

Gender Dysphoria and Transsexualism

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Gender dysphoria is characterized by a strong, persistent cross-gender identification associated with anxiety, depression, irritability, and often a wish to live as a gender different from the sex assigned at birth. People with gender dysphoria often believe they are victims of a biologic accident and are cruelly imprisoned in a body incompatible with their subjective gender identity. The most extreme form of gender dysphoria may be referred to as transsexualism.

(See also [Overview of Sexual Behavior](#).)

Sex, gender, and identity

Sex and gender are not the same thing.

Sex refers to a person's biologic status: male, female, or intersex.

Sexual identity refers to the sex to which a person is sexually attracted (if any).

Gender identity is the subjective sense of knowing to which gender one belongs; ie, whether people regard themselves as male, female, transgender, or another identifying term (eg, genderqueer, nonbinary, agender).

Gender role is the objective, public expression of gender identity and includes everything that people say and do to indicate to themselves and to others the degree to which they are the gender that they identify with.

Gender role behaviors fall on a continuum of traditional masculinity or femininity, with a growing cultural recognition that some people do not fit—nor necessarily wish to fit—into the traditional male-female dichotomy. These people may refer to themselves as genderqueer, nonbinary, or one of many other terms that have become more commonly used over the past 10 years. The term cisgender is sometimes used to refer to people whose gender identity corresponds to their sex at birth. Western cultures are more tolerant of gender-nonconforming (tomboyish) behaviors in young girls (generally not considered a gender disorder) than effeminate or “sissy” behaviors in boys. Many boys role-play as girls or mothers, including trying on their sister's or mother's clothes. Usually, this behavior is part of normal development. Gender nonconformity (behavior that differs from cultural norms for a person's birth sex) in children is not considered a disorder and rarely persists into adulthood or leads to gender dysphoria, although persistently nonconforming boys may be more likely to become homosexual or bisexual as adults.

Gender dysphoria

For most people, there is congruity between their biologic (birth) sex, gender identity, and gender role. However, those with gender dysphoria experience some degree of incongruity between their birth sex and their gender identity. Gender incongruity, or gender nonconformity, itself is not considered a disorder. However, when the perceived mismatch between birth sex and felt gender identity causes significant distress or disability, a diagnosis of gender dysphoria may be appropriate. The distress is typically a combination of anxiety, depression, and irritability. People with severe gender dysphoria, often referred to as transsexual people, may experience severe, disturbing, and long-standing symptoms and

have a strong wish to change their body medically and/or surgically to make their body more closely align with their gender identity.

Although precise figures are lacking, an estimated 0.005 to 0.014% of birth-sex males and 0.002 to 0.003% birth-sex females meet diagnostic criteria for gender dysphoria, as stated in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5). Many more people would identify themselves as transgender people but do not meet criteria for gender dysphoria.

Some scholars argue that the diagnosis of gender dysphoria is primarily a medical condition, akin to disorders of sex development, and not a mental disorder at all. Conversely, some members of the transgender community consider even extreme forms of gender nonconformity to be simply a normal variant in human gender identity and expression.

Etiology

Although biologic factors (eg, genetic complement, prenatal hormonal milieu) largely determine gender identity, the formation of a secure, unconflicted gender identity and gender role is also influenced by social factors (eg, the character of the parents' emotional bond, the relationship that each parent has with the child). Some studies show a higher concordance rate for gender dysphoria in monozygotic twins than in dizygotic twins, suggesting that there is a heritable component to transgender identity.

Rarely, transsexualism is associated with genital ambiguity (intersex conditions [disorders of sex development]) or a [genetic abnormality](#) (eg, [Turner syndrome](#), [Klinefelter syndrome](#)).

When sex labeling and rearing are confusing (eg, in cases of ambiguous genitals or genetic syndromes altering genital appearance, such as androgen insensitivity syndromes), children may become uncertain about their gender identity or role, although the level of importance of environmental factors remains controversial. However, when sex labeling and rearing are unambiguous, even the presence of ambiguous genitals may not affect a child's gender identity development.

Symptoms and Signs

Gender dysphoria symptoms in children

Childhood gender dysphoria often manifests by age 2 to 3 years. Children commonly do the following:

- Prefer cross-dressing
- Insist that they are of the other sex
- Wish that they would wake up as the other sex
- Prefer participating in the stereotypical games and activities of the other sex
- Have negative feelings toward their genitals

For example, a young girl may insist she will grow a penis and become a boy; she may stand to urinate. A boy may fantasize about being female and avoid rough-and-tumble play and competitive games. He may sit to urinate and wish to be rid of his penis and testes. For boys, distress at the physical changes of puberty is often followed by a request during adolescence for feminizing somatic treatments. Most children with gender dysphoria are not evaluated until they are age 6 to 9, at a point when gender dysphoria is already chronic.

