Gender Dysphoria is a distressed state of mind that is of interest to psychiatrists, including forensic psychiatrists. Forensic matters can be best addressed only after one has a good appreciation of relevant psychiatric knowledge and concepts. In this commentary I review the nature of Gender Dysphoria, its relationship to cross-dressing and erotic arousal, and the question of whether it should be thought of as a psychiatric disorder. I also review the complexity of sex and gender; alternative conceptualizations of Gender Dysphoria, its etiology, its multicultural history, and its typical course over time in a given individual. Finally, I summarize treatment options, treatment outcomes, and difficulties of treating Gender Dysphoria within an inmate population.

In this issue of the *Journal*, Dr. Stephen Levine has published an article entitled, “Reflections on the Legal Battles over Prisoners with Gender Dysphoria.” He discusses his views about whether inmates with a diagnosis of Gender Dysphoria should be provided with hormonal and surgical therapies for the condition. In my judgment, to a significant extent, the answer to that question is distinct from the matter of whether one is a prisoner. Instead, to a much larger degree, the answer must rest on a clear understanding of the phenomenon of gender dysphoria itself. For that reason, I will not present a point-by-point response to Dr. Levine’s article. Rather, this commentary is intended to complement that article by providing an overview of the history and conceptualizations that are relevant to an understanding of gender dysphoria.

I will address several specific questions in this overview. What is gender dysphoria, and how can it best be understood? What, if anything, is known about it historically, the role of culture, and its etiology? What is its course over time in any given person? What treatment options are available, and what is the evidence that they can be effective? Finally, what should the clinician’s role be with respect to gender dysphoria, and how can the clinician best provide optimal care to the general population and to those who are incarcerated?

### What is Gender Dysphoria?

The human brain is complex, possessing the capacity to perceive the outside world while maintaining self-awareness. Gender dysphoria is a discomfitting mental state associated with a disparity between one’s internal sense of being either male or female and one’s external anatomical sexual characteristics. Because most persons have never experienced such a disparity, perhaps one could empathize by imagining what it would be like for a man to wake up one morning to discover that his penis was gone. Further, imagine that it had been replaced by a vagina, with enlarged breasts on the chest. Surely, the man would feel extremely uncomfortable; manifesting a strong desire to change his body; a desire that is far more intense than a simple cosmetic desire. One could similarly imagine the inverse scenario for a woman. Such intense discomfort, accompanied by a desire for change, is the hallmark of gender dysphoria.

Some men with gender dysphoria have an aversion to even touching their own penis. Some will urinate sitting down to avoid doing so or tape their penis into the crease of their groin in an effort to act as if it were not present.

Specific treatment options will be discussed below. At this point, I want to note that conceptually there are two primary methods that can be used in an
effort to diminish gender dysphoria: the individual could try to change his mindset to become more comfortable with his body, or he could change his body in an effort to become more comfortable mentally.

Gender Dysphoria, Cross-Dressing and Erotic Arousal

Persons with gender dysphoria may choose to cross-dress in clothing more typically worn by members of the “opposite gender.” Persons diagnosed with a “transvestic disorder” frequently cross-dress because doing so is sexually arousing. Some individuals (e.g., “drag queens”) cross-dress for entertainment purposes. Persons with gender dysphoria cross-dress to try to maintain conformity with their internal sense of being either male or female, not for entertainment purposes and not because they find it erotically arousing. Cross-dressing does not define gender dysphoria.

Historically, cross-dressing has elicited an intense societal response. One of the justifications for executing Joan of Arc on May 30, 1431, was that she had cross-dressed; even though her only known reason for doing so had been as a disguise in an effort to avoid being apprehended.

Terms such as heterosexual, bisexual, and homosexual (used to define one’s erotic orientation) become difficult to apply when referring to individuals who are experiencing gender dysphoria. Heterosexuality ordinarily denotes an attraction to members of the opposite gender. However, for the person experiencing gender dysphoria, which gender should be thought of as the opposite? In describing the sexual orientation of an individual with gender dysphoria, it is best to simply indicate whether that individual is attracted to men, to women, or to both.

