonged, repeated, and severe traumatic events (e.g., childhood abuse, torture), the individual may additionally experience difficulties in regulating emotions or maintaining stable interpersonal relationships, or dissociative symptoms. When the traumatic event produces violent death, symptoms of both problematic bereavement and PTSD may be present.

Prevalence

In the United States, projected lifetime risk for PTSD using DSM-IV criteria at age 75 years is 8.7%. Twelve-month prevalence among U.S. adults is about 3.5%. Lower estimates are seen in Europe and most Asian, African, and Latin American countries, clustering around 0.5%–1.0%. Although different groups have different levels of exposure to traumatic events, the conditional probability of developing PTSD following a similar level of exposure may also vary across cultural groups. Rates of PTSD are higher among veterans and others whose vocation increases the risk of traumatic exposure (e.g., police, firefighters, emergency medical personnel). Highest rates (ranging from one-third to more than one-half of those exposed) are found among survivors of rape, military combat and captivity, and ethnically or politically motivated internment and genocide. The prevalence of PTSD may vary across development; children and adolescents, including preschool children, generally have displayed lower prevalence following exposure to serious traumatic events; however, this may be because previous criteria were insufficiently developmentally informed. The prevalence of full-threshold PTSD also appears to be lower among older adults compared with the general population; there is evidence that subthreshold presentations are more common than full PTSD in later life and that these symptoms are associated with substantial clinical impairment. Compared with U.S. non-Latino whites, higher rates of PTSD have been reported among U.S. Latinos, African Americans, and American Indians, and lower rates have been reported among Asian Americans, after adjustment for traumatic exposure and demographic variables.

Development and Course

PTSD can occur at any age, beginning after the first year of life. Symptoms usually begin within the first 3 months after the trauma, although there may be a delay of months, or even years, before criteria for the diagnosis are met. There is abundant evidence for what DSM-IV called "delayed onset" but is now called "delayed expression," with the recognition that some symptoms typically appear immediately and that the delay is in meeting full criteria.

Frequently, an individual's reaction to a trauma initially meets criteria for acute stress disorder in the immediate aftermath of the trauma. The symptoms of PTSD and the relative predominance of different symptoms may vary over time. Duration of the symptoms also varies, with complete recovery within 3 months occurring in approximately one-half of adults, while some individuals remain symptomatic for longer than 12 months and sometimes for more than 50 years. Symptom recurrence and intensification may occur in response to reminders of the original trauma, ongoing life stressors, or newly experienced traumatic events. For older individuals, declining health, worsening cognitive functioning, and social isolation may exacerbate PTSD symptoms.

The clinical expression of reexperiencing can vary across development. Young children may report new onset of frightening dreams without content specific to the traumatic event. Before age 6 years (see criteria for preschool subtype), young children are more likely to express reexperiencing symptoms through play that refers directly or symbolically to the trauma. They may not manifest fearful reactions at the time of the exposure or during reexperiencing. Parents may report a wide range of emotional or behavioral changes in young children. Children may focus on imagined interventions in their play or storytelling. In addition to avoidance, children may become preoccupied with reminders. Because of young children's limitations in expressing thoughts or labeling emotions, negative alterations in mood or cognition tend to involve primarily mood changes. Children may experience co-occurring traumas (e.g., physical abuse, witnessing domestic violence) and in chronic circumstances may not be able to identify onset of symptomatology. Avoidant behavior may be associated with restricted play or exploratory behavior in young children; reduced participation in new activities in school-age children; or reluctance to pursue developmental opportunities in adolescents (e.g., dating, driving). Older children and adolescents may judge themselves as cowardly. Adolescents may harbor beliefs of being changed in ways that make them socially undesirable and estrange them from peers (e.g., "Now I'll never fit in") and lose aspirations for the future. Irritable or aggressive behavior in children and adolescents can interfere with peer relationships and school behavior. Reckless behavior may lead to accidental injury to self or others, thrill-seeking, or high-risk behaviors. Individuals who continue to experience PTSD into older adulthood may express fewer symptoms of hyperarousal, avoidance, and negative cognitions and mood compared with younger adults with PTSD, although adults exposed to traumatic events during later life may display more avoidance, hyperarousal, sleep problems, and crying spells than do younger adults exposed to the same traumatic events. In older individuals, the disorder is associated with negative health perceptions, primary care utilization, and suicidal ideation.

Risk and Prognostic Factors

Risk (and protective) factors are generally divided into pretraumatic, peritraumatic, and posttraumatic factors.

Pretraumatic factors

Temperamental. These include childhood emotional problems by age 6 years (e.g., prior traumatic exposure, externalizing or anxiety problems) and prior mental disorders (e.g., panic disorder, depressive disorder, PTSD, or obsessive-compulsive disorder [OCD]).

Environmental. These include lower socioeconomic status; lower education; exposure to prior trauma (especially during childhood); childhood adversity (e.g., economic deprivation, family dysfunction, parental separation or death); cultural characteristics (e.g., fatalistic or self-blaming coping strategies); lower intelligence; minority racial/ethnic status; and a family psychiatric history. Social support prior to event exposure is protective.

Genetic and physiological. These include female gender and younger age at the time of trauma exposure (for adults). Certain genotypes may either be protective or increase risk of PTSD after exposure to traumatic events.

Peritraumatic factors

Environmental. These include severity (dose) of the trauma (the greater the magnitude of trauma, the greater the likelihood of PTSD), perceived life threat, personal injury, interpersonal violence (particularly trauma perpetrated by a caregiver or involving a witnessed threat to a caregiver in children), and, for military personnel, being a perpetrator, witnessing atrocities, or killing the enemy. Finally, dissociation that occurs during the trauma and persists afterward is a risk factor.

Posttraumatic factors

Temperamental. These include negative appraisals, inappropriate coping strategies, and development of acute stress disorder.

Environmental. These include subsequent exposure to repeated upsetting reminders, subsequent adverse life events, and financial or other trauma-related losses. Social support (including family stability, for children) is a protective factor that moderates outcome after trauma.

Culture-Related Diagnostic Issues

The risk of onset and severity of PTSD may differ across cultural groups as a result of variation in the type of traumatic exposure (e.g., genocide), the impact on disorder severity of the meaning attributed to the traumatic event (e.g., inability to perform funerary rites after a mass killing), the ongoing sociocultural context (e.g., residing among unpunished perpetrators in postconflict settings), and other cultural factors (e.g., acculturative stress in immigrants). The relative risk for PTSD of particular exposures (e.g., religious persecution) may vary across cultural groups. The clinical expression of the symptoms or symptom clusters of PTSD may vary culturally, particularly with respect to avoidance and numbing symptoms, distressing dreams, and somatic symptoms (e.g., dizziness, shortness of breath, heat sensations).

Cultural syndromes and idioms of distress influence the expression of PTSD and the range of comorbid disorders in different cultures by providing behavioral and cognitive templates that link traumatic exposures to specific symptoms. For example, panic attack symptoms may be salient in PTSD among Cambodians and Latin Americans because of the association of traumatic exposure with panic-like *khyâl* attacks and *ataque de nervios*. Comprehensive evaluation of local expressions of PTSD should include assessment of cultural concepts of distress (see the chapter “Cultural Formulation” in Section III).

Gender-Related Diagnostic Issues

PTSD is more prevalent among females than among males across the lifespan. Females in the general population experience PTSD for a longer duration than do males. At least some of the increased risk for PTSD in females appears to be attributable to a greater likelihood of exposure to traumatic events, such as rape, and other forms of interpersonal violence. Within populations exposed specifically to such stressors, gender differences in risk for PTSD are attenuated or nonsignificant.

Suicide Risk

Traumatic events such as childhood abuse increase a person’s suicide risk. PTSD is associated with suicidal ideation and suicide attempts, and presence of the disorder may indicate which individuals with ideation eventually make a suicide plan or actually attempt suicide.

Functional Consequences of Posttraumatic Stress Disorder

PTSD is associated with high levels of social, occupational, and physical disability, as well as considerable economic costs and high levels of medical utilization. Impaired function-

ing is exhibited across social, interpersonal, developmental, educational, physical health, and occupational domains. In community and veteran samples, PTSD is associated with poor social and family relationships, absenteeism from work, lower income, and lower educational and occupational success.

Differential Diagnosis

Adjustment disorders. In adjustment disorders, the stressor can be of any severity or type rather than that required by PTSD Criterion A. The diagnosis of an adjustment disorder is used when the response to a stressor that meets PTSD Criterion A does not meet all other PTSD criteria (or criteria for another mental disorder). An adjustment disorder is also diagnosed when the symptom pattern of PTSD occurs in response to a stressor that does not meet PTSD Criterion A (e.g., spouse leaving, being fired).

Other posttraumatic disorders and conditions. Not all psychopathology that occurs in individuals exposed to an extreme stressor should necessarily be attributed to PTSD. The diagnosis requires that trauma exposure precede the onset or exacerbation of pertinent symptoms. Moreover, if the symptom response pattern to the extreme stressor meets criteria for another mental disorder, these diagnoses should be given instead of, or in addition to, PTSD. Other diagnoses and conditions are excluded if they are better explained by PTSD (e.g., symptoms of panic disorder that occur only after exposure to traumatic reminders). If severe, symptom response patterns to the extreme stressor may warrant a separate diagnosis (e.g., dissociative amnesia).

Acute stress disorder. Acute stress disorder is distinguished from PTSD because the symptom pattern in acute stress disorder is restricted to a duration of 3 days to 1 month following exposure to the traumatic event.

Anxiety disorders and obsessive-compulsive disorder. In OCD, there are recurrent intrusive thoughts, but these meet the definition of an obsession. In addition, the intrusive thoughts are not related to an experienced traumatic event, compulsions are usually present, and other symptoms of PTSD or acute stress disorder are typically absent. Neither the arousal and dissociative symptoms of panic disorder nor the avoidance, irritability, and anxiety of generalized anxiety disorder are associated with a specific traumatic event. The symptoms of separation anxiety disorder are clearly related to separation from home or family, rather than to a traumatic event.

Major depressive disorder. Major depression may or may not be preceded by a traumatic event and should be diagnosed if other PTSD symptoms are absent. Specifically, major depressive disorder does not include any PTSD Criterion B or C symptoms. Nor does it include a number of symptoms from PTSD Criterion D or E.

Personality disorders. Interpersonal difficulties that had their onset, or were greatly exacerbated, after exposure to a traumatic event may be an indication of PTSD, rather than a personality disorder, in which such difficulties would be expected independently of any traumatic exposure.

Dissociative disorders. Dissociative amnesia, dissociative identity disorder, and depersonalization-derealization disorder may or may not be preceded by exposure to a traumatic event or may or may not have co-occurring PTSD symptoms. When full PTSD criteria are also met, however, the PTSD “with dissociative symptoms” subtype should be considered.

Conversion disorder (functional neurological symptom disorder). New onset of somatic symptoms within the context of posttraumatic distress might be an indication of PTSD rather than conversion disorder (functional neurological symptom disorder).

Psychotic disorders. Flashbacks in PTSD must be distinguished from illusions, hallucinations, and other perceptual disturbances that may occur in schizophrenia, brief psychotic disorder, and other psychotic disorders; depressive and bipolar disorders with

psychotic features; delirium; substance/medication-induced disorders; and psychotic disorders due to another medical condition.

Traumatic brain injury. When a brain injury occurs in the context of a traumatic event (e.g., traumatic accident, bomb blast, acceleration/deceleration trauma), symptoms of PTSD may appear. An event causing head trauma may also constitute a psychological traumatic event, and traumatic brain injury (TBI)–related neurocognitive symptoms are not mutually exclusive and may occur concurrently. Symptoms previously termed *postconcussive* (e.g., headaches, dizziness, sensitivity to light or sound, irritability, concentration deficits) can occur in brain-injured and non-brain-injured populations, including individuals with PTSD. Because symptoms of PTSD and TBI-related neurocognitive symptoms can overlap, a differential diagnosis between PTSD and neurocognitive disorder symptoms attributable to TBI may be possible based on the presence of symptoms that are distinctive to each presentation. Whereas reexperiencing and avoidance are characteristic of PTSD and not the effects of TBI, persistent disorientation and confusion are more specific to TBI (neurocognitive effects) than to PTSD.

Comorbidity

Individuals with PTSD are 80% more likely than those without PTSD to have symptoms that meet diagnostic criteria for at least one other mental disorder (e.g., depressive, bipolar, anxiety, or substance use disorders). Comorbid substance use disorder and conduct disorder are more common among males than among females. Among U.S. military personnel and combat veterans who have been deployed to recent wars in Afghanistan and Iraq, co-occurrence of PTSD and mild TBI is 48%. Although most young children with PTSD also have at least one other diagnosis, the patterns of comorbidity are different than in adults, with oppositional defiant disorder and separation anxiety disorder predominating. Finally, there is considerable comorbidity between PTSD and major neurocognitive disorder and some overlapping symptoms between these disorders.

Acute Stress Disorder

Diagnostic Criteria	308.3 (F43.0)
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- A. Exposure to actual or threatened death, serious injury, or sexual violation in one (or more) of the following ways:
- 1. Directly experiencing the traumatic event(s).
 - 2. Witnessing, in person, the event(s) as it occurred to others.
 - 3. Learning that the event(s) occurred to a close family member or close friend. **Note:** In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
 - 4. Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains, police officers repeatedly exposed to details of child abuse).
- Note:** This does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.
- B. Presence of nine (or more) of the following symptoms from any of the five categories of intrusion, negative mood, dissociation, avoidance, and arousal, beginning or worsening after the traumatic event(s) occurred:

Intrusion Symptoms

- 1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s). **Note:** In children, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the event(s). **Note:** In children, there may be frightening dreams without recognizable content.
3. Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.) **Note:** In children, trauma-specific reenactment may occur in play.
4. Intense or prolonged psychological distress or marked physiological reactions in response to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

Negative Mood

5. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

Dissociative Symptoms

6. An altered sense of the reality of one's surroundings or oneself (e.g., seeing oneself from another's perspective, being in a daze, time slowing).
7. Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

Avoidance Symptoms

8. Efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
9. Efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

Arousal Symptoms

10. Sleep disturbance (e.g., difficulty falling or staying asleep, restless sleep).
 11. Irritable behavior and angry outbursts (with little or no provocation), typically expressed as verbal or physical aggression toward people or objects.
 12. Hypervigilance.
 13. Problems with concentration.
 14. Exaggerated startle response.
- C. Duration of the disturbance (symptoms in Criterion B) is 3 days to 1 month after trauma exposure.

Note: Symptoms typically begin immediately after the trauma, but persistence for at least 3 days and up to a month is needed to meet disorder criteria.

- D. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- E. The disturbance is not attributable to the physiological effects of a substance (e.g., medication or alcohol) or another medical condition (e.g., mild traumatic brain injury) and is not better explained by brief psychotic disorder.
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Diagnostic Features

The essential feature of acute stress disorder is the development of characteristic symptoms lasting from 3 days to 1 month following exposure to one or more traumatic events. Traumatic events that are experienced directly include, but are not limited to, exposure to war as a combatant or civilian, threatened or actual violent personal assault (e.g., sexual

violence, physical attack, active combat, mugging, childhood physical and/or sexual violence, being kidnapped, being taken hostage, terrorist attack, torture), natural or human-made disasters (e.g., earthquake, hurricane, airplane crash), and severe accident (e.g., severe motor vehicle, industrial accident). For children, sexually traumatic events may include inappropriate sexual experiences without violence or injury. A life-threatening illness or debilitating medical condition is not necessarily considered a traumatic event. Medical incidents that qualify as traumatic events involve sudden, catastrophic events (e.g., waking during surgery, anaphylactic shock). Stressful events that do not possess the severe and traumatic components of events encompassed by Criterion A may lead to an adjustment disorder but not to acute stress disorder.

The clinical presentation of acute stress disorder may vary by individual but typically involves an anxiety response that includes some form of reexperiencing of or reactivity to the traumatic event. In some individuals, a dissociative or detached presentation can predominate, although these individuals typically will also display strong emotional or physiological reactivity in response to trauma reminders. In other individuals, there can be a strong anger response in which reactivity is characterized by irritable or possibly aggressive responses. The full symptom picture must be present for at least 3 days after the traumatic event and can be diagnosed only up to 1 month after the event. Symptoms that occur immediately after the event but resolve in less than 3 days would not meet criteria for acute stress disorder.

Witnessed events include, but are not limited to, observing threatened or serious injury, unnatural death, physical or sexual violence inflicted on another individual as a result of violent assault, severe domestic violence, severe accident, war, and disaster; it may also include witnessing a medical catastrophe (e.g., a life-threatening hemorrhage) involving one's child. Events experienced indirectly through learning about the event are limited to close relatives or close friends. Such events must have been violent or accidental—death due to natural causes does not qualify—and include violent personal assault, suicide, serious accident, or serious injury. The disorder may be especially severe when the stressor is interpersonal and intentional (e.g., torture, rape). The likelihood of developing this disorder may increase as the intensity of and physical proximity to the stressor increase.

The traumatic event can be reexperienced in various ways. Commonly, the individual has recurrent and intrusive recollections of the event (Criterion B1). The recollections are spontaneous or triggered recurrent memories of the event that usually occur in response to a stimulus that is reminiscent of the traumatic experience (e.g., the sound of a backfiring car triggering memories of gunshots). These intrusive memories often include sensory (e.g., sensing the intense heat that was perceived in a house fire), emotional (e.g., experiencing the fear of believing that one was about to be stabbed), or physiological (e.g., experiencing the shortness of breath that one suffered during a near-drowning) components.

Distressing dreams may contain themes that are representative of or thematically related to the major threats involved in the traumatic event. (For example, in the case of a motor vehicle accident survivor, the distressing dreams may involve crashing cars generally; in the case of a combat soldier, the distressing dreams may involve being harmed in ways other than combat.)

Dissociative states may last from a few seconds to several hours, or even days, during which components of the event are relived and the individual behaves as though experiencing the event at that moment. While dissociative responses are common during a traumatic event, only dissociative responses that persist beyond 3 days after trauma exposure are considered for the diagnosis of acute stress disorder. For young children, reenactment of events related to trauma may appear in play and may include dissociative moments (e.g., a child who survives a motor vehicle accident may repeatedly crash toy cars during play in a focused and distressing manner). These episodes, often referred to as *flashbacks*, are typically brief but involve a sense that the traumatic event is occurring in the present rather than being remembered in the past and are associated with significant distress.

Some individuals with the disorder do not have intrusive memories of the event itself, but instead experience intense psychological distress or physiological reactivity when they are exposed to triggering events that resemble or symbolize an aspect of the traumatic event (e.g., windy days for children after a hurricane, entering an elevator for a male or female who was raped in an elevator, seeing someone who resembles one's perpetrator). The triggering cue could be a physical sensation (e.g., a sense of heat for a burn victim, dizziness for survivors of head trauma), particularly for individuals with highly somatic presentations. The individual may have a persistent inability to feel positive emotions (e.g., happiness, joy, satisfaction, or emotions associated with intimacy, tenderness, or sexuality) but can experience negative emotions such as fear, sadness, anger, guilt, or shame.

Alterations in awareness can include *depersonalization*, a detached sense of oneself (e.g., seeing oneself from the other side of the room), or *derealization*, having a distorted view of one's surroundings (e.g., perceiving that things are moving in slow motion, seeing things in a daze, not being aware of events that one would normally encode). Some individuals also report an inability to remember an important aspect of the traumatic event that was presumably encoded. This symptom is attributable to dissociative amnesia and is not attributable to head injury, alcohol, or drugs.

Stimuli associated with the trauma are persistently avoided. The individual may refuse to discuss the traumatic experience or may engage in avoidance strategies to minimize awareness of emotional reactions (e.g., excessive alcohol use when reminded of the experience). This behavioral avoidance may include avoiding watching news coverage of the traumatic experience, refusing to return to a workplace where the trauma occurred, or avoiding interacting with others who shared the same traumatic experience.

It is very common for individuals with acute stress disorder to experience problems with sleep onset and maintenance, which may be associated with nightmares or with generalized elevated arousal that prevents adequate sleep. Individuals with acute stress disorder may be quick tempered and may even engage in aggressive verbal and/or physical behavior with little provocation. Acute stress disorder is often characterized by a heightened sensitivity to potential threats, including those that are related to the traumatic experience (e.g., a motor vehicle accident victim may be especially sensitive to the threat potentially caused by any cars or trucks) or those not related to the traumatic event (e.g., fear of having a heart attack). Concentration difficulties, including difficulty remembering daily events (e.g., forgetting one's telephone number) or attending to focused tasks (e.g., following a conversation for a sustained period of time), are commonly reported. Individuals with acute stress disorder may be very reactive to unexpected stimuli, displaying a heightened startle response or jumpiness to loud noises or unexpected movements (e.g., the individual may jump markedly in the response to a telephone ringing).

Associated Features Supporting Diagnosis

Individuals with acute stress disorder commonly engage in catastrophic or extremely negative thoughts about their role in the traumatic event, their response to the traumatic experience, or the likelihood of future harm. For example, an individual with acute stress disorder may feel excessively guilty about not having prevented the traumatic event or about not adapting to the experience more successfully. Individuals with acute stress disorder may also interpret their symptoms in a catastrophic manner, such that flashback memories or emotional numbing may be interpreted as a sign of diminished mental capacity. It is common for individuals with acute stress disorder to experience panic attacks in the initial month after trauma exposure that may be triggered by trauma reminders or may apparently occur spontaneously. Additionally, individuals with acute stress disorder may display chaotic or impulsive behavior. For example, individuals may drive recklessly, make irrational decisions, or gamble excessively. In children, there may be significant separation anxiety, possibly manifested by excessive needs for attention from

caregivers. In the case of bereavement following a death that occurred in traumatic circumstances, the symptoms of acute stress disorder can involve acute grief reactions. In such cases, reexperiencing, dissociative, and arousal symptoms may involve reactions to the loss, such as intrusive memories of the circumstances of the individual's death, disbelief that the individual has died, and anger about the death. Postconcussive symptoms (e.g., headaches, dizziness, sensitivity to light or sound, irritability, concentration deficits), which occur frequently following mild traumatic brain injury, are also frequently seen in individuals with acute stress disorder. Postconcussive symptoms are equally common in brain-injured and non-brain-injured populations, and the frequent occurrence of postconcussive symptoms could be attributable to acute stress disorder symptoms.

Prevalence

The prevalence of acute stress disorder in recently trauma-exposed populations (i.e., within 1 month of trauma exposure) varies according to the nature of the event and the context in which it is assessed. In both U.S. and non-U.S. populations, acute stress disorder tends to be identified in less than 20% of cases following traumatic events that do not involve interpersonal assault; 13%–21% of motor vehicle accidents, 14% of mild traumatic brain injury, 19% of assault, 10% of severe burns, and 6%–12% of industrial accidents. Higher rates (i.e., 20%–50%) are reported following interpersonal traumatic events, including assault, rape, and witnessing a mass shooting.

Development and Course

Acute stress disorder cannot be diagnosed until 3 days after a traumatic event. Although acute stress disorder may progress to posttraumatic stress disorder (PTSD) after 1 month, it may also be a transient stress response that remits within 1 month of trauma exposure and does not result in PTSD. Approximately half of individuals who eventually develop PTSD initially present with acute stress disorder. Symptom worsening during the initial month can occur, often as a result of ongoing life stressors or further traumatic events.

The forms of reexperiencing can vary across development. Unlike adults or adolescents, young children may report frightening dreams without content that clearly reflects aspects of the trauma (e.g., waking in fright in the aftermath of the trauma but being unable to relate the content of the dream to the traumatic event). Children age 6 years and younger are more likely than older children to express reexperiencing symptoms through play that refers directly or symbolically to the trauma. For example, a very young child who survived a fire may draw pictures of flames. Young children also do not necessarily manifest fearful reactions at the time of the exposure or even during reexperiencing. Parents typically report a range of emotional expressions, such as anger, shame, or withdrawal, and even excessively bright positive affect, in young children who are traumatized. Although children may avoid reminders of the trauma, they sometimes become preoccupied with reminders (e.g., a young child bitten by a dog may talk about dogs constantly yet avoid going outside because of fear of coming into contact with a dog).

Risk and Prognostic Factors

Temperamental. Risk factors include prior mental disorder, high levels of negative affectivity (neuroticism), greater perceived severity of the traumatic event, and an avoidant coping style. Catastrophic appraisals of the traumatic experience, often characterized by exaggerated appraisals of future harm, guilt, or hopelessness, are strongly predictive of acute stress disorder.

Environmental. First and foremost, an individual must be exposed to a traumatic event to be at risk for acute stress disorder. Risk factors for the disorder include a history of prior trauma.

Genetic and physiological. Females are at greater risk for developing acute stress disorder.

Elevated reactivity, as reflected by acoustic startle response, prior to trauma exposure increases the risk for developing acute stress disorder.

Culture-Related Diagnostic Issues

The profile of symptoms of acute stress disorder may vary cross-culturally, particularly with respect to dissociative symptoms, nightmares, avoidance, and somatic symptoms (e.g., dizziness, shortness of breath, heat sensations). Cultural syndromes and idioms of distress shape the local symptom profiles of acute stress disorder. Some cultural groups may display variants of dissociative responses, such as possession or trancelike behaviors in the initial month after trauma exposure. Panic symptoms may be salient in acute stress disorder among Cambodians because of the association of traumatic exposure with panic-like *khyâl* attacks, and *ataque de nervios* among Latin Americans may also follow a traumatic exposure.

Gender-Related Diagnostic Issues

Acute stress disorder is more prevalent among females than among males. Sex-linked neurobiological differences in stress response may contribute to females' increased risk for acute stress disorder. The increased risk for the disorder in females may be attributable in part to a greater likelihood of exposure to the types of traumatic events with a high conditional risk for acute stress disorder, such as rape and other interpersonal violence.

