NCC Pediatrics Continuity Clinic Curriculum:
Gender Dysphoria

Pre-Meeting Preparation:

Please read the following enclosures:

1) "Approach to Children and Adolescents with Gender Dysphoria" *(PIR 2016)*
2) "Trans Teen Shares Her Story" *(PIR 2016)*
3) "Information for Care Givers of LGBTQ Youth"

Conference Agenda:

- *Review* Quiz
- Complete Cases

Extra-Credit:

Review the following for more in-depth knowledge on this topic

1) The Endocrine Society's Clinical Guidelines on Endocrine Treatment of Transsexual Persons
2) UCSF *Guidelines for the Primary and Gender-Affirming Care of Transgender and Gender Nonbinary People*
3) Dr. Klein 2016 morning report presentation "*My Patient is Transgender: What Do I Do*?"
4) National Geographic: "*In Their Words: How Children Are Affected By Gender Issues*"

Approach to Children and Adolescents with Gender Dysphoria

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Educational Gaps

1. Clinicians should be aware that patients who have gender dysphoria (GD) often suffer from psychiatric comorbidities that worsen during puberty, at which time they are at high risk of suicide.
2. It is beneficial for clinicians to appreciate their critical role in accruing a thorough and sensitive history suggestive of GD and the complexity therein and in being familiar with both the process and benefits of evaluation and therapy.
3. Primary caregivers must recognize that there is an ideal window of opportunity for patients to receive hormonal intervention, necessitating prompt referrals.

Objectives

After completing this article, the reader should be able to:

1. Define and describe gender dysphoria.
2. Define the terms sex, gender, gender identity, genderqueer, cisgender, gender expression, gender variant, gender nonconforming, transgender, and sexual orientation.
3. Recognize how a child or adolescent who has gender dysphoria can present to the primary clinician.
4. Recognize the controversies about current gender dysphoria prevalence data.
5. Describe the evaluation of a child or adolescent for gender dysphoria.
6. Describe the primary clinician's role in caring for a patient who has gender dysphoria.
7. Describe the benefits of long-term treatment for children and adolescents whose gender dysphoria persists through puberty.

Note: We discuss the use of gonadotropin-releasing hormone analogs for puberty suppression in adolescents who have gender dysphoria, but this is not a U.S. Food and Drug Administration-approved use of these drugs.

AUTHOR DISCLOSURE Drs Lopez, Stewart, and Jacobson-Dickman have disclosed no financial relationships relevant to this article. This commentary does contain a discussion of an unapproved/investigative use of a commercial product/device.

CLINICAL CASE

Riccardo was a 17-year-old natal male who described himself as "being a girl with boy parts," a proclamation that he verbalized at 15 years of age. She preferred to be referred to with female pronouns. She explained that these feelings manifested when she was very young, noting that she wanted to play Cinderella with friends and that her favorite toys were Barbie dolls and a pink stuffed animal. Even as a toddler, Riccardo always preferred to associate with female peers. Socially, Riccardo had transitioned to female gender. She had long bleached blonde hair and wore make-up, jewelry, and typical female clothing. Riccardo was delighted to "pass" as a female. However, she expressed distress about her masculine secondary sexual characteristics. She hated the broadening of her shoulders and development of facial and body hair and her Adam's apple. She explained that she felt that her genitalia did not "belong" to her. Riccardo said bluntly, "If hormones are not prescribed by a doctor, I will get them elsewhere."

At age 15, she was described as becoming increasingly defiant, withdrawn, angry, and depressed. On her 16th birthday, Riccardo requested to change her name to Racquel. Racquel was hospitalized for depression and prescribed antidepressants but reported that they had little benefit. Over the course of the following year, Raquel ingested high doses of over-the-counter medications and prescription drugs to "escape."

At the age of 17, under the care of a pediatric endocrinologist, Racquel began taking feminizing hormones, which she increased on her own to "speed up the process." Four months later, she died by suicide and left a note stating: "Nobody understands how hard it is to live in a body you don't belong in, and you're constantly persecuted for having a medical condition that wasn't under your control when all you're doing is trying to fix it and live life like everybody else."

If Racquel had received mental health support and hormonal therapy at a younger age, could her outcome have been different?