Is Gender Dysphoria a Disorder?

The person with gender dysphoria experiences an atypical state of mind that is different from that which most others experience. However, being different is not synonymous with being disordered. Persons experiencing homosexual attractions are different from people who experience heterosexual attractions, but being different in that way does not constitute a disorder. Ordinarily a difference (even a physical difference) is considered to be a disorder only when it either impairs functioning or causes suffering.

By definition, gender dysphoria represents a state of internalized distress, and physicians are interested in trying to assist patients in alleviating that discomfort. In that sense, gender dysphoria is similar to a depressive disorder; it may require medical intervention to facilitate improvement.

Physicians must also play an important role in accurately diagnosing Gender Dysphoria. Some individuals may transiently experience such feelings, along with obsessive ruminations about gender, during periods of deep depression. Dysphoria, and its accompanying symptoms, is often no longer present once the depression has been properly diagnosed and adequately treated. At times, a disenfranchised, unhappy individual may feel confused about a variety of circumstances, including gender. In some instances, that confusion may subsequently resolve. Given that such feelings can be transient, appropriate caution must be maintained about supporting the movement of such an individual in the direction of a potentially irreversible biological intervention.

Many persons with gender dysphoria have been subjected to prejudice and abuse. Respecting the legitimacy of feelings of gender dysphoria and the dignity of the patient should be mandatory for all physicians. At the same time, such feelings ordinarily necessitate appropriate differential diagnosis, assessment for comorbidities, and the provision of evidence-based treatments, often under circumstances about which much more remains to be learned.

Complexity of Sex and Gender

Persons can differ from one another with respect to sex and gender in several ways. Internally, gonadal sex differs between males and females. Males have testes; females have ovaries. Certain hormone levels (e.g., testosterone and estrogen) also ordinarily differ in relationship to one’s gender.

External anatomical appearances (including differences in facial structure) constitute an individual’s sexual phenotype. Ordinarily, one’s sex of assignment and rearing corresponds with one’s sexual phenotype. However, when a child is born with ambiguous genitalia (i.e., when it is hard to determine from appearances if that child is a boy with a micropenis or a girl with an enlarged clitoris), difficulties can emerge in assigning that child’s gender.
One’s sexual genotype (as opposed to phenotype) is dependent on the structural makeup of an individual’s 23rd pair of chromosomes. Most human beings have 46 chromosomes; comprising 23 pairs. The 23rd pair in a woman ordinarily looks like two X’s next to one another (XX), whereas the 23rd pair in a man ordinarily looks like an X next to a Y (XY).

One of the youngest patients whom I saw clinically because of concerns about gender was an 8-year-old boy who had been insisting that he was a girl. Chromosomal analysis revealed a chimeric pattern. Some of the cells in his body had manifested a male chromosomal pattern (XY), whereas others had manifested a female chromosomal pattern (XX). Was it possible that the presence of those XX chromosomes (or of some other as yet unidentified biological factors) had been contributing to his insistence that he was a girl? Clearly, matters related to sex and gender can be complex, and whether an individual can be categorized as male or female can sometimes depend on the level of analysis that has been performed.

Finally, it is important to appreciate that gender identity and gender role are not the same. Gender role refers to certain expectations that society may place on males and females. For example, a few decades ago in many western societies, men might be encouraged to become doctors, and women, nurses. Gender identity (as opposed to gender role) refers to the essence of how one feels internally (i.e., male versus female). With the advent of electronic media, numerous terms have been coined in an effort to categorize various purported differences in gender identity. Such terms have included transgender, transsexual, gender fluid, nonbinary, demigirl, demiguy, intergender, bigender, trigender, gender queer, pangender, and cisgender. Cisgender is the category to which most persons belong; meaning that their internal sense of gender identity (male versus female) corresponds with their external anatomy.

Alternative Conceptionalizations of Gender Dysphoria

Paul McHugh has suggested that in conceptualizing the phenomenon of gender dysphoria, clinically less emphasis should be placed on the individual’s feelings (i.e., the dysphoria). Instead, he proposes that more emphasis should be placed upon the person’s ideas, and ways of thinking.