Functional Consequences of Acute Stress Disorder

Impaired functioning in social, interpersonal, or occupational domains has been shown across survivors of accidents, assault, and rape who develop acute stress disorder. The extreme levels of anxiety that may be associated with acute stress disorder may interfere with sleep, energy levels, and capacity to attend to tasks. Avoidance in acute stress disorder can result in generalized withdrawal from many situations that are perceived as potentially threatening, which can lead to nonattendance of medical appointments, avoidance of driving to important appointments, and absenteeism from work.

Differential Diagnosis

Adjustment disorders. In acute stress disorder, the stressor can be of any severity rather than of the severity and type required by Criterion A of acute stress disorder. The diagnosis of an adjustment disorder is used when the response to a Criterion A event does not meet the criteria for acute stress disorder (or another specific mental disorder) and when the symptom pattern of acute stress disorder occurs in response to a stressor that does not meet Criterion A for exposure to actual or threatened death, serious injury, or sexual violence (e.g., spouse leaving, being fired). For example, severe stress reactions to life-threatening illnesses that may include some acute stress disorder symptoms may be more appropriately described as an adjustment disorder. Some forms of acute stress response do not include acute stress disorder symptoms and may be characterized by anger, depression, or guilt. These responses are more appropriately described as primarily an adjustment disorder. Depressive or anger responses in an adjustment disorder may involve rumination about the traumatic event, as opposed to involuntary and intrusive distressing memories in acute stress disorder.

Panic disorder. Spontaneous panic attacks are very common in acute stress disorder. However, panic disorder is diagnosed only if panic attacks are unexpected and there is anxiety about future attacks or maladaptive changes in behavior associated with fear of dire consequences of the attacks.

Dissociative disorders. Severe dissociative responses (in the absence of characteristic acute stress disorder symptoms) may be diagnosed as derealization/depersonalization disorder. If severe amnesia of the trauma persists in the absence of characteristic acute stress disorder symptoms, the diagnosis of dissociative amnesia may be indicated.

Posttraumatic stress disorder. Acute stress disorder is distinguished from PTSD because the symptom pattern in acute stress disorder must occur within 1 month of the traumatic event and resolve within that 1-month period. If the symptoms persist for more than 1 month and meet criteria for PTSD, the diagnosis is changed from acute stress disorder to PTSD.

Obsessive-compulsive disorder. In obsessive-compulsive disorder, there are recurrent intrusive thoughts, but these meet the definition of an obsession. In addition, the intrusive thoughts are not related to an experienced traumatic event, compulsions are usually present, and other symptoms of acute stress disorder are typically absent.

Psychotic disorders. Flashbacks in acute stress disorder must be distinguished from illusions, hallucinations, and other perceptual disturbances that may occur in schizophrenia, other psychotic disorders, depressive or bipolar disorder with psychotic features, a delirium, substance/medication-induced disorders, and psychotic disorders due to another medical condition. Acute stress disorder flashbacks are distinguished from these other perceptual disturbances by being directly related to the traumatic experience and by occurring in the absence of other psychotic or substance-induced features.

Traumatic brain injury. When a brain injury occurs in the context of a traumatic event (e.g., traumatic accident, bomb blast, acceleration/deceleration trauma), symptoms of acute stress disorder may appear. An event causing head trauma may also constitute a psychological traumatic event, and traumatic brain injury (TBI)-related neurocognitive symptoms are not mutually exclusive and may occur concurrently. Symptoms previously termed *postconcussive* (e.g., headaches, dizziness, sensitivity to light or sound, irritability, concentration deficits) can occur in brain-injured and non-brain injured populations, including individuals with acute stress disorder. Because symptoms of acute stress disorder and TBI-related neurocognitive symptoms can overlap, a differential diagnosis between acute stress disorder and neurocognitive disorder symptoms attributable to TBI may be possible based on the presence of symptoms that are distinctive to each presentation. Whereas reexperiencing and avoidance are characteristic of acute stress disorder and not the effects of TBI, persistent disorientation and confusion are more specific to TBI (neurocognitive effects) than to acute stress disorder. Furthermore, differential is aided by the fact that symptoms of acute stress disorder persist for up to only 1 month following trauma exposure.

Adjustment Disorders

Diagnostic Criteria

- A. The development of emotional or behavioral symptoms in response to an identifiable stressor(s) occurring within 3 months of the onset of the stressor(s).
- B. These symptoms or behaviors are clinically significant, as evidenced by one or both of the following:
 1. Marked distress that is out of proportion to the severity or intensity of the stressor, taking into account the external context and the cultural factors that might influence symptom severity and presentation.
 2. Significant impairment in social, occupational, or other important areas of functioning.
- C. The stress-related disturbance does not meet the criteria for another mental disorder and is not merely an exacerbation of a preexisting mental disorder.

- D. The symptoms do not represent normal bereavement.
- E. Once the stressor or its consequences have terminated, the symptoms do not persist for more than an additional 6 months.

Specify whether:

309.0 (F43.21) With depressed mood: Low mood, tearfulness, or feelings of hopelessness are predominant.

309.24 (F43.22) With anxiety: Nervousness, worry, jitteriness, or separation anxiety is predominant.

309.28 (F43.23) With mixed anxiety and depressed mood: A combination of depression and anxiety is predominant.

309.3 (F43.24) With disturbance of conduct: Disturbance of conduct is predominant.

309.4 (F43.25) With mixed disturbance of emotions and conduct: Both emotional symptoms (e.g., depression, anxiety) and a disturbance of conduct are predominant.

309.9 (F43.20) Unspecified: For maladaptive reactions that are not classifiable as one of the specific subtypes of adjustment disorder.

Diagnostic Features

The presence of emotional or behavioral symptoms in response to an identifiable stressor is the essential feature of adjustment disorders (Criterion A). The stressor may be a single event (e.g., a termination of a romantic relationship), or there may be multiple stressors (e.g., marked business difficulties and marital problems). Stressors may be recurrent (e.g., associated with seasonal business crises, unfulfilling sexual relationships) or continuous (e.g., a persistent painful illness with increasing disability, living in a crime-ridden neighborhood). Stressors may affect a single individual, an entire family, or a larger group or community (e.g., a natural disaster). Some stressors may accompany specific developmental events (e.g., going to school, leaving a parental home, reentering a parental home, getting married, becoming a parent, failing to attain occupational goals, retirement).

Adjustment disorders may be diagnosed following the death of a loved one when the intensity, quality, or persistence of grief reactions exceeds what normally might be expected, when cultural, religious, or age-appropriate norms are taken into account. A more specific set of bereavement-related symptoms has been designated *persistent complex bereavement disorder*.

Adjustment disorders are associated with an increased risk of suicide attempts and completed suicide.

Prevalence

Adjustment disorders are common, although prevalence may vary widely as a function of the population studied and the assessment methods used. The percentage of individuals in outpatient mental health treatment with a principal diagnosis of an adjustment disorder ranges from approximately 5% to 20%. In a hospital psychiatric consultation setting, it is often the most common diagnosis, frequently reaching 50%.

Development and Course

By definition, the disturbance in adjustment disorders begins within 3 months of onset of a stressor and lasts no longer than 6 months after the stressor or its consequences have ceased. If the stressor is an acute event (e.g., being fired from a job), the onset of the disturbance is usually immediate (i.e., within a few days) and the duration is relatively brief (i.e., no more than a few months). If the stressor or its consequences persist, the adjustment disorder may also continue to be present and become the persistent form.

Risk and Prognostic Factors

Environmental. Individuals from disadvantaged life circumstances experience a high rate of stressors and may be at increased risk for adjustment disorders.

Culture-Related Diagnostic Issues

The context of the individual's cultural setting should be taken into account in making the clinical judgment of whether the individual's response to the stressor is maladaptive or whether the associated distress is in excess of what would be expected. The nature, meaning, and experience of the stressors and the evaluation of the response to the stressors may vary across cultures.

Functional Consequences of Adjustment Disorders

The subjective distress or impairment in functioning associated with adjustment disorders is frequently manifested as decreased performance at work or school and temporary changes in social relationships. An adjustment disorder may complicate the course of illness in individuals who have a general medical condition (e.g., decreased compliance with the recommended medical regimen; increased length of hospital stay).

Differential Diagnosis

Major depressive disorder. If an individual has symptoms that meet criteria for a major depressive disorder in response to a stressor, the diagnosis of an adjustment disorder is not applicable. The symptom profile of major depressive disorder differentiates it from adjustment disorders.

Posttraumatic stress disorder and acute stress disorder. In adjustment disorders, the stressor can be of any severity rather than of the severity and type required by Criterion A of acute stress disorder and posttraumatic stress disorder (PTSD). In distinguishing adjustment disorders from these two posttraumatic diagnoses, there are both timing and symptom profile considerations. Adjustment disorders can be diagnosed immediately and persist up to 6 months after exposure to the traumatic event, whereas acute stress disorder can only occur between 3 days and 1 month of exposure to the stressor, and PTSD cannot be diagnosed until at least 1 month has passed since the occurrence of the traumatic stressor. The required symptom profile for PTSD and acute stress disorder differentiates them from the adjustment disorders. With regard to symptom profiles, an adjustment disorder may be diagnosed following a traumatic event when an individual exhibits symptoms of either acute stress disorder or PTSD that do not meet or exceed the diagnostic threshold for either disorder. An adjustment disorder should also be diagnosed for individuals who have not been exposed to a traumatic event but who otherwise exhibit the full symptom profile of either acute stress disorder or PTSD.

Personality disorders. With regard to personality disorders, some personality features may be associated with a vulnerability to situational distress that may resemble an adjustment disorder. The lifetime history of personality functioning will help inform the interpretation of distressed behaviors to aid in distinguishing a long-standing personality disorder from an adjustment disorder. In addition to some personality disorders incurring vulnerability to distress, stressors may also exacerbate personality disorder symptoms. In the presence of a personality disorder, if the symptom criteria for an adjustment disorder are met, and the stress-related disturbance exceeds what may be attributable to maladaptive personality disorder symptoms (i.e., Criterion C is met), then the diagnosis of an adjustment disorder should be made.

Psychological factors affecting other medical conditions. In psychological factors affecting other medical conditions, specific psychological entities (e.g., psychological symptoms, behaviors, other factors) exacerbate a medical condition. These psychological factors can precipitate, exacerbate, or put an individual at risk for medical illness, or they can worsen an existing condition. In contrast, an adjustment disorder is a reaction to the stressor (e.g., having a medical illness).

Normative stress reactions. When bad things happen, most people get upset. This is not an adjustment disorder. The diagnosis should only be made when the magnitude of the distress (e.g., alterations in mood, anxiety, or conduct) exceeds what would normally be expected (which may vary in different cultures) or when the adverse event precipitates functional impairment.

Comorbidity

Adjustment disorders can accompany most mental disorders and any medical disorder. Adjustment disorders can be diagnosed in addition to another mental disorder only if the latter does not explain the particular symptoms that occur in reaction to the stressor. For example, an individual may develop an adjustment disorder, with depressed mood, after losing a job and at the same time have a diagnosis of obsessive-compulsive disorder. Or, an individual may have a depressive or bipolar disorder and an adjustment disorder as long as the criteria for both are met. Adjustment disorders are common accompaniments of medical illness and may be the major psychological response to a medical disorder.

Other Specified Trauma- and Stressor-Related Disorder

309.89 (F43.8)

This category applies to presentations in which symptoms characteristic of a trauma- and stressor-related disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the trauma- and stressor-related disorders diagnostic class. The other specified trauma- and stressor-related disorder category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for any specific trauma- and stressor-related disorder. This is done by recording "other specified trauma- and stressor-related disorder" followed by the specific reason (e.g., "persistent complex bereavement disorder").

Examples of presentations that can be specified using the "other specified" designation include the following:

1. **Adjustment-like disorders with delayed onset of symptoms that occur more than 3 months after the stressor.**
2. **Adjustment-like disorders with prolonged duration of more than 6 months without prolonged duration of stressor.**
3. **Ataque de nervios:** See "Glossary of Cultural Concepts of Distress" in the Appendix.
4. **Other cultural syndromes:** See "Glossary of Cultural Concepts of Distress" in the Appendix.
5. **Persistent complex bereavement disorder:** This disorder is characterized by severe and persistent grief and mourning reactions (see the chapter "Conditions for Further Study").

Unspecified Trauma- and Stressor-Related Disorder

309.9 (F43.9)

This category applies to presentations in which symptoms characteristic of a trauma- and stressor-related disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the trauma- and stressor-related disorders diagnostic class. The unspecified trauma- or stressor-related disorder category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for a specific trauma- and stressor-related disorder, and includes presentations in which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

Dissociative Disorders

Dissociative disorders are characterized by a disruption of and/or discontinuity in the normal integration of consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior. Dissociative symptoms can potentially disrupt every area of psychological functioning. This chapter includes dissociative identity disorder, dissociative amnesia, depersonalization/derealization disorder, other specified dissociative disorder, and unspecified dissociative disorder.

Dissociative symptoms are experienced as a) unbidden intrusions into awareness and behavior, with accompanying losses of continuity in subjective experience (i.e., “positive” dissociative symptoms such as fragmentation of identity, depersonalization, and derealization) and/or b) inability to access information or to control mental functions that normally are readily amenable to access or control (i.e., “negative” dissociative symptoms such as amnesia).

The dissociative disorders are frequently found in the aftermath of trauma, and many of the symptoms, including embarrassment and confusion about the symptoms or a desire to hide them, are influenced by the proximity to trauma. In DSM-5, the dissociative disorders are placed next to, but are not part of, the trauma- and stressor-related disorders, reflecting the close relationship between these diagnostic classes. Both acute stress disorder and posttraumatic stress disorder contain dissociative symptoms, such as amnesia, flashbacks, numbing, and depersonalization/derealization.

Depersonalization/derealization disorder is characterized by clinically significant persistent or recurrent depersonalization (i.e., experiences of unreality or detachment from one’s mind, self, or body) and/or derealization (i.e., experiences of unreality or detachment from one’s surroundings). These alterations of experience are accompanied by intact reality testing. There is no evidence of any distinction between individuals with predominantly depersonalization versus derealization symptoms. Therefore, individuals with this disorder can have depersonalization, derealization, or both.

Dissociative amnesia is characterized by an inability to recall autobiographical information. This amnesia may be localized (i.e., an event or period of time), selective (i.e., a specific aspect of an event), or generalized (i.e., identity and life history). Dissociative amnesia is fundamentally an inability to recall autobiographical information that is inconsistent with normal forgetting. It may or may not involve purposeful travel or bewildered wandering (i.e., fugue). Although some individuals with amnesia promptly notice that they have “lost time” or that they have a gap in their memory, most individuals with dissociative disorders are initially unaware of their amnesias. For them, awareness of amnesia occurs only when personal identity is lost or when circumstances make these individuals aware that autobiographical information is missing (e.g., when they discover evidence of events they cannot recall or when others tell them or ask them about events they cannot recall). Until and unless this happens, these individuals have “amnesia for their amnesia.” Amnesia is experienced as an essential feature of dissociative amnesia; individuals may experience localized or selective amnesia most commonly, or generalized amnesia rarely. Dissociative fugue is rare in persons with dissociative amnesia but common in dissociative identity disorder.

Dissociative identity disorder is characterized by a) the presence of two or more distinct personality states or an experience of possession and b) recurrent episodes of amnesia. The

fragmentation of identity may vary with culture (e.g., possession-form presentations) and circumstance. Thus, individuals may experience discontinuities in identity and memory that may not be immediately evident to others or are obscured by attempts to hide dysfunction. Individuals with dissociative identity disorder experience a) recurrent, inexplicable intrusions into their conscious functioning and sense of self (e.g., voices; dissociated actions and speech; intrusive thoughts, emotions, and impulses), b) alterations of sense of self (e.g., attitudes, preferences, and feeling like one’s body or actions are not one’s own), c) odd changes of perception (e.g., depersonalization or derealization, such as feeling detached from one’s body while cutting), and d) intermittent functional neurological symptoms. Stress often produces transient exacerbation of dissociative symptoms that makes them more evident.

The residual category of other specified dissociative disorder has seven examples: chronic or recurrent mixed dissociative symptoms that approach, but fall short of, the diagnostic criteria for dissociative identity disorder; dissociative states secondary to brainwashing or thought reform; two acute presentations, of less than 1 month’s duration, of mixed dissociative symptoms, one of which is also marked by the presence of psychotic symptoms; and three single-symptom dissociative presentations—dissociative trance, dissociative stupor or coma, and Ganser’s syndrome (the giving of approximate and vague answers).

Dissociative Identity Disorder

Diagnostic Criteria	300.14 (F44.81)
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- A. Disruption of identity characterized by two or more distinct personality states, which may be described in some cultures as an experience of possession. The disruption in identity involves marked discontinuity in sense of self and sense of agency, accompanied by related alterations in affect, behavior, consciousness, memory, perception, cognition, and/or sensory-motor functioning. These signs and symptoms may be observed by others or reported by the individual.
- B. Recurrent gaps in the recall of everyday events, important personal information, and/or traumatic events that are inconsistent with ordinary forgetting.
- C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- D. The disturbance is not a normal part of a broadly accepted cultural or religious practice.
Note: In children, the symptoms are not better explained by imaginary playmates or other fantasy play.
- E. The symptoms are not attributable to the physiological effects of a substance (e.g., blackouts or chaotic behavior during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

Diagnostic Features

The defining feature of dissociative identity disorder is the presence of two or more distinct personality states or an experience of possession (Criterion A). The overtness or covertness of these personality states, however, varies as a function of psychological motivation, current level of stress, culture, internal conflicts and dynamics, and emotional resilience. Sustained periods of identity disruption may occur when psychosocial pressures are severe and/or prolonged. In many possession-form cases of dissociative identity disorder, and in a small proportion of non-possession-form cases, manifestations of alternate identities are highly overt. Most individuals with non-possession-form dissociative identity disorder do not overtly display their discontinuity of identity for long periods of time; only a small minority present to clinical attention with observable alternation of

identities. When alternate personality states are not directly observed, the disorder can be identified by two clusters of symptoms: 1) sudden alterations or discontinuities in sense of self and sense of agency (Criterion A), and 2) recurrent dissociative amnesias (Criterion B).

Criterion A symptoms are related to discontinuities of experience that can affect any aspect of an individual's functioning. Individuals with dissociative identity disorder may report the feeling that they have suddenly become depersonalized observers of their "own" speech and actions, which they may feel powerless to stop (sense of self). Such individuals may also report perceptions of voices (e.g., a child's voice; crying; the voice of a spiritual being). In some cases, voices are experienced as multiple, perplexing, independent thought streams over which the individual experiences no control. Strong emotions, impulses, and even speech or other actions may suddenly emerge, without a sense of personal ownership or control (sense of agency). These emotions and impulses are frequently reported as ego-dystonic and puzzling. Attitudes, outlooks, and personal preferences (e.g., about food, activities, dress) may suddenly shift and then shift back. Individuals may report that their bodies feel different (e.g., like a small child, like the opposite gender, huge and muscular). Alterations in sense of self and loss of personal agency may be accompanied by a feeling that these attitudes, emotions, and behaviors—even one's body—are "not mine" and/or are "not under my control." Although most Criterion A symptoms are subjective, many of these sudden discontinuities in speech, affect, and behavior can be witnessed by family, friends, or the clinician. Non-epileptic seizures and other conversion symptoms are prominent in some presentations of dissociative identity disorder, especially in some non-Western settings.

The dissociative amnesia of individuals with dissociative identity disorder manifests in three primary ways: as 1) gaps in remote memory of personal life events (e.g., periods of childhood or adolescence; some important life events, such as the death of a grandparent, getting married, giving birth); 2) lapses in dependable memory (e.g., of what happened today, of well-learned skills such as how to do their job, use a computer, read, drive); and 3) discovery of evidence of their everyday actions and tasks that they do not recollect doing (e.g., finding unexplained objects in their shopping bags or among their possessions; finding perplexing writings or drawings that they must have created; discovering injuries; "coming to" in the midst of doing something). Dissociative fugues, wherein the person discovers dissociated travel, are common. Thus, individuals with dissociative identity disorder may report that they have suddenly found themselves at the beach, at work, in a nightclub, or somewhere at home (e.g., in the closet, on a bed or sofa, in the corner) with no memory of how they came to be there. Amnesia in individuals with dissociative identity disorder is not limited to stressful or traumatic events; these individuals often cannot recall everyday events as well.

Individuals with dissociative identity disorder vary in their awareness and attitude toward their amnesias. It is common for these individuals to minimize their amnesic symptoms. Some of their amnesic behaviors may be apparent to others—as when these persons do not recall something they were witnessed to have done or said, when they cannot remember their own name, or when they do not recognize their spouse, children, or close friends.

Possession-form identities in dissociative identity disorder typically manifest as behaviors that appear as if a "spirit," supernatural being, or outside person has taken control, such that the individual begins speaking or acting in a distinctly different manner. For example, an individual's behavior may give the appearance that her identity has been replaced by the "ghost" of a girl who committed suicide in the same community years before, speaking and acting as though she were still alive. Or an individual may be "taken over" by a demon or deity, resulting in profound impairment, and demanding that the individual or a relative be punished for a past act, followed by more subtle periods of identity alteration. However, the majority of possession states around the world are normal, usually part of spiritual practice, and do not meet criteria for dissociative identity disorder.

der. The identities that arise during possession-form dissociative identity disorder present recurrently, are unwanted and involuntary, cause clinically significant distress or impairment (Criterion C), and are not a normal part of a broadly accepted cultural or religious practice (Criterion D).

Associated Features Supporting Diagnosis

Individuals with dissociative identity disorder typically present with comorbid depression, anxiety, substance abuse, self-injury, non-epileptic seizures, or another common symptom. They often conceal, or are not fully aware of, disruptions in consciousness, amnesia, or other dissociative symptoms. Many individuals with dissociative identity disorder report dissociative flashbacks during which they undergo a sensory reliving of a previous event as though it were occurring in the present, often with a change of identity, a partial or complete loss of contact with or disorientation to current reality during the flashback, and a subsequent amnesia for the content of the flashback. Individuals with the disorder typically report multiple types of interpersonal maltreatment during childhood and adulthood. Nonmaltreatment forms of overwhelming early life events, such as multiple long, painful, early-life medical procedures, also may be reported. Self-mutilation and suicidal behavior are frequent. On standardized measures, these individuals report higher levels of hypnotizability and dissociativity compared with other clinical groups and healthy control subjects. Some individuals experience transient psychotic phenomena or episodes. Several brain regions have been implicated in the pathophysiology of dissociative identity disorder, including the orbitofrontal cortex, hippocampus, parahippocampal gyrus, and amygdala.

Prevalence

The 12-month prevalence of dissociative identity disorder among adults in a small U.S. community study was 1.5%. The prevalence across genders in that study was 1.6% for males and 1.4% for females.

Development and Course

Dissociative identity disorder is associated with overwhelming experiences, traumatic events, and/or abuse occurring in childhood. The full disorder may first manifest at almost any age (from earliest childhood to late life). Dissociation in children may generate problems with memory, concentration, attachment, and traumatic play. Nevertheless, children usually do not present with identity changes; instead they present primarily with overlap and interference among mental states (Criterion A phenomena), with symptoms related to discontinuities of experience. Sudden changes in identity during adolescence may appear to be just adolescent turmoil or the early stages of another mental disorder. Older individuals may present to treatment with what appear to be late-life mood disorders, obsessive-compulsive disorder, paranoia, psychotic mood disorders, or even cognitive disorders due to dissociative amnesia. In some cases, disruptive affects and memories may increasingly intrude into awareness with advancing age.

Psychological decompensation and overt changes in identity may be triggered by 1) removal from the traumatizing situation (e.g., through leaving home); 2) the individual's children reaching the same age at which the individual was originally abused or traumatized; 3) later traumatic experiences, even seemingly inconsequential ones, like a minor motor vehicle accident; or 4) the death of, or the onset of a fatal illness in, their abuser(s).

Risk and Prognostic Factors

Environmental. Interpersonal physical and sexual abuse is associated with an increased risk of dissociative identity disorder. Prevalence of childhood abuse and neglect in the

United States, Canada, and Europe among those with the disorder is about 90%. Other forms of traumatizing experiences, including childhood medical and surgical procedures, war, childhood prostitution, and terrorism, have been reported.

Course modifiers. Ongoing abuse, later-life retraumatization, comorbidity with mental disorders, severe medical illness, and delay in appropriate treatment are associated with poorer prognosis.

Culture-Related Diagnostic Issues

Many features of dissociative identity disorder can be influenced by the individual's cultural background. Individuals with this disorder may present with prominent medically unexplained neurological symptoms, such as non-epileptic seizures, paralyses, or sensory loss, in cultural settings where such symptoms are common. Similarly, in settings where normative possession is common (e.g., rural areas in the developing world, among certain religious groups in the United States and Europe), the fragmented identities may take the form of possessing spirits, deities, demons, animals, or mythical figures. Acculturation or prolonged intercultural contact may shape the characteristics of the other identities (e.g., identities in India may speak English exclusively and wear Western clothes). Possession-form dissociative identity disorder can be distinguished from culturally accepted possession states in that the former is involuntary, distressing, uncontrollable, and often recurrent or persistent; involves conflict between the individual and his or her surrounding family, social, or work milieu; and is manifested at times and in places that violate the norms of the culture or religion.

Gender-Related Diagnostic Issues

Females with dissociative identity disorder predominate in adult clinical settings but not in child clinical settings. Adult males with dissociative identity disorder may deny their symptoms and trauma histories, and this can lead to elevated rates of false negative diagnosis. Females with dissociative identity disorder present more frequently with acute dissociative states (e.g., flashbacks, amnesia, fugue, functional neurological [conversion] symptoms, hallucinations, self-mutilation). Males commonly exhibit more criminal or violent behavior than females; among males, common triggers of acute dissociative states include combat, prison conditions, and physical or sexual assaults.