DEFINITION AND CLINICAL PRESENTATION

Sex, gender, and sexual orientation are independent constructs (Table 1). *Sex* is a biological status, categorized as male, female, or intersex and indicated by factors that include chromosomes, gonads, internal reproductive organs, and external genitalia. *Gender* is a psychological status and denotes the attitudes, feelings, and behaviors associated with being male or female. *Gender identity* is the individual's articulation as to whether he or she is male, female, or

TABLE 1. **Terminology Related to Gender and Sexuality***

TERMS	DEFINITION
Sex	A biological status categorized as male, female, or intersex, as indicated by factors that include chromosomes, gonads, internal reproductive organs, and external genitalia
Gender	A psychological status that denotes attitudes, feelings, and behaviors within a given culture that are associated with being male or female
Gender identity	An individual's articulation as to whether he or she is male or female
Transsexual/Transgender	When an individual's gender identity and biological sex are not congruent
Cisgender	Gender identity that is congruent with natal sex
Genderqueer	An absence of identification with either the male or female binary
Gender expression	The communication of gender-specific behaviors and attitudes within a given culture
Gender variant/Gender nonconforming	Broad terms used to identify individuals whose gender expression is different from their natal sex
Sexual orientation	Refers to the sex of those to whom one is sexually and/or romantically attracted: attraction to members of the opposite sex (heterosexual), attraction to members of one's own sex (gay or lesbian), and attraction to both sexes (bisexual)†

**These definitions are derived from the American Psychological Association. Guidelines for psychological practice with lesbian, gay, and bisexual clients* Am Psychol. *2012;67(1):10–42.*

†*These categories continue to be widely used, although research suggests that sexual orientation does not always appear in such stratifiable categories and instead exists on a continuum (eg, Kinsey, Pomeroy, Martin, and Gebhard, 1953; Klein, 1993; Klein, Sepekoff, and Wolff, 1985; Shiveley and DeCecco, 1977).*

transgender. Sex and gender identity overlap in most of the population, and when they do not, individuals may categorize themselves as *transgender* or *transsexual*. In contrast, the term *cisgender* indicates gender identity congruent with natal sex, and the term *genderqueer* denotes an absence of identification with either the male or female binary and instead an incorporation of sex-typical traits of both. *Gender expression* is the communication of gender-specific behaviors and attitudes, which vary in different cultural and social contexts; this expression may not be consistent with the individual's sex or gender identity. The terms *gender variant* and *gender nonconforming* are broad constructs used to identify individuals whose gender expression does not fit with their natal sex (but does not necessarily denote a transgender orientation). *Sexual orientation* is independent of gender identity (1) and is characterized by attraction to members of the opposite sex (heterosexual), attraction to members of one's own sex (gay or lesbian), and attraction to both sexes (bisexual).

The diagnosis of gender identity disorder (GID) has been eliminated in the most recent *Diagnostic and Statistical Manual of Mental Disorders* (DSM-V), reflecting the evolving concept that transgender identity is not an independent pathology. However, feelings of discontent related to social stigmatization, isolation, and rejection in the context of the experience of a body or a natal sex-based assigned gender that are incongruent with gender identity may be defined by newer criteria as gender dysphoria (GD). (2) Table 2 lists the DSM-V diagnostic criteria for GD stratified by childhood or adolescence. The listed attitudes and behaviors must persist for at least 6 months and cause clinically significant impairment in function to meet the diagnosis.

ETIOLOGY AND EPIDEMIOLOGY

Gender identity is likely influenced by a combination of biology, socialization, and culture, (3) although specific and robust evidence is lacking. There is some support for a biological component to transgender identity. A twin study indicates a significant genetic component (62%) and a smaller nonshared environmental component for transgender identity. (4) Observations in humans with inborn disorders of excessive testosterone production and/or exposure show that direct effects of testosterone on the fetal brain are important for the development of male gender identity. (3) The number of individuals who identify as transgender appears to be increasing dramatically, suggesting possible environmental effects, (5) although the increase also could be a consequence of more widespread awareness and increased societal acceptance.

Prevalence studies related to gender identity are complicated and may be misleading for several reasons: (5)

- The reported age at which individuals first identify themselves as transgender varies substantially
- Gender identity may not be simply binary
- Gender identity can be fluid for an individual across the lifespan

Most young children whose gender expression is not congruent with their natal sex do not, in fact, ultimately assume transgender identities in adulthood. (6) The rate of persistence versus change (desistence) has been documented as approximately 16%. (7) However, experts are considering that previous studies may have underestimated long-term persistence. A key issue is that criteria for GID from earlier versions of the DSM on which the studies were based included diagnoses on the basis of transgender behavior alone. Some have suggested that the proportion of persisters would likely be higher by applying current GD criteria (rather than previous GID criteria) and, for example, including individuals who continued to express a desire to be of the opposite sex or to believe that they were the opposite sex, regardless of transgender behaviors per se. A second methodologic criticism is that most of the youth studied had not actually been followed into adulthood, suggesting that with longer follow-up, the number of apparent desisters might be lower. It seems clear, however, that most children whose gender-variant identity persists into adolescence develop an adult transgender identity. In these cases, puberty and attainment of secondary sexual characteristics is often a source of significant distress. (6)

Prevalence estimates of transgenderism in adults in the United States vary from 0.005% to 0.014% for male-to-female (MTF) and 0.002% to 0.03% for female-to-male (FTM). In younger children, sex ratios of those referred to specialty clinics range from 2:1 to 4.5:1 for natal boys to girls; by adolescence, the natal sex ratio is close to equal. (2) Individuals who have GD have been reported in many cultures globally. Worldwide estimates range from 1:30,000 (0.003%) (6) for MTF to 6:100,000 (0.006%) to 1:33,800 (0.003%) for FTM. (7)

