

Differential Diagnosis

Another medical condition. In many instances, women with genito-pelvic pain/penetration disorder will also be diagnosed with another medical condition (e.g., lichen sclerosus, endometriosis, pelvic inflammatory disease, vulvovaginal atrophy). In some cases, treating the medical condition may alleviate the genito-pelvic pain/penetration disorder. Much of the time, this is not the case. There are no reliable tools or diagnostic methods to allow clinicians to know whether the medical condition or genito-pelvic pain/penetration disorder is primary. Often, the associated medical conditions are difficult to diagnose and treat. For example, the increased incidence of postmenopausal pain during intercourse may sometimes be attributable to vaginal dryness or vulvovaginal atrophy associated with declining estrogen levels. The relationship, however, between vulvovaginal atrophy/dryness, estrogen, and pain is not well understood.

Somatic symptom and related disorders. Some women with genito-pelvic pain/penetration disorder may also be diagnosable with somatic symptom disorder. Since both genito-pelvic pain/penetration disorder and the somatic symptom and related disorders are new diagnoses, it is not yet clear whether they can be reliably differentiated. Some women diagnosed with genito-pelvic pain/penetration disorder will also be diagnosed with a specific phobia.

Inadequate sexual stimuli. It is important that the clinician, in considering differential diagnoses, assess the adequacy of sexual stimuli within the woman's sexual experience. Sexual situations in which there is inadequate foreplay or arousal may lead to difficulties in penetration, pain, or avoidance. Erectile dysfunction or premature ejaculation in the male partner may result in difficulties with penetration. These conditions should be carefully assessed. In some situations, a diagnosis of genito-pelvic pain/penetration disorder may not be appropriate.

Comorbidity

Comorbidity between genito-pelvic pain/penetration disorder and other sexual difficulties appears to be common. Comorbidity with relationship distress is also common. This is not surprising, since in Western cultures the inability to have (pain-free) intercourse with a desired partner and the avoidance of sexual opportunities may be either a contributing factor to or the result of other sexual or relationship problems. Because pelvic floor symptoms are implicated in the diagnosis of genito-pelvic pain/penetration disorder, there is likely to be a higher prevalence of other disorders related to the pelvic floor or reproductive organs (e.g., interstitial cystitis, constipation, vaginal infection, endometriosis, irritable bowel syndrome).

Male Hypoactive Sexual Desire Disorder

Diagnostic Criteria

302.71 (F52.0)

- A. Persistently or recurrently deficient (or absent) sexual/erotic thoughts or fantasies and desire for sexual activity. The judgment of deficiency is made by the clinician, taking into account factors that affect sexual functioning, such as age and general and socio-cultural contexts of the individual's life.
- B. The symptoms in Criterion A have persisted for a minimum duration of approximately 6 months.
- C. The symptoms in Criterion A cause clinically significant distress in the individual.
- D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress or other significant stressors and is not attributable to the effects of a substance/medication or another medical condition.

Specify whether:

Lifelong: The disturbance has been present since the individual became sexually active.

Acquired: The disturbance began after a period of relatively normal sexual function.

Specify whether:

Generalized: Not limited to certain types of stimulation, situations, or partners.

Situational: Only occurs with certain types of stimulation, situations, or partners.

Specify current severity:

Mild: Evidence of mild distress over the symptoms in Criterion A.

Moderate: Evidence of moderate distress over the symptoms in Criterion A.

Severe: Evidence of severe or extreme distress over the symptoms in Criterion A.

Diagnostic Features

When an assessment for male hypoactive sexual desire disorder is being made, interpersonal context must be taken into account. A “desire discrepancy,” in which a man has lower desire for sexual activity than his partner, is not sufficient to diagnose male hypoactive sexual desire disorder. Both low/absent desire for sex and deficient/absent sexual thoughts or fantasies are required for a diagnosis of the disorder. There may be variation across men in how sexual desire is expressed.

The lack of desire for sex and deficient/absent erotic thoughts or fantasies must be persistent or recurrent and must occur for a minimum duration of approximately 6 months. The inclusion of this duration criterion is meant to safeguard against making a diagnosis in cases in which a man’s low sexual desire may represent an adaptive response to adverse life conditions (e.g., concern about a partner’s pregnancy when the man is considering terminating the relationship). The introduction of “approximately” in Criterion B allows for clinician judgment in cases in which symptom duration does not meet the recommended 6-month threshold.

Associated Features Supporting Diagnosis

Male hypoactive sexual desire disorder is sometimes associated with erectile and/or ejaculatory concerns. For example, persistent difficulties obtaining an erection may lead a man to lose interest in sexual activity. Men with hypoactive sexual desire disorder often report that they no longer initiate sexual activity and that they are minimally receptive to a partner’s attempt to initiate. Sexual activities (e.g., masturbation or partnered sexual activity) may sometimes occur even in the presence of low sexual desire. Relationship-specific preferences regarding patterns of sexual initiation must be taken into account when making a diagnosis of male hypoactive sexual desire disorder. Although men are more likely to initiate sexual activity, and thus low desire may be characterized by a pattern of non-initiation, many men may prefer to have their partner initiate sexual activity. In such situations, the man’s lack of receptivity to a partner’s initiation should be considered when evaluating low desire.

In addition to the subtypes “lifelong/acquired” and “generalized/situational,” the following five factors must be considered during assessment and diagnosis of male hypoactive sexual desire disorder given that they may be relevant to etiology and/or treatment: 1) partner factors (e.g., partner’s sexual problems, partner’s health status); 2) relationship factors (e.g., poor communication, discrepancies in desire for sexual activity); 3) individual vulnerability factors (e.g., poor body image, history of sexual or emotional abuse), psychiatric comorbidity (e.g., depression, anxiety), or stressors (e.g., job loss, bereavement); 4) cultural/religious factors (e.g., inhibitions related to prohibitions against sexual activity; attitudes toward sexuality); and 5) medical factors relevant to prognosis, course, or treat-

ment. Each of these factors may contribute differently to the presenting symptoms of different men with this disorder.

Prevalence

The prevalence of male hypoactive sexual desire disorder varies depending on country of origin and method of assessment. Approximately 6% of younger men (ages 18–24 years) and 41% of older men (ages 66–74 years) have problems with sexual desire. However, a persistent lack of interest in sex, lasting 6 months or more, affects only a small proportion of men ages 16–44 (1.8%).

Development and Course

By definition, lifelong male hypoactive sexual desire disorder indicates that low or no sexual desire has always been present, whereas the acquired subtype would be assigned if the man's low desire developed after a period of normal sexual desire. There is a requirement that low desire persist for approximately 6 months or more; thus, short-term changes in sexual desire should not be diagnosed as male hypoactive sexual desire disorder.