Suicide Risk

Over 70% of outpatients with dissociative identity disorder have attempted suicide; multiple attempts are common, and other self-injurious behavior is frequent. Assessment of suicide risk may be complicated when there is amnesia for past suicidal behavior or when the presenting identity does not feel suicidal and is unaware that other dissociated identities do.

Functional Consequences of Dissociative Identity Disorder

Impairment varies widely, from apparently minimal (e.g., in high-functioning professionals) to profound. Regardless of level of disability, individuals with dissociative identity disorder commonly minimize the impact of their dissociative and posttraumatic symptoms. The symptoms of higher-functioning individuals may impair their relational, marital, family, and parenting functions more than their occupational and professional life (although the latter also may be affected). With appropriate treatment, many impaired individuals show marked improvement in occupational and personal functioning. However, some remain highly impaired in most activities of living. These individuals may only respond to treatment very slowly, with gradual reduction in or improved tolerance of

their dissociative and posttraumatic symptoms. Long-term supportive treatment may slowly increase these individuals' ability to manage their symptoms and decrease use of more restrictive levels of care.

Differential Diagnosis

Other specified dissociative disorder. The core of dissociative identity disorder is the division of identity, with recurrent disruption of conscious functioning and sense of self. This central feature is shared with one form of other specified dissociative disorder, which may be distinguished from dissociative identity disorder by the presence of chronic or recurrent mixed dissociative symptoms that do not meet Criterion A for dissociative identity disorder or are not accompanied by recurrent amnesia.

Major depressive disorder. Individuals with dissociative identity disorder are often depressed, and their symptoms may appear to meet the criteria for a major depressive episode. Rigorous assessment indicates that this depression in some cases does not meet full criteria for major depressive disorder. Other specified depressive disorder in individuals with dissociative identity disorder often has an important feature: the depressed mood and cognitions *fluctuate* because they are experienced in some identity states but not others.

Bipolar disorders. Individuals with dissociative identity disorder are often misdiagnosed with a bipolar disorder, most often bipolar II disorder. The relatively rapid shifts in mood in individuals with this disorder—typically within minutes or hours, in contrast to the slower mood changes typically seen in individuals with bipolar disorders—are due to the rapid, subjective shifts in mood commonly reported across dissociative states, sometimes accompanied by fluctuation in levels of activation. Furthermore, in dissociative identity disorder, elevated or depressed mood may be displayed in conjunction with overt identities, so one or the other mood may predominate for a relatively long period of time (often for days) or may shift within minutes.

Posttraumatic stress disorder. Some traumatized individuals have both posttraumatic stress disorder (PTSD) and dissociative identity disorder. Accordingly, it is crucial to distinguish between individuals with PTSD only and individuals who have both PTSD and dissociative identity disorder. This differential diagnosis requires that the clinician establish the presence or absence of dissociative symptoms that are not characteristic of acute stress disorder or PTSD. Some individuals with PTSD manifest dissociative symptoms that also occur in dissociative identity disorder: 1) amnesia for some aspects of trauma, 2) dissociative flashbacks (i.e., reliving of the trauma, with reduced awareness of one's current orientation), and 3) symptoms of intrusion and avoidance, negative alterations in cognition and mood, and hyperarousal that are focused around the traumatic event. On the other hand, individuals with dissociative identity disorder manifest dissociative symptoms that are not a manifestation of PTSD: 1) amnesias for many everyday (i.e., nontraumatic) events, 2) dissociative flashbacks that may be followed by amnesia for the content of the flashback, 3) disruptive intrusions (unrelated to traumatic material) by dissociated identity states into the individual's sense of self and agency, and 4) infrequent, full-blown changes among different identity states.

Psychotic disorders. Dissociative identity disorder may be confused with schizophrenia or other psychotic disorders. The personified, internally communicative inner voices of dissociative identity disorder, especially of a child (e.g., "I hear a little girl crying in a closet and an angry man yelling at her"), may be mistaken for psychotic hallucinations. Dissociative experiences of identity fragmentation or possession, and of perceived loss of control over thoughts, feelings, impulses, and acts, may be confused with signs of formal thought disorder, such as thought insertion or withdrawal. Individuals with dissociative identity disorder may also report visual, tactile, olfactory, gustatory, and somatic hallucinations, which are usually related to posttraumatic and dissociative factors, such as partial

flashbacks. Individuals with dissociative identity disorder experience these symptoms as caused by alternate identities, do not have delusional explanations for the phenomena, and often describe the symptoms in a personified way (e.g., “I feel like someone else wants to cry with my eyes”). Persecutory and derogatory internal voices in dissociative identity disorder associated with depressive symptoms may be misdiagnosed as major depression with psychotic features. Chaotic identity change and acute intrusions that disrupt thought processes may be distinguished from brief psychotic disorder by the predominance of dissociative symptoms and amnesia for the episode, and diagnostic evaluation after cessation of the crisis can help confirm the diagnosis.

Substance/medication-induced disorders. Symptoms associated with the physiological effects of a substance can be distinguished from dissociative identity disorder if the substance in question is judged to be etiologically related to the disturbance.

Personality disorders. Individuals with dissociative identity disorder often present identities that appear to encapsulate a variety of severe personality disorder features, suggesting a differential diagnosis of personality disorder, especially of the borderline type. Importantly, however, the individual’s longitudinal variability in personality style (due to inconsistency among identities) differs from the pervasive and persistent dysfunction in affect management and interpersonal relationships typical of those with personality disorders.

Conversion disorder (functional neurological symptom disorder). This disorder may be distinguished from dissociative identity disorder by the absence of an identity disruption characterized by two or more distinct personality states or an experience of possession. Dissociative amnesia in conversion disorder is more limited and circumscribed (e.g., amnesia for a non-epileptic seizure).

Seizure disorders. Individuals with dissociative identity disorder may present with seizurelike symptoms and behaviors that resemble complex partial seizures with temporal lobe foci. These include *déjà vu*, *jamais vu*, depersonalization, derealization, out-of-body experiences, amnesia, disruptions of consciousness, hallucinations, and other intrusion phenomena of sensation, affect, and thought. Normal electroencephalographic findings, including telemetry, differentiate non-epileptic seizures from the seizurelike symptoms of dissociative identity disorder. Also, individuals with dissociative identity disorder obtain very high dissociation scores, whereas individuals with complex partial seizures do not.

Factitious disorder and malingering. Individuals who feign dissociative identity disorder do not report the subtle symptoms of intrusion characteristic of the disorder; instead they tend to overreport well-publicized symptoms of the disorder, such as dissociative amnesia, while underreporting less-publicized comorbid symptoms, such as depression. Individuals who feign dissociative identity disorder tend to be relatively undisturbed by or may even seem to enjoy “having” the disorder. In contrast, individuals with genuine dissociative identity disorder tend to be ashamed of and overwhelmed by their symptoms and to underreport their symptoms or deny their condition. Sequential observation, corroborating history, and intensive psychometric and psychological assessment may be helpful in assessment.

Individuals who malingering dissociative identity disorder usually create limited, stereotyped alternate identities, with feigned amnesia, related to the events for which gain is sought. For example, they may present an “all-good” identity and an “all-bad” identity in hopes of gaining exculpation for a crime.

Comorbidity

Many individuals with dissociative identity disorder present with a comorbid disorder. If not assessed and treated specifically for the dissociative disorder, these individuals often receive prolonged treatment for the comorbid diagnosis only, with limited overall treatment response and resultant demoralization, and disability.

Individuals with dissociative identity disorder usually exhibit a large number of comorbid disorders. In particular, most develop PTSD. Other disorders that are highly comorbid with dissociative identity disorder include depressive disorders, trauma- and stressor-related disorders, personality disorders (especially avoidant and borderline personality disorders), conversion disorder (functional neurological symptom disorder), somatic symptom disorder, eating disorders, substance-related disorders, obsessive-compulsive disorder, and sleep disorders. Dissociative alterations in identity, memory, and consciousness may affect the symptom presentation of comorbid disorders.

Dissociative Amnesia

Diagnostic Criteria	300.12 (F44.0)
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- A. An inability to recall important autobiographical information, usually of a traumatic or stressful nature, that is inconsistent with ordinary forgetting.
Note: Dissociative amnesia most often consists of localized or selective amnesia for a specific event or events; or generalized amnesia for identity and life history.
- B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- C. The disturbance is not attributable to the physiological effects of a substance (e.g., alcohol or other drug of abuse, a medication) or a neurological or other medical condition (e.g., partial complex seizures, transient global amnesia, sequelae of a closed head injury/traumatic brain injury, other neurological condition).
- D. The disturbance is not better explained by dissociative identity disorder, posttraumatic stress disorder, acute stress disorder, somatic symptom disorder, or major or mild neurocognitive disorder.

Coding note: The code for dissociative amnesia without dissociative fugue is **300.12 (F44.0)**. The code for dissociative amnesia with dissociative fugue is **300.13 (F44.1)**.

Specify if:

300.13 (F44.1) With dissociative fugue: Apparently purposeful travel or bewildered wandering that is associated with amnesia for identity or for other important autobiographical information.

Diagnostic Features

The defining characteristic of dissociative amnesia is an inability to recall important autobiographical information that 1) should be successfully stored in memory and 2) ordinarily would be readily remembered (Criterion A). Dissociative amnesia differs from the permanent amnesias due to neurobiological damage or toxicity that prevent memory storage or retrieval in that it is always potentially reversible because the memory has been successfully stored.

Localized amnesia, a failure to recall events during a circumscribed period of time, is the most common form of dissociative amnesia. Localized amnesia may be broader than amnesia for a single traumatic event (e.g., months or years associated with child abuse or intense combat). In *selective amnesia*, the individual can recall some, but not all, of the events during a circumscribed period of time. Thus, the individual may remember part of a traumatic event but not other parts. Some individuals report both localized and selective amnesias.

Generalized amnesia, a complete loss of memory for one’s life history, is rare. Individuals with generalized amnesia may forget personal identity. Some lose previous knowledge about the world (i.e., semantic knowledge) and can no longer access well-learned skills

(i.e., procedural knowledge). Generalized amnesia has an acute onset; the perplexity, disorientation, and purposeless wandering of individuals with generalized amnesia usually bring them to the attention of the police or psychiatric emergency services. Generalized amnesia may be more common among combat veterans, sexual assault victims, and individuals experiencing extreme emotional stress or conflict.

Individuals with dissociative amnesia are frequently unaware (or only partially aware) of their memory problems. Many, especially those with localized amnesia, minimize the importance of their memory loss and may become uncomfortable when prompted to address it. In *systematized amnesia*, the individual loses memory for a specific category of information (e.g., all memories relating to one's family, a particular person, or childhood sexual abuse). In *continuous amnesia*, an individual forgets each new event as it occurs.

Associated Features Supporting Diagnosis

Many individuals with dissociative amnesia are chronically impaired in their ability to form and sustain satisfactory relationships. Histories of trauma, child abuse, and victimization are common. Some individuals with dissociative amnesia report dissociative flashbacks (i.e., behavioral reexperiencing of traumatic events). Many have a history of self-mutilation, suicide attempts, and other high-risk behaviors. Depressive and functional neurological symptoms are common, as are depersonalization, auto-hypnotic symptoms, and high hypnotizability. Sexual dysfunctions are common. Mild traumatic brain injury may precede dissociative amnesia.

Prevalence

The 12-month prevalence for dissociative amnesia among adults in a small U.S. community study was 1.8% (1.0% for males; 2.6% for females).

Development and Course

Onset of generalized amnesia is usually sudden. Less is known about the onset of localized and selective amnesias because these amnesias are seldom evident, even to the individual. Although overwhelming or intolerable events typically precede localized amnesia, its onset may be delayed for hours, days, or longer.

Individuals may report multiple episodes of dissociative amnesia. A single episode may predispose to future episodes. In between episodes of amnesia, the individual may or may not appear to be acutely symptomatic. The duration of the forgotten events can range from minutes to decades. Some episodes of dissociative amnesia resolve rapidly (e.g., when the person is removed from combat or some other stressful situation), whereas other episodes persist for long periods of time. Some individuals may gradually recall the dissociated memories years later. Dissociative capacities may decline with age, but not always. As the amnesia remits, there may be considerable distress, suicidal behavior, and symptoms of posttraumatic stress disorder (PTSD).

Dissociative amnesia has been observed in young children, adolescents, and adults. Children may be the most difficult to evaluate because they often have difficulty understanding questions about amnesia, and interviewers may find it difficult to formulate child-friendly questions about memory and amnesia. Observations of apparent dissociative amnesia are often difficult to differentiate from inattention, absorption, anxiety, oppositional behavior, and learning disorders. Reports from several different sources (e.g., teacher, therapist, case worker) may be needed to diagnose amnesia in children.

Risk and Prognostic Factors

Environmental. Single or repeated traumatic experiences (e.g., war, childhood maltreatment, natural disaster, internment in concentration camps, genocide) are common ante-

cedents. Dissociative amnesia is more likely to occur with 1) a greater number of adverse childhood experiences, particularly physical and/or sexual abuse, 2) interpersonal violence; and 3) increased severity, frequency, and violence of the trauma.

Genetic and physiological. There are no genetic studies of dissociative amnesia. Studies of dissociation report significant genetic and environmental factors in both clinical and nonclinical samples.

Course modifiers. Removal from the traumatic circumstances underlying the dissociative amnesia (e.g., combat) may bring about a rapid return of memory. The memory loss of individuals with dissociative fugue may be particularly refractory. Onset of PTSD symptoms may decrease localized, selective, or systematized amnesia. The returning memory, however, may be experienced as flashbacks that alternate with amnesia for the content of the flashbacks.

Culture-Related Diagnostic Issues

In Asia, the Middle East, and Latin America, non-epileptic seizures and other functional neurological symptoms may accompany dissociative amnesia. In cultures with highly restrictive social traditions, the precipitants of dissociative amnesia often do not involve frank trauma. Instead, the amnesia is preceded by severe psychological stresses or conflicts (e.g., marital conflict, other family disturbances, attachment problems, conflicts due to restriction or oppression).

Suicide Risk

Suicidal and other self-destructive behaviors are common in individuals with dissociative amnesia. Suicidal behavior may be a particular risk when the amnesia remits suddenly and overwhelms the individual with intolerable memories.

Functional Consequences of Dissociative Amnesia

The impairment of individuals with localized, selective, or systematized dissociative amnesia ranges from limited to severe. Individuals with chronic generalized dissociative amnesia usually have impairment in all aspects of functioning. Even when these individuals “re-learn” aspects of their life history, autobiographical memory remains very impaired. Most become vocationally and interpersonally disabled.

Differential Diagnosis

Dissociative identity disorder. Individuals with dissociative amnesia may report depersonalization and auto-hypnotic symptoms. Individuals with dissociative identity disorder report pervasive discontinuities in sense of self and agency, accompanied by many other dissociative symptoms. The amnesias of individuals with localized, selective, and/or systematized dissociative amnesias are relatively stable. Amnesias in dissociative identity disorder include amnesia for everyday events, finding of unexplained possessions, sudden fluctuations in skills and knowledge, major gaps in recall of life history, and brief amnesic gaps in interpersonal interactions.

Posttraumatic stress disorder. Some individuals with PTSD cannot recall part or all of a specific traumatic event (e.g., a rape victim with depersonalization and/or derealization symptoms who cannot recall most events for the entire day of the rape). When that amnesia extends beyond the immediate time of the trauma, a comorbid diagnosis of dissociative amnesia is warranted.

Neurocognitive disorders. In neurocognitive disorders, memory loss for personal information is usually embedded in cognitive, linguistic, affective, attentional, and behavioral

disturbances. In dissociative amnesia, memory deficits are primarily for autobiographical information; intellectual and cognitive abilities are preserved.

Substance-related disorders. In the context of repeated intoxication with alcohol or other substances/medications, there may be episodes of “black outs” or periods for which the individual has no memory. To aid in distinguishing these episodes from dissociative amnesia, a longitudinal history noting that the amnesic episodes occur only in the context of intoxication and do not occur in other situations would help identify the source as substance-induced; however the distinction may be difficult when the individual with dissociative amnesia may also misuse alcohol or other substances in the context of stressful situations that may also exacerbate dissociative symptoms. Some individuals with comorbid dissociative amnesia and substance use disorders will attribute their memory problems solely to the substance use. Prolonged use of alcohol or other substances may result in a substance-induced neurocognitive disorder that may be associated with impaired cognitive function, but in this context the protracted history of substance use and the persistent deficits associated with the neurocognitive disorder would serve to distinguish it from dissociative amnesia, where there is typically no evidence of persistent impairment in intellectual functioning.

Posttraumatic amnesia due to brain injury. Amnesia may occur in the context of a traumatic brain injury (TBI) when there has been an impact to the head or other mechanisms of rapid movement or displacement of the brain within the skull TBI. Other characteristics of TBI include loss of consciousness, disorientation and confusion, or, in more severe cases, neurological signs (e.g., abnormalities on neuroimaging, a new onset of seizures or a marked worsening of a preexisting seizure disorder, visual field cuts, anosmia). A neurocognitive disorder attributable to TBI must present either immediately after brain injury occurs or immediately after the individual recovers consciousness after the injury, and persist past the acute post-injury period. The cognitive presentation of a neurocognitive disorder following TBI is variable and includes difficulties in the domains of complex attention, executive function, learning and memory as well as slowed speed of information processing and disturbances in social cognition. These additional features help distinguish it from dissociative amnesia.

Seizure disorders. Individuals with seizure disorders may exhibit complex behavior during seizures or post-ictally with subsequent amnesia. Some individuals with a seizure disorder engage in nonpurposive wandering that is limited to the period of seizure activity. Conversely, behavior during a dissociative fugue is usually purposeful, complex, and goal-directed and may last for days, weeks, or longer. Occasionally, individuals with a seizure disorder will report that earlier autobiographical memories have been “wiped out” as the seizure disorder progresses. Such memory loss is not associated with traumatic circumstances and appears to occur randomly. Serial electroencephalograms usually show abnormalities. Telemetric electroencephalographic monitoring usually shows an association between the episodes of amnesia and seizure activity. Dissociative and epileptic amnesias may coexist.

Catatonic stupor. Mutism in catatonic stupor may suggest dissociative amnesia, but failure of recall is absent. Other catatonic symptoms (e.g., rigidity, posturing, negativism) are usually present.

Factitious disorder and malingering. There is no test, battery of tests, or set of procedures that invariably distinguishes dissociative amnesia from feigned amnesia. Individuals with factitious disorder or malingering have been noted to continue their deception even during hypnotic or barbiturate-facilitated interviews. Feigned amnesia is more common in individuals with 1) acute, florid dissociative amnesia; 2) financial, sexual, or legal problems; or 3) a wish to escape stressful circumstances. True amnesia can be associated with those same circumstances. Many individuals who malingering confess spontaneously or when confronted.

Normal and age-related changes in memory. Memory decrements in major and mild neurocognitive disorders differ from those of dissociative amnesia, which are usually associated with stressful events and are more specific, extensive, and/or complex.

Comorbidity

As dissociative amnesia begins to remit, a wide variety of affective phenomena may surface: dysphoria, grief, rage, shame, guilt, psychological conflict and turmoil, and suicidal and homicidal ideation, impulses, and acts. These individuals may have symptoms that then meet diagnostic criteria for persistent depressive disorder (dysthymia); major depressive disorder; other specified or unspecified depressive disorder; adjustment disorder, with depressed mood; or adjustment disorder, with mixed disturbance of emotions and conduct. Many individuals with dissociative amnesia develop PTSD at some point during their life, especially when the traumatic antecedents of their amnesia are brought into conscious awareness.

Many individuals with dissociative amnesia have symptoms that meet diagnostic criteria for a comorbid somatic symptom or related disorder (and vice versa), including somatic symptom disorder and conversion disorder (functional neurological symptom disorder). Many individuals with dissociative amnesia have symptoms that meet diagnostic criteria for a personality disorder, especially dependent, avoidant, and borderline.

Depersonalization/Derealization Disorder

Diagnostic Criteria	300.6 (F48.1)
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- A. The presence of persistent or recurrent experiences of depersonalization, derealization, or both:
 - 1. **Depersonalization:** Experiences of unreality, detachment, or being an outside observer with respect to one's thoughts, feelings, sensations, body, or actions (e.g., perceptual alterations, distorted sense of time, unreal or absent self, emotional and/or physical numbing).
 - 2. **Derealization:** Experiences of unreality or detachment with respect to surroundings (e.g., individuals or objects are experienced as unreal, dreamlike, foggy, lifeless, or visually distorted).
 - B. During the depersonalization or derealization experiences, reality testing remains intact.
 - C. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
 - D. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, medication) or another medical condition (e.g., seizures).
 - E. The disturbance is not better explained by another mental disorder, such as schizophrenia, panic disorder, major depressive disorder, acute stress disorder, posttraumatic stress disorder, or another dissociative disorder.
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Diagnostic Features

The essential features of depersonalization/derealization disorder are persistent or recurrent episodes of depersonalization, derealization, or both. Episodes of depersonalization are characterized by a feeling of unreality or detachment from, or unfamiliarity with, one's whole self or from aspects of the self (Criterion A1). The individual may feel detached from his or her entire being (e.g., "I am no one," "I have no self"). He or she may also feel subjectively detached from aspects of the self, including feelings (e.g., hypoemotionality:

“I know I have feelings but I don’t feel them”), thoughts (e.g., “My thoughts don’t feel like my own,” “head filled with cotton”), whole body or body parts, or sensations (e.g., touch, proprioception, hunger, thirst, libido). There may also be a diminished sense of agency (e.g., feeling robotic, like an automaton; lacking control of one’s speech or movements). The depersonalization experience can sometimes be one of a split self, with one part observing and one participating, known as an “out-of-body experience” in its most extreme form. The unitary symptom of “depersonalization” consists of several symptom factors: anomalous body experiences (i.e., unreality of the self and perceptual alterations); emotional or physical numbing; and temporal distortions with anomalous subjective recall.

Episodes of derealization are characterized by a feeling of unreality or detachment from, or unfamiliarity with, the world, be it individuals, inanimate objects, or all surroundings (Criterion A2). The individual may feel as if he or she were in a fog, dream, or bubble, or as if there were a veil or a glass wall between the individual and world around. Surroundings may be experienced as artificial, colorless, or lifeless. Derealization is commonly accompanied by subjective visual distortions, such as blurriness, heightened acuity, widened or narrowed visual field, two-dimensionality or flatness, exaggerated three-dimensionality, or altered distance or size of objects (i.e., macropsia or micropsia). Auditory distortions can also occur, whereby voices or sounds are muted or heightened. In addition, Criterion C requires the presence of clinically significant distress or impairment in social, occupational, or other important areas of functioning, and Criteria D and E describe exclusionary diagnoses.

Associated Features Supporting Diagnosis

Individuals with depersonalization/derealization disorder may have difficulty describing their symptoms and may think they are “crazy” or “going crazy”. Another common experience is the fear of irreversible brain damage. A commonly associated symptom is a subjectively altered sense of time (i.e., too fast or too slow), as well as a subjective difficulty in vividly recalling past memories and owning them as personal and emotional. Vague somatic symptoms, such as head fullness, tingling, or lightheadedness, are not uncommon. Individuals may suffer extreme rumination or obsessional preoccupation (e.g., constantly obsessing about whether they really exist, or checking their perceptions to determine whether they appear real). Varying degrees of anxiety and depression are also common associated features. Individuals with the disorder have been found to have physiological hyporeactivity to emotional stimuli. Neural substrates of interest include the hypothalamic-pituitary-adrenocortical axis, inferior parietal lobule, and prefrontal cortical-limbic circuits.

Prevalence

Transient depersonalization/derealization symptoms lasting hours to days are common in the general population. The 12-month prevalence of depersonalization/derealization disorder is thought to be markedly less than for transient symptoms, although precise estimates for the disorder are unavailable. In general, approximately one-half of all adults have experienced at least one lifetime episode of depersonalization/derealization. However, symptomatology that meets full criteria for depersonalization/derealization disorder is markedly less common than transient symptoms. Lifetime prevalence in U.S. and non-U.S. countries is approximately 2% (range of 0.8% to 2.8%). The gender ratio for the disorder is 1:1.

Development and Course

The mean age at onset of depersonalization/derealization disorder is 16 years, although the disorder can start in early or middle childhood; a minority cannot recall ever not having had

the symptoms. Less than 20% of individuals experience onset after age 20 years and only 5% after age 25 years. Onset in the fourth decade of life or later is highly unusual. Onset can range from extremely sudden to gradual. Duration of depersonalization/derealization disorder episodes can vary greatly, from brief (hours or days) to prolonged (weeks, months, or years). Given the rarity of disorder onset after age 40 years, in such cases the individual should be examined more closely for underlying medical conditions (e.g., brain lesions, seizure disorders, sleep apnea). The course of the disorder is often persistent. About one-third of cases involve discrete episodes; another third, continuous symptoms from the start; and still another third, an initially episodic course that eventually becomes continuous.

While in some individuals the intensity of symptoms can wax and wane considerably, others report an unwavering level of intensity that in extreme cases can be constantly present for years or decades. Internal and external factors that affect symptom intensity vary between individuals, yet some typical patterns are reported. Exacerbations can be triggered by stress, worsening mood or anxiety symptoms, novel or overstimulating settings, and physical factors such as lighting or lack of sleep.

Risk and Prognostic Factors

Temperamental. Individuals with depersonalization/derealization disorder are characterized by harm-avoidant temperament, immature defenses, and both disconnection and overconnection schemata. Immature defenses such as idealization/devaluation, projection and acting out result in denial of reality and poor adaptation. *Cognitive disconnection schemata* reflect defectiveness and emotional inhibition and subsume themes of abuse, neglect, and deprivation. *Overconnection schemata* involve impaired autonomy with themes of dependency, vulnerability, and incompetence.

