ABSTRACT
Most children explore various aspects of gender and sexuality as children. Youth with consistent, persistent, and insistent gender non-conformity or gender dysphoria are important to identify in the pre- and early-pubertal years as early intervention and support may be lifesaving. Those whose gender non-conformity persists into puberty and adolescence are most likely to identify as transgender. Blocking pubertal development at Tanner stage 2 for pre-pubertal, gender non-conforming children is a relatively new but reversible and highly beneficial strategy to delay puberty, giving patients and families time to come up with a transition plan. Early identification, collaborative support from healthcare providers and mental health clinicians, and supportive interventions for both children and families grappling with gender variance may improve social and mental health outcomes for what has traditionally been considered a high-risk, vulnerable population.

KEYWORDS: transgender, LGBTQ youth, child gender play

INTRODUCTION
Typically children are assigned their sex or gender at birth based on chromosomes, gonads and hormones, as well as visible genital anatomy. For most people the assignment of gender at birth is congruent with their gender identity, their innate sense of their own maleness or femaleness, as well as their social gender expression (appearance and behavior). However, there are some individuals whose internal gender identity does not correlate with natal or assigned gender. Gender-variant or non-conforming children may challenge parents, health care providers and society with issues and needs that extend beyond our typical binary approach to sex and gender. This article will provide a brief introduction to paradigms, terminology, and issues common to pre-pubertal gender variant children, as well as why early identification is important for those who have gender non-conforming behaviors persistent into adolescence.

Current western society views gender in a binary manner – male/man and female/woman – often with rigid internal and external expectations that people adhere to as hetero-normative gender and sexual conformity. Recent paradigms incorporate a more fluid or spectrum approach to gender and sexuality. These more fluid paradigms allow persons to define where they might fall and move along a spectrum of gender and sexuality [Figure 1].

Gender, sex, and sexuality are often confused [Table 1]. Persons who have long standing incongruency between their natal gender assigned at birth and the gender they identify with are often called transgender, an umbrella term for individuals and communities whose identities do not conform unambiguously to conventional notions of male or female gender roles, but blend or move between them. While gender play and experimentation is common in all children, most children who play or explore outside the gender norms do not become transgender adults. Gender-variant youth make up a smaller but important subset of children, who consistently identify or express differently than their natal assigned gender. This subset of children benefits from early identification and support as they negotiate developmental milestones and the tasks of adolescence.

CASE 1: Patient J. is an 8-year-old genetic and anatomic male who has a long history of playing with dolls, dressing up in female clothing, and using make-up. He would like to grow his hair long and wear more feminine clothing at school. Most of his friends are girls. His mother comes to your clinic concerned about what his behavior means and asks, “Is he gay?”
Table 1. Terminology and definition

