

Assessment and Treatment of Gender Dysphoria and Gender Variant Patients: A Primer for Psychiatrists

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Regardless of their area of specialization, adult psychiatrists are likely to encounter patients who are transgender; however, medical school curricula and psychiatric residency training devote little attention to caring for these patients. The primary aim of the present article is to assist adult psychiatrists who do not specialize in transgender clinical care in the delivery of respectful, clinically competent and culturally attuned care to gender variant patients including those who identify as transgender or transsexual or meet DSM-5 criteria for the diagnosis of Gender Dysphoria. The following are reviewed: The history and evolution of conceptualizations of gender variance, its

classification and related terminology including differences between DSM-IV and DSM-5; the prevalence of transgender identity and Gender Dysphoria; the influences of biological and psychosocial factors on gender development; the clinical assessment and treatment of Gender Dysphoria in adults; and current societal trends, including increased societal acceptance of gender variance, legal protections for gender variant individuals and increased access to gender transition services.

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Transgender and other gender variant people are sufficiently common that adult psychiatrists are likely to encounter such patients regardless of the area in which they practice; however, medical school curricula and psychiatric residency training have devoted little attention to assessing and caring for their needs (1, 2). In recognition of this deficit in provider training and its contribution to transgender health disparities (3, 4), calls for increased training have been made by several distinguished and authoritative bodies including the Institute of Medicine (5), the Department of Health and Human Services (6), the American Psychiatric Association (7), and the Association of American Medical Colleges (2). Even when implemented, such curricular enhancements will not address the needs of psychiatrists who have already completed their training.

The primary aim of the present article is to assist adult psychiatrists who do not specialize in transgender clinical care in the delivery of clinically competent, respectful and culturally attuned care to transgender patients. The article should also be helpful to other practicing mental health professionals and those in training. Caring for transgender patients entails providing a welcoming and affirmative clinical environment, conducting accurate diagnostic assessments, providing appropriate evidenced-based treatment and making necessary referrals when specialist care is needed including referrals to hormonal and surgical providers for those desiring such services in their gender transition.

We begin with a review of the history and evolution of conceptualizations of gender and gender variance, its classification and related terminology, including differences between DSM-IV and DSM-5. We then examine the prevalence of gender variance and what is known about its development before turning to the clinical assessment and treatment of gender dysphoria in adults, including those with intersex conditions. We conclude by examining current societal trends including increased social acceptance of gender variance, protections for gender variant individuals and increased access to gender transition services for adults. Specific guidance on these matters for child and adolescent psychiatrists can be found elsewhere (8). Definitions of key terms can be found in Table 1.

ABBREVIATIONS

CAH	congenital adrenal hyperplasia
DSM	Diagnostic and Statistical Manual
GD	Gender Dysphoria
GID	Gender Identity Disorder
HBIGDA	Harry Benjamin International Gender Dysphoria Association
HHS	U.S. Department of Health and Human Services
WPATH	World Professional Association for Transgender Health
WPATH SOC7	WPATH Standards of Care, version 7