Environmental. There is a clear association between the disorder and childhood interpersonal traumas in a substantial portion of individuals, although this association is not as prevalent or as extreme in the nature of the traumas as in other dissociative disorders, such as dissociative identity disorder. In particular, emotional abuse and emotional neglect have been most strongly and consistently associated with the disorder. Other stressors can include physical abuse; witnessing domestic violence; growing up with a seriously impaired, mentally ill parent; or unexpected death or suicide of a family member or close friend. Sexual abuse is a much less common antecedent but can be encountered. The most common proximal precipitants of the disorder are severe stress (interpersonal, financial, occupational), depression, anxiety (particularly panic attacks), and illicit drug use. Symptoms may be specifically induced by substances such as tetrahydrocannabinol, hallucinogens, ketamine, MDMA (3,4-methylenedioxymethamphetamine; “ecstasy”) and salvia. Marijuana use may precipitate new-onset panic attacks and depersonalization/derealization symptoms simultaneously.

Culture-Related Diagnostic Issues

Volitionally induced experiences of depersonalization/derealization can be a part of meditative practices that are prevalent in many religions and cultures and should not be diagnosed as a disorder. However, there are individuals who initially induce these states intentionally but over time lose control over them and may develop a fear and aversion for related practices.

Functional Consequences of Depersonalization/Derealization Disorder

Symptoms of depersonalization/derealization disorder are highly distressing and are associated with major morbidity. The affectively flattened and robotic demeanor that these

individuals often demonstrate may appear incongruent with the extreme emotional pain reported by those with the disorder. Impairment is often experienced in both interpersonal and occupational spheres, largely due to the hypoemotionality with others, subjective difficulty in focusing and retaining information, and a general sense of disconnectedness from life.

Differential Diagnosis

Illness anxiety disorder. Although individuals with depersonalization/derealization disorder can present with vague somatic complaints as well as fears of permanent brain damage, the diagnosis of depersonalization/derealization disorder is characterized by the presence of a constellation of typical depersonalization/derealization symptoms and the absence of other manifestations of illness anxiety disorder.

Major depressive disorder. Feelings of numbness, deadness, apathy, and being in a dream are not uncommon in major depressive episodes. However, in depersonalization/derealization disorder, such symptoms are associated with further symptoms of the disorder. If the depersonalization/derealization clearly precedes the onset of a major depressive episode or clearly continues after its resolution, the diagnosis of depersonalization/derealization disorder applies.

Obsessive-compulsive disorder. Some individuals with depersonalization/derealization disorder can become obsessively preoccupied with their subjective experience or develop rituals checking on the status of their symptoms. However, other symptoms of obsessive-compulsive disorder unrelated to depersonalization/derealization are not present.

Other dissociative disorders. In order to diagnose depersonalization/derealization disorder, the symptoms should not occur in the context of another dissociative disorder, such as dissociative identity disorder. Differentiation from dissociative amnesia and conversion disorder (functional neurological symptom disorder) is simpler, as the symptoms of these disorders do not overlap with those of depersonalization/derealization disorder.

Anxiety disorders. Depersonalization/derealization is one of the symptoms of panic attacks, increasingly common as panic attack severity increases. Therefore, depersonalization/derealization disorder should not be diagnosed when the symptoms occur only during panic attacks that are part of panic disorder, social anxiety disorder, or specific phobia. In addition, it is not uncommon for depersonalization/derealization symptoms to first begin in the context of new-onset panic attacks or as panic disorder progresses and worsens. In such presentations, the diagnosis of depersonalization/derealization disorder can be made if 1) the depersonalization/derealization component of the presentation is very prominent from the start, clearly exceeding in duration and intensity the occurrence of actual panic attacks; or 2) the depersonalization/derealization continues after panic disorder has remitted or has been successfully treated.

Psychotic disorders. The presence of intact reality testing specifically regarding the depersonalization/derealization symptoms is essential to differentiating depersonalization/derealization disorder from psychotic disorders. Rarely, positive-symptom schizophrenia can pose a diagnostic challenge when nihilistic delusions are present. For example, an individual may complain that he or she is dead or the world is not real; this could be either a subjective experience that the individual knows is not true or a delusional conviction.

Substance/medication-induced disorders. Depersonalization/derealization associated with the physiological effects of substances during acute intoxication or withdrawal is not diagnosed as depersonalization/derealization disorder. The most common precipitating substances are the illicit drugs marijuana, hallucinogens, ketamine, ecstasy, and salvia. In

about 15% of all cases of depersonalization/derealization disorder, the symptoms are precipitated by ingestion of such substances. If the symptoms persist for some time in the absence of any further substance or medication use, the diagnosis of depersonalization/derealization disorder applies. This diagnosis is usually easy to establish since the vast majority of individuals with this presentation become highly phobic and aversive to the triggering substance and do not use it again.

Mental disorders due to another medical condition. Features such as onset after age 40 years or the presence of atypical symptoms and course in any individual suggest the possibility of an underlying medical condition. In such cases, it is essential to conduct a thorough medical and neurological evaluation, which may include standard laboratory studies, viral titers, an electroencephalogram, vestibular testing, visual testing, sleep studies, and/or brain imaging. When the suspicion of an underlying seizure disorder proves difficult to confirm, an ambulatory electroencephalogram may be indicated; although temporal lobe epilepsy is most commonly implicated, parietal and frontal lobe epilepsy may also be associated.

Comorbidity

In a convenience sample of adults recruited for a number of depersonalization research studies, lifetime comorbidities were high for unipolar depressive disorder and for any anxiety disorder, with a significant proportion of the sample having both disorders. Comorbidity with posttraumatic stress disorder was low. The three most commonly co-occurring personality disorders were avoidant, borderline, and obsessive-compulsive.

Other Specified Dissociative Disorder

300.15 (F44.89)

This category applies to presentations in which symptoms characteristic of a dissociative disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the dissociative disorders diagnostic class. The other specified dissociative disorder category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for any specific dissociative disorder. This is done by recording "other specified dissociative disorder" followed by the specific reason (e.g., "dissociative trance").

Examples of presentations that can be specified using the "other specified" designation include the following:

1. **Chronic and recurrent syndromes of mixed dissociative symptoms:** This category includes identity disturbance associated with less-than-marked discontinuities in sense of self and agency, or alterations of identity or episodes of possession in an individual who reports no dissociative amnesia.
2. **Identity disturbance due to prolonged and intense coercive persuasion:** Individuals who have been subjected to intense coercive persuasion (e.g., brainwashing, thought reform, indoctrination while captive, torture, long-term political imprisonment, recruitment by sects/cults or by terror organizations) may present with prolonged changes in, or conscious questioning of, their identity.
3. **Acute dissociative reactions to stressful events:** This category is for acute, transient conditions that typically last less than 1 month, and sometimes only a few hours or days. These conditions are characterized by constriction of consciousness; depersonalization; derealization; perceptual disturbances (e.g., time slowing, macropsia);

micro-amnesias; transient stupor; and/or alterations in sensory-motor functioning (e.g., analgesia, paralysis).

4. **Dissociative trance:** This condition is characterized by an acute narrowing or complete loss of awareness of immediate surroundings that manifests as profound unresponsiveness or insensitivity to environmental stimuli. The unresponsiveness may be accompanied by minor stereotyped behaviors (e.g., finger movements) of which the individual is unaware and/or that he or she cannot control, as well as transient paralysis or loss of consciousness. The dissociative trance is not a normal part of a broadly accepted collective cultural or religious practice.
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Unspecified Dissociative Disorder

300.15 (F44.9)

This category applies to presentations in which symptoms characteristic of a dissociative disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the dissociative disorders diagnostic class. The unspecified dissociative disorder category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for a specific dissociative disorder, and includes presentations for which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

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Somatic Symptom and Related Disorders

Somatic symptom disorder and other disorders with prominent somatic symptoms constitute a new category in DSM-5 called *somatic symptom and related disorders*. This chapter includes the diagnoses of somatic symptom disorder, illness anxiety disorder, conversion disorder (functional neurological symptom disorder), psychological factors affecting other medical conditions, factitious disorder, other specified somatic symptom and related disorder, and unspecified somatic symptom and related disorder. All of the disorders in this chapter share a common feature: the prominence of somatic symptoms associated with significant distress and impairment. Individuals with disorders with prominent somatic symptoms are commonly encountered in primary care and other medical settings but are less commonly encountered in psychiatric and other mental health settings. These reconceptualized diagnoses, based on a reorganization of DSM-IV somatoform disorder diagnoses, are more useful for primary care and other medical (nonpsychiatric) clinicians.

The major diagnosis in this diagnostic class, somatic symptom disorder, emphasizes diagnosis made on the basis of positive symptoms and signs (distressing somatic symptoms plus abnormal thoughts, feelings, and behaviors in response to these symptoms) rather than the absence of a medical explanation for somatic symptoms. A distinctive characteristic of many individuals with somatic symptom disorder is not the somatic symptoms per se, but instead the way they present and interpret them. Incorporating affective, cognitive, and behavioral components into the criteria for somatic symptom disorder provides a more comprehensive and accurate reflection of the true clinical picture than can be achieved by assessing the somatic complaints alone.

The principles behind the changes in the somatic symptom and related diagnoses from DSM-IV are crucial in understanding the DSM-5 diagnoses. The DSM-IV term *somatoform disorders* was confusing and is replaced by *somatic symptom and related disorders*. In DSM-IV there was a great deal of overlap across the somatoform disorders and a lack of clarity about the boundaries of diagnoses. Although individuals with these disorders primarily present in medical rather than mental health settings, nonpsychiatric physicians found the DSM-IV somatoform diagnoses difficult to understand and use. The current DSM-5 classification recognizes this overlap by reducing the total number of disorders as well as their subcategories.

The previous criteria overemphasized the centrality of medically unexplained symptoms. Such symptoms are present to various degrees, particularly in conversion disorder, but somatic symptom disorders can also accompany diagnosed medical disorders. The reliability of determining that a somatic symptom is medically unexplained is limited, and grounding a diagnosis on the absence of an explanation is problematic and reinforces mind-body dualism. It is not appropriate to give an individual a mental disorder diagnosis solely because a medical cause cannot be demonstrated. Furthermore, the presence of a medical diagnosis does not exclude the possibility of a comorbid mental disorder, including a somatic symptom and related disorder. Perhaps because of the predominant focus on lack of medical explanation, individuals regarded these diagnoses as pejorative and demeaning, implying that their physical symptoms were not “real.” The new classification defines the major diagnosis, somatic symptom disorder, on the basis of positive symptoms (distressing somatic symptoms plus abnormal thoughts, feelings, and behaviors in response

to these symptoms). However, medically unexplained symptoms remain a key feature in conversion disorder and pseudocyesis (other specified somatic symptom and related disorder) because it is possible to demonstrate definitively in such disorders that the symptoms are not consistent with medical pathophysiology.

It is important to note that some other mental disorders may initially manifest with primarily somatic symptoms (e.g., major depressive disorder, panic disorder). Such diagnoses may account for the somatic symptoms, or they may occur alongside one of the somatic symptom and related disorders in this chapter. There is also considerable medical comorbidity among somatizing individuals. Although somatic symptoms are frequently associated with psychological distress and psychopathology, some somatic symptom and related disorders can arise spontaneously, and their causes can remain obscure. Anxiety disorders and depressive disorders may accompany somatic symptom and related disorders. The somatic component adds severity and complexity to depressive and anxiety disorders and results in higher severity, functional impairment, and even refractoriness to traditional treatments. In rare instances, the degree of preoccupation may be so severe as to warrant consideration of a delusional disorder diagnosis.

A number of factors may contribute to somatic symptom and related disorders. These include genetic and biological vulnerability (e.g., increased sensitivity to pain), early traumatic experiences (e.g., violence, abuse, deprivation), and learning (e.g., attention obtained from illness, lack of reinforcement of nonsomatic expressions of distress), as well as cultural/social norms that devalue and stigmatize psychological suffering as compared with physical suffering. Differences in medical care across cultures affect the presentation, recognition, and management of these somatic presentations. Variations in symptom presentation are likely the result of the interaction of multiple factors within cultural contexts that affect how individuals identify and classify bodily sensations, perceive illness, and seek medical attention for them. Thus, somatic presentations can be viewed as expressions of personal suffering inserted in a cultural and social context.

All of these disorders are characterized by the prominent focus on somatic concerns and their initial presentation mainly in medical rather than mental health care settings. Somatic symptom disorder offers a more clinically useful method of characterizing individuals who may have been considered in the past for a diagnosis of somatization disorder. Furthermore, approximately 75% of individuals previously diagnosed with hypochondriasis are subsumed under the diagnosis of somatic symptom disorder. However, about 25% of individuals with hypochondriasis have high health anxiety in the absence of somatic symptoms, and many such individuals' symptoms would not qualify for an anxiety disorder diagnosis. The DSM-5 diagnosis of illness anxiety disorder is for this latter group of individuals. Illness anxiety disorder can be considered either in this diagnostic section or as an anxiety disorder. Because of the strong focus on somatic concerns, and because illness anxiety disorder is most often encountered in medical settings, for utility it is listed with the somatic symptom and related disorders. In conversion disorder, the essential feature is neurological symptoms that are found, after appropriate neurological assessment, to be incompatible with neurological pathophysiology. Psychological factors affecting other medical conditions is also included in this chapter. Its essential feature is the presence of one or more clinically significant psychological or behavioral factors that adversely affect a medical condition by increasing the risk for suffering, death, or disability. Like the other somatic symptom and related disorders, factitious disorder embodies persistent problems related to illness perception and identity. In the great majority of reported cases of factitious disorder, both imposed on self and imposed on another, individuals present with somatic symptoms and medical disease conviction. Consequently, DSM-5 factitious disorder is included among the somatic symptom and related disorders. Other specified somatic symptom and related disorder and unspecified somatic symptom and related disorder include conditions for which some, but not all, of the criteria for somatic symptom disorder or illness anxiety disorder are met, as well as pseudocyesis.

Somatic Symptom Disorder

Diagnostic Criteria	300.82 (F45.1)
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- A. One or more somatic symptoms that are distressing or result in significant disruption of daily life.
- B. Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:
 - 1. Disproportionate and persistent thoughts about the seriousness of one's symptoms.
 - 2. Persistently high level of anxiety about health or symptoms.
 - 3. Excessive time and energy devoted to these symptoms or health concerns.
- C. Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent (typically more than 6 months).

Specify if:

With predominant pain (previously pain disorder): This specifier is for individuals whose somatic symptoms predominantly involve pain.

Specify if:

Persistent: A persistent course is characterized by severe symptoms, marked impairment, and long duration (more than 6 months).

Specify current severity:

- Mild:** Only one of the symptoms specified in Criterion B is fulfilled.
- Moderate:** Two or more of the symptoms specified in Criterion B are fulfilled.
- Severe:** Two or more of the symptoms specified in Criterion B are fulfilled, plus there are multiple somatic complaints (or one very severe somatic symptom).

Diagnostic Features

Individuals with somatic symptom disorder typically have multiple, current, somatic symptoms that are distressing or result in significant disruption of daily life (Criterion A), although sometimes only one severe symptom, most commonly pain, is present. Symptoms may be specific (e.g., localized pain) or relatively nonspecific (e.g., fatigue). The symptoms sometimes represent normal bodily sensations or discomfort that does not generally signify serious disease. Somatic symptoms without an evident medical explanation are not sufficient to make this diagnosis. The individual's suffering is authentic, whether or not it is medically explained.

The symptoms may or may not be associated with another medical condition. The diagnoses of somatic symptom disorder and a concurrent medical illness are not mutually exclusive, and these frequently occur together. For example, an individual may become seriously disabled by symptoms of somatic symptom disorder after an uncomplicated myocardial infarction even if the myocardial infarction itself did not result in any disability. If another medical condition or high risk for developing one is present (e.g., strong family history), the thoughts, feelings, and behaviors associated with this condition are excessive (Criterion B).

Individuals with somatic symptom disorder tend to have very high levels of worry about illness (Criterion B). They appraise their bodily symptoms as unduly threatening, harmful, or troublesome and often think the worst about their health. Even when there is evidence to the contrary, some patients still fear the medical seriousness of their symptoms. In severe somatic symptom disorder, health concerns may assume a central role in the individual's life, becoming a feature of his or her identity and dominating interpersonal relationships.

Individuals typically experience distress that is principally focused on somatic symptoms and their significance. When asked directly about their distress, some individuals describe it in relation to other aspects of their lives, while others deny any source of distress other than the somatic symptoms. Health-related quality of life is often impaired, both physically and mentally. In severe somatic symptom disorder, the impairment is marked, and when persistent, the disorder can lead to invalidism.

There is often a high level of medical care utilization, which rarely alleviates the individual's concerns. Consequently, the patient may seek care from multiple doctors for the same symptoms. These individuals often seem unresponsive to medical interventions, and new interventions may only exacerbate the presenting symptoms. Some individuals with the disorder seem unusually sensitive to medication side effects. Some feel that their medical assessment and treatment have been inadequate.

Associated Features Supporting Diagnosis

Cognitive features include attention focused on somatic symptoms, attribution of normal bodily sensations to physical illness (possibly with catastrophic interpretations), worry about illness, and fear that any physical activity may damage the body. The relevant associated behavioral features may include repeated bodily checking for abnormalities, repeated seeking of medical help and reassurance, and avoidance of physical activity. These behavioral features are most pronounced in severe, persistent somatic symptom disorder. These features are usually associated with frequent requests for medical help for different somatic symptoms. This may lead to medical consultations in which individuals are so focused on their concerns about somatic symptom(s) that they cannot be redirected to other matters. Any reassurance by the doctor that the symptoms are not indicative of serious physical illness tends to be short-lived and/or is experienced by the individuals as the doctor not taking their symptoms with due seriousness. As the focus on somatic symptoms is a primary feature of the disorder, individuals with somatic symptom disorder typically present to general medical health services rather than mental health services. The suggestion of referral to a mental health specialist may be met with surprise or even frank refusal by individuals with somatic symptom disorder.

Since somatic symptom disorder is associated with depressive disorders, there is an increased suicide risk. It is not known whether somatic symptom disorder is associated with suicide risk independent of its association with depressive disorders.

Prevalence

The prevalence of somatic symptom disorder is not known. However, the prevalence of somatic symptom disorder is expected to be higher than that of the more restrictive DSM-IV somatization disorder (<1%) but lower than that of undifferentiated somatoform disorder (approximately 19%). The prevalence of somatic symptom disorder in the general adult population may be around 5%–7%. Females tend to report more somatic symptoms than do males, and the prevalence of somatic symptom disorder is consequently likely to be higher in females.

Development and Course

In older individuals, somatic symptoms and concurrent medical illnesses are common, and a focus on Criterion B is crucial for making the diagnosis. Somatic symptom disorder may be underdiagnosed in older adults either because certain somatic symptoms (e.g., pain, fatigue) are considered part of normal aging or because illness worry is considered “understandable” in older adults who have more general medical illnesses and medications than do younger people. Concurrent depressive disorder is common in older people who present with numerous somatic symptoms.

In children, the most common symptoms are recurrent abdominal pain, headache, fatigue, and nausea. A single prominent symptom is more common in children than in adults. While young children may have somatic complaints, they rarely worry about “illness” per se prior to adolescence. The parents’ response to the symptom is important, as this may determine the level of associated distress. It is the parent who may determine the interpretation of symptoms and the associated time off school and medical help seeking.

Risk and Prognostic Factors

Temperamental. The personality trait of negative affectivity (neuroticism) has been identified as an independent correlate/risk factor of a high number of somatic symptoms. Comorbid anxiety or depression is common and may exacerbate symptoms and impairment.

Environmental. Somatic symptom disorder is more frequent in individuals with few years of education and low socioeconomic status, and in those who have recently experienced stressful life events.

Course modifiers. Persistent somatic symptoms are associated with demographic features (female sex, older age, fewer years of education, lower socioeconomic status, unemployment), a reported history of sexual abuse or other childhood adversity, concurrent chronic physical illness or psychiatric disorder (depression, anxiety, persistent depressive disorder [dysthymia], panic), social stress, and reinforcing social factors such as illness benefits. Cognitive factors that affect clinical course include sensitization to pain, heightened attention to bodily sensations, and attribution of bodily symptoms to a possible medical illness rather than recognizing them as a normal phenomenon or psychological stress.

Culture-Related Diagnostic Issues

Somatic symptoms are prominent in various “culture-bound syndromes.” High numbers of somatic symptoms are found in population-based and primary care studies around the world, with a similar pattern of the most commonly reported somatic symptoms, impairment, and treatment seeking. The relationship between number of somatic symptoms and illness worry is similar in different cultures, and marked illness worry is associated with impairment and greater treatment seeking across cultures. The relationship between numerous somatic symptoms and depression appears to be very similar around the world and between different cultures within one country.

Despite these similarities, there are differences in somatic symptoms among cultures and ethnic groups. The description of somatic symptoms varies with linguistic and other local cultural factors. These somatic presentations have been described as “idioms of distress” because somatic symptoms may have special meanings and shape patient-clinician interactions in the particular cultural contexts. “Burnout,” the sensation of heaviness or the complaints of “gas”; too much heat in the body; or burning in the head are examples of symptoms that are common in some cultures or ethnic groups but rare in others. Explanatory models also vary, and somatic symptoms may be attributed variously to particular family, work, or environmental stresses; general medical illness; the suppression of feelings of anger and resentment; or certain culture-specific phenomena, such as semen loss. There may also be differences in medical treatment seeking among cultural groups, in addition to differences due to variable access to medical care services. Seeking treatment for multiple somatic symptoms in general medical clinics is a worldwide phenomenon and occurs at similar rates among ethnic groups in the same country.

Functional Consequences of Somatic Symptom Disorder

The disorder is associated with marked impairment of health status. Many individuals with severe somatic symptom disorder are likely to have impaired health status scores more than 2 standard deviations below population norms.

Differential Diagnosis

If the somatic symptoms are consistent with another mental disorder (e.g., panic disorder), and the diagnostic criteria for that disorder are fulfilled, then that mental disorder should be considered as an alternative or additional diagnosis. A separate diagnosis of somatic symptom disorder is not made if the somatic symptoms and related thoughts, feelings, or behaviors occur only during major depressive episodes. If, as commonly occurs, the criteria for both somatic symptom disorder and another mental disorder diagnosis are fulfilled, then both should be coded, as both may require treatment.

Other medical conditions. The presence of somatic symptoms of unclear etiology is not in itself sufficient to make the diagnosis of somatic symptom disorder. The symptoms of many individuals with disorders like irritable bowel syndrome or fibromyalgia would not satisfy the criterion necessary to diagnose somatic symptom disorder (Criterion B). Conversely, the presence of somatic symptoms of an established medical disorder (e.g., diabetes or heart disease) does not exclude the diagnosis of somatic symptom disorder if the criteria are otherwise met.

Panic disorder. In panic disorder, somatic symptoms and anxiety about health tend to occur in acute episodes, whereas in somatic symptom disorder, anxiety and somatic symptoms are more persistent.

Generalized anxiety disorder. Individuals with generalized anxiety disorder worry about multiple events, situations, or activities, only one of which may involve their health. The main focus is not usually somatic symptoms or fear of illness as it is in somatic symptom disorder.

Depressive disorders. Depressive disorders are commonly accompanied by somatic symptoms. However, depressive disorders are differentiated from somatic symptom disorder by the core depressive symptoms of low (dysphoric) mood and anhedonia.

Illness anxiety disorder. If the individual has extensive worries about health but no or minimal somatic symptoms, it may be more appropriate to consider illness anxiety disorder.

Conversion disorder (functional neurological symptom disorder). In conversion disorder, the presenting symptom is loss of function (e.g., of a limb), whereas in somatic symptom disorder, the focus is on the distress that particular symptoms cause. The features listed under Criterion B of somatic symptom disorder may be helpful in differentiating the two disorders.

Delusional disorder. In somatic symptom disorder, the individual's beliefs that somatic symptoms might reflect serious underlying physical illness are not held with delusional intensity. Nonetheless, the individual's beliefs concerning the somatic symptoms can be firmly held. In contrast, in delusional disorder, somatic subtype, the somatic symptom beliefs and behavior are stronger than those found in somatic symptom disorder.

Body dysmorphic disorder. In body dysmorphic disorder, the individual is excessively concerned about, and preoccupied by, a perceived defect in his or her physical features. In contrast, in somatic symptom disorder, the concern about somatic symptoms reflects fear of underlying illness, not of a defect in appearance.

Obsessive-compulsive disorder. In somatic symptom disorder, the recurrent ideas about somatic symptoms or illness are less intrusive, and individuals with this disorder do not exhibit the associated repetitive behaviors aimed at reducing anxiety that occur in obsessive-compulsive disorder.

Comorbidity

Somatic symptom disorder is associated with high rates of comorbidity with medical disorders as well as anxiety and depressive disorders. When a concurrent medical illness is

present, the degree of impairment is more marked than would be expected from the physical illness alone. When an individual's symptoms meet diagnostic criteria for somatic symptom disorder, the disorder should be diagnosed; however, in view of the frequent comorbidity, especially with anxiety and depressive disorders, evidence for these concurrent diagnoses should be sought.

Illness Anxiety Disorder

Diagnostic Criteria

300.7 (F45.21)

- A. Preoccupation with having or acquiring a serious illness.
- B. Somatic symptoms are not present or, if present, are only mild in intensity. If another medical condition is present or there is a high risk for developing a medical condition (e.g., strong family history is present), the preoccupation is clearly excessive or disproportionate.
- C. There is a high level of anxiety about health, and the individual is easily alarmed about personal health status.
- D. The individual performs excessive health-related behaviors (e.g., repeatedly checks his or her body for signs of illness) or exhibits maladaptive avoidance (e.g., avoids doctor appointments and hospitals).
- E. Illness preoccupation has been present for at least 6 months, but the specific illness that is feared may change over that period of time.
- F. The illness-related preoccupation is not better explained by another mental disorder, such as somatic symptom disorder, panic disorder, generalized anxiety disorder, body dysmorphic disorder, obsessive-compulsive disorder, or delusional disorder, somatic type.