Only a minority of children diagnosed with gender dysphoria remain gender dysphoric as adults. There is considerable controversy over when or whether to support the social and/or medical transition of prepubertal children with gender dysphoria; there is no conclusive research to guide this decision.

Gender dysphoria symptoms in adults

Although most transsexuals have gender dysphoria symptoms or experience a sense of being different in early childhood, some do not present until adulthood. Male-to-female transsexuals (transwomen) may first be cross-dressers and only later in life come to accept their cross-gender identity.

Marriage and military service are common among transsexuals who seek to run from their cross-gender (transgender) feelings. Once they accept their cross-gender feelings and publicly transition, many transwomen blend seamlessly into the fabric of society as women—with or without hormone therapy or sex reassignment surgery.

Some birth-sex males who identify as women are satisfied with mastering a more feminine appearance and obtaining female identification cards (eg, driver's license, passport) to help them work and live in society as women. Others experience problems, which may include anxiety, depression, and suicidal behavior. These problems may be related to societal and family stressors associated with lack of acceptance of gender-nonconforming behaviors.

Diagnosis

Specific DSM-5 criteria

Diagnosis in all age groups

Gender dysphoria is expressed differently in different age groups. But for diagnosis of gender dysphoria in all age groups, DSM-5 criteria require the presence of both of the following:

Marked incongruity between birth sex and felt gender identity (cross-gender identification) that has been present for ≥ 6 months

Clinically significant distress or functional impairment resulting from this incongruity

Diagnosis in children

In addition to the characteristics required for all age groups, children must have ≥ 6 of the following:

A strong desire to be or insistence that they are the other gender (or some other gender)

A strong preference for dressing in clothing typical of the opposite gender and, in girls, resistance to wearing typically feminine clothing

A strong preference for cross-gender roles when playing

A strong preference for toys, games, and activities typical of the other gender

A strong preference for playmates of the other gender

A strong rejection of toys, games, and activities typical of the gender that matches their birth sex

A strong dislike of their anatomy

A strong desire for the primary and/or secondary sex characteristics that match their felt gender identity

Cross-gender identification must not be merely a desire for perceived cultural advantages of being the other sex. For example, a boy who says he wants to be a girl so that he will receive the same special treatment his younger sister receives is not likely to have gender dysphoria.

Diagnosis in adolescents and adults

In addition to the characteristics required for all age groups, adolescents and adults must have ≥ 1 of the following:

A strong desire to be rid of (or for young adolescents, prevent the development of) their primary and/or secondary sex characteristics

A strong desire for the primary and/or secondary sex characteristics that match their felt gender

A strong desire to be the other gender (or some other gender)

A strong desire to be treated like another gender

A strong belief that they have the typical feelings and reactions of another gender

Diagnosis of gender dysphoria in adults focuses on determining whether there is significant distress or obvious impairment in social, occupational, or other important areas of functioning. Gender nonconformity alone is insufficient for diagnosis.

Treatment

Psychotherapy

For certain motivated patients above a certain age (typically 16 years or older), cross-sex hormone therapy and sometimes sex reassignment surgery and other gender-affirming surgeries, with consent and assent as required.

Gender-nonconforming behavior, such as cross-dressing, may not require treatment if it occurs without concurrent psychologic distress or functional impairment. Such behavior is not considered a disorder.

When treatment is required, it is aimed at helping patients adapt to rather than trying to dissuade them from their identity. Attempts at altering gender identity in adults have not proved effective and are now considered unethical.

In most Western cultures, most transsexuals who request treatment are birth-sex males who claim a female gender identity and regard their genitals and masculine features with repugnance. However, as treatments have improved, female-to-male transsexual people (transmen) are increasingly seen in medical and psychiatric practice, although the incidence in Western cultures is about one third of that for male-to-female transsexualism.

Transsexuals' primary objective in seeking medical help is not to obtain psychologic treatment but to obtain hormones and/or sex reassignment (gender-confirming, or genital) surgery that will make their physical appearance approximate their felt gender identity. The combination of psychotherapy, hormonal reassignment, living at least a year in the felt gender, and sex reassignment surgery may be curative when the disorder is appropriately diagnosed and clinicians follow the internationally accepted standards of care for the treatment of gender identity disorders, available from the World Professional Association for Transgender Health ([WPATH](#)).