There is a normative age-related decline in sexual desire. Like women, men identify a variety of triggers for their sexual desire, and they describe a wide range of reasons that they choose to engage in sexual activity. Although erotic visual cues may be more potent elicitors of desire in younger men, the potency of sexual cues may decrease with age and must be considered when evaluating men for hypoactive sexual desire disorder.

Risk and Prognostic Factors

Temperamental. Mood and anxiety symptoms appear to be strong predictors of low desire in men. Up to half of men with a past history of psychiatric symptoms may have moderate or severe loss of desire, compared with only 15% of those without such a history. A man's feelings about himself, his perception of his partner's sexual desire toward him, feelings of being emotionally connected, and contextual variables may all negatively (as well as positively) affect sexual desire.

Environmental. Alcohol use may increase the occurrence of low desire. Among gay men, self-directed homophobia, interpersonal problems, attitudes, lack of adequate sex education, and trauma resulting from early life experiences must be taken into account in explaining the low desire. Social and cultural contextual factors should also be considered.

Genetic and physiological. Endocrine disorders such as hyperprolactinemia significantly affect sexual desire in men. Age is a significant risk factor for low desire in men. It is unclear whether or not men with low desire also have abnormally low levels of testosterone; however, among hypogonadal men, low desire is common. There also may be a critical threshold below which testosterone will affect sexual desire in men and above which there is little effect of testosterone on men's desire.

Culture-Related Diagnostic Issues

There is marked variability in prevalence rates of low desire across cultures, ranging from 12.5% in Northern European men to 28% in Southeast Asian men ages 40–80 years. Just as there are higher rates of low desire among East Asian subgroups of women, men of East Asian ancestry also have higher rates of low desire. Guilt about sex may mediate this association between East Asian ethnicity and sexual desire in men.

Gender-Related Diagnostic Issues

In contrast to the classification of sexual disorders in women, desire and arousal disorders have been retained as separate constructs in men. Despite some similarities in the experi-

ence of desire across men and women, and the fact that desire fluctuates over time and is dependent on contextual factors, men do report a significantly higher intensity and frequency of sexual desire compared with women.

Differential Diagnosis

Nonsexual mental disorders. Nonsexual mental disorders, such as major depressive disorder, which is characterized by “markedly diminished interest or pleasure in all, or almost all, activities,” may explain the lack of sexual desire. If the lack of desire is better explained by another mental disorder, then a diagnosis of male hypoactive sexual desire disorder would not be made.

Substance/medication use. Substance/medication use may explain the lack of sexual desire.

Another medical condition. If the low /absent desire and deficient/absent erotic thoughts or fantasies are better explained by the effects of another medical condition (e.g., hypogonadism, diabetes mellitus, thyroid dysfunction, central nervous system disease), then a diagnosis of male hypoactive sexual desire disorder would not be made.

Interpersonal factors. If interpersonal or significant contextual factors, such as severe relationship distress or other significant stressors, are associated with the loss of desire in the man, then a diagnosis of male hypoactive sexual desire disorder would not be made.

Other sexual dysfunctions. The presence of another sexual dysfunction does not rule out a diagnosis of male hypoactive sexual desire disorder; there is some evidence that up to one-half of men with low sexual desire also have erectile difficulties, and slightly fewer may also have early ejaculation difficulties. If the man’s low desire is explained by self-identification as an asexual, then a diagnosis of male hypoactive sexual desire disorder is not made.

Comorbidity

Depression and other mental disorders, as well as endocrinological factors, are often comorbid with male hypoactive sexual desire disorder.

Premature (Early) Ejaculation

Diagnostic Criteria	302.75 (F52.4)
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- A. A persistent or recurrent pattern of ejaculation occurring during partnered sexual activity within approximately 1 minute following vaginal penetration and before the individual wishes it.
Note: Although the diagnosis of premature (early) ejaculation may be applied to individuals engaged in nonvaginal sexual activities, specific duration criteria have not been established for these activities.
- B. The symptom in Criterion A must have been present for at least 6 months and must be experienced on almost all or all (approximately 75%–100%) occasions of sexual activity (in identified situational contexts or, if generalized, in all contexts).
- C. The symptom in Criterion A causes clinically significant distress in the individual.
- D. The sexual dysfunction is not better explained by a nonsexual mental disorder or as a consequence of severe relationship distress or other significant stressors and is not attributable to the effects of a substance/medication or another medical condition.

Specify whether:

- Lifelong:** The disturbance has been present since the individual became sexually active.
- Acquired:** The disturbance began after a period of relatively normal sexual function.

Specify whether:

Generalized: Not limited to certain types of stimulation, situations, or partners.

Situational: Only occurs with certain types of stimulation, situations, or partners.

Specify current severity:

Mild: Ejaculation occurring within approximately 30 seconds to 1 minute of vaginal penetration.

Moderate: Ejaculation occurring within approximately 15–30 seconds of vaginal penetration.

Severe: Ejaculation occurring prior to sexual activity, at the start of sexual activity, or within approximately 15 seconds of vaginal penetration.

Diagnostic Features

Premature (early) ejaculation is manifested by ejaculation that occurs prior to or shortly after vaginal penetration, operationalized by an individual's estimate of ejaculatory latency (i.e., elapsed time before ejaculation) after vaginal penetration. Estimated and measured intravaginal ejaculatory latencies are highly correlated as long as the ejaculatory latency is of short duration; therefore, self-reported estimates of ejaculatory latency are sufficient for diagnostic purposes. A 60-second intravaginal ejaculatory latency time is an appropriate cutoff for the diagnosis of lifelong premature (early) ejaculation in heterosexual men. There are insufficient data to determine if this duration criterion can be applied to acquired premature (early) ejaculation. The durational definition may apply to males of varying sexual orientations, since ejaculatory latencies appear to be similar across men of different sexual orientations and across different sexual activities.

Associated Features Supporting Diagnosis

Many males with premature (early) ejaculation complain of a sense of lack of control over ejaculation and report apprehension about their anticipated inability to delay ejaculation on future sexual encounters.

The following factors may be relevant in the evaluation of any sexual dysfunction: 1) partner factors (e.g., partner's sexual problems, partner's health status); 2) relationship factors (e.g., poor communication, discrepancies in desire for sexual activity); 3) individual vulnerability factors (e.g., poor body image, history of sexual or emotional abuse), psychiatric comorbidity (e.g., depression, anxiety), and stressors (e.g., job loss, bereavement); 4) cultural/religious factors (e.g., inhibitions related to prohibitions against sexual activity; attitudes toward sexuality); and 5) medical factors relevant to prognosis, course, or treatment.