Specify whether:
Care-seeking type: Medical care, including physician visits or undergoing tests and procedures, is frequently used.
Care-avoidant type: Medical care is rarely used.

Diagnostic Features

Most individuals with hypochondriasis are now classified as having somatic symptom disorder; however, in a minority of cases, the diagnosis of illness anxiety disorder applies instead. Illness anxiety disorder entails a preoccupation with having or acquiring a serious, undiagnosed medical illness (Criterion A). Somatic symptoms are not present or, if present, are only mild in intensity (Criterion B). A thorough evaluation fails to identify a serious medical condition that accounts for the individual's concerns. While the concern may be derived from a nonpathological physical sign or sensation, the individual's distress emanates not primarily from the physical complaint itself but rather from his or her anxiety about the meaning, significance, or cause of the complaint (i.e., the suspected medical diagnosis). If a physical sign or symptom is present, it is often a normal physiological sensation (e.g., orthostatic dizziness), a benign and self-limited dysfunction (e.g., transient tinnitus), or a bodily discomfort not generally considered indicative of disease (e.g., belching). If a diagnosable medical condition is present, the individual's anxiety and preoccupation are clearly excessive and disproportionate to the severity of the condition (Criterion B). Empirical evidence and existing literature pertain to previously defined DSM hypochondriasis, and it is unclear to what extent and how precisely they apply to the description of this new diagnosis.

The preoccupation with the idea that one is sick is accompanied by substantial anxiety about health and disease (Criterion C). Individuals with illness anxiety disorder are easily

alarmed about illness, such as by hearing about someone else falling ill or reading a health-related news story. Their concerns about undiagnosed disease do not respond to appropriate medical reassurance, negative diagnostic tests, or benign course. The physician's attempts at reassurance and symptom palliation generally do not alleviate the individual's concerns and may heighten them. Illness concerns assume a prominent place in the individual's life, affecting daily activities, and may even result in invalidism. Illness becomes a central feature of the individual's identity and self-image, a frequent topic of social discourse, and a characteristic response to stressful life events. Individuals with the disorder often examine themselves repeatedly (e.g., examining one's throat in the mirror) (Criterion D). They research their suspected disease excessively (e.g., on the Internet) and repeatedly seek reassurance from family, friends, or physicians. This incessant worrying often becomes frustrating for others and may result in considerable strain within the family. In some cases, the anxiety leads to maladaptive avoidance of situations (e.g., visiting sick family members) or activities (e.g., exercise) that these individuals fear might jeopardize their health.

Associated Features Supporting Diagnosis

Because they believe they are medically ill, individuals with illness anxiety disorder are encountered far more frequently in medical than in mental health settings. The majority of individuals with illness anxiety disorder have extensive yet unsatisfactory medical care, though some may be too anxious to seek medical attention. They generally have elevated rates of medical utilization but do not utilize mental health services more than the general population. They often consult multiple physicians for the same problem and obtain repeatedly negative diagnostic test results. At times, medical attention leads to a paradoxical exacerbation of anxiety or to iatrogenic complications from diagnostic tests and procedures. Individuals with the disorder are generally dissatisfied with their medical care and find it unhelpful, often feeling they are not being taken seriously by physicians. At times, these concerns may be justified, since physicians sometimes are dismissive or respond with frustration or hostility. This response can occasionally result in a failure to diagnose a medical condition that is present.

Prevalence

Prevalence estimates of illness anxiety disorder are based on estimates of the DSM-III and DSM-IV diagnosis *hypochondriasis*. The 1- to 2-year prevalence of health anxiety and/or disease conviction in community surveys and population-based samples ranges from 1.3% to 10%. In ambulatory medical populations, the 6-month/1-year prevalence rates are between 3% and 8%. The prevalence of the disorder is similar in males and females.

Development and Course

The development and course of illness anxiety disorder are unclear. Illness anxiety disorder is generally thought to be a chronic and relapsing condition with an age at onset in early and middle adulthood. In population-based samples, health-related anxiety increases with age, but the ages of individuals with high health anxiety in medical settings do not appear to differ from those of other patients in those settings. In older individuals, health-related anxiety often focuses on memory loss; the disorder is thought to be rare in children.

Risk and Prognostic Factors

Environmental. Illness anxiety disorder may sometimes be precipitated by a major life stress or a serious but ultimately benign threat to the individual's health. A history of child-

hood abuse or of a serious childhood illness may predispose to development of the disorder in adulthood.

Course modifiers. Approximately one-third to one-half of individuals with illness anxiety disorder have a transient form, which is associated with less psychiatric comorbidity, more medical comorbidity, and less severe illness anxiety disorder.

Culture-Related Diagnostic Issues

The diagnosis should be made with caution in individuals whose ideas about disease are congruent with widely held, culturally sanctioned beliefs. Little is known about the phenomenology of the disorder across cultures, although the prevalence appears to be similar across different countries with diverse cultures.

Functional Consequences of Illness Anxiety Disorder

Illness anxiety disorder causes substantial role impairment and decrements in physical function and health-related quality of life. Health concerns often interfere with interpersonal relationships, disrupt family life, and damage occupational performance.

Differential Diagnosis

Other medical conditions. The first differential diagnostic consideration is an underlying medical condition, including neurological or endocrine conditions, occult malignancies, and other diseases that affect multiple body systems. The presence of a medical condition does not rule out the possibility of coexisting illness anxiety disorder. If a medical condition is present, the health-related anxiety and disease concerns are clearly disproportionate to its seriousness. Transient preoccupations related to a medical condition do not constitute illness anxiety disorder.

Adjustment disorders. Health-related anxiety is a normal response to serious illness and is not a mental disorder. Such nonpathological health anxiety is clearly related to the medical condition and is typically time-limited. If the health anxiety is severe enough, an adjustment disorder may be diagnosed. However, only when the health anxiety is of sufficient duration, severity, and distress can illness anxiety disorder be diagnosed. Thus, the diagnosis requires the continuous persistence of disproportionate health-related anxiety for at least 6 months.

Somatic symptom disorder. Somatic symptom disorder is diagnosed when significant somatic symptoms are present. In contrast, individuals with illness anxiety disorder have minimal somatic symptoms and are primarily concerned with the idea they are ill.

Anxiety disorders. In generalized anxiety disorder, individuals worry about multiple events, situations, or activities, only one of which may involve health. In panic disorder, the individual may be concerned that the panic attacks reflect the presence of a medical illness; however, although these individuals may have health anxiety, their anxiety is typically very acute and episodic. In illness anxiety disorder, the health anxiety and fears are more persistent and enduring. Individuals with illness anxiety disorder may experience panic attacks that are triggered by their illness concerns.

Obsessive-compulsive and related disorders. Individuals with illness anxiety disorder may have intrusive thoughts about having a disease and also may have associated compulsive behaviors (e.g., seeking reassurance). However, in illness anxiety disorder, the preoccupations are usually focused on having a disease, whereas in obsessive-compulsive disorder (OCD), the thoughts are intrusive and are usually focused on fears of getting a disease in the future. Most individuals with OCD have obsessions or compulsions involving other concerns in addition to fears about contracting disease. In body dysmorphic dis-

order, concerns are limited to the individual’s physical appearance, which is viewed as defective or flawed.

Major depressive disorder. Some individuals with a major depressive episode ruminate about their health and worry excessively about illness. A separate diagnosis of illness anxiety disorder is not made if these concerns occur only during major depressive episodes. However, if excessive illness worry persists after remission of an episode of major depressive disorder, the diagnosis of illness anxiety disorder should be considered.

Psychotic disorders. Individuals with illness anxiety disorder are not delusional and can acknowledge the possibility that the feared disease is not present. Their ideas do not attain the rigidity and intensity seen in the somatic delusions occurring in psychotic disorders (e.g., schizophrenia; delusional disorder, somatic type; major depressive disorder, with psychotic features). True somatic delusions are generally more bizarre (e.g., that an organ is rotting or dead) than the concerns seen in illness anxiety disorder. The concerns seen in illness anxiety disorder, though not founded in reality, are plausible.

Comorbidity

Because illness anxiety disorder is a new disorder, exact comorbidities are unknown. Hypochondriasis co-occurs with anxiety disorders (in particular, generalized anxiety disorder, panic disorder, and OCD) and depressive disorders. Approximately two-thirds of individuals with illness anxiety disorder are likely to have at least one other comorbid major mental disorder. Individuals with illness anxiety disorder may have an elevated risk for somatic symptom disorder and personality disorders.

**Conversion Disorder
(Functional Neurological Symptom Disorder)**

Diagnostic Criteria

- A. One or more symptoms of altered voluntary motor or sensory function.
- B. Clinical findings provide evidence of incompatibility between the symptom and recognized neurological or medical conditions.
- C. The symptom or deficit is not better explained by another medical or mental disorder.
- D. The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.

Coding note: The ICD-9-CM code for conversion disorder is **300.11**, which is assigned regardless of the symptom type. The ICD-10-CM code depends on the symptom type (see below).

Specify symptom type:

- (F44.4) **With weakness or paralysis**
- (F44.4) **With abnormal movement** (e.g., tremor, dystonic movement, myoclonus, gait disorder)
- (F44.4) **With swallowing symptoms**
- (F44.4) **With speech symptom** (e.g., dysphonia, slurred speech)
- (F44.5) **With attacks or seizures**
- (F44.6) **With anesthesia or sensory loss**
- (F44.6) **With special sensory symptom** (e.g., visual, olfactory, or hearing disturbance)
- (F44.7) **With mixed symptoms**

Specify if:

Acute episode: Symptoms present for less than 6 months.

Persistent: Symptoms occurring for 6 months or more.

Specify if:

With psychological stressor (*specify stressor*)

Without psychological stressor

Diagnostic Features

Many clinicians use the alternative names of “functional” (referring to abnormal central nervous system functioning) or “psychogenic” (referring to an assumed etiology) to describe the symptoms of conversion disorder (functional neurological symptom disorder). In conversion disorder, there may be one or more symptoms of various types. Motor symptoms include weakness or paralysis; abnormal movements, such as tremor or dystonic movements; gait abnormalities; and abnormal limb posturing. Sensory symptoms include altered, reduced, or absent skin sensation, vision, or hearing. Episodes of abnormal generalized limb shaking with apparent impaired or loss of consciousness may resemble epileptic seizures (also called *psychogenic* or *non-epileptic seizures*). There may be episodes of unresponsiveness resembling syncope or coma. Other symptoms include reduced or absent speech volume (dysphonia/aphonia), altered articulation (dysarthria), a sensation of a lump in the throat (globus), and diplopia.

Although the diagnosis requires that the symptom is not explained by neurological disease, it should not be made simply because results from investigations are normal or because the symptom is “bizarre.” There must be clinical findings that show clear evidence of incompatibility with neurological disease. Internal inconsistency at examination is one way to demonstrate incompatibility (i.e., demonstrating that physical signs elicited through one examination method are no longer positive when tested a different way). Examples of such examination findings include

- Hoover’s sign, in which weakness of hip extension returns to normal strength with contralateral hip flexion against resistance.
- Marked weakness of ankle plantar-flexion when tested on the bed in an individual who is able to walk on tiptoes;
- Positive findings on the tremor entrainment test. On this test, a unilateral tremor may be identified as functional if the tremor changes when the individual is distracted away from it. This may be observed if the individual is asked to copy the examiner in making a rhythmical movement with their unaffected hand and this causes the functional tremor to change such that it copies or “entrains” to the rhythm of the unaffected hand or the functional tremor is suppressed, or no longer makes a simple rhythmical movement.
- In attacks resembling epilepsy or syncope (“psychogenic” non-epileptic attacks), the occurrence of closed eyes with resistance to opening or a normal simultaneous electroencephalogram (although this alone does not exclude all forms of epilepsy or syncope).
- For visual symptoms, a tubular visual field (i.e., tunnel vision).

It is important to note that the diagnosis of conversion disorder should be based on the overall clinical picture and not on a single clinical finding.

Associated Features Supporting Diagnosis

A number of associated features can support the diagnosis of conversion disorder. There may be a history of multiple similar somatic symptoms. Onset may be associated with stress or trauma, either psychological or physical in nature. The potential etiological rele-

vance of this stress or trauma may be suggested by a close temporal relationship. However, while assessment for stress and trauma is important, the diagnosis should not be withheld if none is found.

Conversion disorder is often associated with dissociative symptoms, such as depersonalization, derealization, and dissociative amnesia, particularly at symptom onset or during attacks.

The diagnosis of conversion disorder does not require the judgment that the symptoms are not intentionally produced (i.e., not feigned), as the definite absence of feigning may not be reliably discerned. The phenomenon of *la belle indifférence* (i.e., lack of concern about the nature or implications of the symptom) has been associated with conversion disorder but it is not specific for conversion disorder and should not be used to make the diagnosis. Similarly the concept of *secondary gain* (i.e., when individuals derive external benefits such as money or release from responsibilities) is also not specific to conversion disorder and particularly in the context of definite evidence for feigning, the diagnoses that should be considered instead would include factitious disorder or malingering (see the section “Differential Diagnosis” for this disorder).

Prevalence

Transient conversion symptoms are common, but the precise prevalence of the disorder is unknown. This is partly because the diagnosis usually requires assessment in secondary care, where it is found in approximately 5% of referrals to neurology clinics. The incidence of individual persistent conversion symptoms is estimated to be 2–5/100,000 per year.

Development and Course

Onset has been reported throughout the life course. The onset of non-epileptic attacks peaks in the third decade, and motor symptoms have their peak onset in the fourth decade. The symptoms can be transient or persistent. The prognosis may be better in younger children than in adolescents and adults.

Risk and Prognostic Factors

Temperamental. Maladaptive personality traits are commonly associated with conversion disorder.

Environmental. There may be a history of childhood abuse and neglect. Stressful life events are often, but not always, present.

Genetic and physiological. The presence of neurological disease that causes similar symptoms is a risk factor (e.g., non-epileptic seizures are more common in patients who also have epilepsy).

Course modifiers. Short duration of symptoms and acceptance of the diagnosis are positive prognostic factors. Maladaptive personality traits, the presence of comorbid physical disease, and the receipt of disability benefits may be negative prognostic factors.

Culture-Related Diagnostic Issues

Changes resembling conversion (and dissociative) symptoms are common in certain culturally sanctioned rituals. If the symptoms are fully explained within the particular cultural context and do not result in clinically significant distress or disability, then the diagnosis of conversion disorder is not made.

Gender-Related Diagnostic Issues

Conversion disorder is two to three times more common in females.

Functional Consequences of Conversion Disorder

Individuals with conversion symptoms may have substantial disability. The severity of disability can be similar to that experienced by individuals with comparable medical diseases.

Differential Diagnosis

If another mental disorder better explains the symptoms, that diagnosis should be made. However the diagnosis of conversion disorder may be made in the presence of another mental disorder.

Neurological disease. The main differential diagnosis is neurological disease that might better explain the symptoms. After a thorough neurological assessment, an unexpected neurological disease cause for the symptoms is rarely found at follow up. However, reassessment may be required if the symptoms appear to be progressive. Conversion disorder may coexist with neurological disease.

Somatic symptom disorder. Conversion disorder may be diagnosed in addition to somatic symptom disorder. Most of the somatic symptoms encountered in somatic symptom disorder cannot be demonstrated to be clearly incompatible with pathophysiology (e.g., pain, fatigue), whereas in conversion disorder, such incompatibility is required for the diagnosis. The excessive thoughts, feelings, and behaviors characterizing somatic symptom disorder are often absent in conversion disorder.

Factitious disorder and malingering. The diagnosis of conversion disorder does not require the judgment that the symptoms are *not* intentionally produced (i.e., not feigned), because assessment of conscious intention is unreliable. However definite evidence of feigning (e.g., clear evidence that loss of function is present during the examination but not at home) would suggest a diagnosis of factitious disorder if the individual's apparent aim is to assume the sick role or malingering if the aim is to obtain an incentive such as money.

Dissociative disorders. Dissociative symptoms are common in individuals with conversion disorder. If both conversion disorder and a dissociative disorder are present, both diagnoses should be made.

Body dysmorphic disorder. Individuals with body dysmorphic disorder are excessively concerned about a perceived defect in their physical features but do not complain of symptoms of sensory or motor functioning in the affected body part.

Depressive disorders. In depressive disorders, individuals may report general heaviness of their limbs, whereas the weakness of conversion disorder is more focal and prominent. Depressive disorders are also differentiated by the presence of core depressive symptoms.

Panic disorder. Episodic neurological symptoms (e.g., tremors and paresthesias) can occur in both conversion disorder and panic attacks. In panic attacks, the neurological symptoms are typically transient and acutely episodic with characteristic cardiorespiratory symptoms. Loss of awareness with amnesia for the attack and violent limb movements occur in non-epileptic attacks, but not in panic attacks.

Comorbidity

Anxiety disorders, especially panic disorder, and depressive disorders commonly co-occur with conversion disorder. Somatic symptom disorder may co-occur as well. Psychosis, substance use disorder, and alcohol misuse are uncommon. Personality disorders are more common in individuals with conversion disorder than in the general population. Neurological or other medical conditions commonly coexist with conversion disorder as well.

Psychological Factors Affecting Other Medical Conditions

Diagnostic Criteria

316 (F54)

- A. A medical symptom or condition (other than a mental disorder) is present.
- B. Psychological or behavioral factors adversely affect the medical condition in one of the following ways:
 - 1. The factors have influenced the course of the medical condition as shown by a close temporal association between the psychological factors and the development or exacerbation of, or delayed recovery from, the medical condition.
 - 2. The factors interfere with the treatment of the medical condition (e.g., poor adherence).
 - 3. The factors constitute additional well-established health risks for the individual.
 - 4. The factors influence the underlying pathophysiology, precipitating or exacerbating symptoms or necessitating medical attention.
- C. The psychological and behavioral factors in Criterion B are not better explained by another mental disorder (e.g., panic disorder, major depressive disorder, posttraumatic stress disorder).

Specify current severity:

Mild: Increases medical risk (e.g., inconsistent adherence with antihypertension treatment).

Moderate: Aggravates underlying medical condition (e.g., anxiety aggravating asthma).

Severe: Results in medical hospitalization or emergency room visit.

Extreme: Results in severe, life-threatening risk (e.g., ignoring heart attack symptoms).

Diagnostic Features

The essential feature of psychological factors affecting other medical conditions is the presence of one or more clinically significant psychological or behavioral factors that adversely affect a medical condition by increasing the risk for suffering, death, or disability (Criterion B). These factors can adversely affect the medical condition by influencing its course or treatment, by constituting an additional well-established health risk factor, or by influencing the underlying pathophysiology to precipitate or exacerbate symptoms or to necessitate medical attention.

Psychological or behavioral factors include psychological distress, patterns of interpersonal interaction, coping styles, and maladaptive health behaviors, such as denial of symptoms or poor adherence to medical recommendations. Common clinical examples are anxiety-exacerbating asthma, denial of need for treatment for acute chest pain, and manipulation of insulin by an individual with diabetes wishing to lose weight. Many different psychological factors have been demonstrated to adversely influence medical conditions—for example, symptoms of depression or anxiety, stressful life events, relationship style, personality traits, and coping styles. The adverse effects can range from acute, with immediate medical consequences (e.g., Takotsubo cardiomyopathy) to chronic, occurring over a long period of time (e.g., chronic occupational stress increasing risk for hypertension). Affected medical conditions can be those with clear pathophysiology (e.g., diabetes, cancer, coronary disease), functional syndromes (e.g., migraine, irritable bowel syndrome, fibromyalgia), or idiopathic medical symptoms (e.g., pain, fatigue, dizziness).

This diagnosis should be reserved for situations in which the effect of the psychological factor on the medical condition is evident and the psychological factor has clinically significant effects on the course or outcome of the medical condition. Abnormal psychological or behavioral symptoms that develop in response to a medical condition are more properly coded as an adjustment disorder (a clinically significant psychological response to an identifiable stressor). There must be reasonable evidence to suggest an association between the psychological factors and the medical condition, although it may often not be possible to demonstrate direct causality or the mechanisms underlying the relationship.

Prevalence

The prevalence of psychological factors affecting other medical conditions is unclear. In U.S. private insurance billing data, it is a more common diagnosis than somatic symptom disorders.

Development and Course

Psychological factors affecting other medical conditions can occur across the lifespan. Particularly with young children, corroborative history from parents or school can assist the diagnostic evaluation. Some conditions are characteristic of particular life stages (e.g., in older individuals, the stress associated with acting as a caregiver for an ill spouse or partner).

Culture-Related Diagnostic Issues

Many differences between cultures may influence psychological factors and their effects on medical conditions, such as those in language and communication style, explanatory models of illness, patterns of seeking health care, service availability and organization, doctor-patient relationships and other healing practices, family and gender roles, and attitudes toward pain and death. Psychological factors affecting other medical conditions must be differentiated from culturally specific behaviors such as using faith or spiritual healers or other variations in illness management that are acceptable within a culture and represent an attempt to help the medical condition rather than interfere with it. These local practices may complement rather than obstruct evidence-based interventions. If they do not adversely affect outcomes, they should not be pathologized as psychological factors affecting other medical conditions.

Functional Consequences of Psychological Factors Affecting Other Medical Conditions

Psychological and behavioral factors have been demonstrated to affect the course of many medical diseases.

Differential Diagnosis

Mental disorder due to another medical condition. A temporal association between symptoms of a mental disorder and those of a medical condition is also characteristic of a mental disorder due to another medical condition, but the presumed causality is in the opposite direction. In a mental disorder due to another medical condition, the medical condition is judged to be causing the mental disorder through a direct physiological mechanism. In psychological factors affecting other medical conditions, the psychological or behavioral factors are judged to affect the course of the medical condition.

Adjustment disorders. Abnormal psychological or behavioral symptoms that develop in response to a medical condition are more properly coded as an adjustment disorder (a clinically significant psychological response to an identifiable stressor). For example, an indi-

vidual with angina that is precipitated whenever he becomes enraged would be diagnosed as having psychological factors affecting other medical conditions, whereas an individual with angina who developed maladaptive anticipatory anxiety would be diagnosed as having an adjustment disorder with anxiety. In clinical practice, however, psychological factors and a medical condition are often mutually exacerbating (e.g., anxiety as both a precipitant and a consequence of angina), in which case the distinction is arbitrary. Other mental disorders frequently result in medical complications, most notably substance use disorders (e.g., alcohol use disorder, tobacco use disorder). If an individual has a coexisting major mental disorder that adversely affects or causes another medical condition, diagnoses of the mental disorder and the medical condition are usually sufficient. Psychological factors affecting other medical conditions is diagnosed when the psychological traits or behaviors do not meet criteria for a mental diagnosis.

Somatic symptom disorder. Somatic symptom disorder is characterized by a combination of distressing somatic symptoms and excessive or maladaptive thoughts, feelings, and behavior in response to these symptoms or associated health concerns. The individual may or may not have a diagnosable medical condition. In contrast, in psychological factors affecting other medical conditions, the psychological factors adversely affect a medical condition; the individual’s thoughts, feelings, and behavior are not necessarily excessive. The difference is one of emphasis, rather than a clear-cut distinction. In psychological factors affecting other medical conditions, the emphasis is on the exacerbation of the medical condition (e.g., an individual with angina that is precipitated whenever he becomes anxious). In somatic symptom disorder, the emphasis is on maladaptive thoughts, feelings, and behavior (e.g., an individual with angina who worries constantly that she will have a heart attack, takes her blood pressure multiple times per day, and restricts her activities).

Illness anxiety disorder. Illness anxiety disorder is characterized by high illness anxiety that is distressing and/or disruptive to daily life with minimal somatic symptoms. The focus of clinical concern is the individual’s worry about having a disease; in most cases, no serious disease is present. In psychological factors affecting other medical conditions, anxiety may be a relevant psychological factor affecting a medical condition, but the clinical concern is the adverse effects on the medical condition.

Comorbidity

By definition, the diagnosis of psychological factors affecting other medical conditions entails a relevant psychological or behavioral syndrome or trait and a comorbid medical condition.

Factitious Disorder

Diagnostic Criteria	300.19 (F68.10)
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Factitious Disorder Imposed on Self

- A. Falsification of physical or psychological signs or symptoms, or induction of injury or disease, associated with identified deception.
- B. The individual presents himself or herself to others as ill, impaired, or injured.
- C. The deceptive behavior is evident even in the absence of obvious external rewards.
- D. The behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder.

Specify:

Single episode

Recurrent episodes (two or more events of falsification of illness and/or induction of injury)

Factitious Disorder Imposed on Another (Previously Factitious Disorder by Proxy)

- A. Falsification of physical or psychological signs or symptoms, or induction of injury or disease, in another, associated with identified deception.
- B. The individual presents another individual (victim) to others as ill, impaired, or injured.
- C. The deceptive behavior is evident even in the absence of obvious external rewards.
- D. The behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder.

Note: The perpetrator, not the victim, receives this diagnosis.

Specify:

Single episode

Recurrent episodes (two or more events of falsification of illness and/or induction of injury)

Recording Procedures

When an individual falsifies illness in another (e.g., children, adults, pets), the diagnosis is factitious disorder imposed on another. The perpetrator, not the victim, is given the diagnosis. The victim may be given an abuse diagnosis (e.g., 995.54 [T74.12X]; see the chapter “Other Conditions That May Be a Focus of Clinical Attention”).