MENTAL HEALTH AND SOCIAL COMORBIDITY

Psychiatric comorbidity is very common in transgender youth, with depression, anxiety, and suicidality being two to three times more frequent than among cisgender controls. (8) In a recent large national transgender survey, a staggering 41% of adult respondents reported attempting suicide (compared to 1.6% of the general population), which serves as strong impetus for reexamining current

TABLE 2. **Diagnostic Criteria for Gender Dysphoria***

CHILDHOOD (6 OUT OF 8 CRITERIA)†	
1.	Desire to be of the other gender or the insistence that one is of the opposite sex
2.	Preference for cross-dressing and rejection of stereotypical dress style associated with the natal gender
3.	Preference for cross-gender roles in fantasy play
4.	Preference for toys, games, and activities stereotypically associated with the other gender
5.	Preference for playmates of the other gender
6.	Rejection of toys, games, and activities stereotypically associated with the natal gender
7.	Strong dislike of one's sexual anatomy
8.	Desire for sex characteristics that match the desired gender
ADOLESCENCE (2 OUT OF 6 CRITERIA)†	
1.	Incongruence between experienced and assigned gender
2.	Desire to prevent or be rid of primary and (even anticipated) secondary sexual characteristics
3.	Desire to acquire primary or secondary sexual characteristics of the opposite sex
4.	Desire to be the opposite or an alternative gender from one's assigned gender
5.	Desire to be treated as the opposite or an alternative gender from one's assigned gender
6.	Conviction that one has the feelings and reactions of the opposite or an alternative gender

**Adapted from the* Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition.
†*In children, six of eight attitudes and behaviors incongruent with the child's natal sex should be met. Among adolescents, two of six criteria should be met. In both groups, these criteria must persist for at least 6 months and cause clinically significant impairment in function.*

treatment practices of GD in childhood. (9) Of great interest is a recent study that demonstrated that youth who were treated with pubertal suppression, cross-sex hormones, and gender reassignment surgery, in addition to being cared for by a highly trained multidisciplinary team that included mental health clinicians, had mental health outcomes similar to the general population. (10) Results of this study strongly suggested that many of the adverse psychological outcomes noted in transgender youth may be preventable with early recognition, hormonal treatment, and mental health support.

Youth who are validated in their transgender identity by their families and in their social environment have much better psychological outcomes. (11) Therefore, critical to their health is an investment in family counseling and education about gender identity and GD that can help parents to accept and support their children. This presents a challenge when parents have strong attitudes against accepting their child's transgender identity, which can be based on religious, cultural, or other strongly held philosophies. In such situations, the primary care clinician should continue education and refer the child for a mental health evaluation and/or counseling, considering the higher risk of depression, anxiety, and suicide.

Transgender children who have "come out" are more likely to be victimized by their peers. (12) How schools respond to these situations varies substantially, with many reports of teachers and administrative staff rejecting children's transgender status. Persistent use of the gendered birth name and nonpreferred pronouns is common practice in schools as well, which can be harmful to the transgender child. The school environment plays a major role in the psychosocial adjustment of transgender youth. Advocates who can help the family be aware, explain to them how to exercise their rights, and help educate school officials are now more widely available in the United States (Table 3).

EVALUATION AND TREATMENT

The role of the primary clinician is to identify patients who may have GD, refer them to appropriate diagnostic and treatment centers, and provide anticipatory guidance and counseling. The primary clinician must actively seek out

TABLE 3. **Resources for Education and Advocacy for Transgender Youth and Families**

World Professional Association for Transgender Health (WPATH): http://www.wpath.org
TransYouth Family Allies (TYFA): www.imatyfa.org
Parents, Families & Friends of Lesbians & Gays (PFLAG): www.community.pflag.org
International Foundation for Gender Education: http://www.ifge.org
Gay, Lesbian & Straight Education Network (GLSEN): www.glsen.org
Family Acceptance Project: For LGBT and diverse families at risk for suicide, mental health issues and homelessness: http://familyproject.sfsu.edu/
The Trevor Project: Suicide prevention for sexual and gender minority youth: www.thetrevorproject.org
Amplify Your Voice: News, message boards, listserves for GLBT youth by state: http://amplifyyourvoice.org
Gay and Lesbian National Help Center: Toll-free, anonymous peer counseling, information, and referrals with huge database: http://www.glnh.org (888.THE.GLNH)
Trans Youth Equality Foundation (TYEF): Support, resources, and networking services, based in Portland, ME: www.transyouthequality.org
Lambda Legal: National organization committed to achieving full recognition of the civil rights of lesbians, gay men, bisexuals, transgender people, and those with human immunodeficiency virus through impact litigation, education, and public policy work: http://www.lambdalegal.org/
Gender Odyssey: An international conference, located in Seattle, WA, that focuses on the needs and interests of transgender and gender-nonconforming people: http://www.genderodyssey.org/
Gender Spectrum: Education, training, and support to help create a gender-sensitive and -inclusive environment for children of all ages: https://www.genderspectrum.org/

