

Legal, Mental Health, and Societal Considerations Related to Gender Identity and Transsexualism

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The recent increased awareness of transgender persons in society has led to a number of legislative initiatives. For example, there has been legislation prohibiting what children can be taught in school about transgender persons, and local school boards have been sued in an attempt to block the enactment of such legislation.^{1,2} There has also been legislation prohibiting transgender females from competing in women's sports.³ It is likely forensic psychiatrists will be asked to provide expert testimony regarding these and related questions. Related questions might pertain to the capacity of a transgender adolescent to consent to hormonal or surgical procedures without parental agreement, the appropriateness of conversion therapy to try to reverse a person's sense of gender identity, or if parents should have the right to consent to the provision of puberty suppressing hormones to their own prepubescent child.

In some instances, before one can consider gender-related questions about a given individual, making a differential diagnosis can be important. That would be so, for example, when ruminative obsessional doubts about gender identity develop in conjunction with a major depressive disorder, or when there are concerns that a troubled cis-gender adole-

scient may be responding to misguided but well-intentioned peer suggestions that the source of that person's distress may be gender dysphoria. Among other skills, forensic psychiatrists need to be good diagnosticians.

To be able to adequately address gender-related questions, it is essential that there first be a clear understanding about the essence of gender identity itself. The term gender identity refers to one's personal sense of one's own gender (most commonly whether persons feel themselves to be male or female). Gender identity should not be confused with gender role, the latter having to do with societal expectations for men and women (e.g., who should wear a tie and who should wear a dress).

Most of us never question our own gender. We do not even think about it. Men know they are men, and women know they are women. But imagine for the moment waking up one day to the discovery that you now have the anatomy of the opposite gender. You are now a man with female anatomy or a woman with male anatomy. That feeling would be extremely distressing, and you would likely have an intense desire to change your body to conform to the gender you know yourself to be. That is the feeling experienced by many transgender individuals. Their bodies simply do not conform to the gender they know themselves to be. When transgender persons seek gender-affirming surgery, it is for mental health reasons; to achieve a sense of enhanced mental well-being. Such surgery is not being performed to correct a gender identity disorder.

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It is often assumed that feelings of gender identity develop because of what our parents told us; that is, that we are either a girl or a boy. Between 1993 and 2001, a number of infants manifesting a normal male 46 XY chromosomal makeup had been born with a rare genetic abnormality that caused them to have ambiguous genitalia.⁴ As a consequence, it had not been possible to determine by looking at them whether they were male or female. Fourteen of sixteen such infants had then undergone surgical reconstruction and been raised as females. During that time period, surgical techniques had not been developed to enable the creation of an anatomically male body. By adolescence, despite not knowing anything about their own genetic makeup, and despite having been raised as females, the majority mentally felt themselves to be male. In other words, their sense of gender identity (whether they had felt themselves to be either male or female) had been determined by underlying biological factors; in this case factors related to the presence of a Y chromosome. It had not been determined by what their parents had told them. Irrespective of their surgically and hormonally created female anatomy, they had wanted to live their lives as men.

At the same time, a smaller percentage of these XY individuals raised as females did continue to maintain a female gender identity over time despite the presence of a Y chromosome. It appears that sometimes nature and sometimes nurture can be the predominant determinant of one's gender identity. Either way, feelings of gender identity are self-discovered; not self-chosen.

As a psychiatrist, I had been referred the case of a nine-year-old child who appeared to be a boy, but who kept insisting that he was a girl. When a chromosomal analysis had been performed, the nuclei of some cells obtained from that child had contained the typical XY male chromosomal appearance, whereas others had contained the typical XX female appearance. This is a rare chromosomal variant (XX/XY chimerism).⁵ In observing the child's external anatomy, one would have concluded that the child was a boy. At a genetic level, it would not have been possible to determine whether the child was a boy (XY) or girl (XX). With respect to gender identity, this child clearly self-identified as female. It is an unanswered question whether that was because critical cells in this child's brain had contained a female XX chromosomal pattern. Also, unanswered are questions about

how this child should be raised, about what, if anything, classmates and teachers should be told regarding this child's gender, and on which sports teams this child should be permitted to play. It seems likely this child's sense of gender identity was related to the presence of a chromosomal variant, and not just coincidence. The questions of what a woman is, or what a man is, are far more complex than some would choose to acknowledge.

