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# Understanding Gender Variance in Children and Adolescents

Lisa K. Simons, MD; Scott F. Leibowitz, MD; and Marco A. Hidalgo, PhD

## Abstract

*Gender variance* is an umbrella term used to describe gender identity, expression, or behavior that falls outside of culturally defined norms associated with a specific gender. In recent years, growing media coverage has heightened public awareness about gender variance in childhood and adolescence, and an increasing number of referrals to clinics specializing in care for gender-variant youth have been reported in the United States. Gender-variant expression, behavior, and identity may present in childhood and adolescence in a number of ways, and youth with gender variance have unique health needs. For those experiencing gender dysphoria, or distress encountered by the discordance between biological sex and gender identity, puberty is often an exceptionally challenging time. Pediatric primary care providers may be families' first resource for education and support, and they play a critical role in supporting the health of youth with gender variance by screening for psychosocial problems and health risks, referring for gender-specific mental health and medical care, and providing ongoing advocacy and support. [*Pediatr Ann.* 2014; 43(6):e126–e131.]

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Children are assigned a gender at birth, often based on a clinician's examination of external genital anatomy and sometimes using chromosomes. For the majority of children and adolescents, birth-assigned gender corresponds with gender identity, or an individual's innate sense of self as male, female, or an alternate gender;<sup>1</sup> however, a minority of individuals experience discordance between their assigned gender and internal gender identity. Some children's gender expression, or way of communicating gender within a given culture, falls outside of stereotypical norms.<sup>2</sup> *Gender variance* is an umbrella term used to describe behaviors, appearance, or identity of people who do not conform to culturally defined norms for their birth-assigned gender.<sup>2</sup>

In recent years, growing media coverage has heightened public awareness about gender variance in childhood and adolescence. An increasing number of referrals to clinics specializing in care for gender-variant youth have been reported in Europe, Canada, and the United States.<sup>3-5</sup> Although the prevalence of gender variance in the United States is largely unknown, there appears to be a significant need for expert health care services in this area.

Parents may react to their child's gender variance in many different ways, and in some cases, may feel conflicted or unsure of how to respond. Families who are concerned or seeking information about their child's gender expression, behaviors, or identity often turn to primary care providers first. It is essential that pediatricians are familiar with phenomenology related to gender (identity, expression, and behavior) and recognize when referral to a mental health or medical provider with gender-related expertise is indicated. This article reviews gender-related terminology, describes common presentations of gender variance, and offers an overview of a multidisciplinary model of care for gender-variant youth.

## TERMINOLOGY

Gender-related terminology can sometimes be used differently by health care professionals, patients, and community members. When working with patients and families, it is important to be sensitive and respectful regarding the use of preferred names, gender pronouns, and gender-related vocabulary.

**Biological sex:** Attributes that characterize biological maleness and femaleness (eg, sex-determining genes, chromosomes, gonads, hormones, internal and external reproductive structures).<sup>2</sup>

**Gender identity (affirmed gender):** An individual's personal sense of self as male, female, or an alternate gender.<sup>1</sup>

**Gender expression:** The way in which an individual acts to communicate gender within a given culture—examples include clothing, haircut, and communication patterns. Gender expression does not always correlate with gender identity or biological (ie, assigned) sex.<sup>2</sup>

**Gender role:** Behaviors, attitudes, and personality traits that a society in a given historical period designates as "masculine" or "feminine."<sup>1</sup>

**Gender variance:** Behaviors, appearance, or identity of people who do not conform to culturally defined norms for their assigned gender.<sup>2</sup>

**Transgender:** Individuals with an affirmed gender identity different than their biological sex.<sup>6</sup> Transgender can also be used to describe people whose gender identity, expression, or behaviors falls outside of culturally defined norms for their biological sex.<sup>2</sup>

**Cis-gender:** Individuals whose affirmed gender matches their biological sex.

**Gender dysphoria:** Internal distress caused by a discrepancy between a person's gender identity and biological sex. Not all gender-variant individuals experience gender dysphoria.<sup>1</sup>

**Transitioning:** Process by which individuals change social, physical, or legal characteristics for the purpose of

living in their desired gender role. Transitioning may or may not include hormonal and/or surgical procedures.<sup>1</sup>

**Sexual orientation:** The tendency to be romantically or physically attracted to persons of the same sex, opposite sex, both sexes, or neither sex. Sexual orientation is distinct from gender identity and gender expression.<sup>2</sup>

## EPIDEMIOLOGY

The prevalence of gender variance in childhood and adolescence is largely unknown. Potential attempts to determine worldwide prevalence are complicated by a number of factors, including a lack of population-based studies as well as international and cross-cultural variation in gender identity and expression.<sup>1,7</sup> Prevalence estimates in adults have largely been based on clinical samples seeking gender-related medical and/or surgical care primarily in Western Europe.<sup>8</sup>