Diagnostic Features

The essential feature of factitious disorder is the falsification of medical or psychological signs and symptoms in oneself or others that are associated with the identified deception. Individuals with factitious disorder can also seek treatment for themselves or another following induction of injury or disease. The diagnosis requires demonstrating that the individual is taking surreptitious actions to misrepresent, simulate, or cause signs or symptoms of illness or injury in the absence of obvious external rewards. Methods of illness falsification can include exaggeration, fabrication, simulation, and induction. While a preexisting medical condition may be present, the deceptive behavior or induction of injury associated with deception causes others to view such individuals (or another) as more ill or impaired, and this can lead to excessive clinical intervention. Individuals with factitious disorder might, for example, report feelings of depression and suicidality following the death of a spouse despite the death not being true or the individual's not having a spouse; deceptively report episodes of neurological symptoms (e.g., seizures, dizziness, or blacking out); manipulate a laboratory test (e.g., by adding blood to urine) to falsely indicate an abnormality; falsify medical records to indicate an illness; ingest a substance (e.g., insulin or warfarin) to induce an abnormal laboratory result or illness; or physically injure themselves or induce illness in themselves or another (e.g., by injecting fecal material to produce an abscess or to induce sepsis).

Associated Features Supporting Diagnosis

Individuals with factitious disorder imposed on self or factitious disorder imposed on another are at risk for experiencing great psychological distress or functional impairment by causing harm to themselves and others. Family, friends, and health care professionals are also often adversely affected by their behavior. Factitious disorders have similarities to substance use disorders, eating disorders, impulse-control disorders, pedophilic disorder, and some other established disorders related to both the persistence of the behavior and the intentional efforts to conceal the disordered behavior through deception. Whereas some aspects of factitious disorders might represent criminal behavior (e.g., factitious dis-

order imposed on another, in which the parent's actions represent abuse and maltreatment of a child), such criminal behavior and mental illness are not mutually exclusive. The diagnosis of factitious disorder emphasizes the objective identification of falsification of signs and symptoms of illness, rather than an inference about intent or possible underlying motivation. Moreover, such behaviors, including the induction of injury or disease, are associated with deception.

Prevalence

The prevalence of factitious disorder is unknown, likely because of the role of deception in this population. Among patients in hospital settings, it is estimated that about 1% of individuals have presentations that meet the criteria for factitious disorder.

Development and Course

The course of factitious disorder is usually one of intermittent episodes. Single episodes and episodes that are characterized as persistent and unremitting are both less common. Onset is usually in early adulthood, often after hospitalization for a medical condition or a mental disorder. When imposed on another, the disorder may begin after hospitalization of the individual's child or other dependent. In individuals with recurrent episodes of falsification of signs and symptoms of illness and/or induction of injury, this pattern of successive deceptive contact with medical personnel, including hospitalizations, may become lifelong.

Differential Diagnosis

Caregivers who lie about abuse injuries in dependents solely to protect themselves from liability are not diagnosed with factitious disorder imposed on another because protection from liability is an external reward (Criterion C, the deceptive behavior is evident even in the absence of obvious external rewards). Such caregivers who, upon observation, analysis of medical records, and/or interviews with others, are found to lie more extensively than needed for immediate self-protection are diagnosed with factitious disorder imposed on another.

Somatic symptom disorder. In somatic symptom disorder, there may be excessive attention and treatment seeking for perceived medical concerns, but there is no evidence that the individual is providing false information or behaving deceptively.

Malingering. Malingering is differentiated from factitious disorder by the intentional reporting of symptoms for personal gain (e.g., money, time off work). In contrast, the diagnosis of factitious disorder requires the absence of obvious rewards.

Conversion disorder (functional neurological symptom disorder). Conversion disorder is characterized by neurological symptoms that are inconsistent with neurological pathophysiology. Factitious disorder with neurological symptoms is distinguished from conversion disorder by evidence of deceptive falsification of symptoms.

Borderline personality disorder. Deliberate physical self-harm in the absence of suicidal intent can also occur in association with other mental disorders such as borderline personality disorder. Factitious disorder requires that the induction of injury occur in association with deception.

Medical condition or mental disorder not associated with intentional symptom falsification. Presentation of signs and symptoms of illness that do not conform to an identifiable medical condition or mental disorder increases the likelihood of the presence of a factitious disorder. However, the diagnosis of factitious disorder does not exclude the presence of true medical condition or mental disorder, as comorbid illness often occurs in the individual along with factitious disorder. For example, individuals who might manipulate blood sugar levels to produce symptoms may also have diabetes.

Other Specified Somatic Symptom and Related Disorder

300.89 (F45.8)

This category applies to presentations in which symptoms characteristic of a somatic symptom and related disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the somatic symptom and related disorders diagnostic class.

Examples of presentations that can be specified using the “other specified” designation include the following:

1. **Brief somatic symptom disorder:** Duration of symptoms is less than 6 months.
2. **Brief illness anxiety disorder:** Duration of symptoms is less than 6 months.
3. **Illness anxiety disorder without excessive health-related behaviors:** Criterion D for illness anxiety disorder is not met.
4. **Pseudocyesis:** A false belief of being pregnant that is associated with objective signs and reported symptoms of pregnancy.

Unspecified Somatic Symptom and Related Disorder

300.82 (F45.9)

This category applies to presentations in which symptoms characteristic of a somatic symptom and related disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the somatic symptom and related disorders diagnostic class. The unspecified somatic symptom and related disorder category should not be used unless there are decidedly unusual situations where there is insufficient information to make a more specific diagnosis.

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Feeding and Eating Disorders

Feeding and eating disorders are characterized by a persistent disturbance of eating or eating-related behavior that results in the altered consumption or absorption of food and that significantly impairs physical health or psychosocial functioning. Diagnostic criteria are provided for pica, rumination disorder, avoidant/restrictive food intake disorder, anorexia nervosa, bulimia nervosa, and binge-eating disorder.

The diagnostic criteria for rumination disorder, avoidant/restrictive food intake disorder, anorexia nervosa, bulimia nervosa, and binge-eating disorder result in a classification scheme that is mutually exclusive, so that during a single episode, only one of these diagnoses can be assigned. The rationale for this approach is that, despite a number of common psychological and behavioral features, the disorders differ substantially in clinical course, outcome, and treatment needs. A diagnosis of pica, however, may be assigned in the presence of any other feeding and eating disorder.

Some individuals with disorders described in this chapter report eating-related symptoms resembling those typically endorsed by individuals with substance use disorders, such as craving and patterns of compulsive use. This resemblance may reflect the involvement of the same neural systems, including those implicated in regulatory self-control and reward, in both groups of disorders. However, the relative contributions of shared and distinct factors in the development and perpetuation of eating and substance use disorders remain insufficiently understood.

Finally, obesity is not included in DSM-5 as a mental disorder. Obesity (excess body fat) results from the long-term excess of energy intake relative to energy expenditure. A range of genetic, physiological, behavioral, and environmental factors that vary across individuals contributes to the development of obesity; thus, obesity is not considered a mental disorder. However, there are robust associations between obesity and a number of mental disorders (e.g., binge-eating disorder, depressive and bipolar disorders, schizophrenia). The side effects of some psychotropic medications contribute importantly to the development of obesity, and obesity may be a risk factor for the development of some mental disorders (e.g., depressive disorders).

Pica

Diagnostic Criteria

- A. Persistent eating of nonnutritive, nonfood substances over a period of at least 1 month.
- B. The eating of nonnutritive, nonfood substances is inappropriate to the developmental level of the individual.
- C. The eating behavior is not part of a culturally supported or socially normative practice.
- D. If the eating behavior occurs in the context of another mental disorder (e.g., intellectual disability [intellectual developmental disorder], autism spectrum disorder, schizophrenia) or medical condition (including pregnancy), it is sufficiently severe to warrant additional clinical attention.

Coding note: The ICD-9-CM code for pica is **307.52** and is used for children or adults. The ICD-10-CM codes for pica are **(F98.3)** in children and **(F50.8)** in adults.

Specify if:

In remission: After full criteria for pica were previously met, the criteria have not been met for a sustained period of time.

Diagnostic Features

The essential feature of pica is the eating of one or more nonnutritive, nonfood substances on a persistent basis over a period of at least 1 month (Criterion A) that is severe enough to warrant clinical attention. Typical substances ingested tend to vary with age and availability and might include paper, soap, cloth, hair, string, wool, soil, chalk, talcum powder, paint, gum, metal, pebbles, charcoal or coal, ash, clay, starch, or ice. The term *nonfood* is included because the diagnosis of pica does not apply to ingestion of diet products that have minimal nutritional content. There is typically no aversion to food in general. The eating of nonnutritive, nonfood substances must be developmentally inappropriate (Criterion B) and not part of a culturally supported or socially normative practice (Criterion C). A minimum age of 2 years is suggested for a pica diagnosis to exclude developmentally normal mouthing of objects by infants that results in ingestion. The eating of nonnutritive, nonfood substances can be an associated feature of other mental disorders (e.g., intellectual disability [intellectual developmental disorder], autism spectrum disorder, schizophrenia). If the eating behavior occurs exclusively in the context of another mental disorder, a separate diagnosis of pica should be made only if the eating behavior is sufficiently severe to warrant additional clinical attention (Criterion D).

Associated Features Supporting Diagnosis

Although deficiencies in vitamins or minerals (e.g., zinc, iron) have been reported in some instances, often no specific biological abnormalities are found. In some cases, pica comes to clinical attention only following general medical complications (e.g., mechanical bowel problems; intestinal obstruction, such as that resulting from a bezoar; intestinal perforation; infections such as toxoplasmosis and toxocariasis as a result of ingesting feces or dirt; poisoning, such as by ingestion of lead-based paint).

Prevalence

The prevalence of pica is unclear. Among individuals with intellectual disability, the prevalence of pica appears to increase with the severity of the condition.

Development and Course

Onset of pica can occur in childhood, adolescence, or adulthood, although childhood onset is most commonly reported. Pica can occur in otherwise normally developing children, whereas in adults, it appears more likely to occur in the context of intellectual disability or other mental disorders. The eating of nonnutritive, nonfood substances may also manifest in pregnancy, when specific cravings (e.g., chalk or ice) might occur. The diagnosis of pica during pregnancy is only appropriate if such cravings lead to the ingestion of nonnutritive, nonfood substances to the extent that the eating of these substances poses potential medical risks. The course of the disorder can be protracted and can result in medical emergencies (e.g., intestinal obstruction, acute weight loss, poisoning). The disorder can potentially be fatal depending on substances ingested.

Risk and Prognostic Factors

Environmental. Neglect, lack of supervision, and developmental delay can increase the risk for this condition.

Culture-Related Diagnostic Issues

In some populations, the eating of earth or other seemingly nonnutritive substances is believed to be of spiritual, medicinal, or other social value, or may be a culturally supported or socially normative practice. Such behavior does not warrant a diagnosis of pica (Criterion C).

Gender-Related Diagnostic Issues

Pica occurs in both males and females. It can occur in females during pregnancy; however, little is known about the course of pica in the postpartum period.

Diagnostic Markers

Abdominal flat plate radiography, ultrasound, and other scanning methods may reveal obstructions related to pica. Blood tests and other laboratory tests can be used to ascertain levels of poisoning or the nature of infection.

Functional Consequences of Pica

Pica can significantly impair physical functioning, but it is rarely the sole cause of impairment in social functioning. Pica often occurs with other disorders associated with impaired social functioning.

Differential Diagnosis

Eating of nonnutritive, nonfood substances may occur during the course of other mental disorders (e.g., autism spectrum disorder, schizophrenia) and in Kleine-Levin syndrome. In any such instance, an additional diagnosis of pica should be given only if the eating behavior is sufficiently persistent and severe to warrant additional clinical attention.

Anorexia nervosa. Pica can usually be distinguished from the other feeding and eating disorders by the consumption of nonnutritive, nonfood substances. It is important to note, however, that some presentations of anorexia nervosa include ingestion of nonnutritive, nonfood substances, such as paper tissues, as a means of attempting to control appetite. In such cases, when the eating of nonnutritive, nonfood substances is primarily used as a means of weight control, anorexia nervosa should be the primary diagnosis.

Factitious disorder. Some individuals with factitious disorder may intentionally ingest foreign objects as part of the pattern of falsification of physical symptoms. In such instances, there is an element of deception that is consistent with deliberate induction of injury or disease.

Nonsuicidal self-injury and nonsuicidal self-injury behaviors in personality disorders. Some individuals may swallow potentially harmful items (e.g., pins, needles, knives) in the context of maladaptive behavior patterns associated with personality disorders or nonsuicidal self-injury.

Comorbidity

Disorders most commonly comorbid with pica are autism spectrum disorder and intellectual disability (intellectual developmental disorder), and, to a lesser degree, schizophrenia and obsessive-compulsive disorder. Pica can be associated with trichotillomania (hair-pulling disorder) and excoriation (skin-picking) disorder. In comorbid presentations, the hair or skin is typically ingested. Pica can also be associated with avoidant/restrictive food intake disorder, particularly in individuals with a strong sensory component to their presentation. When an individual is known to have pica, assessment should include consideration of the possibility of gastrointestinal complications, poisoning, infection, and nutritional deficiency.

Rumination Disorder

Diagnostic Criteria

307.53 (F98.21)

- A. Repeated regurgitation of food over a period of at least 1 month. Regurgitated food may be re-chewed, re-swallowed, or spit out.
- B. The repeated regurgitation is not attributable to an associated gastrointestinal or other medical condition (e.g., gastroesophageal reflux, pyloric stenosis).
- C. The eating disturbance does not occur exclusively during the course of anorexia nervosa, bulimia nervosa, binge-eating disorder, or avoidant/restrictive food intake disorder.
- D. If the symptoms occur in the context of another mental disorder (e.g., intellectual disability [intellectual developmental disorder] or another neurodevelopmental disorder), they are sufficiently severe to warrant additional clinical attention.

Specify if:

In remission: After full criteria for rumination disorder were previously met, the criteria have not been met for a sustained period of time.

Diagnostic Features

The essential feature of rumination disorder is the repeated regurgitation of food occurring after feeding or eating over a period of at least 1 month (Criterion A). Previously swallowed food that may be partially digested is brought up into the mouth without apparent nausea, involuntary retching, or disgust. The food may be re-chewed and then ejected from the mouth or re-swallowed. Regurgitation in rumination disorder should be frequent, occurring at least several times per week, typically daily. The behavior is not better explained by an associated gastrointestinal or other medical condition (e.g., gastroesophageal reflux, pyloric stenosis) (Criterion B) and does not occur exclusively during the course of anorexia nervosa, bulimia nervosa, binge-eating disorder, or avoidant/restrictive food intake disorder (Criterion C). If the symptoms occur in the context of another mental disorder (e.g., intellectual disability [intellectual developmental disorder], neurodevelopmental disorder), they must be sufficiently severe to warrant additional clinical attention (Criterion D) and should represent a primary aspect of the individual’s presentation requiring intervention. The disorder may be diagnosed across the life span, particularly in individuals who also have intellectual disability. Many individuals with rumination disorder can be directly observed engaging in the behavior by the clinician. In other instances diagnosis can be made on the basis of self-report or corroborative information from parents or caregivers. Individuals may describe the behavior as habitual or outside of their control.

Associated Features Supporting Diagnosis

Infants with rumination disorder display a characteristic position of straining and arching the back with the head held back, making sucking movements with their tongue. They may give the impression of gaining satisfaction from the activity. They may be irritable and hungry between episodes of regurgitation. Weight loss and failure to make expected weight gains are common features in infants with rumination disorder. Malnutrition may occur despite the infant’s apparent hunger and the ingestion of relatively large amounts of food, particularly in severe cases, when regurgitation immediately follows each feeding episode and regurgitated food is expelled. Malnutrition might also occur in older children and adults, particularly when the regurgitation is accompanied by restriction of intake. Adolescents and adults may attempt to disguise the regurgitation behavior by placing a

hand over the mouth or coughing. Some will avoid eating with others because of the acknowledged social undesirability of the behavior. This may extend to an avoidance of eating prior to social situations, such as work or school (e.g., avoiding breakfast because it may be followed by regurgitation).

Prevalence

Prevalence data for rumination disorder are inconclusive, but the disorder is commonly reported to be higher in certain groups, such as individuals with intellectual disability.

Development and Course

Onset of rumination disorder can occur in infancy, childhood, adolescence, or adulthood. The age at onset in infants is usually between ages 3 and 12 months. In infants, the disorder frequently remits spontaneously, but its course can be protracted and can result in medical emergencies (e.g., severe malnutrition). It can potentially be fatal, particularly in infancy. Rumination disorder can have an episodic course or occur continuously until treated. In infants, as well as in older individuals with intellectual disability (intellectual developmental disorder) or other neurodevelopmental disorders, the regurgitation and rumination behavior appears to have a self-soothing or self-stimulating function, similar to that of other repetitive motor behaviors such as head banging.

Risk and Prognostic Factors

Environmental. Psychosocial problems such as lack of stimulation, neglect, stressful life situations, and problems in the parent-child relationship may be predisposing factors in infants and young children.

Functional Consequences of Rumination Disorder

Malnutrition secondary to repeated regurgitation may be associated with growth delay and have a negative effect on development and learning potential. Some older individuals with rumination disorder deliberately restrict their food intake because of the social undesirability of regurgitation. They may therefore present with weight loss or low weight. In older children, adolescents, and adults, social functioning is more likely to be adversely affected.

Differential Diagnosis

Gastrointestinal conditions. It is important to differentiate regurgitation in rumination disorder from other conditions characterized by gastroesophageal reflux or vomiting. Conditions such as gastroparesis, pyloric stenosis, hiatal hernia, and Sandifer syndrome in infants should be ruled out by appropriate physical examinations and laboratory tests.

Anorexia nervosa and bulimia nervosa. Individuals with anorexia nervosa and bulimia nervosa may also engage in regurgitation with subsequent spitting out of food as a means of disposing of ingested calories because of concerns about weight gain.

Comorbidity

Regurgitation with associated rumination can occur in the context of a concurrent medical condition or another mental disorder (e.g., generalized anxiety disorder). When the regurgitation occurs in this context, a diagnosis of rumination disorder is appropriate only when the severity of the disturbance exceeds that routinely associated with such conditions or disorders and warrants additional clinical attention.

Avoidant/Restrictive Food Intake Disorder

Diagnostic Criteria

307.59 (F50.8)

- A. An eating or feeding disturbance (e.g., apparent lack of interest in eating or food; avoidance based on the sensory characteristics of food; concern about aversive consequences of eating) as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with one (or more) of the following:
 1. Significant weight loss (or failure to achieve expected weight gain or faltering growth in children).
 2. Significant nutritional deficiency.
 3. Dependence on enteral feeding or oral nutritional supplements.
 4. Marked interference with psychosocial functioning.
- B. The disturbance is not better explained by lack of available food or by an associated culturally sanctioned practice.
- C. The eating disturbance does not occur exclusively during the course of anorexia nervosa or bulimia nervosa, and there is no evidence of a disturbance in the way in which one's body weight or shape is experienced.
- D. The eating disturbance is not attributable to a concurrent medical condition or not better explained by another mental disorder. When the eating disturbance occurs in the context of another condition or disorder, the severity of the eating disturbance exceeds that routinely associated with the condition or disorder and warrants additional clinical attention.

Specify if:

In remission: After full criteria for avoidant/restrictive food intake disorder were previously met, the criteria have not been met for a sustained period of time.

Diagnostic Features

Avoidant/restrictive food intake disorder replaces and extends the DSM-IV diagnosis of feeding disorder of infancy or early childhood. The main diagnostic feature of avoidant/restrictive food intake disorder is avoidance or restriction of food intake (Criterion A) manifested by clinically significant failure to meet requirements for nutrition or insufficient energy intake through oral intake of food. One or more of the following key features must be present: significant weight loss, significant nutritional deficiency (or related health impact), dependence on enteral feeding or oral nutritional supplements, or marked interference with psychosocial functioning. The determination of whether weight loss is significant (Criterion A1) is a clinical judgment; instead of losing weight, children and adolescents who have not completed growth may not maintain weight or height increases along their developmental trajectory.

Determination of significant nutritional deficiency (Criterion A2) is also based on clinical assessment (e.g., assessment of dietary intake, physical examination, and laboratory testing), and related impact on physical health can be of a similar severity to that seen in anorexia nervosa (e.g., hypothermia, bradycardia, anemia). In severe cases, particularly in infants, malnutrition can be life threatening. "Dependence" on enteral feeding or oral nutritional supplements (Criterion A3) means that supplementary feeding is required to sustain adequate intake. Examples of individuals requiring supplementary feeding include infants with failure to thrive who require nasogastric tube feeding, children with neurodevelopmental disorders who are dependent on nutritionally complete supplements, and individuals who rely on gastrostomy tube feeding or complete oral nutrition supplements in the absence of an underlying medical condition. Inability to participate in normal social

activities, such as eating with others, or to sustain relationships as a result of the disturbance would indicate marked interference with psychosocial functioning (Criterion A4).

Avoidant/restrictive food intake disorder does not include avoidance or restriction of food intake related to lack of availability of food or to cultural practices (e.g., religious fasting or normal dieting) (Criterion B), nor does it include developmentally normal behaviors (e.g., picky eating in toddlers, reduced intake in older adults). The disturbance is not better explained by excessive concern about body weight or shape (Criterion C) or by concurrent medical factors or mental disorders (Criterion D).

In some individuals, food avoidance or restriction may be based on the sensory characteristics of qualities of food, such as extreme sensitivity to appearance, color, smell, texture, temperature, or taste. Such behavior has been described as “restrictive eating,” “selective eating,” “choosy eating,” “perseverant eating,” “chronic food refusal,” and “food neophobia” and may manifest as refusal to eat particular brands of foods or to tolerate the smell of food being eaten by others. Individuals with heightened sensory sensitivities associated with autism may show similar behaviors.

Food avoidance or restriction may also represent a conditioned negative response associated with food intake following, or in anticipation of, an aversive experience, such as choking; a traumatic investigation, usually involving the gastrointestinal tract (e.g., esophagoscopy); or repeated vomiting. The terms *functional dysphagia* and *globus hystericus* have also been used for such conditions.

Associated Features Supporting Diagnosis

Several features may be associated with food avoidance or reduced food intake, including a lack of interest in eating or food, leading to weight loss or faltering growth. Very young infants may present as being too sleepy, distressed, or agitated to feed. Infants and young children may not engage with the primary caregiver during feeding or communicate hunger in favor of other activities. In older children and adolescents, food avoidance or restriction may be associated with more generalized emotional difficulties that do not meet diagnostic criteria for an anxiety, depressive, or bipolar disorder, sometimes called “food avoidance emotional disorder.”

Development and Course

Food avoidance or restriction associated with insufficient intake or lack of interest in eating most commonly develops in infancy or early childhood and may persist in adulthood. Likewise, avoidance based on sensory characteristics of food tends to arise in the first decade of life but may persist into adulthood. Avoidance related to aversive consequences can arise at any age. The scant literature regarding long-term outcomes suggests that food avoidance or restriction based on sensory aspects is relatively stable and long-standing, but when persisting into adulthood, such avoidance/restriction can be associated with relatively normal functioning. There is currently insufficient evidence directly linking avoidant/restrictive food intake disorder and subsequent onset of an eating disorder.

Infants with avoidant/restrictive food intake disorder may be irritable and difficult to console during feeding, or may appear apathetic and withdrawn. In some instances, parent-child interaction may contribute to the infant’s feeding problem (e.g., presenting food inappropriately, or interpreting the infant’s behavior as an act of aggression or rejection). Inadequate nutritional intake may exacerbate the associated features (e.g., irritability, developmental lags) and further contribute to feeding difficulties. Associated factors include infant temperament or developmental impairments that reduce an infant’s responsiveness to feeding. Coexisting parental psychopathology, or child abuse or neglect, is suggested if feeding and weight improve in response to changing caregivers. In infants, children, and prepubertal adolescents, avoidant/restrictive food intake disorder may be associated with growth delay, and the resulting malnutrition negatively affects development and learning

potential. In older children, adolescents, and adults, social functioning tends to be adversely affected. Regardless of the age, family function may be affected, with heightened stress at mealtimes and in other feeding or eating contexts involving friends and relatives.

Avoidant/restrictive food intake disorder manifests more commonly in children than in adults, and there may be a long delay between onset and clinical presentation. Triggers for presentation vary considerably and include physical, social, and emotional difficulties.

Risk and Prognostic Factors

Temperamental. Anxiety disorders, autism spectrum disorder, obsessive-compulsive disorder, and attention-deficit/hyperactivity disorder may increase risk for avoidant or restrictive feeding or eating behavior characteristic of the disorder.

Environmental. Environmental risk factors for avoidant/restrictive food intake disorder include familial anxiety. Higher rates of feeding disturbances may occur in children of mothers with eating disorders.

Genetic and physiological. History of gastrointestinal conditions, gastroesophageal reflux disease, vomiting, and a range of other medical problems has been associated with feeding and eating behaviors characteristic of avoidant/restrictive food intake disorder.

Culture-Related Diagnostic Issues

Presentations similar to avoidant/restrictive food intake disorder occur in various populations, including in the United States, Canada, Australia, and Europe. Avoidant/restrictive food intake disorder should not be diagnosed when avoidance of food intake is solely related to specific religious or cultural practices.

Gender-Related Diagnostic Issues

Avoidant/restrictive food intake disorder is equally common in males and females in infancy and early childhood, but avoidant/restrictive food intake disorder comorbid with autism spectrum disorder has a male predominance. Food avoidance or restriction related to altered sensory sensitivities can occur in some physiological conditions, most notably pregnancy, but is not usually extreme and does not meet full criteria for the disorder.

Diagnostic Markers

Diagnostic markers include malnutrition, low weight, growth delay, and the need for artificial nutrition in the absence of any clear medical condition other than poor intake.

Functional Consequences of Avoidant/Restrictive Food Intake Disorder

Associated developmental and functional limitations include impairment of physical development and social difficulties that can have a significant negative impact on family function.