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<thead>
<tr>
<th>Terms related to Gender Identity and Expression</th>
<th>Terms related to Sexual Identity and Expression</th>
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<tr>
<td><strong>Gender</strong> - characteristics culturally associated with femaleness or maleness</td>
<td><strong>Biologic, anatomical or natal sex</strong> - usually determined at birth by external genitalia, but also includes chromosomes, hormones, internal and external reproductive organs</td>
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<td><strong>Gender Expression</strong> - how a person expresses one’s gender identity; external characteristics and behaviors</td>
<td><strong>Sexual Attraction</strong> - gender that a person is attracted to; attraction may be gynophilic, androphilic, both or neither</td>
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<td><strong>Gender Identity</strong> - how a person perceives and feels gender; internal self-perception as masculine, feminine or other</td>
<td><strong>Sexual Behavior</strong> - what one does for sexual intercourse and sexual satisfaction</td>
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<td><strong>Gender Binary</strong> - concept of only two genders - male/female or man/woman, with persons strictly gendered as either/or</td>
<td><strong>Sexual Identity or Orientation</strong> - how one labels his/her emotional, physical, and/or sexual attraction to others</td>
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<td><strong>Gender Non-conforming, Variant, or Diverse</strong> - person who does not conform to cultural or normative gender expectations</td>
<td><strong>Straight</strong> - used to refer to people whose sexual orientation is heterosexual</td>
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<td><strong>Transgender (Trans, Transsexual)</strong> - person’s gender identity and natal gender are incongruent; umbrella term referring to a group of people whose gender identity and/or expression does not conform to cultural norms</td>
<td><strong>Homosexual</strong> - person primarily emotionally, physically, sexually attracted to same sex</td>
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<td><strong>Cisgender</strong> - person’s natal gender matches asserted gender identity</td>
<td><strong>Heterosexual</strong> - person primarily emotionally, physically, sexually attracted to opposite sex</td>
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<td><strong>Transman (Female to Male, FTM)</strong> - identity label for natal females who transition to male identity and expression</td>
<td><strong>Bisexual</strong> - person attracted to and has sexual relationships with both female- and male-identified persons</td>
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<td><strong>Boi</strong> - natal female who does not identify as, or partially identifies as female or feminine</td>
<td><strong>Gay</strong> - a homosexual male or female</td>
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<td><strong>Butch</strong> - having what are conventionally considered masculine traits (physical, mental or emotional)</td>
<td><strong>Lesbian</strong> - a homosexual female</td>
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<td><strong>Transwoman</strong> - (Male to Female, MTF) - identity label for natal males who transition to female identity and expression</td>
<td><strong>Pansexual</strong> - someone who is sexually attracted to all or many gender expressions</td>
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<td><strong>Femme</strong> - Feminine traits or identified person of any gender/sex</td>
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<td><strong>Intersex</strong> - umbrella term for a variety of congenital conditions in which chromosomal, gonadal, genitals and internal sex organ development is atypical. Also known as Disorders of Sex Development (DSD)</td>
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<td><strong>Androgynous</strong> - person appearing and/or identifying as neither male nor female</td>
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**GENDER DEVELOPMENT**

Understanding gender development from infancy through adolescence provides a framework and holistic perspective that can promote person-centered approaches to gender-variant and sexually-diverse patients. Early on, infants begin to learn about masculinity versus femininity through cues such as dress, hairstyle and even scents of caregivers. Gender identity begins to shape in the second year of life and can be relatively stable as early as 3–4 years old. Children unconsciously perform gender-stereotyped activities based on social cues promoting socially acceptable behaviors. Most preschool children play with toys and games that are in alignment with their assigned birth gender. A gender non-conforming child preferentially and consistently chooses non-sex-typed toys, games, activities, and appearance. Early gender nonconformity does not necessarily cause the child distress in and of itself, but can be challenging for some parents and families.
As children move into grade school, they understand and embrace more static concepts of established gender roles and sex differences. Most children, however, will explore some gender non-conforming behaviors in childhood as passing short-lived phases lasting several weeks to several years. Gender non-conforming children more typically engage in consistent, persistent, and insistent cross-gender play, activities, appearance and even body modification. Gender non-conforming children can also be differentiated from children experiencing a passing phase or experimentation by an expressed or unexpressed desire for alternative genitals or by expressing that they feel they are in the wrong bodies. In these school-age years, both parents and children may try to reshape and redirect gender non-conforming interests and expression into more socially acceptable norms for the child’s natal gender. Youth who feel pressure to conform to a gender that they do not feel is their own may experience negative developmental outcomes such as low self-esteem, internalizing and externalizing symptoms, and isolation from peers and family.

As childhood may be a more “gender neutral” time, for most gender-variant youth, puberty is a time of new and additional stressors such as the development of unfamiliar and unwanted secondary sex characteristics. The additional stress of negotiating the physical, social and emotional changes of adolescence in a body that does not fit with one’s gender identity can contribute to poorer health outcomes. Gender dysphoria and variation is linked to isolation, anxiety, depression and suicidality. In addition, this dissonance and stress can lead to self-injurious behaviors such as cutting, burning, drug use and unprotected sexual activity. Many gender non-conforming adolescents have difficulty functioning academically and socially as puberty ensues. The prevalence of suicide attempts among transgender adolescents has been reported in some studies to be as high as 40%. It is important for health care providers to associate these health-risk behaviors and mental health concerns with gender nonconformity, as they may trigger providers to assess gender identity and sexual orientation.