signs and symptoms of GD, which are often subtle and indirect, manifesting as mood or behavior changes. A parent or child may not express GD concerns directly for several reasons, including lack of awareness about this entity, shame, the belief and, in some cases, hope that GD-related behaviors will be transient or "a phase," and the belief that GD need not be addressed until adulthood. Identifying GD in patients who are peripubertal is especially important because the onset of puberty heightens the risk of depression, suicide, and self-destructive choices and behaviors. (8)(13) Furthermore, in appropriate cases, this time can be the ideal juncture for initiating puberty-halting hormonal therapy.

The Prepubertal Child

The clinician who suspects GD in a prepubertal child may begin an initial assessment with direct, nonjudgmental questions such as, "Do you have any concerns that your child might have a problem with his or her gender?" An explicit differentiation between sexual attraction and gender identity should be offered to alleviate any potential ambiguity or misconception. The interview should be extended to investigate a description of and degree to which the child's mood and behavior are affected and whether there have been changes in the family and/or social dynamics or school performance. Information about gender nonconforming behaviors should be elicited (Table 4), such as a preference for toys (eg, dolls for boys and trucks for girls) or clothing typical of the opposite sex (eg, boxer shorts instead of female underwear for girls), preoccupation with fantasy characters that are typically of greater interest to the opposite sex (such as the princess for natal boys), assumption of the role of the opposite-sex parent when engaged in pretend play, and preference for urination standing up for girls or sitting down for boys. Parents should be informed that the presence of one or two such behaviors, particularly when short-lived, does not predict an evolving transgender identity because gender nonconforming behaviors and preferences are frequently transient during childhood. However, tenacious expression of cross-sex interests, especially persistence of transgender identity into adolescence, suggests that the condition is not likely to revert thereafter. Mental health intervention may not be imperative; the decision likely will depend on the impact on the child, ie, if the child is gender nonconforming but does not appear to have psychological distress. On the other hand, if there is suspicion of GD with accompanying distress and/or if the family is challenged with adjusting to their child's identity, they should be referred to a mental health clinician promptly.

Ideally, the mental health referral is to a clinician (psychologist, psychiatrist, or licensed therapist) with experience evaluating children with GD. Centers of expertise in this field with multidisciplinary programs are preferred, but in

TABLE 4. **Approach to Obtaining a Gender Dysphoria History for the Primary Clinician***

EXAMPLES OF GENDER NONCONFORMING BEHAVIOR AND PREFERENCES	EXAMPLES OF SUGGESTED QUESTIONS AND PHRASING
Gender identity different from the sex assigned at birth	Some young people feel that they were born in the wrong body; have you ever felt like that?
Persistence of gender identity different from the sex assigned at birth	For how long have you felt that you were a girl/boy?
Gender nonconforming behavior	What kind of toys would you like to play with?
	Do you prefer to wear girls' or boys' underwear?
	What do you (and what would you like to) wear when you swim?
	Who are your favorite fantasy characters?
	What do you (and what would you like to) dress up as at Halloween?
	Which character from the TV shows or movies do you admire?
Evaluation of source of distress	What kinds of thoughts make you feel sad?
	What do you think about your body?

**The purpose of obtaining a sensitive and thorough gender dysphoria-related history is not to diagnose gender dysphoria; rather, it is designed to assess the necessity for referral and further evaluation by a mental health clinician.*

many cases this is not a realistic option, and greater effort must be made in finding a suitable provider. A list of centers in North America has been published. (14)

The mental health clinician should conduct an exhaustive and methodical evaluation for GD that assesses for psychological comorbidities and provide therapy as needed. "Reparative psychotherapy" aimed at changing the gender identity or expression and promoting acceptance of the natal sex has been shown to be both unsuccessful and psychologically deleterious. (15)(16)(17)(18) The "gender affirmative model" is more accepted among experts. This model defines gender health as a child's opportunity to live as the gender that feels most real or comfortable to that child and to express that gender with freedom from restriction, aspersion, or rejection. (19) Nevertheless, complete social gender transition in young children is controversial. Retrospectively, children whose GD persists beyond childhood will benefit most, but predicting whose transgender identity will persist is challenging and should only be determined with the help of a mental health therapist. (20)

There is no recommended endocrine therapy or intervention for GD during prepubescence.

The Peripubertal and Pubertal Child or Adolescent

Identification of GD in patients who are peripubertal is especially important because puberty is associated with increased rates of high-risk behaviors and suicide. (8)(13) Furthermore, if endocrine therapy is deemed appropriate, this is the ideal time to intervene, ie, before the irreversible physical transformation caused by increasing concentrations of androgens and estrogens of puberty.