Prevalence

Estimates of the prevalence of premature (early) ejaculation vary widely depending on the definition utilized. Internationally, more than 20%–30% of men ages 18–70 years report concern about how rapidly they ejaculate. With the new definition of premature (early) ejaculation (i.e., ejaculation occurring within approximately 1 minute of vaginal penetration), only 1%–3% of men would be diagnosed with the disorder. Prevalence of premature (early) ejaculation may increase with age.

Development and Course

By definition, lifelong premature (early) ejaculation starts during a male's initial sexual experiences and persists thereafter. Some men may experience premature (early) ejaculation during their initial sexual encounters but gain ejaculatory control over time. It is the persistence of ejaculatory problems for longer than 6 months that determines the diagnosis of premature (early) ejaculation. In contrast, some men develop the disorder after a period of

having a normal ejaculatory latency, known as *acquired premature (early) ejaculation*. There is far less known about acquired premature (early) ejaculation than about lifelong premature (early) ejaculation. The acquired form likely has a later onset, usually appearing during or after the fourth decade of life. Lifelong is relatively stable throughout life. Little is known about the course of acquired premature (early) ejaculation. Reversal of medical conditions such as hyperthyroidism and prostatitis appears to restore ejaculatory latencies to baseline values. Lifelong premature (early) ejaculation begins with early sexual experiences and persists throughout an individual's life. In approximately 20% of men with premature (early) ejaculation, ejaculatory latencies decrease further with age. Age and relationship length have been found to be negatively associated with prevalence of premature (early) ejaculation.

Risk and Prognostic Factors

Temperamental. Premature (early) ejaculation may be more common in men with anxiety disorders, especially social anxiety disorder (social phobia).

Genetic and physiological. There is a moderate genetic contribution to lifelong premature (early) ejaculation. Premature (early) ejaculation may be associated with dopamine transporter gene polymorphism or serotonin transporter gene polymorphism. Thyroid disease, prostatitis, and drug withdrawal are associated with acquired premature (early) ejaculation. Positron emission tomography measures of regional cerebral blood flow during ejaculation have shown primary activation in the mesocephalic transition zone, including the ventral tegmental area.

Culture-Related Diagnostic Issues

Perception of what constitutes a normal ejaculatory latency is different in many cultures. Measured ejaculatory latencies may differ in some countries. Such differences may be explained by cultural or religious factors as well as genetic differences between populations.

Gender-Related Diagnostic Issues

Premature (early) ejaculation is a sexual disorder in males. Males and their sexual partners may differ in their perception of what constitutes an acceptable ejaculatory latency. There may be increasing concerns in females about early ejaculation in their sexual partners, which may be a reflection of changing societal attitudes concerning female sexual activity.

Diagnostic Markers

Ejaculatory latency is usually monitored in research settings by the sexual partner utilizing a timing device (e.g., stopwatch), though this is not ideal in real-life sexual situations. For vaginal intercourse, the time between intravaginal penetration and ejaculation is measured.

Functional Consequences of Premature (Early) Ejaculation

A pattern of premature (early) ejaculation may be associated with decreased self-esteem, a sense of lack of control, and adverse consequences for partner relationships. It may also cause personal distress in the sexual partner and decreased sexual satisfaction in the sexual partner. Ejaculation prior to penetration may be associated with difficulties in conception.

Differential Diagnosis

Substance/medication-induced sexual dysfunction. When problems with premature ejaculation are due exclusively to substance use, intoxication, or withdrawal, substance/medication-induced sexual dysfunction should be diagnosed.

Ejaculatory concerns that do not meet diagnostic criteria. It is necessary to identify males with normal ejaculatory latencies who desire longer ejaculatory latencies and males who have episodic premature (early) ejaculation (e.g., during the first sexual encounter with a new partner when a short ejaculatory latency may be common or normative). Neither of these situations would lead to a diagnosis of premature (early) ejaculation, even though these situations may be distressing to some males.

Comorbidity

Premature (early) ejaculation may be associated with erectile problems. In many cases, it may be difficult to determine which difficulty preceded the other. Lifelong premature (early) ejaculation may be associated with certain anxiety disorders. Acquired premature (early) ejaculation may be associated with prostatitis, thyroid disease, or drug withdrawal (e.g., during opioid withdrawal).

Substance/Medication-Induced Sexual Dysfunction

Diagnostic Criteria

- A. A clinically significant disturbance in sexual function is predominant 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 a sexual dysfunction that is not substance/medication-induced. Such evidence of an independent sexual dysfunction 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 sexual dysfunction (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 in the individual.

Note: This diagnosis should be made instead of 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 sexual dysfunctions 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 sexual dysfunction, the 4th position character is “1,” and the clinician should record “mild [substance] use disorder” before the substance-induced sexual dysfunction (e.g., “mild cocaine use disorder with cocaine-induced sexual dysfunction”). If a moderate or severe substance use disorder is comorbid with the substance-induced sexual dysfunction, 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 sexual dysfunction.

		ICD-10-CM		
	ICD-9-CM	With use disorder, mild	With use disorder, moderate or severe	Without use disorder
Alcohol	291.89	F10.181	F10.281	F10.981
Opioid	292.89	F11.181	F11.281	F11.981
Sedative, hypnotic, or anxiolytic	292.89	F13.181	F13.281	F13.981
Amphetamine (or other stimulant)	292.89	F15.181	F15.281	F15.981
Cocaine	292.89	F14.181	F14.281	F14.981
Other (or unknown) substance	292.89	F19.181	F19.281	F19.981

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.

Specify current severity:

- Mild:** Occurs on 25%–50% of occasions of sexual activity.
- Moderate:** Occurs on 50%–75% of occasions of sexual activity.
- Severe:** Occurs on 75% or more of occasions of sexual activity.

Recording Procedures

ICD-9-CM. The name of the substance/medication-induced sexual dysfunction begins with the specific substance (e.g., alcohol, fluoxetine) that is presumed to be causing the sexual dysfunction. 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 (e.g., fluoxetine), 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), followed by the severity specifier (e.g., mild, moderate, severe). 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 erectile dysfunction occurring during intoxication in a man with a severe alcohol use disorder, the diagnosis is 291.89 alcohol-induced sexual dysfunction, with onset during intoxication, moderate. An additional diagnosis of 303.90 severe alcohol use disorder is also given. When more than one substance is judged to play a sig-

nificant role in the development of the sexual dysfunction, each should be listed separately (e.g., 292.89 cocaine-induced sexual dysfunction with onset during intoxication, moderate; 292.89 fluoxetine-induced sexual dysfunction, with onset after medication use).