**EARLY DIAGNOSIS AND INTERVENTION**

It is important that all healthcare providers have some understanding of gender variance and can recognize children who are struggling with non-conforming gender identity. Primary care providers, especially advanced nurse practitioners, pediatricians, and family doctors are often the first stop for parents with questions or concerns about gender non-conforming behaviors. As many gender-variant children exhibit mental health sequelae of experiencing this dissonance in natal versus identified gender, school nurses and counselors, social service professionals, and psychiatrists should also have a familiarity with features of gender non-conformity for early identification, early intervention, and support services.

Evaluation of gender non-conformity has traditionally taken place within the discipline of mental health, with a focus on body and gender dysphoria. Currently gender non-conformity is captured in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), as “gender identity disorder (GID)”. At present, core components necessary for the diagnosis of GID in children include: “A strong and persistent cross-gender identification...persistent discomfort with his or her sex or sense of inappropriateness in the gender role of that sex, the disturbance is not concurrent with a physical intersex condition, the disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.” While these criteria may offer some insight into the experience of some gender non-conforming persons, there are many reasons why a pathologic approach does not suffice, nor does it promote understanding or acceptance to a range of diversity and expression of gender and sexuality.

It is important to make clear to parents and families that there are currently no accurate ways to “diagnose” which gender non-conforming pre-pubertal children will consider themselves transgender in adolescence. Studies report continuation rates range from 15% to 40%, with most gender non-conforming natal males going on to become homosexual identified men in adulthood. While some gender non-conformity in prepubertal years is linked to later homosexual orientation, other studies show that as many as one third to one half of children referred to a gender clinic continued in adolescence with their gender non-conformity. The more long standing the non-conformity, the more intense the body dysphoria, and the more assertive patients are about identity as opposed to activities, the more likely they will be to continue into adolescence as transgender.

When working with families with prepubertal children who are non-conforming, the primary focus is to support the parents and recommend that children be supported for who and how they are. It is critical that parents...
work through their own concerns and processes of confusion, loss, shame, guilt and fear with a mental health provider. Children who are not supported by their parents risk increased distress, trauma, anxiety, isolation, and other psychosocial challenges. Data from the California Family Acceptance Project demonstrates all sexual minority youth enjoy protective benefits with parental love and support. Even if parents do not understand or fully accept their child’s gender identity or sexual orientation, family support offers tremendous protective effects in terms of depression, suicidality, and substance use.

Mental health clinicians have an important role in the assessment and treatment planning for transgender youth. Mental health personnel can assess and differentiate between cross-gender interests and play versus transgender identification and gender dysphoria; evaluate identity in the context of the child’s family and psychosocial environment; educate children and parents about gender identity and sexual health; model acceptance of gender non-conformity; evaluate and treat coexisting mental health concerns; and help children and families create safe, healthy, and supported transition plans. Moreover, mental health clinicians can act as a liaison and advocate for children by working with schools, the legal system, and medical providers.

Creating a positive and successful transition plan includes: helping children and parents plan for disclosure to family, friends, school or playmates and other social contacts; educating staff and students within the school system; providing supportive documentation for name and gender change; and coordinating with schools, the legal system and medical providers. Many families request a “safe letter” to provide to social and legal entities that explains their child is in the process of transitioning and under the care of health professionals. Creating a positive and successful transition plan includes: helping children and parents plan for disclosure to family, friends, school or playmates and other social contacts; educating staff and students within the school system; providing supportive documentation for name and gender change. Many families request a “safe letter” to provide to social and legal entities that explains their child is in the process of transitioning and under the care of health professionals. Most importantly, if there are any concerns about persons and environment as potentially harmful to a child and her/his disclosure, or social transition, guardians may want to consider containing gender non-conforming expression to the home until a safer plan is developed. Finally, medical and mental health providers should communicate frequently, especially if there are mental health concerns such as depression, anxiety, suicidal ideation, eating disorder, and/or substance abuse.