Studies to date have adhered to measuring the prevalence of gender identity disorder (GID), a psychiatric diagnosis that was replaced by gender dysphoria (GD) in the May 2013 release of the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*.<sup>9</sup> The criteria for GD, which is marked by clinically significant distress encountered by the discordance between biological sex and gender identity that disrupts social or school functioning, are listed in **Table 1**. The shift from GID to GD resulted from a complex and ongoing discourse between American mental health researchers and practitioners. Although detailing the nuances of this discourse is beyond the scope of this article, it should be noted that consensus to abandon GID in *DSM-5* represents a paradigmatic shift that de-emphasizes gender variant identity as pathological and focuses instead on the potential psychosocial challenges associated with gender variance. Given this recent reformulation of gender-related phenomenol-

TABLE 1.

**DSM-5 Diagnostic Criteria for Gender Dysphoria****Gender Dysphoria in Children**

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):

- 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).
- 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.
- A strong preference for cross-gender roles in make-believe play or fantasy play.
- A strong preference for the toys, games, or activities stereotypically used or engaged in by the other gender.
- A strong preference for playmates of the other gender.
- 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.
- A strong dislike of one's sexual anatomy.
- A strong desire for the primary and/or secondary sex characteristics that match one's experienced gender.
- The condition is associated with clinically significant distress or impairment in social, school, or other areas of functioning.

**Gender Dysphoria in Adolescents**

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:

- 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).
- A strong desire to be rid of one's primary and/or secondary sex characteristics because of an incongruence between one's experienced/expressed gender (or in young adolescents, a desire to prevent the development of anticipated secondary sex characteristics).
- A strong desire for the primary and/or secondary sex characteristics of the other gender.
- A strong desire to be of the other gender (or some alternative gender different from one's assigned gender).
- A strong desire to be treated as the other gender (or some alternative gender different from one's assigned gender).
- 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).
- The condition is associated with clinically significant distress or impairment in social, school, or other areas of functioning.

DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.  
From the DSM-5.<sup>9</sup>

ogy, no studies have examined GD prevalence (per *DSM-5* criteria) in children or adolescents.

**ETIOLOGY**

The etiology of gender variance is poorly understood. No singular factor has been identified, and the etiology is likely multifactorial. To date, research has examined psychosocial and biological factors, including parent-child relationship characteristics, in utero sex hormone exposure, brain anatomy and activation patterns, and genetic variations. A recent review of gender identity development in adolescence provides a thorough description of previous research.<sup>10</sup>

**GENDER IDENTITY DEVELOPMENT**

Research on childhood gender development proposes that by age 3 years, most children have a sense of what it means to be male or female and by age 5 to 6 years, most children will declare a gender identity of male or female, that this identity will be consistent with their birth-assigned sex, and that it will remain constant across the life span.<sup>11</sup> It has been suggested that the majority of children with gender variance more commonly express gender-nonconforming behavior than a desire to be a gender different from the one assigned at birth.<sup>8</sup> Until future studies incorporate GD diagnostic criteria, previous research using GID criteria inform current conceptualizations of gender development and are reported here. These studies suggest that without treatment, GD does not persist through late childhood or early adolescence in the majority of young children who meet diagnostic criteria for GD.<sup>8,12,13</sup> In cases where GD subsides, the majority of children will proceed to later identify as gay or lesbian, whereas fewer may identify as heterosexual.<sup>11,13-16</sup> In contrast to prepubertal children with GD, postpubertal adolescents



with GD are more likely to continue experiencing GD through adolescence and adulthood.<sup>3</sup> For some adolescents, GD emerges during adolescence.

Gender-variant youth can, therefore, be considered to comprise at least two different subgroups of youth—what developmental/clinical psychologist Diane Ehrensaft, PhD, refers to as “apples and oranges.”<sup>17</sup> The “apples” refer to children with gender variance who may actually be transgender, and the “oranges” being children with gender variance who develop to be cis-gender gay, lesbian, or heterosexual individuals. A lack of empirical research on gender-variant children has limited the degree to which these subgroups of gender-variant children can be reliably distinguished from each other in childhood. However, recent findings from a clinic-referred sample of youth in the Netherlands has begun to shed empirical light on the developmental characteristics of “apples” versus “oranges,” suggesting that the likelihood of transgender identity in adolescence may be predicted by several factors, including a high severity of childhood GD, GD persistence into adolescence, and a proclivity in children to assert their gender cognitively versus affectively (ie, “I am a girl” versus “I feel like a girl.”).<sup>14,16</sup> Additional research is needed to further elucidate the characteristics of gender development in gender-variant youth.