Adolescents are unlikely to broach the subject of GD with their physicians, and parents often have not identified the problem to that degree of specificity. Accordingly, the primary care clinician must have a high index of suspicion and persist in gathering pertinent history. Even if the parents are naïve to their child's GD, they often may express concerns about mood and behavior or have questions related to their child's sexual orientation. Education and engagement of family support is vital because the risk of suicide is heightened in the context of an unsupportive of family. The suicide attempt risk is 4% in a setting of strongly supportive parents and as high as 60% in those with nonsupportive parents. (21) When families fail to accept their child's gender of choice, the risk of homelessness, drug and alcohol abuse, prostitution, and use of illegally obtained hormones also is intensified. (13)

Consistent with the standard for an adolescent psychosocial medical history interview, discussions about GD should initially take place with patient and caregivers separately. An example of a direct and nonjudgmental initial question for the adolescent can be, ''Do you think that you might have a problem with your gender?" The response may

include content related to sexual attraction, gender identity, or both. Although most homosexual and bisexual adolescents do not have GD, a high percentage (50%-90%) of people with GD are homosexual in relation to their natal gender (but heterosexual in relation to their desired gender) or bisexual (10%). (22)(23)(24) If the patient appears to have GD, a prompt referral to a mental health clinician for diagnostic confirmation is recommended. According to data from adolescents who received support with mental health and/or endocrine therapy, GD that is present during adolescence persists in more than 90% of cases. (10)(25)(26)

Prompt referral is of critical importance if puberty has begun because the patient might be eligible for puberty-suppressing endocrine therapy. Multidisciplinary centers, often based in pediatric endocrinology or adolescent medicine clinics, with collaborative mental health professionals are good resources. (14) The Endocrine Society, with the support of the Pediatric Endocrine Society, has provided guidelines for treatment of adolescents who meet strict eligibility criteria (Table 5). (27) Of note, the criteria include that the patient must have initiated puberty based on physical examination, defined as Sexual Maturity Rating 2 for both males (genitalia) and females (breast development). Furthermore, any endocrine intervention must be performed in collaboration with a mental health professional.

Puberty suppression is achieved with gonadotropin-releasing hormone (GnRH) analogs, a therapy that has been used in children with precocious puberty since the 1980s. Such therapy allows a smoother social and physical transition to the gender role that is congruent with the child's gender identity. Suppressing puberty via a reversible process allows time for assessing the persistence of the affirmed gender as the child matures and before he or she undergoes irreversible physical changes from puberty. Furthermore, the therapy diminishes the psychological trauma and risk of suicide provoked by the physical changes of puberty. GnRH analogs are administered as intramuscular injections monthly or every 3 months (leuprolide acetate) or as a yearly subcutaneous implant (histrelin acetate). The suppressive reproductive axis effects of these therapies are reversible, and the adverse effect profiles are favorable and well characterized. Of note, GnRH analogs decrease growth velocity from a pubertal to a prepubertal rate. Subsequent treatment with cross-sex hormones appears to trigger "catch-up" growth and final height normalization, although research in this specific area is minimal. (28)

Suppressive therapy with GnRH analogs for youth with GD has not been approved by the U.S. Food and Drug Administration. Financial coverage or reimbursement by insurance companies can be difficult to obtain, although this has improved substantially in recent years. Out-of-pocket expense can total 15,000 USD yearly.

Adolescents with GD who undergo pubertal suppression have improved behavioral, emotional, and depressive symptoms. (23)(26)(29)

Adolescents with more advanced puberty (beyond Sexual Maturity Rating 2) may also be candidates for suppression of puberty to prevent the progression of later-onset secondary sexual characteristics, such as "masculine" facial bone structure, Adam's apple, facial hair, and a taller adult height in natal males. Moreover, this treatment may provide relief from the distress of menstrual periods in natal females and spontaneous erections in natal males. (27)

TABLE 5. **Eligibility Criteria for Suppression of Puberty from the Endocrine Society Practice Guideline on Endocrine Treatment of Transsexual Persons***

1.	Fulfills the current DSM or ICD criteria for gender dysphoria or transsexualism
2.	Has (early) pubertal changes that have resulted in worsening of their gender dysphoria
3.	Does not suffer from psychiatric comorbidity that interferes with the diagnostic evaluation or treatment
4.	Has adequate psychological and social support during treatment
5.	Has experienced puberty to at least Sexual Maturity Rating 2
	AND
6.	Demonstrates knowledge and understanding of the expected outcomes of suppression of puberty, future cross-sex hormone treatment, and sex reassignment surgery as well as the medical and social risks and benefits of sex reassignment

DSM=Diagnostic and Statistical Manual of Mental Disorders, *ICD=International Classification of Diseases.*
**Adapted from Hembree et al.* J Clin Endocrinol Metab. *2009;94(9):3132–3154.*

The Endocrine Society recommends hormone replacement therapy (HRT), referred to as "cross-sex hormones," in adolescents age 16 years and older who fulfill the criteria outlined in Table 5. (27) These include "feminizing hormones" for natal males such as estrogen and spironolactone (an androgen antagonist) and testosterone therapy for natal females. A GnRH analog is often continued to suppress endogenous testosterone or estrogen and allow for a lower dose of HRT. HRT has irreversible effects, such as breast and facial hair development with estrogen and testosterone, respectively. Greatly improved psychological well-being has been associated with HRT administration after timely suppression of puberty. (23)(26) When HRT is initiated after puberty (when cross-gender physical features have already developed), dissatisfaction with the affirmed gender appearance often persists, leading to further reparative surgeries and significant emotional distress.