**MEDICAL INTERVENTIONS**

During early childhood and up until pre-puberty, children who exhibit gender non-conformity should be encouraged to be themselves and explore a variety of gender interests and expressions. Parents should be reassured that the trajectory and outcome for gender non-conforming children is unpredictable. Many gender non-conforming children will become adults who are heterosexual (cisgender – when a person’s anatomical gender matches a person’s expressed gender identity or homosexual (cisgender). Persistent, inconsistent and consistent non-conforming gender behaviors and expression may be more likely to lead to a future transgender identity. When gender non-conformity continues unabated or newly emerges during puberty, these youth are more likely to identify as transgender.

Early identification allows medical providers to offer anticipatory guidance and proactive medical care. Most guidelines now recommend the use of gonadotropin releasing hormone agonists (leuprolide, triptorelin, goserlin, or histrelin) as puberty blockers for gender non-conforming youth starting puberty, and addition of cross sex hormones later in adolescence (Figure 2). Blocking the progression of endogenous puberty allows youth to avoid developing unwanted secondary sexual characteristics and provides time and opportunity to more fully explore gender identity. Additional time allows parents and families to adjust their understanding of their child and their imagined future life; support parents and child in developing resiliency and social skills to better navigate successfully through adolescence; and to create a plan for transition that is safe and healthy for that teen.

Puberty blockers are completely reversible, allowing children to return and develop in the puberty of the natal gender without known adverse sequelae. Puberty blockers started at the very beginning of puberty, with the start of breast budding or testicular enlargement as well as initial pubic hair growth [Tanner 2 sexual maturity staging] maintain adolescents in temporary and reversible prepubertal state, with no further development of secondary sexual characteristics. Puberty suppression for transgender adolescence may reduce symptoms of depression and other emotional problems, in turn enhancing overall functioning. Eliminating development of secondary sex characteristics of the adolescent’s natal, but not identified gender, allows for more congruent development of identified secondary sex characteristics when
cross-gender hormones are started and eliminates the need for many future cosmetic surgeries. Puberty blockers can make it easier for persons to “pass” in their identified gender as they mature into adulthood. Most continuing gender non-conforming adolescents desperately want to go through puberty in their identified gender and are both relieved and excited when they start puberty blockers and/or cross-gender hormones. It is important to remember that some gender non-conforming youth do not desire complete phenotypic transition, and are content with their endogenous hormones, hormone-only treatment, partial surgical gender confirmation surgeries [i.e. mastectomy but not phalloplasty, breast implants but not penis or orchietomy]. Youth who identify as gender queer or androgynous may or may not want to take cross-gender hormones or take low doses that do not fully suppress their own endogenous hormones. Youth who can provide informed consent do not have to choose one binary end of the gender continuum over another. Furthermore, gender non-conforming persons may experience a more fluid identity and may change their transition goals and requests for treatment over time.

CONCLUSION
While most children explore various aspects of gender and sexuality as children, consistent, persistent, and insistent gender non-conformity or gender dysphoria is important to screen for and identify in the pre- and early pubertal years. Most gender non-conforming prepubertal children do not identify as transgender later in life but rather may identify as homosexual. Those whose gender non-conformity persists into adolescence are most likely to identify as transgender. Blocking pubertal development at Tanner stage 2 for prepubertal transgender children is a relatively new but highly beneficial strategy to delay puberty and decrease unwanted and distressing secondary sexual characteristics while supporting chosen puberty development. Early identification, collaborative support from healthcare providers and mental health clinicians, and supportive interventions for both children and families grappling with gender variance may improve social and mental health outcomes for what has traditionally been considered a high-risk, vulnerable population.

References

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Disclosures
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