Differential Diagnosis

Appetite loss preceding restricted intake is a nonspecific symptom that can accompany a number of mental diagnoses. Avoidant/restrictive food intake disorder can be diagnosed concurrently with the disorders below if all criteria are met, and the eating disturbance requires specific clinical attention.

Other medical conditions (e.g., gastrointestinal disease, food allergies and intolerances, occult malignancies). Restriction of food intake may occur in other medical condi-

tions, especially those with ongoing symptoms such as vomiting, loss of appetite, nausea, abdominal pain, or diarrhea. A diagnosis of avoidant/restrictive food intake disorder requires that the disturbance of intake is beyond that directly accounted for by physical symptoms consistent with a medical condition; the eating disturbance may also persist after being triggered by a medical condition and following resolution of the medical condition.

Underlying medical or comorbid mental conditions may complicate feeding and eating. Because older individuals, postsurgical patients, and individuals receiving chemotherapy often lose their appetite, an additional diagnosis of avoidant/restrictive food intake disorder requires that the eating disturbance is a primary focus for intervention.

Specific neurological/neuromuscular, structural, or congenital disorders and conditions associated with feeding difficulties. Feeding difficulties are common in a number of congenital and neurological conditions often related to problems with oral/esophageal/pharyngeal structure and function, such as hypotonia of musculature, tongue protrusion, and unsafe swallowing. Avoidant/restrictive food intake disorder can be diagnosed in individuals with such presentations as long as all diagnostic criteria are met.

Reactive attachment disorder. Some degree of withdrawal is characteristic of reactive attachment disorder and can lead to a disturbance in the caregiver-child relationship that can affect feeding and the child's intake. Avoidant/restrictive food intake disorder should be diagnosed concurrently only if all criteria are met for both disorders and the feeding disturbance is a primary focus for intervention.

Autism spectrum disorder. Individuals with autism spectrum disorder often present with rigid eating behaviors and heightened sensory sensitivities. However, these features do not always result in the level of impairment that would be required for a diagnosis of avoidant/restrictive food intake disorder. Avoidant/restrictive food intake disorder should be diagnosed concurrently only if all criteria are met for both disorders and when the eating disturbance requires specific treatment.

Specific phobia, social anxiety disorder (social phobia), and other anxiety disorders. Specific phobia, other type, specifies "situations that may lead to choking or vomiting" and can represent the primary trigger for the fear, anxiety, or avoidance required for diagnosis. Distinguishing specific phobia from avoidant/restrictive food intake disorder can be difficult when a fear of choking or vomiting has resulted in food avoidance. Although avoidance or restriction of food intake secondary to a pronounced fear of choking or vomiting can be conceptualized as specific phobia, in situations when the eating problem becomes the primary focus of clinical attention, avoidant/restrictive food intake disorder becomes the appropriate diagnosis. In social anxiety disorder, the individual may present with a fear of being observed by others while eating, which can also occur in avoidant/restrictive food intake disorder.

Anorexia nervosa. Restriction of energy intake relative to requirements leading to significantly low body weight is a core feature of anorexia nervosa. However, individuals with anorexia nervosa also display a fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, as well as specific disturbances in relation to perception and experience of their own body weight and shape. These features are not present in avoidant/restrictive food intake disorder, and the two disorders should not be diagnosed concurrently. Differential diagnosis between avoidant/restrictive food intake disorder and anorexia nervosa may be difficult, especially in late childhood and early adolescence, because these disorders may share a number of common symptoms (e.g., food avoidance, low weight). Differential diagnosis is also potentially difficult in individuals with anorexia nervosa who deny any fear of fatness but nonetheless engage in persistent behaviors that prevent weight gain and who do not recognize the medical seriousness of their low weight—a presentation sometimes termed "non-fat phobic anorexia nervosa." Full consideration of symptoms, course, and family history is advised, and diagnosis may

be best made in the context of a clinical relationship over time. In some individuals, avoidant/restrictive food intake disorder might precede the onset of anorexia nervosa.

Obsessive-compulsive disorder. Individuals with obsessive-compulsive disorder may present with avoidance or restriction of intake in relation to preoccupations with food or ritualized eating behavior. Avoidant/restrictive food intake disorder should be diagnosed concurrently only if all criteria are met for both disorders and when the aberrant eating is a major aspect of the clinical presentation requiring specific intervention.

Major depressive disorder. In major depressive disorder, appetite might be affected to such an extent that individuals present with significantly restricted food intake, usually in relation to overall energy intake and often associated with weight loss. Usually appetite loss and related reduction of intake abate with resolution of mood problems. Avoidant/restrictive food intake disorder should only be used concurrently if full criteria are met for both disorders and when the eating disturbance requires specific treatment.

Schizophrenia spectrum disorders. Individuals with schizophrenia, delusional disorder, or other psychotic disorders may exhibit odd eating behaviors, avoidance of specific foods because of delusional beliefs, or other manifestations of avoidant or restrictive intake. In some cases, delusional beliefs may contribute to a concern about negative consequences of ingesting certain foods. Avoidant/restrictive food intake disorder should be used concurrently only if all criteria are met for both disorders and when the eating disturbance requires specific treatment.

Factitious disorder or factitious disorder imposed on another. Avoidant/restrictive food intake disorder should be differentiated from factitious disorder or factitious disorder imposed on another. In order to assume the sick role, some individuals with factitious disorder may intentionally describe diets that are much more restrictive than those they are actually able to consume, as well as complications of such behavior, such as a need for enteral feedings or nutritional supplements, an inability to tolerate a normal range of foods, and/or an inability to participate normally in age-appropriate situations involving food. The presentation may be impressively dramatic and engaging, and the symptoms reported inconsistently. In factitious disorder imposed on another, the caregiver describes symptoms consistent with avoidant/restrictive food intake disorder and may induce physical symptoms such as failure to gain weight. As with any diagnosis of factitious disorder imposed on another, the caregiver receives the diagnosis rather than the affected individual, and diagnosis should be made only on the basis of a careful, comprehensive assessment of the affected individual, the caregiver, and their interaction.

Comorbidity

The most commonly observed disorders comorbid with avoidant/restrictive food intake disorder are anxiety disorders, obsessive-compulsive disorder, and neurodevelopmental disorders (specifically autism spectrum disorder, attention-deficit/hyperactivity disorder, and intellectual disability [intellectual developmental disorder]).

Anorexia Nervosa

Diagnostic Criteria

- A. Restriction of energy intake relative to requirements, leading to a significantly low body weight in the context of age, sex, developmental trajectory, and physical health. *Significantly low weight* is defined as a weight that is less than minimally normal or, for children and adolescents, less than that minimally expected.
- B. Intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain, even though at a significantly low weight.

- C. Disturbance in the way in which one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight.

Coding note: The ICD-9-CM code for anorexia nervosa is **307.1**, which is assigned regardless of the subtype. The ICD-10-CM code depends on the subtype (see below).

Specify whether:

(F50.01) Restricting type: During the last 3 months, the individual has not engaged in recurrent episodes of binge eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas). This subtype describes presentations in which weight loss is accomplished primarily through dieting, fasting, and/or excessive exercise.

(F50.02) Binge-eating/purging type: During the last 3 months, the individual has engaged in recurrent episodes of binge eating or purging behavior (i.e., self-induced vomiting or the misuse of laxatives, diuretics, or enemas).

Specify if:

In partial remission: After full criteria for anorexia nervosa were previously met, Criterion A (low body weight) has not been met for a sustained period, but either Criterion B (intense fear of gaining weight or becoming fat or behavior that interferes with weight gain) or Criterion C (disturbances in self-perception of weight and shape) is still met.

In full remission: After full criteria for anorexia nervosa were previously met, none of the criteria have been met for a sustained period of time.

Specify current severity:

The minimum level of severity is based, for adults, on current body mass index (BMI) (see below) or, for children and adolescents, on BMI percentile. The ranges below are derived from World Health Organization categories for thinness in adults; for children and adolescents, corresponding BMI percentiles should be used. The level of severity may be increased to reflect clinical symptoms, the degree of functional disability, and the need for supervision.

Mild: BMI ≥ 17 kg/m²

Moderate: BMI 16–16.99 kg/m²

Severe: BMI 15–15.99 kg/m²

Extreme: BMI < 15 kg/m²

Subtypes

Most individuals with the binge-eating/purging type of anorexia nervosa who binge eat also purge through self-induced vomiting or the misuse of laxatives, diuretics, or enemas. Some individuals with this subtype of anorexia nervosa do not binge eat but do regularly purge after the consumption of small amounts of food.

Crossover between the subtypes over the course of the disorder is not uncommon; therefore, subtype description should be used to describe current symptoms rather than longitudinal course.

Diagnostic Features

There are three essential features of anorexia nervosa: persistent energy intake restriction; intense fear of gaining weight or of becoming fat, or persistent behavior that interferes with weight gain; and a disturbance in self-perceived weight or shape. The individual maintains a body weight that is below a minimally normal level for age, sex, developmental trajectory, and physical health (Criterion A). Individuals' body weights frequently meet this criterion following a significant weight loss, but among children and adolescents, there may alternatively be failure to make expected weight gain or to maintain a normal developmental trajectory (i.e., while growing in height) instead of weight loss.

Criterion A requires that the individual's weight be significantly low (i.e., less than minimally normal or, for children and adolescents, less than that minimally expected). Weight assessment can be challenging because normal weight range differs among individuals, and different thresholds have been published defining thinness or underweight status. Body mass index (BMI; calculated as weight in kilograms/height in meters²) is a useful measure to assess body weight for height. For adults, a BMI of 18.5 kg/m² has been employed by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) as the lower limit of normal body weight. Therefore, most adults with a BMI greater than or equal to 18.5 kg/m² would not be considered to have a significantly low body weight. On the other hand, a BMI of lower than 17.0 kg/m² has been considered by the WHO to indicate moderate or severe thinness; therefore, an individual with a BMI less than 17.0 kg/m² would likely be considered to have a significantly low weight. An adult with a BMI between 17.0 and 18.5 kg/m², or even above 18.5 kg/m², might be considered to have a significantly low weight if clinical history or other physiological information supports this judgment.

For children and adolescents, determining a BMI-for-age percentile is useful (see, e.g., the CDC BMI percentile calculator for children and teenagers. As for adults, it is not possible to provide definitive standards for judging whether a child's or an adolescent's weight is significantly low, and variations in developmental trajectories among youth limit the utility of simple numerical guidelines. The CDC has used a BMI-for-age below the 5th percentile as suggesting underweight; however, children and adolescents with a BMI above this benchmark may be judged to be significantly underweight in light of failure to maintain their expected growth trajectory. In summary, in determining whether Criterion A is met, the clinician should consider available numerical guidelines, as well as the individual's body build, weight history, and any physiological disturbances.

Individuals with this disorder typically display an intense fear of gaining weight or of becoming fat (Criterion B). This intense fear of becoming fat is usually not alleviated by weight loss. In fact, concern about weight gain may increase even as weight falls. Younger individuals with anorexia nervosa, as well as some adults, may not recognize or acknowledge a fear of weight gain. In the absence of another explanation for the significantly low weight, clinician inference drawn from collateral history, observational data, physical and laboratory findings, or longitudinal course either indicating a fear of weight gain or supporting persistent behaviors that prevent it may be used to establish Criterion B.

The experience and significance of body weight and shape are distorted in these individuals (Criterion C). Some individuals feel globally overweight. Others realize that they are thin but are still concerned that certain body parts, particularly the abdomen, buttocks, and thighs, are "too fat." They may employ a variety of techniques to evaluate their body size or weight, including frequent weighing, obsessive measuring of body parts, and persistent use of a mirror to check for perceived areas of "fat." The self-esteem of individuals with anorexia nervosa is highly dependent on their perceptions of body shape and weight. Weight loss is often viewed as an impressive achievement and a sign of extraordinary self-discipline, whereas weight gain is perceived as an unacceptable failure of self-control. Although some individuals with this disorder may acknowledge being thin, they often do not recognize the serious medical implications of their malnourished state.

Often, the individual is brought to professional attention by family members after marked weight loss (or failure to make expected weight gains) has occurred. If individuals seek help on their own, it is usually because of distress over the somatic and psychological sequelae of starvation. It is rare for an individual with anorexia nervosa to complain of weight loss per se. In fact, individuals with anorexia nervosa frequently either lack insight into or deny the problem. It is therefore often important to obtain information from family members or other sources to evaluate the history of weight loss and other features of the illness.

Associated Features Supporting Diagnosis

The semi-starvation of anorexia nervosa, and the purging behaviors sometimes associated with it, can result in significant and potentially life-threatening medical conditions. The nutritional compromise associated with this disorder affects most major organ systems and can produce a variety of disturbances. Physiological disturbances, including amenorrhea and vital sign abnormalities, are common. While most of the physiological disturbances associated with malnutrition are reversible with nutritional rehabilitation, some, including loss of bone mineral density, are often not completely reversible. Behaviors such as self-induced vomiting and misuse of laxatives, diuretics, and enemas may cause a number of disturbances that lead to abnormal laboratory findings; however, some individuals with anorexia nervosa exhibit no laboratory abnormalities.

When seriously underweight, many individuals with anorexia nervosa have depressive signs and symptoms such as depressed mood, social withdrawal, irritability, insomnia, and diminished interest in sex. Because these features are also observed in individuals without anorexia nervosa who are significantly undernourished, many of the depressive features may be secondary to the physiological sequelae of semi-starvation, although they may also be sufficiently severe to warrant an additional diagnosis of major depressive disorder.

Obsessive-compulsive features, both related and unrelated to food, are often prominent. Most individuals with anorexia nervosa are preoccupied with thoughts of food. Some collect recipes or hoard food. Observations of behaviors associated with other forms of starvation suggest that obsessions and compulsions related to food may be exacerbated by undernutrition. When individuals with anorexia nervosa exhibit obsessions and compulsions that are not related to food, body shape, or weight, an additional diagnosis of obsessive-compulsive disorder (OCD) may be warranted.

Other features sometimes associated with anorexia nervosa include concerns about eating in public, feelings of ineffectiveness, a strong desire to control one's environment, inflexible thinking, limited social spontaneity, and overly restrained emotional expression. Compared with individuals with anorexia nervosa, restricting type, those with binge-eating/purging type have higher rates of impulsivity and are more likely to abuse alcohol and other drugs.

A subgroup of individuals with anorexia nervosa show excessive levels of physical activity. Increases in physical activity often precede onset of the disorder, and over the course of the disorder increased activity accelerates weight loss. During treatment, excessive activity may be difficult to control, thereby jeopardizing weight recovery.

Individuals with anorexia nervosa may misuse medications, such as by manipulating dosage, in order to achieve weight loss or avoid weight gain. Individuals with diabetes mellitus may omit or reduce insulin doses in order to minimize carbohydrate metabolism.

Prevalence

The 12-month prevalence of anorexia nervosa among young females is approximately 0.4%. Less is known about prevalence among males, but anorexia nervosa is far less common in males than in females, with clinical populations generally reflecting approximately a 10:1 female-to-male ratio.

Development and Course

Anorexia nervosa commonly begins during adolescence or young adulthood. It rarely begins before puberty or after age 40, but cases of both early and late onset have been described. The onset of this disorder is often associated with a stressful life event, such as leaving home for college. The course and outcome of anorexia nervosa are highly variable. Younger individuals may manifest atypical features, including denying "fear of fat." Older

individuals more likely have a longer duration of illness, and their clinical presentation may include more signs and symptoms of long-standing disorder. Clinicians should not exclude anorexia nervosa from the differential diagnosis solely on the basis of older age.

Many individuals have a period of changed eating behavior prior to full criteria for the disorder being met. Some individuals with anorexia nervosa recover fully after a single episode, with some exhibiting a fluctuating pattern of weight gain followed by relapse, and others experiencing a chronic course over many years. Hospitalization may be required to restore weight and to address medical complications. Most individuals with anorexia nervosa experience remission within 5 years of presentation. Among individuals admitted to hospitals, overall remission rates may be lower. The crude mortality rate (CMR) for anorexia nervosa is approximately 5% per decade. Death most commonly results from medical complications associated with the disorder itself or from suicide.

Risk and Prognostic Factors

Temperamental. Individuals who develop anxiety disorders or display obsessional traits in childhood are at increased risk of developing anorexia nervosa.

Environmental. Historical and cross-cultural variability in the prevalence of anorexia nervosa supports its association with cultures and settings in which thinness is valued. Occupations and avocations that encourage thinness, such as modeling and elite athletics, are also associated with increased risk.

Genetic and physiological. There is an increased risk of anorexia nervosa and bulimia nervosa among first-degree biological relatives of individuals with the disorder. An increased risk of bipolar and depressive disorders has also been found among first-degree relatives of individuals with anorexia nervosa, particularly relatives of individuals with the binge-eating/purging type. Concordance rates for anorexia nervosa in monozygotic twins are significantly higher than those for dizygotic twins. A range of brain abnormalities has been described in anorexia nervosa using functional imaging technologies (functional magnetic resonance imaging, positron emission tomography). The degree to which these findings reflect changes associated with malnutrition versus primary abnormalities associated with the disorder is unclear.

Culture-Related Diagnostic Issues

Anorexia nervosa occurs across culturally and socially diverse populations, although available evidence suggests cross-cultural variation in its occurrence and presentation. Anorexia nervosa is probably most prevalent in post-industrialized, high-income countries such as in the United States, many European countries, Australia, New Zealand, and Japan, but its incidence in most low- and middle-income countries is uncertain. Whereas the prevalence of anorexia nervosa appears comparatively low among Latinos, African Americans, and Asians in the United States, clinicians should be aware that mental health service utilization among individuals with an eating disorder is significantly lower in these ethnic groups and that the low rates may reflect an ascertainment bias. The presentation of weight concerns among individuals with eating and feeding disorders varies substantially across cultural contexts. The absence of an expressed intense fear of weight gain, sometimes referred to as “fat phobia,” appears to be relatively more common in populations in Asia, where the rationale for dietary restriction is commonly related to a more culturally sanctioned complaint such as gastrointestinal discomfort. Within the United States, presentations without a stated intense fear of weight gain may be comparatively more common among Latino groups.

Diagnostic Markers

The following laboratory abnormalities may be observed in anorexia nervosa; their presence may serve to increase diagnostic confidence.

Hematology. Leukopenia is common, with the loss of all cell types but usually with apparent lymphocytosis. Mild anemia can occur, as well as thrombocytopenia and, rarely, bleeding problems.

Serum chemistry. Dehydration may be reflected by an elevated blood urea nitrogen level. Hypercholesterolemia is common. Hepatic enzyme levels may be elevated. Hypomagnesemia, hypozincemia, hypophosphatemia, and hyperamylasemia are occasionally observed. Self-induced vomiting may lead to metabolic alkalosis (elevated serum bicarbonate), hypochloremia, and hypokalemia; laxative abuse may cause a mild metabolic acidosis.

Endocrine. Serum thyroxine (T_4) levels are usually in the low-normal range; triiodothyronine (T_3) levels are decreased, while reverse T_3 levels are elevated. Females have low serum estrogen levels, whereas males have low levels of serum testosterone.

Electrocardiography. Sinus bradycardia is common, and, rarely, arrhythmias are noted. Significant prolongation of the QTc interval is observed in some individuals.

Bone mass. Low bone mineral density, with specific areas of osteopenia or osteoporosis, is often seen. The risk of fracture is significantly elevated.

Electroencephalography. Diffuse abnormalities, reflecting a metabolic encephalopathy, may result from significant fluid and electrolyte disturbances.

Resting energy expenditure. There is often a significant reduction in resting energy expenditure.

Physical signs and symptoms. Many of the physical signs and symptoms of anorexia nervosa are attributable to starvation. Amenorrhea is commonly present and appears to be an indicator of physiological dysfunction. If present, amenorrhea is usually a consequence of the weight loss, but in a minority of individuals it may actually precede the weight loss. In prepubertal females, menarche may be delayed. In addition to amenorrhea, there may be complaints of constipation, abdominal pain, cold intolerance, lethargy, and excess energy.

The most remarkable finding on physical examination is emaciation. Commonly, there is also significant hypotension, hypothermia, and bradycardia. Some individuals develop lanugo, a fine downy body hair. Some develop peripheral edema, especially during weight restoration or upon cessation of laxative and diuretic abuse. Rarely, petechiae or ecchymoses, usually on the extremities, may indicate a bleeding diathesis. Some individuals evidence a yellowing of the skin associated with hypercarotenemia. As may be seen in individuals with bulimia nervosa, individuals with anorexia nervosa who self-induce vomiting may have hypertrophy of the salivary glands, particularly the parotid glands, as well as dental enamel erosion. Some individuals may have scars or calluses on the dorsal surface of the hand from repeated contact with the teeth while inducing vomiting.

Suicide Risk

Suicide risk is elevated in anorexia nervosa, with rates reported as 12 per 100,000 per year. Comprehensive evaluation of individuals with anorexia nervosa should include assessment of suicide-related ideation and behaviors as well as other risk factors for suicide, including a history of suicide attempt(s).

Functional Consequences of Anorexia Nervosa

Individuals with anorexia nervosa may exhibit a range of functional limitations associated with the disorder. While some individuals remain active in social and professional functioning, others demonstrate significant social isolation and/or failure to fulfill academic or career potential.

Differential Diagnosis

Other possible causes of either significantly low body weight or significant weight loss should be considered in the differential diagnosis of anorexia nervosa, especially when the presenting features are atypical (e.g., onset after age 40 years).

Medical conditions (e.g., gastrointestinal disease, hyperthyroidism, occult malignancies, and acquired immunodeficiency syndrome [AIDS]). Serious weight loss may occur in medical conditions, but individuals with these disorders usually do not also manifest a disturbance in the way their body weight or shape is experienced or an intense fear of weight gain or persist in behaviors that interfere with appropriate weight gain. Acute weight loss associated with a medical condition can occasionally be followed by the onset or recurrence of anorexia nervosa, which can initially be masked by the comorbid medical condition. Rarely, anorexia nervosa develops after bariatric surgery for obesity.

Major depressive disorder. In major depressive disorder, severe weight loss may occur, but most individuals with major depressive disorder do not have either a desire for excessive weight loss or an intense fear of gaining weight.

Schizophrenia. Individuals with schizophrenia may exhibit odd eating behavior and occasionally experience significant weight loss, but they rarely show the fear of gaining weight and the body image disturbance required for a diagnosis of anorexia nervosa.

Substance use disorders. Individuals with substance use disorders may experience low weight due to poor nutritional intake but generally do not fear gaining weight and do not manifest body image disturbance. Individuals who abuse substances that reduce appetite (e.g., cocaine, stimulants) and who also endorse fear of weight gain should be carefully evaluated for the possibility of comorbid anorexia nervosa, given that the substance use may represent a persistent behavior that interferes with weight gain (Criterion B).

Social anxiety disorder (social phobia), obsessive-compulsive disorder, and body dysmorphic disorder. Some of the features of anorexia nervosa overlap with the criteria for social phobia, OCD, and body dysmorphic disorder. Specifically, individuals may feel humiliated or embarrassed to be seen eating in public, as in social phobia; may exhibit obsessions and compulsions related to food, as in OCD; or may be preoccupied with an imagined defect in bodily appearance, as in body dysmorphic disorder. If the individual with anorexia nervosa has social fears that are limited to eating behavior alone, the diagnosis of social phobia should not be made, but social fears unrelated to eating behavior (e.g., excessive fear of speaking in public) may warrant an additional diagnosis of social phobia. Similarly, an additional diagnosis of OCD should be considered only if the individual exhibits obsessions and compulsions unrelated to food (e.g., an excessive fear of contamination), and an additional diagnosis of body dysmorphic disorder should be considered only if the distortion is unrelated to body shape and size (e.g., preoccupation that one's nose is too big).

Bulimia nervosa. Individuals with bulimia nervosa exhibit recurrent episodes of binge eating, engage in inappropriate behavior to avoid weight gain (e.g., self-induced vomiting), and are overly concerned with body shape and weight. However, unlike individuals with anorexia nervosa, binge-eating/purging type, individuals with bulimia nervosa maintain body weight at or above a minimally normal level.

Avoidant/restrictive food intake disorder. Individuals with this disorder may exhibit significant weight loss or significant nutritional deficiency, but they do not have a fear of gaining weight or of becoming fat, nor do they have a disturbance in the way they experience their body shape and weight.

Comorbidity

Bipolar, depressive, and anxiety disorders commonly co-occur with anorexia nervosa. Many individuals with anorexia nervosa report the presence of either an anxiety disorder

or symptoms prior to onset of their eating disorder. OCD is described in some individuals with anorexia nervosa, especially those with the restricting type. Alcohol use disorder and other substance use disorders may also be comorbid with anorexia nervosa, especially among those with the binge-eating/purging type.

Bulimia Nervosa

Diagnostic Criteria	307.51 (F50.2)
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- A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
 - 1. Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than what most individuals would eat in a similar period of time under similar circumstances.
 - 2. A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- B. Recurrent inappropriate compensatory behaviors in order to prevent weight gain, such as self-induced vomiting; misuse of laxatives, diuretics, or other medications; fasting; or excessive exercise.
- C. The binge eating and inappropriate compensatory behaviors both occur, on average, at least once a week for 3 months.
- D. Self-evaluation is unduly influenced by body shape and weight.
- E. The disturbance does not occur exclusively during episodes of anorexia nervosa.

Specify if:

- In partial remission:** After full criteria for bulimia nervosa were previously met, some, but not all, of the criteria have been met for a sustained period of time.
- In full remission:** After full criteria for bulimia nervosa were previously met, none of the criteria have been met for a sustained period of time.

Specify current severity:

The minimum level of severity is based on the frequency of inappropriate compensatory behaviors (see below). The level of severity may be increased to reflect other symptoms and the degree of functional disability.