ICD-10-CM. The name of the substance/medication-induced sexual dysfunction begins with the specific substance (e.g., alcohol, fluoxetine) that is presumed to be causing the sexual dysfunction. 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 (e.g., fluoxetine), 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.

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 sexual dysfunction, followed by the specification of onset (i.e., onset during intoxication, onset during withdrawal, with onset after medication use), followed by the severity specifier (e.g., mild, moderate, severe). For example, in the case of erectile dysfunction occurring during intoxication in a man with a severe alcohol use disorder, the diagnosis is F10.281 moderate alcohol use disorder with alcohol-induced sexual dysfunction, with onset during intoxication, moderate. A separate diagnosis of the comorbid severe alcohol use disorder is not given. If the substance-induced sexual dysfunction 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., F15.981 amphetamine-induced sexual dysfunction, with onset during intoxication). When more than one substance is judged to play a significant role in the development of the sexual dysfunction, each should be listed separately (e.g., F14.181 mild cocaine use disorder with cocaine-induced sexual dysfunction, with onset during intoxication, moderate; F19.981 fluoxetine-induced sexual dysfunction, with onset after medication use, moderate).

Diagnostic Features

The major feature is a disturbance in sexual function that has a temporal relationship with substance/medication initiation, dose increase, or substance/medication discontinuation.

Associated Features Supporting Diagnosis

Sexual dysfunctions can occur in association with intoxication with the following classes of substances: alcohol; opioids; sedatives, hypnotics, or anxiolytics; stimulants (including cocaine); and other (or unknown) substances. Sexual dysfunctions can occur in association with withdrawal from the following classes of substances: alcohol; opioids; sedatives, hypnotics, or anxiolytics; and other (or unknown) substances. Medications that can induce sexual dysfunctions include antidepressants, antipsychotics, and hormonal contraceptives.

The most commonly reported side effect of antidepressant drugs is difficulty with orgasm or ejaculation. Problems with desire and erection are less frequent. Approximately 30% of sexual complaints are clinically significant. Certain agents, such as bupropion and mirtazapine, appear not to be associated with sexual side effects.

The sexual problems associated with antipsychotic drugs, including problems with sexual desire, erection, lubrication, ejaculation, or orgasm, have occurred with typical as well as atypical agents. However, problems are less common with prolactin-sparing antipsychotics than with agents that cause significant prolactin elevation.

Although the effects of mood stabilizers on sexual function are unclear, it is possible that lithium and anticonvulsants, with the possible exception of lamotrigine, have adverse effects on sexual desire. Problems with orgasm may occur with gabapentin. Similarly, there may be a higher prevalence of erectile and orgasmic problems associated with benzodiazepines. There have not been such reports with buspirone.

Many nonpsychiatric medications, such as cardiovascular, cytotoxic, gastrointestinal, and hormonal agents, are associated with disturbances in sexual function. Illicit substance use is associated with decreased sexual desire, erectile dysfunction, and difficulty reaching orgasm. Sexual dysfunctions are also seen in individuals receiving methadone but are seldom reported by patients receiving buprenorphine. Chronic alcohol abuse and chronic nicotine abuse are associated with erectile problems.

Prevalence

The prevalence and the incidence of substance/medication-induced sexual dysfunction are unclear, likely because of underreporting of treatment-emergent sexual side effects. Data on substance/medication-induced sexual dysfunction typically concern the effects of antidepressant drugs. The prevalence of antidepressant-induced sexual dysfunction varies in part depending on the specific agent. Approximately 25%–80% of individuals taking monoamine oxidase inhibitors, tricyclic antidepressants, serotonergic antidepressants, and combined serotonergic-adrenergic antidepressants report sexual side effects. There are differences in the incidence of sexual side effects between some serotonergic and combined adrenergic-serotonergic antidepressants, although it is unclear if these differences are clinically significant.

Approximately 50% of individuals taking antipsychotic medications will experience adverse sexual side effects, including problems with sexual desire, erection, lubrication, ejaculation, or orgasm. The incidence of these side effects among different antipsychotic agents is unclear.

Exact prevalence and incidence of sexual dysfunctions among users of nonpsychiatric medications such as cardiovascular, cytotoxic, gastrointestinal, and hormonal agents are unknown. Elevated rates of sexual dysfunction have been reported with methadone or high-dose opioid drugs for pain. There are increased rates of decreased sexual desire, erectile dysfunction, and difficulty reaching orgasm associated with illicit substance use. The prevalence of sexual problems appears related to chronic drug abuse and appears higher in individuals who abuse heroin (approximately 60%–70%) than in individuals who abuse amphetamines or 3,4-methylenedioxymethamphetamine (i.e., MDMA, ecstasy). Elevated rates of sexual dysfunction are also seen in individuals receiving methadone but are seldom reported by patients receiving buprenorphine. Chronic alcohol abuse and chronic nicotine abuse are related to higher rates of erectile problems.

Development and Course

The onset of antidepressant-induced sexual dysfunction may be as early as 8 days after the agent is first taken. Approximately 30% of individuals with mild to moderate orgasm delay will experience spontaneous remission of the dysfunction within 6 months. In some cases, serotonin reuptake inhibitor-induced sexual dysfunction may persist after the agent is discontinued. The time to onset of sexual dysfunction after initiation of antipsychotic drugs or drugs of abuse is unknown. It is probable that the adverse effects of nicotine and alcohol may not appear until after years of use. Premature (early) ejaculation can sometimes occur after cessation of opioid use. There is some evidence that disturbances in sexual function related to substance/medication use increase with age.

Culture-Related Diagnostic Issues

There may be an interaction among cultural factors, the influence of medications on sexual functioning, and the response of the individual to those changes.

Gender-Related Diagnostic Issues

Some gender differences in sexual side effects may exist.

Functional Consequences of Substance/Medication-Induced Sexual Dysfunction

Medication-induced sexual dysfunction may result in medication noncompliance.

Differential Diagnosis

Non-substance/medication-induced sexual dysfunctions. Many mental conditions, such as depressive, bipolar, anxiety, and psychotic disorders, are associated with disturbances of sexual function. Thus, differentiating a substance/medication-induced sexual dysfunction from a manifestation of the underlying mental disorder can be quite difficult. The diagnosis is usually established if a close relationship between substance/medication initiation or discontinuation is observed. A clear diagnosis can be established if the problem occurs after substance/medication initiation, dissipates with substance/medication discontinuation, and recurs with introduction of the same agent. Most substance/medication-induced side effects occur shortly after initiation or discontinuation. Sexual side effects that only occur after chronic use of a substance/medication may be extremely difficult to diagnose with certainty.