TABLE 1. Terminology

Assigned gender: the gender attributed to an individual after birth; for most individuals, this corresponds to the sex on their original birth certificate, aka assigned sex.*
Cisgender: a term for individuals whose experienced and expressed gender are congruent with their gender assigned at birth.
Experienced gender: one's sense of belonging or not belonging to a particular gender; aka <i>gender identity</i> .
Expressed gender: how one expresses one's experienced gender.
Gender: a person's social status as male (boy/man) or female (girl/woman) or alternative category.*
Gender assignment: assignment of a gender to an individual. In typically developed newborns the initial or "natal" gender assignment is usually made on the basis of the appearance of the external genitalia.
Gendered behavior: Behavior in which males and females differ on average.
Gender binary: a gender-categorization system limited to the two options, male and female.
Gender confirming surgery: surgical procedures intended to alter primary and/or secondary sex characteristics to affirm a person's experienced gender identity, aka sex reassignment surgery.
Gender dysphoria (not capitalized): distress caused by the discrepancy between one's experienced/expressed gender and one's assigned gender and/or primary or secondary sex characteristics.
Gender Dysphoria (capitalized): a diagnostic category in DSM-5, with specific diagnoses defined by age-group-specific sets of criteria. The present paper addresses only Gender Dysphoria in adults.
Gender identity: one's identity as belonging or not belonging to a particular gender, whether male, female or a non-binary alternative; aka experienced gender.
Gender Identity Disorder: a diagnostic category in DSM-III and DSM-IV that was replaced in DSM-5 by <i>Gender Dysphoria</i> .
Gender incongruence (not capitalized): Incongruence between experienced/expressed gender and assigned gender and/or psychical gender characteristics.
Gender Incongruence (capitalized): A diagnostic category (analogous to Gender Dysphoria in DSM-5) proposed for ICD-11.
Gender variance: any variation of experienced or expressed gender from socially ascribed norms within the gender binary.
Genderqueer: an identity label used by some individuals whose experienced and/or expressed gender does not conform to the male/female binary or who reject the gender binary.
Gender role: cultural/societal definition of the roles of males and females (or of alternative genders).
Gender transition: the process through which individuals alter their gender expression which may or may not involve medical/surgical interventions.
Intersex: (1) A subset of the somatic conditions known as disorders of sex development in which chromosomal sex is inconsistent with genital sex, or in which the genital or gonadal sex is not classifiable as either male or female. As used here <i>intersex</i> does not refer to individuals who report their identity as intersex in the absence of a verifiable intersex condition.
Sex: a person's categorization as biologically male or female, usually on the basis of the genitals and reproductive tract.*
Transgender: an umbrella term usually referring to persons whose experienced or expressed gender does not conform to normative social expectations based on the gender they were assigned at birth.
Transsexual: a subset of transgender individuals who desire to modify, or have modified, their bodies through hormones or surgery to be more congruent with their experienced gender.

* On official documents such as birth certificates, driver's licenses, or passports, the traditional category "sex" is equivalent to "gender" in current psychological terminology.

HISTORY

Nineteenth and 20th century theories of gender variance and views of appropriate treatment were pathologizing and highly stigmatizing to transsexual people. While mainstream psychiatry is now more affirming of gender variance, transgender individuals often are aware of the past and may seek psychiatric care with trepidation. In addition, our patients are likely to have encountered providers who adhere to outdated stigmatizing theories and approaches to treatment. Therefore, it is important to be aware of this history which is reviewed briefly below and more extensively elsewhere (9).

People who we might call transgender today are evident in historical records since ancient times and some transitioned socially to live as members of the other gender prior to the availability of hormonal and surgical treatments for somatic transition (10-12). As reviewed elsewhere, the first documented use of isolated sex hormones for both male to female and female to male gender transition occurred in the 1930s (13, 14). Prior to that, attempts had been made to transplant gonads with the hope of manipulating secondary sex characteristics (15). The first gender confirming surgeries (aka *sex reassignment surgeries*) in the West were performed in Germany in the 1920s and 30's for feminizing surgeries and in the 1940s for masculinizing surgeries (14).

In the 19th and early 20th century, theorizing about what is now recognized as transgender phenomena was not distinguished from theorizing about what is today referred to as homosexuality (15). For example, the mid-19th century German lawyer and human rights activist, Karl Heinz Ulrich, hypothesized that some men were born with a woman's spirit but a male body. He believed these individuals constituted a third sex

and called them urnings (16). While historians of homosexuality often regard Ulrichs' urnings as homosexual men, a female spirit in a male body closely resembles the narratives of 20th century theories of transsexuality (9). Until the middle of the 20th century, transgender presentations were, with rare exceptions, viewed as psychopathological, and Richard von Krafft-Ebing reinforced this view in his landmark publication, *Psychopathia Sexualis*, an early psychiatric diagnostic manual (17). There he documented cases of individuals who desired to live as members of the other sex and those who had been born as one sex and were living as members of the other, and referred to such presentations as "metamorphosis sexualis paranoia."

In the early 20th century, greater attention focused on both sexual and gender variance with the emergence of the field of sexology, notably in the work of Magnus Hirschfeld and his Institute for Sexual Science (18). A German physician and sexologist, Hirschfeld is credited with being the first to distinguish homosexuality from transsexuality, which he referred to as "Transvestitismus" (19). Those distinctions, however, were not broadly accepted until decades later. Hirschfeld assisted surgeons in Europe who were already experimenting with gender reassignment surgery in the 1920s and advocated for the rights of both homosexual and gender variant individuals (16).