- Mild:** An average of 1–3 episodes of inappropriate compensatory behaviors per week.
- Moderate:** An average of 4–7 episodes of inappropriate compensatory behaviors per week.
- Severe:** An average of 8–13 episodes of inappropriate compensatory behaviors per week.
- Extreme:** An average of 14 or more episodes of inappropriate compensatory behaviors per week.

Diagnostic Features

There are three essential features of bulimia nervosa: recurrent episodes of binge eating (Criterion A), recurrent inappropriate compensatory behaviors to prevent weight gain (Criterion B), and self-evaluation that is unduly influenced by body shape and weight (Criterion D). To qualify for the diagnosis, the binge eating and inappropriate compensatory behaviors must occur, on average, at least once per week for 3 months (Criterion C). An “episode of binge eating” is defined as eating, in a discrete period of time, an amount of food that is definitely larger than most individuals would eat in a similar period of time under similar circumstances (Criterion A1). The context in which the eating occurs

may affect the clinician's estimation of whether the intake is excessive. For example, a quantity of food that might be regarded as excessive for a typical meal might be considered normal during a celebration or holiday meal. A "discrete period of time" refers to a limited period, usually less than 2 hours. A single episode of binge eating need not be restricted to one setting. For example, an individual may begin a binge in a restaurant and then continue to eat on returning home. Continual snacking on small amounts of food throughout the day would not be considered an eating binge.

An occurrence of excessive food consumption must be accompanied by a sense of lack of control (Criterion A2) to be considered an episode of binge eating. An indicator of loss of control is the inability to refrain from eating or to stop eating once started. Some individuals describe a dissociative quality during, or following, the binge-eating episodes. The impairment in control associated with binge eating may not be absolute; for example, an individual may continue binge eating while the telephone is ringing but will cease if a roommate or spouse unexpectedly enters the room. Some individuals report that their binge-eating episodes are no longer characterized by an acute feeling of loss of control but rather by a more generalized pattern of uncontrolled eating. If individuals report that they have abandoned efforts to control their eating, loss of control should be considered as present. Binge eating can also be planned in some instances.

The type of food consumed during binges varies both across individuals and for a given individual. Binge eating appears to be characterized more by an abnormality in the amount of food consumed than by a craving for a specific nutrient. However, during binges, individuals tend to eat foods they would otherwise avoid.

Individuals with bulimia nervosa are typically ashamed of their eating problems and attempt to conceal their symptoms. Binge eating usually occurs in secrecy or as inconspicuously as possible. The binge eating often continues until the individual is uncomfortably, or even painfully, full. The most common antecedent of binge eating is negative affect. Other triggers include interpersonal stressors; dietary restraint; negative feelings related to body weight, body shape, and food; and boredom. Binge eating may minimize or mitigate factors that precipitated the episode in the short-term, but negative self-evaluation and dysphoria often are the delayed consequences.

Another essential feature of bulimia nervosa is the recurrent use of inappropriate compensatory behaviors to prevent weight gain, collectively referred to as *purge behaviors* or *purging* (Criterion B). Many individuals with bulimia nervosa employ several methods to compensate for binge eating. Vomiting is the most common inappropriate compensatory behavior. The immediate effects of vomiting include relief from physical discomfort and reduction of fear of gaining weight. In some cases, vomiting becomes a goal in itself, and the individual will binge eat in order to vomit or will vomit after eating a small amount of food. Individuals with bulimia nervosa may use a variety of methods to induce vomiting, including the use of fingers or instruments to stimulate the gag reflex. Individuals generally become adept at inducing vomiting and are eventually able to vomit at will. Rarely, individuals consume syrup of ipecac to induce vomiting. Other purging behaviors include the misuse of laxatives and diuretics. A number of other compensatory methods may also be used in rare cases. Individuals with bulimia nervosa may misuse enemas following episodes of binge eating, but this is seldom the sole compensatory method employed. Individuals with this disorder may take thyroid hormone in an attempt to avoid weight gain. Individuals with diabetes mellitus and bulimia nervosa may omit or reduce insulin doses in order to reduce the metabolism of food consumed during eating binges. Individuals with bulimia nervosa may fast for a day or more or exercise excessively in an attempt to prevent weight gain. Exercise may be considered excessive when it significantly interferes with important activities, when it occurs at inappropriate times or in inappropriate settings, or when the individual continues to exercise despite injury or other medical complications.

Individuals with bulimia nervosa place an excessive emphasis on body shape or weight in their self-evaluation, and these factors are typically extremely important in determining

self-esteem (Criterion D). Individuals with this disorder may closely resemble those with anorexia nervosa in their fear of gaining weight, in their desire to lose weight, and in the level of dissatisfaction with their bodies. However, a diagnosis of bulimia nervosa should not be given when the disturbance occurs only during episodes of anorexia nervosa (Criterion E).

Associated Features Supporting Diagnosis

Individuals with bulimia nervosa typically are within the normal weight or overweight range (body mass index [BMI] ≥ 18.5 and < 30 in adults). The disorder occurs but is uncommon among obese individuals. Between eating binges, individuals with bulimia nervosa typically restrict their total caloric consumption and preferentially select low-calorie (“diet”) foods while avoiding foods that they perceive to be fattening or likely to trigger a binge.

Menstrual irregularity or amenorrhea often occurs among females with bulimia nervosa; it is uncertain whether such disturbances are related to weight fluctuations, to nutritional deficiencies, or to emotional distress. The fluid and electrolyte disturbances resulting from the purging behavior are sometimes sufficiently severe to constitute medically serious problems. Rare but potentially fatal complications include esophageal tears, gastric rupture, and cardiac arrhythmias. Serious cardiac and skeletal myopathies have been reported among individuals following repeated use of syrup of ipecac to induce vomiting. Individuals who chronically abuse laxatives may become dependent on their use to stimulate bowel movements. Gastrointestinal symptoms are commonly associated with bulimia nervosa, and rectal prolapse has also been reported among individuals with this disorder.

Prevalence

Twelve-month prevalence of bulimia nervosa among young females is 1%–1.5%. Point prevalence is highest among young adults since the disorder peaks in older adolescence and young adulthood. Less is known about the point prevalence of bulimia nervosa in males, but bulimia nervosa is far less common in males than it is in females, with an approximately 10:1 female-to-male ratio.

Development and Course

Bulimia nervosa commonly begins in adolescence or young adulthood. Onset before puberty or after age 40 is uncommon. The binge eating frequently begins during or after an episode of dieting to lose weight. Experiencing multiple stressful life events also can precipitate onset of bulimia nervosa.

Disturbed eating behavior persists for at least several years in a high percentage of clinic samples. The course may be chronic or intermittent, with periods of remission alternating with recurrences of binge eating. However, over longer-term follow-up, the symptoms of many individuals appear to diminish with or without treatment, although treatment clearly impacts outcome. Periods of remission longer than 1 year are associated with better long-term outcome.

Significantly elevated risk for mortality (all-cause and suicide) has been reported for individuals with bulimia nervosa. The CMR (crude mortality rate) for bulimia nervosa is nearly 2% per decade.

Diagnostic cross-over from initial bulimia nervosa to anorexia nervosa occurs in a minority of cases (10%–15%). Individuals who do experience cross-over to anorexia nervosa commonly will revert back to bulimia nervosa or have multiple occurrences of cross-overs between these disorders. A subset of individuals with bulimia nervosa continue to binge eat but no longer engage in inappropriate compensatory behaviors, and therefore their

symptoms meet criteria for binge-eating disorder or other specified eating disorder. Diagnosis should be based on the current (i.e., past 3 months) clinical presentation.

Risk and Prognostic Factors

Temperamental. Weight concerns, low self-esteem, depressive symptoms, social anxiety disorder, and overanxious disorder of childhood are associated with increased risk for the development of bulimia nervosa.

Environmental. Internalization of a thin body ideal has been found to increase risk for developing weight concerns, which in turn increase risk for the development of bulimia nervosa. Individuals who experienced childhood sexual or physical abuse are at increased risk for developing bulimia nervosa.

Genetic and physiological. Childhood obesity and early pubertal maturation increase risk for bulimia nervosa. Familial transmission of bulimia nervosa may be present, as well as genetic vulnerabilities for the disorder.

Course modifiers. Severity of psychiatric comorbidity predicts worse long-term outcome of bulimia nervosa.

Culture-Related Diagnostic Issues

Bulimia nervosa has been reported to occur with roughly similar frequencies in most industrialized countries, including the United States, Canada, many European countries, Australia, Japan, New Zealand, and South Africa. In clinical studies of bulimia nervosa in the United States, individuals presenting with this disorder are primarily white. However, the disorder also occurs in other ethnic groups and with prevalence comparable to estimated prevalences observed in white samples.

Gender-Related Diagnostic Issues

Bulimia nervosa is far more common in females than in males. Males are especially underrepresented in treatment-seeking samples, for reasons that have not yet been systematically examined.

Diagnostic Markers

No specific diagnostic test for bulimia nervosa currently exists. However, several laboratory abnormalities may occur as a consequence of purging and may increase diagnostic certainty. These include fluid and electrolyte abnormalities, such as hypokalemia (which can provoke cardiac arrhythmias), hypochloremia, and hyponatremia. The loss of gastric acid through vomiting may produce a metabolic alkalosis (elevated serum bicarbonate), and the frequent induction of diarrhea or dehydration through laxative and diuretic abuse can cause metabolic acidosis. Some individuals with bulimia nervosa exhibit mildly elevated levels of serum amylase, probably reflecting an increase in the salivary isoenzyme.

Physical examination usually yields no physical findings. However, inspection of the mouth may reveal significant and permanent loss of dental enamel, especially from lingual surfaces of the front teeth due to recurrent vomiting. These teeth may become chipped and appear ragged and “moth-eaten.” There may also be an increased frequency of dental caries. In some individuals, the salivary glands, particularly the parotid glands, may become notably enlarged. Individuals who induce vomiting by manually stimulating the gag reflex may develop calluses or scars on the dorsal surface of the hand from repeated contact with the teeth. Serious cardiac and skeletal myopathies have been reported among individuals following repeated use of syrup of ipecac to induce vomiting.

Suicide Risk

Suicide risk is elevated in bulimia nervosa. Comprehensive evaluation of individuals with this disorder should include assessment of suicide-related ideation and behaviors as well as other risk factors for suicide, including a history of suicide attempts.

Functional Consequences of Bulimia Nervosa

Individuals with bulimia nervosa may exhibit a range of functional limitations associated with the disorder. A minority of individuals report severe role impairment, with the social-life domain most likely to be adversely affected by bulimia nervosa.

Differential Diagnosis

Anorexia nervosa, binge-eating/purging type. Individuals whose binge-eating behavior occurs only during episodes of anorexia nervosa are given the diagnosis anorexia nervosa, binge-eating/purging type, and should not be given the additional diagnosis of bulimia nervosa. For individuals with an initial diagnosis of anorexia nervosa who binge and purge but whose presentation no longer meets the full criteria for anorexia nervosa, binge-eating/purging type (e.g., when weight is normal), a diagnosis of bulimia nervosa should be given only when all criteria for bulimia nervosa have been met for at least 3 months.

Binge-eating disorder. Some individuals binge eat but do not engage in regular inappropriate compensatory behaviors. In these cases, the diagnosis of binge-eating disorder should be considered.

Kleine-Levin syndrome. In certain neurological or other medical conditions, such as Kleine-Levin syndrome, there is disturbed eating behavior, but the characteristic psychological features of bulimia nervosa, such as overconcern with body shape and weight, are not present.

Major depressive disorder, with atypical features. Overeating is common in major depressive disorder, with atypical features, but individuals with this disorder do not engage in inappropriate compensatory behaviors and do not exhibit the excessive concern with body shape and weight characteristic of bulimia nervosa. If criteria for both disorders are met, both diagnoses should be given.

Borderline personality disorder. Binge-eating behavior is included in the impulsive behavior criterion that is part of the definition of borderline personality disorder. If the criteria for both borderline personality disorder and bulimia nervosa are met, both diagnoses should be given.

Comorbidity

Comorbidity with mental disorders is common in individuals with bulimia nervosa, with most experiencing at least one other mental disorder and many experiencing multiple comorbidities. Comorbidity is not limited to any particular subset but rather occurs across a wide range of mental disorders. There is an increased frequency of depressive symptoms (e.g., low self-esteem) and bipolar and depressive disorders (particularly depressive disorders) in individuals with bulimia nervosa. In many individuals, the mood disturbance begins at the same time as or following the development of bulimia nervosa, and individuals often ascribe their mood disturbances to the bulimia nervosa. However, in some individuals, the mood disturbance clearly precedes the development of bulimia nervosa. There may also be an increased frequency of anxiety symptoms (e.g., fear of social situations) or anxiety disorders. These mood and anxiety disturbances frequently remit follow-

ing effective treatment of the bulimia nervosa. The lifetime prevalence of substance use, particularly alcohol or stimulant use, is at least 30% among individuals with bulimia nervosa. Stimulant use often begins in an attempt to control appetite and weight. A substantial percentage of individuals with bulimia nervosa also have personality features that meet criteria for one or more personality disorders, most frequently borderline personality disorder.

Binge-Eating Disorder

Diagnostic Criteria

307.51 (F50.8)

- A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
 - 1. Eating, in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than what most people would eat in a similar period of time under similar circumstances.
 - 2. A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- B. The binge-eating episodes are associated with three (or more) of the following:
 - 1. Eating much more rapidly than normal.
 - 2. Eating until feeling uncomfortably full.
 - 3. Eating large amounts of food when not feeling physically hungry.
 - 4. Eating alone because of feeling embarrassed by how much one is eating.
 - 5. Feeling disgusted with oneself, depressed, or very guilty afterward.
- C. Marked distress regarding binge eating is present.
- D. The binge eating occurs, on average, at least once a week for 3 months.
- E. The binge eating is not associated with the recurrent use of inappropriate compensatory behavior as in bulimia nervosa and does not occur exclusively during the course of bulimia nervosa or anorexia nervosa.

Specify if:

In partial remission: After full criteria for binge-eating disorder were previously met, binge eating occurs at an average frequency of less than one episode per week for a sustained period of time.

In full remission: After full criteria for binge-eating disorder were previously met, none of the criteria have been met for a sustained period of time.

Specify current severity:

The minimum level of severity is based on the frequency of episodes of binge eating (see below). The level of severity may be increased to reflect other symptoms and the degree of functional disability.

Mild: 1–3 binge-eating episodes per week.

Moderate: 4–7 binge-eating episodes per week.

Severe: 8–13 binge-eating episodes per week.

Extreme: 14 or more binge-eating episodes per week.

Diagnostic Features

The essential feature of binge-eating disorder is recurrent episodes of binge eating that must occur, on average, at least once per week for 3 months (Criterion D). An “episode of binge eating” is defined as eating, in a discrete period of time, an amount of food that is defi-

nately larger than most people would eat in a similar period of time under similar circumstances (Criterion A1). The context in which the eating occurs may affect the clinician's estimation of whether the intake is excessive. For example, a quantity of food that might be regarded as excessive for a typical meal might be considered normal during a celebration or holiday meal. A "discrete period of time" refers to a limited period, usually less than 2 hours. A single episode of binge eating need not be restricted to one setting. For example, an individual may begin a binge in a restaurant and then continue to eat on returning home. Continual snacking on small amounts of food throughout the day would not be considered an eating binge.

An occurrence of excessive food consumption must be accompanied by a sense of lack of control (Criterion A2) to be considered an episode of binge eating. An indicator of loss of control is the inability to refrain from eating or to stop eating once started. Some individuals describe a dissociative quality during, or following, the binge-eating episodes. The impairment in control associated with binge eating may not be absolute; for example, an individual may continue binge eating while the telephone is ringing but will cease if a roommate or spouse unexpectedly enters the room. Some individuals report that their binge-eating episodes are no longer characterized by an acute feeling of loss of control but rather by a more generalized pattern of uncontrolled eating. If individuals report that they have abandoned efforts to control their eating, loss of control may still be considered as present. Binge eating can also be planned in some instances.

The type of food consumed during binges varies both across individuals and for a given individual. Binge eating appears to be characterized more by an abnormality in the amount of food consumed than by a craving for a specific nutrient.

Binge eating must be characterized by marked distress (Criterion C) and at least three of the following features: eating much more rapidly than normal; eating until feeling uncomfortably full; eating large amounts of food when not feeling physically hungry; eating alone because of feeling embarrassed by how much one is eating; and feeling disgusted with oneself, depressed, or very guilty afterward (Criterion B).

Individuals with binge-eating disorder are typically ashamed of their eating problems and attempt to conceal their symptoms. Binge eating usually occurs in secrecy or as inconspicuously as possible. The most common antecedent of binge eating is negative affect. Other triggers include interpersonal stressors; dietary restraint; negative feelings related to body weight, body shape, and food; and boredom. Binge eating may minimize or mitigate factors that precipitated the episode in the short-term, but negative self-evaluation and dysphoria often are the delayed consequences.

Associated Features Supporting Diagnosis

Binge-eating disorder occurs in normal-weight/overweight and obese individuals. It is reliably associated with overweight and obesity in treatment-seeking individuals. Nevertheless, binge-eating disorder is distinct from obesity. Most obese individuals do not engage in recurrent binge eating. In addition, compared with weight-matched obese individuals without binge-eating disorder, those with the disorder consume more calories in laboratory studies of eating behavior and have greater functional impairment, lower quality of life, more subjective distress, and greater psychiatric comorbidity.

Prevalence

Twelve-month prevalence of binge-eating disorder among U.S. adult (age 18 or older) females and males is 1.6% and 0.8%, respectively. The gender ratio is far less skewed in binge-eating disorder than in bulimia nervosa. Binge-eating disorder is as prevalent among females from racial or ethnic minority groups as has been reported for white females. The disorder is more prevalent among individuals seeking weight-loss treatment than in the general population.

Development and Course

Little is known about the development of binge-eating disorder. Both binge eating and loss-of-control eating without objectively excessive consumption occur in children and are associated with increased body fat, weight gain, and increases in psychological symptoms. Binge eating is common in adolescent and college-age samples. Loss-of-control eating or episodic binge eating may represent a prodromal phase of eating disorders for some individuals.

Dieting follows the development of binge eating in many individuals with binge-eating disorder. (This is in contrast to bulimia nervosa, in which dysfunctional dieting usually precedes the onset of binge eating.) Binge-eating disorder typically begins in adolescence or young adulthood but can begin in later adulthood. Individuals with binge-eating disorder who seek treatment usually are older than individuals with either bulimia nervosa or anorexia nervosa who seek treatment.

Remission rates in both natural course and treatment outcome studies are higher for binge-eating disorder than for bulimia nervosa or anorexia nervosa. Binge-eating disorder appears to be relatively persistent, and the course is comparable to that of bulimia nervosa in terms of severity and duration. Crossover from binge-eating disorder to other eating disorders is uncommon.

Risk and Prognostic Factors

Genetic and physiological. Binge-eating disorder appears to run in families, which may reflect additive genetic influences.

Culture-Related Diagnostic Issues

Binge-eating disorder occurs with roughly similar frequencies in most industrialized countries, including the United States, Canada, many European countries, Australia, and New Zealand. In the United States, the prevalence of binge-eating disorder appears comparable among non-Latino whites, Latinos, Asians, and African Americans.

Functional Consequences of Binge-Eating Disorder

Binge-eating disorder is associated with a range of functional consequences, including social role adjustment problems, impaired health-related quality of life and life satisfaction, increased medical morbidity and mortality, and associated increased health care utilization compared with body mass index (BMI)-matched control subjects. It may also be associated with an increased risk for weight gain and the development of obesity.

Differential Diagnosis

Bulimia nervosa. Binge-eating disorder has recurrent binge eating in common with bulimia nervosa but differs from the latter disorder in some fundamental respects. In terms of clinical presentation, the recurrent inappropriate compensatory behavior (e.g., purging, driven exercise) seen in bulimia nervosa is absent in binge-eating disorder. Unlike individuals with bulimia nervosa, individuals with binge-eating disorder typically do not show marked or sustained dietary restriction designed to influence body weight and shape between binge-eating episodes. They may, however, report frequent attempts at dieting. Binge-eating disorder also differs from bulimia nervosa in terms of response to treatment. Rates of improvement are consistently higher among individuals with binge-eating disorder than among those with bulimia nervosa.

Obesity. Binge-eating disorder is associated with overweight and obesity but has several key features that are distinct from obesity. First, levels of overvaluation of body

weight and shape are higher in obese individuals with the disorder than in those without the disorder. Second, rates of psychiatric comorbidity are significantly higher among obese individuals with the disorder compared with those without the disorder. Third, the long-term successful outcome of evidence-based psychological treatments for binge-eating disorder can be contrasted with the absence of effective long-term treatments for obesity.

Bipolar and depressive disorders. Increases in appetite and weight gain are included in the criteria for major depressive episode and in the atypical features specifiers for depressive and bipolar disorders. Increased eating in the context of a major depressive episode may or may not be associated with loss of control. If the full criteria for both disorders are met, both diagnoses can be given. Binge eating and other symptoms of disordered eating are seen in association with bipolar disorder. If the full criteria for both disorders are met, both diagnoses should be given.

Borderline personality disorder. Binge eating is included in the impulsive behavior criterion that is part of the definition of borderline personality disorder. If the full criteria for both disorders are met, both diagnoses should be given.

Comorbidity

Binge-eating disorder is associated with significant psychiatric comorbidity that is comparable to that of bulimia nervosa and anorexia nervosa. The most common comorbid disorders are bipolar disorders, depressive disorders, anxiety disorders, and, to a lesser degree, substance use disorders. The psychiatric comorbidity is linked to the severity of binge eating and not to the degree of obesity.

Other Specified Feeding or Eating Disorder

307.59 (F50.8)

This category applies to presentations in which symptoms characteristic of a feeding and eating disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the feeding and eating disorders diagnostic class. The other specified feeding or eating disorder category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for any specific feeding and eating disorder. This is done by recording “other specified feeding or eating disorder” followed by the specific reason (e.g., “bulimia nervosa of low frequency”).

Examples of presentations that can be specified using the “other specified” designation include the following:

1. **Atypical anorexia nervosa:** All of the criteria for anorexia nervosa are met, except that despite significant weight loss, the individual’s weight is within or above the normal range.
2. **Bulimia nervosa (of low frequency and/or limited duration):** All of the criteria for bulimia nervosa are met, except that the binge eating and inappropriate compensatory behaviors occur, on average, less than once a week and/or for less than 3 months.
3. **Binge-eating disorder (of low frequency and/or limited duration):** All of the criteria for binge-eating disorder are met, except that the binge eating occurs, on average, less than once a week and/or for less than 3 months.
4. **Purging disorder:** Recurrent purging behavior to influence weight or shape (e.g., self-induced vomiting; misuse of laxatives, diuretics, or other medications) in the absence of binge eating.

5. **Night eating syndrome:** Recurrent episodes of night eating, as manifested by eating after awakening from sleep or by excessive food consumption after the evening meal. There is awareness and recall of the eating. The night eating is not better explained by external influences such as changes in the individual's sleep-wake cycle or by local social norms. The night eating causes significant distress and/or impairment in functioning. The disordered pattern of eating is not better explained by binge-eating disorder or another mental disorder, including substance use, and is not attributable to another medical disorder or to an effect of medication.
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Unspecified Feeding or Eating Disorder

307.50 (F50.9)

This category applies to presentations in which symptoms characteristic of a feeding and eating disorder that cause clinically significant distress or impairment in social, occupational, or other important areas of functioning predominate but do not meet the full criteria for any of the disorders in the feeding and eating disorders diagnostic class. The unspecified feeding or eating disorder category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for a specific feeding and eating disorder, and includes presentations in which there is insufficient information to make a more specific diagnosis (e.g., in emergency room settings).

Elimination Disorders

Elimination disorders all involve the inappropriate elimination of urine or feces and are usually first diagnosed in childhood or adolescence. This group of disorders includes *enuresis*, the repeated voiding of urine into inappropriate places, and *encopresis*, the repeated passage of feces into inappropriate places. Subtypes are provided to differentiate nocturnal from diurnal (i.e., during waking hours) voiding for enuresis and the presence or absence of constipation and overflow incontinence for encopresis. Although there are minimum age requirements for diagnosis of both disorders, these are based on developmental age and not solely on chronological age. Both disorders may be voluntary or involuntary. Although these disorders typically occur separately, co-occurrence may also be observed.

Enuresis

Diagnostic Criteria	307.6 (F98.0)
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- A. Repeated voiding of urine into bed or clothes, whether involuntary or intentional.
- B. The behavior is clinically significant as manifested by either a frequency of at least twice a week for at least 3 consecutive months or the presence of clinically significant distress or impairment in social, academic (occupational), or other important areas of functioning.
- C. Chronological age is at least 5 years (or equivalent developmental level).
- D. The behavior is not attributable to the physiological effects of a substance (e.g., a diuretic, an antipsychotic medication) or another medical condition (e.g., diabetes, spina bifida, a seizure disorder).

Specify whether:

- Nocturnal only:** Passage of urine only during nighttime sleep.
- Diurnal only:** Passage of urine during waking hours.
- Nocturnal and diurnal:** A combination of the two subtypes above.

Subtypes

The nocturnal-only subtype of enuresis, sometimes referred to as *monosymptomatic enuresis*, is the most common subtype and involves incontinence only during nighttime sleep, typically during the first one-third of the night. The diurnal-only subtype occurs in the absence of nocturnal enuresis and may be referred to simply as *urinary incontinence*. Individuals with this subtype can be divided into two groups. Individuals with “urge incontinence” have sudden urge symptoms and detrusor instability, whereas individuals with “voiding postponement” consciously defer micturition urges until incontinence results. The nocturnal-and-diurnal subtype is also known as *nonmonosymptomatic enuresis*.

Diagnostic Features

The essential feature of enuresis is repeated voiding of urine during the day or at night into bed or clothes (Criterion A). Most often the voiding is involuntary, but occasionally it may