Other Specified Sexual Dysfunction

302.79 (F52.8)

This category applies to presentations in which symptoms characteristic of a sexual dysfunction that cause clinically significant distress in the individual predominate but do not meet the full criteria for any of the disorders in the sexual dysfunctions diagnostic class. The other specified sexual dysfunction 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 sexual dysfunction. This is done by recording “other specified sexual dysfunction” followed by the specific reason (e.g., “sexual aversion”).

Unspecified Sexual Dysfunction

302.70 (F52.9)

This category applies to presentations in which symptoms characteristic of a sexual dysfunction that cause clinically significant distress in the individual predominate but do not meet the full criteria for any of the disorders in the sexual dysfunctions diagnostic class. The unspecified sexual dysfunction category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for a specific sexual dysfunction, and includes presentations for which there is insufficient information to make a more specific diagnosis.

Gender Dysphoria

In this chapter, there is one overarching diagnosis of gender dysphoria, with separate developmentally appropriate criteria sets for children and for adolescents and adults. The area of sex and gender is highly controversial and has led to a proliferation of terms whose meanings vary over time and within and between disciplines. An additional source of confusion is that in English “sex” connotes both male/female and sexuality. This chapter employs constructs and terms as they are widely used by clinicians from various disciplines with specialization in this area. In this chapter, *sex* and *sexual* refer to the biological indicators of male and female (understood in the context of reproductive capacity), such as in sex chromosomes, gonads, sex hormones, and nonambiguous internal and external genitalia. Disorders of sex development denote conditions of inborn somatic deviations of the reproductive tract from the norm and/or discrepancies among the biological indicators of male and female. *Cross-sex* hormone treatment denotes the use of feminizing hormones in an individual assigned male at birth based on traditional biological indicators or the use of masculinizing hormones in an individual assigned female at birth.

The need to introduce the term *gender* arose with the realization that for individuals with conflicting or ambiguous biological indicators of sex (i.e., “intersex”), the lived role in society and/or the identification as male or female could not be uniformly associated with or predicted from the biological indicators and, later, that some individuals develop an identity as female or male at variance with their uniform set of classical biological indicators. Thus, *gender* is used to denote the public (and usually legally recognized) lived role as boy or girl, man or woman, but, in contrast to certain social constructionist theories, biological factors are seen as contributing, in interaction with social and psychological factors, to gender development. *Gender assignment* refers to the initial assignment as male or female. This occurs usually at birth and, thereby, yields the “natal gender.” *Gender-atypical* refers to somatic features or behaviors that are not typical (in a statistical sense) of individuals with the same assigned gender in a given society and historical era; for behavior, *gender-nonconforming* is an alternative descriptive term. *Gender reassignment* denotes an official (and usually legal) change of gender. *Gender identity* is a category of social identity and refers to an individual’s identification as male, female, or, occasionally, some category other than male or female. *Gender dysphoria* as a general descriptive term refers to an individual’s affective/cognitive discontent with the assigned gender but is more specifically defined when used as a diagnostic category. *Transgender* refers to the broad spectrum of individuals who transiently or persistently identify with a gender different from their natal gender. *Transsexual* denotes an individual who seeks, or has undergone, a social transition from male to female or female to male, which in many, but not all, cases also involves a somatic transition by cross-sex hormone treatment and genital surgery (*sex reassignment surgery*).

Gender dysphoria refers to the distress that may accompany the incongruence between one’s experienced or expressed gender and one’s assigned gender. Although not all individuals will experience distress as a result of such incongruence, many are distressed if the desired physical interventions by means of hormones and/or surgery are not available. The current term is more descriptive than the previous DSM-IV term *gender identity disorder* and focuses on dysphoria as the clinical problem, not identity per se.

Gender Dysphoria

Diagnostic Criteria

Gender Dysphoria in Children

302.6 (F64.2)

- A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least six of the following (one of which must be Criterion A1):
1. A strong desire to be of the other gender or an insistence that one is the other gender (or some alternative gender different from one's assigned gender).
 2. In boys (assigned gender), a strong preference for cross-dressing or simulating female attire; or in girls (assigned gender), a strong preference for wearing only typical masculine clothing and a strong resistance to the wearing of typical feminine clothing.
 3. A strong preference for cross-gender roles in make-believe play or fantasy play.
 4. A strong preference for the toys, games, or activities stereotypically used or engaged in by the other gender.
 5. A strong preference for playmates of the other gender.
 6. In boys (assigned gender), a strong rejection of typically masculine toys, games, and activities and a strong avoidance of rough-and-tumble play; or in girls (assigned gender), a strong rejection of typically feminine toys, games, and activities.
 7. A strong dislike of one's sexual anatomy.
 8. A strong desire for the primary and/or secondary sex characteristics that match one's experienced gender.
- B. The condition is associated with clinically significant distress or impairment in social, school, or other important areas of functioning.

Specify if:

With a disorder of sex development (e.g., a congenital adrenogenital disorder such as 255.2 [E25.0] congenital adrenal hyperplasia or 259.50 [E34.50] androgen insensitivity syndrome).

Coding note: Code the disorder of sex development as well as gender dysphoria.

Gender Dysphoria in Adolescents and Adults

302.85 (F64.1)

- A. A marked incongruence between one's experienced/expressed gender and assigned gender, of at least 6 months' duration, as manifested by at least two of the following:
1. A marked incongruence between one's experienced/expressed gender and primary and/or secondary sex characteristics (or in young adolescents, the anticipated secondary sex characteristics).
 2. A strong desire to be rid of one's primary and/or secondary sex characteristics because of a marked incongruence with one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of the anticipated secondary sex characteristics).
 3. A strong desire for the primary and/or secondary sex characteristics of the other gender.
 4. A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
 5. A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
 6. A strong conviction that one has the typical feelings and reactions of the other gender (or some alternative gender different from one's assigned gender).

- B. The condition is associated with clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Specify if:

With a disorder of sex development (e.g., a congenital adrenogenital disorder such as 255.2 [E25.0] congenital adrenal hyperplasia or 259.50 [E34.50] androgen insensitivity syndrome).

Coding note: Code the disorder of sex development as well as gender dysphoria.

Specify if:

Posttransition: The individual has transitioned to full-time living in the desired gender (with or without legalization of gender change) and has undergone (or is preparing to have) at least one cross-sex medical procedure or treatment regimen—namely, regular cross-sex hormone treatment or gender reassignment surgery confirming the desired gender (e.g., penectomy, vaginoplasty in a natal male; mastectomy or phalloplasty in a natal female).

Specifiers

The posttransition specifier may be used in the context of continuing treatment procedures that serve to support the new gender assignment.