## SOCIAL GENDER TRANSITIONING

Currently, the topic of social gender transitioning in prepubertal children is controversial. Social gender transitioning refers to individuals’ intention to present—in name, in preferred gender pronoun, in dress—as a gender different from their birth-assigned gender and in a manner consistent with their affirmed gender. Proponents of social transitioning in prepubertal children argue that children allowed to transition to their affirmed gender will experience less social distress and, because the transi-

tion occurs solely at the social level (ie, without medical intervention), these children can fully revert to their birth-assigned gender should GD desist.<sup>18</sup> Opponents of social transitioning in pre-pubertal children argue that it can contribute to GD persistence, thereby increasing one’s likelihood to be transgender in adolescence,<sup>19</sup> and that given the high desistance of childhood GD in adolescence, it is likely that children may undergo premature or entirely contraindicated social transitioning.<sup>20</sup>

## CLINICAL PRESENTATIONS

Presentations of gender-variant expression, behavior, and identity differ according to developmental stage. The following vignettes illustrate how these different cohorts may present to their pediatrician.

### A Prepubertal Natal Male with Gender-Variant Behavior

Andy is a 5-year-old natal male presenting for a well-checkup visit. The pediatrician notices that Andy has long hair and is wearing a pink shirt with sequins. He could easily be confused for a girl. Mom reports that Andy will “only play with girls” and “prefers toys that are stereotypically feminine, such as dolls.” On a few occasions, he has stated, “I wish I could be a girl,” but he appears relatively happy and well-adjusted when wearing “boy clothes” to kindergarten.

### A Peripubertal Natal Female with Gender Dysphoria

Lily is an 8-year-old natal girl presenting with a headache. She appears different since the last visit, with a short haircut that leads the pediatrician to mistake Lily for her older brother. Her mother describes Lily as a “tomboy,” preferring to play sports and spend time with mostly boys. However, Lily has become withdrawn in the past few months, scratching herself where breast buds appear to be developing. She has been

asking about breast growth with increasing worry about her own body. She recently had a tantrum, refusing to leave the house until she could wear her older brother’s clothing.

### A Peripubertal Natal Male who Is Transgender (ie, a Transgender Female)

Tommy is a 14-year-old natal male presenting for a physical. He has always been a quiet child, never interested in sports or roughhousing with other boys. When the pediatrician enters the room, Tommy avoids eye contact. He is wearing a sweater with a collar exposing one shoulder, his hair is shoulder-length, and his fingernails are painted silver. Tommy remains quiet while Mom reports that since last year, Tommy’s grades have dropped, he “announced that he might be gay,” and he has started dressing “androgynously.” The pediatrician meets with Tommy alone. During a sexual behavior screen, Tommy states that he is attracted to boys but that he has not been sexually active. He tells the pediatrician that he “might be feeling like a girl inside” and that he might be transgender. He is distressed about his changing voice, body hair, and waking up in the morning with erections, and all he can focus on is “not getting taller.”

The youth depicted in these vignettes illustrate how gender identity and expression might present across development. Although there are overlapping recurring themes for all youth with gender variance, there are also common presentations within each developmental cohort. As mentioned earlier, the trajectory of young children with gender variance, such as Andy, may reflect a number of identity outcomes later in life. Supporting children and families as they navigate open-ended exploration of gender that does not presume later identity outcomes is a hallmark of working with this age group.<sup>9,21</sup> An older child on the cusp of pubertal changes, like Lily, may

present with anticipatory anxiety about the emergence of secondary sex characteristics. Further exploring gender identity and the correlation between physical development and anxiety or other mood changes is critical in this group. Adolescents such as Tommy may experience an emergence or intensification of GD during puberty. The development of unwanted secondary sexual characteristics is often exceptionally distressing. Some adolescents who feel “different” may at first declare a gay, lesbian, or bisexual sexual orientation but later realize that what they are experiencing is related to discordance between their gender identity and physical anatomy. Others may recognize this earlier and declare that they were born in the wrong body. Exploration of gender identity with older youth, who have an increased ability to think abstractly, helps differentiate those who are experiencing GD, same-sex attractions, or both.

### MENTAL HEALTH

Children and adolescents with gender variance may experience coexisting mental health problems, and it is unknown to what extent these are reflective of societal responses to gender variance rather than genetic predisposition. One study of children with GID referred to Dutch and Canadian gender clinics found behavior problems and peer-relation difficulties in both groups.<sup>22</sup> In adolescents with GD, anxiety and depression are reported frequently. A Dutch study of youth referred to a gender clinic in Amsterdam (mean age 14.5) reported that 32% met *DSM-IV* criteria for one or more co-occurring psychiatric disorders, with anxiety and depression most frequently described.<sup>23</sup> This is similar to findings at a pediatric multidisciplinary gender clinic in Boston, which reported that 44% of adolescents (mean age 14.8 years) had received psychiatric diagnoses prior to their initial presentation at the clinic.<sup>5</sup> Among these diagnoses, de-

pression, anxiety, and bipolar disorder were most commonly observed.