Endocrine Society Guidelines (Table 5) recommend assessing comprehension of transgender outcomes and treatment risks even in minors, although this can be difficult to ascertain, particularly in younger patients. In practice, the depth of discussion depends on the age and maturity of the child. Nevertheless, endocrinologists should verify understanding of the parent(s) or legal guardian(s) involved, and many programs obtain written consent before initiating hormonal intervention.

The longest study of transgender adolescents who underwent a uniform protocol of pubertal suppression followed by HRT during adolescence and gender reassignment surgery in adulthood demonstrated that GD was alleviated in young adulthood (mean age 21 years). The psychosocial functioning improved and quality of life was similar or better than same-age adults from the general population. (10) Currently, gender reassignment surgery is not recommended before adulthood.

EDUCATION OF SUPPORT HEALTH STAFF

All individuals who have direct contact with patients, including nurses, medical assistants, reception desk staff, and others, should be educated about gender nonconformity and GD. Sensitivity training can have a profoundly positive impact on patients' experience in the clinical setting. Parents and patients often report discrimination or, at the very least, feeling uncomfortable and sometimes are compelled to educate health staff about theirs or their child's gender identity. (30)

Summary

- The definition of gender dysphoria (GD) includes the experience of a body that is incongruent with gender identity. The prevalence of GD is not as yet known, but the current proposed numbers are likely underestimated. Prevalence studies are complicated by several confounding factors and results may be misleading. (5)(7)
- On the basis of strong evidence from retrospective studies of relevant populations, clinicians should be especially vigilant in identifying GD in patients who are peripubertal because the onset of puberty heightens the risk of depression, anxiety, self-destructive choices, and suicide. (8)(13)
- On the basis of strong evidence, "reparative psychotherapy" is both unsuccessful and psychologically deleterious. (15)(16)(17)(18) On the basis of expert consensus, the "gender affirmative model" is more accepted. (19)
- On the basis of strong evidence, adolescents treated with a protocol of pubertal suppression followed by hormone replacement therapy during adolescence and gender reassignment surgery in adulthood have improved psychological outcomes and quality of lives compared with age-matched adults from the general population. (10)(29)
- A large national transgender survey revealed that 41% of adult respondents had attempting suicide. On the basis of strong evidence, youth who are validated in their transgender identity by supportive family and social environments have much more favorable psychological outcomes. (11) The primary care clinician has a unique role and responsibility to identify patients with possible GD and provide anticipatory guidance, counseling, and family support. Primary health care clinicians can provide the impetus and means to greatly improve the lifelong psychological well-being of their patients with GD and potentially save lives. (9)(11)(13)(30)

CME quiz and references for this article are at http://pedsinreview.aappublications.org/content/37/3/89.

Parent Resources from the AAP at HealthyChildren.org

- English only: https://www.healthychildren.org/English/ages-stages/gradeschool/Pages/Gender-Identity-and-Gender-Confusion-In-Children.aspx

Trans Teen Shares Her Story

EDITOR'S NOTE
Jazz Jennings is an adolescent who at a young age identified herself as a female after being "assigned" as a male at birth. Jazz and her mother, Jeanette, advocate for LGBTQ (lesbian, gay, bisexual, transgender, queer/questioning) rights. Their commentary is a powerful statement on the serious consequences that result from ignoring the issues facing youth with transgender dysphoria.

Jazz: I've always known I was a girl. My heart and soul are female. I just happen to have been born with male genitalia. From the time I could express myself, I acted like a stereotypical girl and told my parents that I was a girl.

At first they thought it was a phase, but the harder I pushed, the more they listened. They never forced me to be someone I wasn't and let me transition into the girl I knew I was at the age of 5, but I was one of the lucky ones. There are so many kids who hide who they are or aren't accepted by their parents.

Jeanette: When my daughter Jazz was first diagnosed with gender identity disorder, now called gender dysphoria, at the age of 3, my husband and I were broken-hearted. We knew that her journey in life was going to be filled with hardship, but instead of trying to change her to comply with societal norms, we embraced her for who she was and promised her a life filled with unconditional love and acceptance.