Diagnostic Features

Individuals with gender dysphoria have a marked incongruence between the gender they have been assigned to (usually at birth, referred to as *natal gender*) and their experienced/expressed gender. This discrepancy is the core component of the diagnosis. There must also be evidence of distress about this incongruence. Experienced gender may include alternative gender identities beyond binary stereotypes. Consequently, the distress is not limited to a desire to simply be of the other gender, but may include a desire to be of an alternative gender, provided that it differs from the individual's assigned gender.

Gender dysphoria manifests itself differently in different age groups. Prepubertal natal girls with gender dysphoria may express the wish to be a boy, assert they are a boy, or assert they will grow up to be a man. They prefer boys' clothing and hairstyles, are often perceived by strangers as boys, and may ask to be called by a boy's name. Usually, they display intense negative reactions to parental attempts to have them wear dresses or other feminine attire. Some may refuse to attend school or social events where such clothes are required. These girls may demonstrate marked cross-gender identification in role-playing, dreams, and fantasies. Contact sports, rough-and-tumble play, traditional boyhood games, and boys as playmates are most often preferred. They show little interest in stereotypically feminine toys (e.g., dolls) or activities (e.g., feminine dress-up or role-play). Occasionally, they refuse to urinate in a sitting position. Some natal girls may express a desire to have a penis or claim to have a penis or that they will grow one when older. They may also state that they do not want to develop breasts or menstruate.

Prepubertal natal boys with gender dysphoria may express the wish to be a girl or assert they are a girl or that they will grow up to be a woman. They have a preference for dressing in girls' or women's clothes or may improvise clothing from available materials (e.g., using towels, aprons, and scarves for long hair or skirts). These children may role-play female figures (e.g., playing "mother") and often are intensely interested in female fantasy figures. Traditional feminine activities, stereotypical games, and pastimes (e.g., "playing house"; drawing feminine pictures; watching television or videos of favorite female characters) are most often preferred. Stereotypical female-type dolls (e.g., Barbie) are often favorite toys, and girls are their preferred playmates. They avoid rough-and-tumble play and competitive sports and have little interest in stereotypically masculine toys (e.g., cars, trucks). Some may pretend not to have a penis and insist on sitting to urinate. More

rarely, they may state that they find their penis or testes disgusting, that they wish them removed, or that they have, or wish to have, a vagina.

In young adolescents with gender dysphoria, clinical features may resemble those of children or adults with the condition, depending on developmental level. As secondary sex characteristics of young adolescents are not yet fully developed, these individuals may not state dislike of them, but they are concerned about imminent physical changes.

In adults with gender dysphoria, the discrepancy between experienced gender and physical sex characteristics is often, but not always, accompanied by a desire to be rid of primary and/or secondary sex characteristics and/or a strong desire to acquire some primary and/or secondary sex characteristics of the other gender. To varying degrees, adults with gender dysphoria may adopt the behavior, clothing, and mannerisms of the experienced gender. They feel uncomfortable being regarded by others, or functioning in society, as members of their assigned gender. Some adults may have a strong desire to be of a different gender and treated as such, and they may have an inner certainty to feel and respond as the experienced gender without seeking medical treatment to alter body characteristics. They may find other ways to resolve the incongruence between experienced/expressed and assigned gender by partially living in the desired role or by adopting a gender role neither conventionally male nor conventionally female.

Associated Features Supporting Diagnosis

When visible signs of puberty develop, natal boys may shave their legs at the first signs of hair growth. They sometimes bind their genitals to make erections less visible. Girls may bind their breasts, walk with a stoop, or use loose sweaters to make breasts less visible. Increasingly, adolescents request, or may obtain without medical prescription and supervision, hormonal suppressors ("blockers") of gonadal steroids (e.g., gonadotropin-releasing hormone [GnRH] analog, spironolactone). Clinically referred adolescents often want hormone treatment and many also wish for gender reassignment surgery. Adolescents living in an accepting environment may openly express the desire to be and be treated as the experienced gender and dress partly or completely as the experienced gender, have a hairstyle typical of the experienced gender, preferentially seek friendships with peers of the other gender, and/or adopt a new first name consistent with the experienced gender. Older adolescents, when sexually active, usually do not show or allow partners to touch their sexual organs. For adults with an aversion toward their genitals, sexual activity is constrained by the preference that their genitals not be seen or touched by their partners. Some adults may seek hormone treatment (sometimes without medical prescription and supervision) and gender reassignment surgery. Others are satisfied with either hormone treatment or surgery alone.

Adolescents and adults with gender dysphoria before gender reassignment are at increased risk for suicidal ideation, suicide attempts, and suicides. After gender reassignment, adjustment may vary, and suicide risk may persist.

Prevalence

For natal adult males, prevalence ranges from 0.005% to 0.014%, and for natal females, from 0.002% to 0.003%. Since not all adults seeking hormone treatment and surgical reassignment attend specialty clinics, these rates are likely modest underestimates. Sex differences in rate of referrals to specialty clinics vary by age group. In children, sex ratios of natal boys to girls range from 2:1 to 4.5:1. In adolescents, the sex ratio is close to parity; in adults, the sex ratio favors natal males, with ratios ranging from 1:1 to 6.1:1. In two countries, the sex ratio appears to favor natal females (Japan: 2.2:1; Poland: 3.4:1).

Development and Course

Because expression of gender dysphoria varies with age, there are separate criteria sets for children versus adolescents and adults. Criteria for children are defined in a more con-

crete, behavioral manner than those for adolescents and adults. Many of the core criteria draw on well-documented behavioral gender differences between typically developing boys and girls. Young children are less likely than older children, adolescents, and adults to express extreme and persistent anatomic dysphoria. In adolescents and adults, incongruence between experienced gender and somatic sex is a central feature of the diagnosis. Factors related to distress and impairment also vary with age. A very young child may show signs of distress (e.g., intense crying) only when parents tell the child that he or she is “really” not a member of the other gender but only “desires” to be. Distress may not be manifest in social environments supportive of the child’s desire to live in the role of the other gender and may emerge only if the desire is interfered with. In adolescents and adults, distress may manifest because of strong incongruence between experienced gender and somatic sex. Such distress may, however, be mitigated by supportive environments and knowledge that biomedical treatments exist to reduce incongruence. Impairment (e.g., school refusal, development of depression, anxiety, and substance abuse) may be a consequence of gender dysphoria.