Drawing parallels to both body dysmorphic disorder and anorexia nervosa, he points out that in those sorts of conditions an individual expresses the belief that “something is wrong” with his body. In anorexia nervosa the person (usually a woman) believes that she is “too fat.” In Gender Dysphoria, people believe that they are “in the wrong body.” McHugh argues that in neither case should the desire for bodily change be supported clinically.

In the case of anorexia nervosa, McHugh believes that an effort should be made clinically to dissuade the patient of the idea that she is overweight (when clearly she is not) and of the idea that she can only be happy (less distressed) if thin. In the case of Gender Dysphoria, McHugh believes that an effort should be made clinically to dissuade patients of the idea that they are in the wrong body (arguing that ordinarily there is no evidence that that is so), and of the idea that he can only be happy (less dysphoric) via bodily change. McHugh argues that surgical removal of a completely healthy and fully functioning organ (e.g., the penis) represents a radical departure from acceptable medical practice.

In the case of anorexia nervosa, supporting the patient’s desire for bodily change (i.e., to remain thin) is likely to result in a continued loss of periodic menstruation, impairments in thinking associated with malnutrition, and even death. In the case of Gender Dysphoria, supporting bodily change can be associated with decreased anguish, without unacceptable consequences, at least in some instances.

Etiology of Gender Identity

Feelings of gender identity do not ordinarily emerge as a consequence of a self-made decision. In growing up, I did not choose to experience a sense of being male. Instead, over time I discovered that sense to be present within me. That raises the question, “To what extent was that sense influenced by biological factors (nature), and to what extent by life experiences (nurture)?”

In 2004, Reiner and Gearhart published an article entitled, “Discordant Sexual Identity in Some Genetic Males with Cloacal Exstrophy Assigned to Female Sex at Birth.” Cloacal exstrophy is a rare embryogenic defect of the pelvis and its contents that develops in genetic XY males. It is associated with a severe diminution in the size of the penis, or even with an absent penis.

Because of the pathologically small or absent penis at birth, physicians and parents have to make the extremely difficult decision about whether to raise...
the child as a boy or as a girl. In the Reiner and Gearhart cohort, which comprised 16 genetic males with cloacal exstrophy, 14 were operated upon to create a vagina so that they could be raised as females. Two parents refused surgery, and their two sons were raised as boys, albeit as boys without a penis.

The 14 boys raised as females had not been informed about their XY chromosomal makeup as children. Nevertheless, by the age of 16, 8 of the 14 (57%) had already been living as self-declared males. In the case of those eight individuals, it appears that biology (the presence of a Y chromosome) played a significant role in contributing to their sense of gender identity. At the same time, by the age of 16, 6 of the 14 XY males raised as females (43%) were still living as females.

Reiner and Gearhart suggest that both nature and nurture can influence feelings of gender identity, and that at least in some cases (8 of 14), the effects of nature (biology) trumped the effects of nurture. They also documented that a sense of gender identity can be experienced and labeled mentally and that it can be very powerful, motivating behaviors that can significantly affect how an individual chooses to present to the world.

**Culture and Gender Dysphoria**

In 2015, former Olympian gold medalist, Bruce Jenner, announced that he was “transitioning” intending to live life as a woman (Caitlyn Jenner). In the 1920s, a well-known British track and field athlete named Mary Weston, who had been born intra-sexed but raised as woman, caused quite a stir when she announced her intention to live the remainder of her life as a man named Mark Weston. Some have suggested that contemporary societal beliefs may fuel the idea that one can “be born in the wrong body.”

Centuries ago, in the Middle East, biological males, living as women, served as priestesses to the rulers. In Africa, several ancient kings cross-dressed openly. In Japan, early Shamans underwent the process of becoming female, and in southern Russia evidence of persons living transgendered lives has been found in Iron Age graves.

The earliest evidence of an interest in sex change surgery dates back approximately 200 years BCE. Elagabalus, the Roman Emperor at that time, was known to pluck his body hair and to wear female makeup and attire in public. Reportedly, he offered money to his physicians if they could change his body.