Transgender adolescents in the United States face high rates of verbal harassment, physical assault, and peer and family rejection, and many experience homelessness, economic marginalization, and lack of access to medical and mental health services.<sup>2,7,24,25</sup> Findings from the National School Climate Survey suggest that transgender high school students often encounter hostile school environments and, overall, report higher levels of victimization at school than their lesbian, gay, and bisexual peers.<sup>26</sup> When asked if they had ever experienced harassment and assault based on gender expression, 75% of transgender students reported verbal harassment, 32% reported physical harassment, and 17% reported physical assault.<sup>26</sup>

### CARE FOR GENDER-VARIANT CHILDREN AND ADOLESCENTS: A MULTIDISCIPLINARY MODEL

Currently, there is no consensus regarding the best course of management for children and adolescents with GD, and although a body of research is growing, outcomes in this area are lacking. Although management may vary between clinics, there is consensus that the most comprehensive care is delivered through a multidisciplinary team comprised of medical and mental health clinicians with gender-related expertise and familiarity with developmental stages of childhood/adolescence.<sup>27</sup> The model of care at the Gender and Sex Development Program at Ann & Robert H. Lurie Children's Hospital of Chicago embraces a gender-affirming model that does not view gender variance as a mental illness. An affirming philosophy supports children and adolescents living as they feel most comfortable and promotes exploration of gender identity without presuming a specific “one-size-fits-all” trajectory of gender development.<sup>28</sup> The goal of care is to meet the medical and

mental health needs of youth with gender variance while providing support for family and community around the child or adolescent.

### MENTAL HEALTH ROLE

The World Professional Association for Transgender Health (WPATH) Standards of Care outline the role of the mental health professional working with children and adolescents with GD as including: (1) assessment of GD, (2) provision of family counseling and supportive psychotherapy to assist with exploring gender identity, (3) assessment and treatment of coexisting mental health concerns, (4) referral to medical providers for consideration of transition services, (5) education and advocacy on behalf of children with GD, and (6) referral for peer and parent support groups.<sup>1</sup> Several psychotherapeutic approaches to treating children with GD have been proposed and are described elsewhere.<sup>6</sup> For youth with gender variance who are not gender dysphoric, providing education and support for families is the primary goal, and referral to medical providers for physical transitioning is not indicated.

### MEDICAL PROVIDER ROLE

Puberty is often a time of heightened distress for youth with GD. Many, but not all, desire hormonal intervention. Current guidelines for medical treatment of GD have been published by WPATH and the Endocrine Society.<sup>1,27</sup> All patients considering hormonal intervention must fulfill specific criteria and meet with a mental health professional to rule out psychiatric comorbidity that could interfere with the identification of GD, ensure psychosocial support, and confirm that the patient fully understands the effects of treatment.<sup>1,27</sup> Here, we briefly outline two forms of hormonal intervention. A more thorough discussion of hormonal treatments (including management considerations, dosing,

side effects, and risks) is available in separate reviews.<sup>1,3,27-29</sup>

## PUBERTAL SUPPRESSION

Pubertal suppression with gonadotropin-releasing hormone (GnRH) analogues may be considered for some peripubertal youth who have entered pubertal development (Tanner stage 2+) and experience either persistent GD or the emergence of GD. If administered early, GnRH analogues can block the occurrence of irreversible changes of puberty, alleviate psychological distress related to impending pubertal changes, and ultimately improve physical outcomes for those who proceed with cross-sex hormone therapy.<sup>27-29</sup> Pubertal suppression is a reversible intervention that offers peripubertal youth additional time to explore their gender identity and provides families additional time for decision making.

## CROSS-GENDER HORMONE THERAPY

For adolescents with persistent GD, cross-gender hormones may be used to facilitate an appearance that is more congruent with a patient's asserted gender. Estrogen and sometimes androgen-receptor blockers (usually spironolactone) are used for feminization, and testosterone is used for masculinization. Cross-gender hormones induce various phenotypic changes, some of which are reversible and others that are not.

## CONCLUSION

Gender-variant expression, behavior, and identity in children and adolescents present in a number of ways. Pediatricians may be families' first resource for education and support, and they are instrumental in early identification of gender dysphoria, screening for psychosocial problems and health risks, referral for gender-specific care, and provision of ongoing support for families. As such, pediatric primary care providers play a

critical role in supporting the health of youth with gender variance.

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