Gender dysphoria without a disorder of sex development. For clinic-referred children, onset of cross-gender behaviors is usually between ages 2 and 4 years. This corresponds to the developmental time period in which most typically developing children begin expressing gendered behaviors and interests. For some preschool-age children, both pervasive cross-gender behaviors and the expressed desire to be the other gender may be present, or, more rarely, labeling oneself as a member of the other gender may occur. In some cases, the expressed desire to be the other gender appears later, usually at entry into elementary school. A small minority of children express discomfort with their sexual anatomy or will state the desire to have a sexual anatomy corresponding to the experienced gender (“anatomic dysphoria”). Expressions of anatomic dysphoria become more common as children with gender dysphoria approach and anticipate puberty.

Rates of persistence of gender dysphoria from childhood into adolescence or adulthood vary. In natal males, persistence has ranged from 2.2% to 30%. In natal females, persistence has ranged from 12% to 50%. Persistence of gender dysphoria is modestly correlated with dimensional measures of severity ascertained at the time of a childhood baseline assessment. In one sample of natal males, lower socioeconomic background was also modestly correlated with persistence. It is unclear if particular therapeutic approaches to gender dysphoria in children are related to rates of long-term persistence. Extant follow-up samples consisted of children receiving no formal therapeutic intervention or receiving therapeutic interventions of various types, ranging from active efforts to reduce gender dysphoria to a more neutral, “watchful waiting” approach. It is unclear if children “encouraged” or supported to live socially in the desired gender will show higher rates of persistence, since such children have not yet been followed longitudinally in a systematic manner. For both natal male and female children showing persistence, almost all are sexually attracted to individuals of their natal sex. For natal male children whose gender dysphoria does not persist, the majority are *androphilic* (sexually attracted to males) and often self-identify as gay or homosexual (ranging from 63% to 100%). In natal female children whose gender dysphoria does not persist, the percentage who are *gynephilic* (sexually attracted to females) and self-identify as lesbian is lower (ranging from 32% to 50%).

In both adolescent and adult natal males, there are two broad trajectories for development of gender dysphoria: early onset and late onset. *Early-onset gender dysphoria* starts in childhood and continues into adolescence and adulthood; or, there is an intermittent period in which the gender dysphoria desists and these individuals self-identify as gay or homosexual, followed by recurrence of gender dysphoria. *Late-onset gender dysphoria* occurs around puberty or much later in life. Some of these individuals report having had a desire to be of the other gender in childhood that was not expressed verbally to others. Others do not recall any signs of childhood gender dysphoria. For adolescent males with late-onset gender dysphoria, parents often report surprise because they did not see signs of gender

dysphoria during childhood. Expressions of anatomic dysphoria are more common and salient in adolescents and adults once secondary sex characteristics have developed.

Adolescent and adult natal males with early-onset gender dysphoria are almost always sexually attracted to men (androphilic). Adolescents and adults with late-onset gender dysphoria frequently engage in transvestic behavior with sexual excitement. The majority of these individuals are gynephilic or sexually attracted to other posttransition natal males with late-onset gender dysphoria. A substantial percentage of adult males with late-onset gender dysphoria cohabit with or are married to natal females. After gender transition, many self-identify as lesbian. Among adult natal males with gender dysphoria, the early-onset group seeks out clinical care for hormone treatment and reassignment surgery at an earlier age than does the late-onset group. The late-onset group may have more fluctuations in the degree of gender dysphoria and be more ambivalent about and less likely satisfied after gender reassignment surgery.

In both adolescent and adult natal females, the most common course is the early-onset form of gender dysphoria. The late-onset form is much less common in natal females compared with natal males. As in natal males with gender dysphoria, there may have been a period in which the gender dysphoria desisted and these individuals self-identified as lesbian; however, with recurrence of gender dysphoria, clinical consultation is sought, often with the desire for hormone treatment and reassignment surgery. Parents of natal adolescent females with the late-onset form also report surprise, as no signs of childhood gender dysphoria were evident. Expressions of anatomic dysphoria are much more common and salient in adolescents and adults than in children.

Adolescent and adult natal females with early-onset gender dysphoria are almost always gynephilic. Adolescents and adults with the late-onset form of gender dysphoria are usually androphilic and after gender transition self-identify as gay men. Natal females with the late-onset form do not have co-occurring transvestic behavior with sexual excitement.

Gender dysphoria in association with a disorder of sex development. Most individuals with a disorder of sex development who develop gender dysphoria have already come to medical attention at an early age. For many, starting at birth, issues of gender assignment were raised by physicians and parents. Moreover, as infertility is quite common for this group, physicians are more willing to perform cross-sex hormone treatments and genital surgery before adulthood.

Disorders of sex development in general are frequently associated with gender-atypical behavior starting in early childhood. However, in the majority of cases, this does not lead to gender dysphoria. As individuals with a disorder of sex development become aware of their medical history and condition, many experience uncertainty about their gender, as opposed to developing a firm conviction that they are another gender. However, most do not progress to gender transition. Gender dysphoria and gender transition may vary considerably as a function of a disorder of sex development, its severity, and assigned gender.

Risk and Prognostic Factors

Temperamental. For individuals with gender dysphoria without a disorder of sex development, atypical gender behavior among individuals with early-onset gender dysphoria develops in early preschool age, and it is possible that a high degree of atypicality makes the development of gender dysphoria and its persistence into adolescence and adulthood more likely.

Environmental. Among individuals with gender dysphoria without a disorder of sex development, males with gender dysphoria (in both childhood and adolescence) more commonly have older brothers than do males without the condition. Additional predisposing

factors under consideration, especially in individuals with late-onset gender dysphoria (adulthood), include habitual fetishistic transvestism developing into autogynephilia (i.e., sexual arousal associated with the thought or image of oneself as a woman) and other forms of more general social, psychological, or developmental problems.

Genetic and physiological. For individuals with gender dysphoria without a disorder of sex development, some genetic contribution is suggested by evidence for (weak) familiarity of transsexualism among nontwin siblings, increased concordance for transsexualism in monozygotic compared with dizygotic same-sex twins, and some degree of heritability of gender dysphoria. As to endocrine findings, no endogenous systemic abnormalities in sex-hormone levels have been found in 46,XY individuals, whereas there appear to be increased androgen levels (in the range found in hirsute women but far below normal male levels) in 46,XX individuals. Overall, current evidence is insufficient to label gender dysphoria without a disorder of sex development as a form of intersexuality limited to the central nervous system.