Jazz endured bigotry, discrimination, and bullying, but her biggest fear was that she would look like her dad one day. She'd have nightmares about growing a beard and a mustache. We educated ourselves and learned that because Jazz was still young, it would be possible to delay puberty and avoid having her body betray her. Fifty percent of transgender youth attempt suicide before they are age 21, and we were determined that she wouldn't be another statistic. In our eyes, hormone treatment was a life or death situation. We wanted a live daughter, not a dead son.

Jazz: The puberty blockers and cross-sex hormones did save my life. If my parents had waited, it would have been too late. It's impossible to erase all of the secondary male characteristics that accompany male puberty. I have friends who transitioned after puberty. They have Adam's apples that need to be shaved and have full beards that will need to be removed with painful electrolysis and laser treatments. Many of them self-harm, have attempted suicide, and end up hospitalized. It's devastating for them.

They all wish that they could have stopped male puberty like I did. The same holds true for my guy friends. All of them have had or will need double mastectomies, and they wanted to die when their menstrual cycles began.

Jeanette: I have committed my life to helping transgender youth. Their voices need to be heard when they are young. The signs are often there, and, therefore, it's up to the adults to be in tune with them and listen to what they have to say. In addition, those adults need to take action and put their child's needs and wants ahead of their own egos.

Education is the key. There's so much information on the internet and in the media. There's no excuse for those who look the other way. Early professional intervention is mandatory so that these children can lead happy, productive lives. As Jazz would say, "They are just kids, and all kids deserve to be happy."

Jeanette Jennings, Jazz Jennings

NOTE: *Jazz Jennings is a 15-year-old transgender girl who socially transitioned when she was 5. She's been an advocate for trans youth since she was first interviewed*

AUTHOR DISCLOSURE Mrs. Jennings has disclosed no financial relationships relevant to this article. This commentary does contain a discussion of an unapproved/investigative use of a commercial product/device.

by Barbara Walters at the age of 6. She is the coauthor of the children's picture book, "I Am Jazz," about her early life. Jazz was named one of "The 25 Most Influential Teens" in 2014 and 2015 by Time *magazine.*

Jeanette Jennings is a proud mom of four who has been married 22 years to her husband Greg. Her youngest, 15-year-old daughter Jazz, is transgender. In 2007, the family started sharing their story publicly and created the TransKids Purple Rainbow Foundation. She and Jazz speak all over the country at schools, universities, medical conferences, and symposiums.

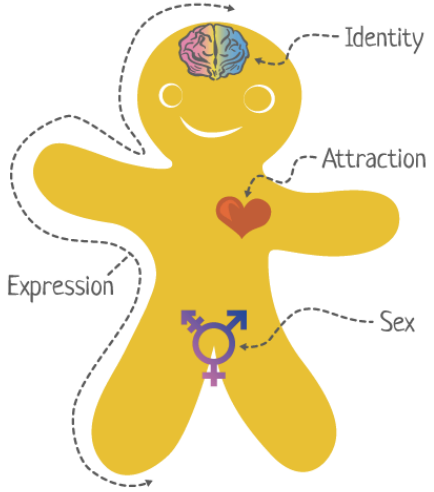
Jazz, Jeanette, and their family are the subjects of the TLC docuseries "I Am Jazz."

Parent Resources from the AAP at HealthyChildren.org

- English only: https://www.healthychildren.org/English/ages-stages/gradeschool/Pages/Gender-Non-Conforming-Transgender-Children.aspx

What Is Gender

- **Gender Identity:** Internal sense of being male, female, both, or something else. Stabilizes as early as 4 years old.
- **Gender Expression:** How you show your gender through behavior, clothing, etc. This many change overtime and not conform to gender identity
- **Sexual Orientation:** Who you are attracted to physically and emotionally.
- **Gender Variant:** People who's gender identity is different from societal norms. Boys may want to play with dolls and girls may want to wear "masculine" clothing.
- **Transgendered:** People whose gender identity differs from assigned birth sex and transition to desired gender. MTF refers to a male's transition to female; and FTM refers to a female's transition to male.
- **Ally:** A person who believes heterosexism, homophobia, and transphobia are social injustices



RESOURCES

Education for General Pediatric Providers

- Guide for Caring for Transgendered Patients: http://www.prh.org/ARSHE
- Lesbian, Gay, Bisexual, and Transgender Health and Wellness resource for professionals: www.aap.org

Referral Information

- The Gay and Lesbian Medical Association http://glma.org/

Articles

- Enhancing pediatric workforce diversity and providing culturally effective pediatric care: implications for practice, education, and policy making. Pediatrics. 2013;132(4):e1105-16.
- Levine DA. Office-based care for lesbian, gay, bisexual, transgender, and questioning youth. Pediatrics. 2013;132(1):e297-313.