As all physicians know, at the moment of conception, when sperm meets ova, gender is determined at a chromosomal level.⁶ If the 23rd, final pair of chromosomes looks like an X next to a Y, genetically the individual is deemed to be male. Ordinarily the presence of a Y chromosome induces the fetus to develop testes, which in turn produce testosterone, causing the external anatomy to become masculinized. Some genetic XY males possess cells that are unresponsive to testosterone, however, and as a consequence they maintain the bodily appearance of a genetic female.⁷ These XY individuals ordinarily live their lives as women; and because their genetics are generally unknown to others, they are routinely accepted as women. Most maintain a female gender identity, likely because their brains have not become masculinized due to insensitivity to testosterone during embryonic development.⁸

Accurate information about the development of sex and gender has not been widely disseminated, and as a consequence there has been much misunderstanding. For example, at her confirmation hearing, U.S. Supreme Court Justice Ketanji Brown Jackson had been asked to define "woman."⁹ Presumably, that had been because her questioner had believed the answer should have been obvious; that womanhood is determined solely on the basis of one's observable anatomy at birth.

Whether transgender individuals are going to be accepted as the persons they know themselves to be has a variety of societal implications. For example, after a transgender woman, Lia Thomas, had won a collegiate swimming championship, a number of American states had proposed, and subsequently enacted, bans on participation by transgender women in female sports.³ None of us want our children to compete at an unfair disadvantage, and the supporters of those proposed bans had argued, in effect, that having the genetic makeup of a male provided an unfair advantage when competing in women's sports.

Gold medal Olympic Champion Michael Phelps had had a genetic advantage based upon his chromosomal makeup (a mutation on the FBN1 gene on chromosome 15) that had allowed for an unusually effective swimming stroke, as well as for greater resistance to muscle fatigue.¹⁰ Rightfully, no legislation had been proposed to ban him from competing. Genetically tall females have an advantage over shorter females in basketball. Ordinarily, it is not genetics, or underlying biology, that determines whom one should be allowed to compete against in sports.

Transgender females routinely undergo orchiectomy, which lowers their testosterone levels. Lowered levels of testosterone can cause a decrease in muscle mass and strength. Lowered levels of testosterone also decrease hemoglobin levels in the blood, thereby reducing any endurance advantage that might have existed relative to other women.¹¹

If being a woman, or being a man, is more than just a matter of genetics, or of anatomical appearance at birth (but also a matter of one's experienced gender identity), there seems no good reason why a transgender female should be held to a different standard than other women when competing in sports. Ordinarily, it is hard work, dedication, and perseverance that determines a winner, not one's genetics.

The existence of transgender persons is not new, nor is it unique to American culture. For example, the Roman Emperor Elagabalus who ruled from 218 to 222 was known to have plucked his body hairs, to have worn female makeup, to have preferred being called a lady and not a lord, and to have dressed like a woman in public.¹² Reportedly, Elagabalus had offered vast sums of money to any physician who could provide him with a vagina, likely the first documented example of an interest in what is now known as gender-affirming surgery.¹² In Thailand, transgender women are often referred to as Katoey, in India as Hijra, and in Indonesia as Warias.^{13–15} Born as males, Warias present themselves to the world as women, believing that they have a female soul that is residing in a man's body.¹⁵ Most are not interested in gender-affirming surgery, instead believing that after they die their souls will return to heaven as women.¹⁵ Though born male, and accepting of the fact that their bodies are male, Warias have a female gender identity, and they live their lives as females. While living in Jakarta, Indonesia, as a child, former President Barack Obama had been cared for by a nanny named Evie who is a Warias transgender female.¹⁶

It is true that the makeup of the world includes women, girls, men, and boys. As documented here, there are nuances within each such category, however, and old beliefs can be difficult to modify, which is understandable. Nevertheless, we have an obligation to educate our children factually, and to instill within them good moral values. Rather than fearing advancing knowledge and change, we should embrace it. There are many variants of both men and women, and many variants of gender identity (not all of which are addressed here). None of those variants make an individual any less human. In keeping with their sense of gender identity, transgender males and females should be accepted for who they are. The mental health community should advocate for protection of their rights when needed. Forensic psychiatrists should be prepared to conduct informed evaluations that address specific medicolegal questions that may be posed.

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