Although patients with gender dysphoria are no longer required to have psychotherapy before consideration for cross-sex hormonal and surgical procedures, mental health care practitioners can do the following to help patients make decisions:

- Assess and treat comorbid disorders (eg, [depression](#), [substance use disorders](#))

- Help patients deal with the negative effects of stigma (eg, disapproval, discrimination)

- Help patients find a gender expression that is comfortable

- If applicable, facilitate gender role changes, coming out, and transitioning

Male-to-female transsexualism

Feminizing hormones in moderate doses (eg, estradiol transdermal patches 0.1 to 0.15 mg/day) plus electrolysis, voice therapy, and other feminizing treatments may make the adjustment to a female gender role more stable. Feminizing hormones have significant beneficial effects on the symptoms of gender dysphoria, often before there are any visible changes in secondary sexual characteristics (eg, breast growth, decreased facial and body hair growth, redistribution of fat to the hips). Feminizing hormones, even without psychologic support or surgery, are all some patients need to make them feel sufficiently comfortable as a female.

Sex reassignment surgery is requested by many male-to-female transsexuals. Surgery involves removal of the penis and testes and creation of an artificial vagina. A part of the glans penis is retained as a clitoris, which is usually sexually sensitive and retains the capacity for orgasm in most cases.

The decision to pursue sex reassignment surgery often raises important social problems for patients. Many of these patients are married and have children. A parent or spouse who changes sex and gender role will likely have substantial adjustment issues in intimate relationships and may lose loved ones in the process. In follow-up studies, genital surgery has helped some transsexuals live happier and more productive lives and so is justified in highly motivated, appropriately assessed and treated transsexuals who have completed at least 1 year of living full-time in the opposite gender role. Some patients also pursue nongenital, gender-affirming surgical procedures such as breast augmentation, facial feminization surgeries (eg, rhinoplasty, brow lift, hairline changes, jaw reconfiguration, tracheal cartilage shave [reduction of the laryngeal cartilage]), or vocal cord surgeries to change the quality of the voice.

Participation in gender support groups, available in most large cities or through the Internet, is usually helpful.

Female-to-male transsexualism

Female-to-male patients often ask for mastectomy early because it is difficult to live in the male gender role with a large amount of breast tissue; breast binding often makes breathing difficult.

Then, hysterectomy and oophorectomy may be done after a course of androgenic hormones (eg, testosterone ester preparations 300 to 400 mg IM every 3 weeks or equivalent doses of androgen transdermal patches or gels). Testosterone preparations permanently deepen the voice, induce a more masculine muscle and fat distribution, induce clitoromegaly, and promote growth of facial and body hair.

Patients may opt for one of the following:

- An artificial phallus (neophallus) to be fashioned from skin transplanted from the inner forearm, leg, or abdomen (phalloplasty)

- A micropenis to be fashioned from fat tissue removed from the mons pubis and placed around the testosterone-hypertrophied clitoris (metoidioplasty)

With either procedure, scrotoplasty is usually also done; the labia majora are dissected to form hollow cavities to approximate a scrotum, and testes implants are inserted to fill the neoscrotum.

Surgery may help certain patients achieve greater adaptation and life satisfaction. Similar to male-to-female transsexuals, female-to-male transsexuals should live in the male gender role for at least 1 year before referral for irreversible genital surgery.

Anatomic results of neophallus surgical procedures are often less satisfactory in terms of function and appearance than neovaginal procedures for male-to-female transsexuals, possibly resulting in relatively fewer requests for genital sex reassignment surgery from female-to-male transsexuals. As techniques for phalloplasty continue to improve, requests for phalloplasty have increased.

Complications are common, especially in procedures that involve extending the urethra into the neophallus. These complications may include [urinary tract infections](#), [urethral strictures](#), and a deviated urinary stream.

Key Points

Whether gender dysphoria should be considered a mental disorder is a matter of debate; some scholars think it is primarily a medical condition, whereas some members of the transgender community consider even extreme forms of gender nonconformity a normal variant in human gender identity and expression.

Diagnose gender dysphoria only when the incongruity between birth sex and felt gender identity is marked and causes significant distress and/or significant functional impairment.

Transsexuals' primary objective in seeking medical help is usually not to obtain psychologic treatment but to obtain hormones and/or genital surgery to make their physical appearance approximate their felt gender identity.

For some male-to-female transsexuals, feminizing hormones are all they need to make them feel sufficiently comfortable as a female.

Transsexuals should live in the opposite gender role for at least 1 year before sex reassignment surgery is considered.

The treatment of prepubertal children diagnosed with gender dysphoria remains controversial.