MetroHealth

Gender Creative, Gender Fluid, Gender Awesome

Information for Care Givers of LGBTQ Youth

Common Heath Disparities in LGBTQ Youth

Mental Health

- Higher rates of depression and more than twice as likely to have SI.
- Higher rates of eating disorders
- Experience significantly higher rates of bullying and physical violence
- Stigmatization and parental rejection is common—often leading to psychological distress, low self esteem, and homelessness; which all increase rates of risky behavior.

Sexual Health

- More likely to have intercourse before age 13, with > 4 partners, and less likely to use protection.
- Lesbian youth have higher rates of teenage pregnancy than heterosexual females as many MSM and WSW have sex with opposite gender (and less likely to use condoms).
- HIV rates for MSM and MTF youth are increasing among 13 to 24 year olds.

Drug Use

- Significantly higher rates of tobacco, alcohol, marijuana, cocaine, ecstasy, methamphetamine, and heroin use
- Transgendered youth may inject liquid silicone, share needles, or use transgenic hormones found on the street.

Office Based Visits

Making a LGBTQ friendly office- Create an accepting environment

- Questionnaires and intake forms should not assume heterosexuality.
- Ensure all staff uses gender neutral terms (ie using "partner" instead of "girlfriend".)
- Create a confidential environment—inform caregiver and patient that information will not be shared without consent.
- Provide pamphlets regarding LGBT community support systems or sexual health in private exam rooms
- Small tokens, such as a rainbow pin or window decal, can show openness and acceptance to LGBT youth.

Health Care

- Obtain an appropriate comprehensive and nonjudgmental psychosocial history. *If engaging in sexual activity, can ask "are you having sex with males, females, or both," "Was there any insertive or receptive sex," or even simply "what parts were touching."*
- Encourage teens to discuss any questions about emerging sexual/gender identities.
- CDC recommends assessing all teens for STI risk and follow STI testing based on sexual behaviors and not strictly orientation
- HPV vaccine, routine cervical cancer screening and contraception should still be offered to WSW as they still may have intercourse with males.
- MSM should received vaccines for Hepatitis A and B if not previously vaccinated

Specifics for Transgendered Care

Gender Dysphoria: emotional distress of having a gender identity different from natal sex. Children often express dysphoria starting in preschool. Physical changes during puberty may cause added distress and anxiety.

- Acknowledge and affirm feelings of gender dysphoria
- Gender dysphoria in childhood may resolve by adolescence or continue into adulthood. Thus, make all options available as the child grows up.
- All transgendered youth should be referred to a qualified mental health professional to ensure support

Strategies of Gender Transition

- **Reversible**: changes of outward gender expression, such as hair style, breast binding, or name. GnRH analogs may be used in this stage to suppress puberty at Tanner stages 2-3 until emotionally ready for further hormonal therapy.
- **Partially reversible:** use of gradually increasing cross gender hormone therapy, initiated around age 16 years. A mental health professional should document psychological readiness before initiating hormones.
- **Irreversible:** Surgical Phase, recommended for 18 years or older.

With proper support and guidance, majority of sexually minority youth emerge as adults who lead happy, productive lives.

Gender Dysphoria Quiz

1. Define the following terms:

    a. Sex:

    b. Gender:

    c. Gender Identity:

    d. Transsexual/Transgender:

    e. Cisgender:

    f. Genderqueer:

    g. Gender expression:

    h. Sexual orientation:

2. ***True or False?*** Most young children whose gender expression is not congruent with their natal sex ultimately continue their transgender identities in adulthood.

3. What biologic criterion must a patient meet to qualify for puberty suppression treatment per the Endocrine Society Practice Guidline?

4. Is puberty supression with GnRH analogs reversible? What do these medications do to a patient's height? How does GnRH treatment differ from treatment with hormone replacement therapy?

5. You discover on arrival to your new command that the local community psychologist practices "reparative psychotherapy" for gender dysphoric patients. What is this? Should you send her patients? Why or why not? If not, what are some resources you could use to find alternative care for your patients?

Gender Dysphoria Cases

Case 1: You are on an overnight call on the Pediatric Ward of your hospital. The ER calls you to evaluate a 16 year old biological male who identifies as female, and is complaining of genital pain. As you arrive, you overhear the nurse refer to the patient as "John" (the patient already expressed a preference to be called "Samantha") and state to a fellow nurse that "he or she or whatever is in room 5." The patient overhears this and becomes visibly upset. How could this situation have gone better?

What can you do as a provider to help rebuild patient-physician alliance and provide compassionate, patient-centered care?

Case 2: In your clinic rotation you see a 13 year old girl. During the psychosocial evaluation of the patient without parents in the room, the patient tells you that she identifies as male but parents do not know and the patient is not sure how to proceed. What is your next move in helping to care for this patient?

What new 'history' or 'review of systems' questions might you ask to help take care of this patient?

Case 3: Consider the attached article "Trans Teen Shares Her Story". Were you surprised at the age at which Jazz was diagnosed with Gender Dysphoria? What factors might have contributed to a successful outcome for Jazz? How might things have been different for her if her diagnosis and treatment was delayed?