Today, biological men living as women are present in a variety of cultures. In Thailand, the Katoey, who are biologically male, live openly as women. In India, the Hijra, whose history dates back to second century, are biological men who also live openly as women. In North America, before the arrival of Europeans, many Native American Indian tribes gave special reverence to “two-spirited people;” biological men who lived openly as women. A Waria named Evie, who had been living as a woman, served as a nanny to Barack Obama while he was living in Indonesia as a child. Clearly, the phenomena of biological men who feel themselves to be female is not unique to modern North American culture.

**Gender Dysphoria in Europe and the United States**

In modern-day Europe, the condition was first described by Magnus Hirschfeld and Havelock Ellis in the 1920s and 1930s, with the earliest sex reassignment surgeries having been performed at Hirschfeld’s institute in Berlin. At about the same time, Harry Benjamin, a colleague of Hirschfeld’s, introduced the concept into the United States. Today, the World Professional Association for Transgender Health (WPATH), formerly the Harry Benjamin International Gender Dysphoria Association, recommends standards (i.e., guidelines) of care.

Numerous examples of transgendered individuals living productively in American society can be cited. For instance, Joy Ladin, born as a male in 1961, holds the David and Ruth Guttesman Chair in English at Stern College for Women at Yeshiva University. She is the first openly transgendered professor at an Orthodox Jewish institution.

**Course Over Time**

In the 1980s, Richard Green observed a cohort of 44 boys who manifested evidence of gender dysphoria. By adolescence, or early adulthood, only one of the 44 still showed evidence of it, most of them having developed a homosexual orientation.

In 2008, Madeline Wallien reported on a cohort of 77 gender-dysphoric youngsters initially seen between the ages of 5 and 12. Approximately 10 years
after the study began, 54 of the original 77 were available for follow-up. At that time, 70 percent of the boys (28/40), and 36 percent of the girls (5/14), were no longer experiencing gender dysphoria.

These findings suggest that among prepubescent children, especially boys, feelings of gender dysphoria can be unstable and are likely to change. That raises the question of whether supporting cross-dressing in a prepubescent child is generally in the child’s best interest. It also questions the practice of hormonally suppressing the onset of puberty and its accompanying bodily changes, to facilitate a later sex change transition.30

When gender dysphoria persists beyond prepubescence into adolescence, most of the time such feelings persist into adulthood. However, clinical cases are occasionally seen where such feelings diminish during adulthood. Some postsurgical patients have regretted having undergone the procedure. Walt Heyer was born as a boy.31 As an adult, he surgically transitioned to a woman. Since then, having had regrets, he once again began living as a man and started a support group for others who had experienced similar regrets. Patients should be informed about such occurrences.

Some individuals who initially cross-dress because doing so is erotically arousing (i.e., those with transvestism) develop feelings of gender dysphoria de novo, only during the later years of their lives. Such individuals have been referred to as “aging transvestites,” and some have sought out sex reassignment surgery.32

Treatment Options

Psychotherapy can be provided to help individuals explore the possibility of feeling more comfortable in their own bodies. Conversely, it can be used to help educate and guide individuals through the process of change. Therapists ordinarily encourage patients to go slowly through that process, proceeding initially with noninvasive steps (e.g., cross-dressing), to develop confidence that subsequent potentially irreversible interventions will not be regretted.25

Feminizing and masculinizing hormones are also available, as is surgery, as methods of treatment. Surgery for those transitioning to a female body ordinarily involves breast augmentation and surgical construction of a vulva, clitoris, and vagina.33 For those transitioning to a male body, bilateral mastectomy is possible. However, the surgical construction of a fully functional penis and scrotum (now available to wounded military men with groin injuries) is not yet widely available for purposes of sex reassignment.34 Most natal women transitioning to a male body still live as men without a penis (although ordinarily testosterone therapy will gradually enlarge the clitoris to an average length of about 1.5 to 2 inches).35

Generally, a man who is transitioning to a female body does not want to look like a man dressed as a woman. For that reason, a variety of other interventions are also available, including electrolysis, voice training, vocal cord modification, and Botox injections.36 Surgical procedures to feminize facial appearance can include forehead contouring, scalp advancement, brow lift, chin and jaw contouring, rhinoplasty, chondrolaryngoplasty (tracheal shave), lip lift, cheek augmentation, and facelift.37

Treatment Outcome

There is remarkably little literature available regarding the outcome of psychotherapy intended to help individuals with gender dysphoria live more comfortably within the bodies into which they were born. Clinically, that approach rarely seems to be a realistic option, because most have already tried for years to live as their biological selves without success.