In gender dysphoria associated with a disorder of sex development, the likelihood of later gender dysphoria is increased if prenatal production and utilization (via receptor sensitivity) of androgens are grossly atypical relative to what is usually seen in individuals with the same assigned gender. Examples include 46,XY individuals with a history of normal male prenatal hormone milieu but inborn nonhormonal genital defects (as in cloacal bladder exstrophy or penile agenesis) and who have been assigned to the female gender. The likelihood of gender dysphoria is further enhanced by additional, prolonged, highly gender-atypical postnatal androgen exposure with somatic virilization as may occur in female-raised and noncastrated 46,XY individuals with 5-alpha reductase-2 deficiency or 17-beta-hydroxysteroid dehydrogenase-3 deficiency or in female-raised 46,XX individuals with classical congenital adrenal hyperplasia with prolonged periods of non-adherence to glucocorticoid replacement therapy. However, the prenatal androgen milieu is more closely related to gendered behavior than to gender identity. Many individuals with disorders of sex development and markedly gender-atypical behavior do not develop gender dysphoria. Thus, gender-atypical behavior by itself should not be interpreted as an indicator of current or future gender dysphoria. There appears to be a higher rate of gender dysphoria and patient-initiated gender change from assigned female to male than from assigned male to female in 46,XY individuals with a disorder of sex development.

Culture-Related Diagnostic Issues

Individuals with gender dysphoria have been reported across many countries and cultures. The equivalent of gender dysphoria has also been reported in individuals living in cultures with institutionalized gender categories other than male or female. It is unclear whether with these individuals the diagnostic criteria for gender dysphoria would be met.

Diagnostic Markers

Individuals with a somatic disorder of sex development show some correlation of final gender identity outcome with the degree of prenatal androgen production and utilization. However, the correlation is not robust enough for the biological factor, where ascertainable, to replace a detailed and comprehensive diagnostic interview evaluation for gender dysphoria.

Functional Consequences of Gender Dysphoria

Preoccupation with cross-gender wishes may develop at all ages after the first 2–3 years of childhood and often interfere with daily activities. In older children, failure to develop age-typical same-sex peer relationships and skills may lead to isolation from peer groups and to distress. Some children may refuse to attend school because of teasing and harass-

ment or pressure to dress in attire associated with their assigned sex. Also in adolescents and adults, preoccupation with cross-gender wishes often interferes with daily activities. Relationship difficulties, including sexual relationship problems, are common, and functioning at school or at work may be impaired. Gender dysphoria, along with atypical gender expression, is associated with high levels of stigmatization, discrimination, and victimization, leading to negative self-concept, increased rates of mental disorder comorbidity, school dropout, and economic marginalization, including unemployment, with attendant social and mental health risks, especially in individuals from resource-poor family backgrounds. In addition, these individuals' access to health services and mental health services may be impeded by structural barriers, such as institutional discomfort or inexperience in working with this patient population.

Differential Diagnosis

Nonconformity to gender roles. Gender dysphoria should be distinguished from simple nonconformity to stereotypical gender role behavior by the strong desire to be of another gender than the assigned one and by the extent and pervasiveness of gender-variant activities and interests. The diagnosis is not meant to merely describe nonconformity to stereotypical gender role behavior (e.g., "tomboyism" in girls, "girly-boy" behavior in boys, occasional cross-dressing in adult men). Given the increased openness of atypical gender expressions by individuals across the entire range of the transgender spectrum, it is important that the clinical diagnosis be limited to those individuals whose distress and impairment meet the specified criteria.

Transvestic disorder. Transvestic disorder occurs in heterosexual (or bisexual) adolescent and adult males (rarely in females) for whom cross-dressing behavior generates sexual excitement and causes distress and/or impairment without drawing their primary gender into question. It is occasionally accompanied by gender dysphoria. An individual with transvestic disorder who also has clinically significant gender dysphoria can be given both diagnoses. In many cases of late-onset gender dysphoria in gynephilic natal males, transvestic behavior with sexual excitement is a precursor.

Body dysmorphic disorder. An individual with body dysmorphic disorder focuses on the alteration or removal of a specific body part because it is perceived as abnormally formed, not because it represents a repudiated assigned gender. When an individual's presentation meets criteria for both gender dysphoria and body dysmorphic disorder, both diagnoses can be given. Individuals wishing to have a healthy limb amputated (termed by some *body integrity identity disorder*) because it makes them feel more "complete" usually do not wish to change gender, but rather desire to live as an amputee or a disabled person.

Schizophrenia and other psychotic disorders. In schizophrenia, there may rarely be delusions of belonging to some other gender. In the absence of psychotic symptoms, insistence by an individual with gender dysphoria that he or she is of some other gender is not considered a delusion. Schizophrenia (or other psychotic disorders) and gender dysphoria may co-occur.

Other clinical presentations. Some individuals with an emasculation desire who develop an alternative, nonmale/nonfemale gender identity do have a presentation that meets criteria for gender dysphoria. However, some males seek castration and/or penectomy for aesthetic reasons or to remove psychological effects of androgens without changing male identity; in these cases, the criteria for gender dysphoria are not met.

Comorbidity

Clinically referred children with gender dysphoria show elevated levels of emotional and behavioral problems—most commonly, anxiety, disruptive and impulse-control, and de-

pressive disorders. In prepubertal children, increasing age is associated with having more behavioral or emotional problems; this is related to the increasing non-acceptance of gender-variant behavior by others. In older children, gender-variant behavior often leads to peer ostracism, which may lead to more behavioral problems. The prevalence of mental health problems differs among cultures; these differences may also be related to differences in attitudes toward gender variance in children. However, also in some non-Western cultures, anxiety has been found to be relatively common in individuals with gender dysphoria, even in cultures with accepting attitudes toward gender-variant behavior. Autism spectrum disorder is more prevalent in clinically referred children with gender dysphoria than in the general population. Clinically referred adolescents with gender dysphoria appear to have comorbid mental disorders, with anxiety and depressive disorders being the most common. As in children, autism spectrum disorder is more prevalent in clinically referred adolescents with gender dysphoria than in the general population. Clinically referred adults with gender dysphoria may have coexisting mental health problems, most commonly anxiety and depressive disorders.

Other Specified Gender Dysphoria

302.6 (F64.8)

This category applies to presentations in which symptoms characteristic of gender dysphoria 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 gender dysphoria. The other specified gender dysphoria category is used in situations in which the clinician chooses to communicate the specific reason that the presentation does not meet the criteria for gender dysphoria. This is done by recording “other specified gender dysphoria” followed by the specific reason (e.g., “brief gender dysphoria”).

An example of a presentation that can be specified using the “other specified” designation is the following:

The current disturbance meets symptom criteria for gender dysphoria, but the duration is less than 6 months.

Unspecified Gender Dysphoria

302.6 (F64.9)

This category applies to presentations in which symptoms characteristic of gender dysphoria 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 gender dysphoria. The unspecified gender dysphoria category is used in situations in which the clinician chooses *not* to specify the reason that the criteria are not met for gender dysphoria, and includes presentations in which there is insufficient information to make a more specific diagnosis.

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