Clinically, many patients have reported that psychotherapy designed to educate and guide them through the process of transitioning has been helpful. Such therapy may include a discussion about sperm-banking, to maintain the option of being a parent (via a surrogate or a partner) of one’s biological child. It may also have included counseling regarding such practical legal matters as how to change a gender descriptor on a birth certificate, a driver’s license, or a passport and how to be responsive to the concerns of family, school, job, and place of worship.

In 2011, Asscheman38 published a long-term follow-up of 1,331 individuals who were receiving treatment with feminizing or masculinizing hormones. Nine hundred sixty-six were biological men receiving a form of estrogen (and cyproterone acetate to decrease testosterone). Three hundred sixty-five were biological women receiving testosterone. Women receiving testosterone experienced dramatic masculinizing effects (e.g., beard growth and a marked increase in libido), with no significant morbidity and no mortality (although long-term effects of testosterone on the ovaries are unknown). Biological males receiving feminizing hormones experi-
enced only minimal bodily effects (e.g., small breasts), as well as a significant decrease in libido. At the same time, they had a 51 percent higher mortality rate than the general population. Most died of suicides, AIDS, and drug abuse. Current estrogens use has been associated with three times the increased risk of cardiovascular death. There has also been an increased occurrence of lung and hematological diseases. Patients should be fully informed about such findings.

In Sweden, Dhejne et al. followed 324 persons who had undergone sex reassignment surgery over a 30-year period extending from 1973 to 2003. One hundred ninety-one had been men with female surgical reassignment. One hundred thirty-three had been women with male surgical reassignment. In most cases, such surgery had diminished the distress of gender dysphoria. However, the mortality rate within that cohort was 2.8 times higher than in the general population. The rate of attempted suicide had been 4.9 times higher and the completed suicide rates had been 19.1 times higher than the comparable rates in the general population.

Although there had been no way of knowing what the suicide rate might have been had such individuals not had surgery, clearly, for many of them, the surgery did not produce a good long-term outcome. The researchers did not conclude that such surgery should not be done, as it decreased feelings of gender dysphoria for many. However, they emphasized the importance of providing ongoing follow-up and additional mental health care to those who undergo the procedures.

Lundstrom summarized the findings of three independent reviews of the relevant world literature. Those researchers reported a 10 to 15 percent rate of surgical failure. They also reported that a good surgical outcome was necessary for a good overall outcome.

**Treating Inmates Who Experience Gender Dysphoria**

Punishment for a prisoner is the deprivation of certain liberties. Withholding helpful medical, surgical, or psychiatric treatments that would otherwise be available should not be part of that punishment. Inmates with Gender Dysphoria should have a comprehensive psychiatric and physical examination, accompanied by appropriate laboratory testing. A proper differential diagnosis is necessary, along with an assessment of comorbidities, including any personality vulnerabilities that may exist. Like other patients, inmates should be provided with full information about potential benefits, limitations, risks, and options available to them.

Clinicians should treat inmates respectfully and objectively, remaining aware of the concept of countertransference (e.g., the presence of any negative emotions in the evaluator that could impair the provision of needed treatment). A task force of the American Psychiatric Association stressed the importance of determining best treatment practices and of respecting the rights of all persons who are gender variant. Treatment in a prison must be provided within a setting that is safe, secure, and responsive to the legitimate concerns of administrators, staff, and other inmates. Inmates who receive sex change interventions must be provided with ongoing care for any other mental health needs that may also be present. Careful follow-up, accompanied by documentation of long-term treatment outcome, is essential.

**References**