Harry Benjamin, a mid-century pioneering endocrinologist and sexologist, is credited with both popularizing the term *transsexual* in its current usage and for raising awareness about transsexual individuals within the medical profession. He offered hormone treatment at a time when mainstream physicians, including psychiatrists, regarded transsexual individuals as confused homosexuals, people with perverse fetishes, or delusional individuals in need of psychotherapy (20-25). Benjamin challenged the view that transsexuality was amenable to treatment with psychotherapy. He believed instead that treatment was primarily within the purview of medicine and that the aim of treatment should be to better align the physical body with one's gender identity. He had a complex theory that gender identity develops through early conditioning and associated psychological factors added to a foundation of the biological products of chromosomes and hormones. In his view psychological treatment could not change that foundation, although it might improve one's level of psychosocial functioning. His belief in the futility of psychotherapeutic attempts to change gender identity was pioneering at the time. His book, *The Transsexual Phenomenon* (26), was immensely successful in describing and explaining the gender-affirmative treatment path he pioneered. The possibility of gender transition seized the American popular imagination in 1952 when Christine Jorgensen, a former American armed services member, returned to the U.S. after transitioning from male to female in Denmark (25). The publicity surrounding Jorgensen's transition eventually led to greater popular, medical, and psychiatric awareness of transsexuality and increased public discussions of gender reassignment. Nev-

ertheless, many medical and mental health professionals remained critical of offering hormonal and surgical transition procedures to treat people suffering from what they perceived to be either a severe neurotic or psychotic mental disorder [e.g., (20-25)].

The first two editions of the DSM (1952 and 1968) did not include any gender diagnoses (27). The psychiatric diagnosis of Trans-sexualism (sic) first appeared in ICD-9 in 1975 (28), and in 1980, DSM-III included Transsexuality, Gender Identity Disorder (GID) of Childhood, and Atypical Gender Identity Disorder, which were stated to be associated with moderate to severe coexisting personality disturbance (29). An etiologic link was suggested with disturbed parent-child relationships, which had been observed in limited clinical samples but were not a generalizable characteristic (29). American psychiatrists, most notably, Robert Stoller, Ira B. Pauly, and Richard Green were proponents of Benjamin's more affirmative model of treatment. Proponents of this model founded the Harry Benjamin International Gender Dysphoria Association (HBIGDA) in 1979, renamed in 2006 the World Professional Association for Transgender Health (WPATH). The organization has produced seven iterations of standards for transgender care since 1979.

Up to forty university-based U.S. gender identity clinics opened between 1963-1979 (15, 25). These gender identity clinics provided interdisciplinary care that included psychiatrists and other mental health professionals, with the aim of assimilation and integration of transsexual individuals into the heterosexual cisgender world (15). Therefore, the clinics employed rigid selection criteria that excluded many transgender people, e.g., the ability of the patient to pass as a member of the experienced gender socially, vocationally and sexually (24, 25). In 1979 a follow-up study was published claiming that gender confirming surgery confers no objective advantage in terms of social rehabilitation (e.g., economic situation, "gender appropriate" cohabitation or marriage, current psychiatric treatment) (30). This study was used to justify the closure of Johns Hopkins gender clinic, despite the fact that the study also reported evidence of improved subjective sense of well-being post transition (30). Closure of other gender clinics followed a 1981 decision of the U.S. Department of Health and Human Services labeling transsexual surgery as experimental (31).

The university-based gender clinics played an important role in the provision of medical services to transgender people and in promoting research to improve that care (15, 25). In the wake of the closure of the academic gender clinics in the U.S., transgender people came to rely on a loose network of medical and mental health providers, often affiliated with HBIGDA/WPATH. With transition services now offered outside of university-based clinics, U.S. medical schools and residency training programs offered little exposure to the provision of this care, leaving psychiatrists and other physicians poorly prepared for the growth in demand for transgender services seen in recent decades (1). In the early 1990's, starting at Tom Waddell Health Center in San Fran-

cisco, medical providers developed the “informed consent model” (see section on Assessment and Treatment) in which hormone treatment can be initiated by experienced primary care providers, in most cases without evaluation by a mental health professional. WPATH SOC 7 formally recognized informed consent in 2011 and the model has been replicated across the country and is increasingly available.

In 1994 the DSM-IV replaced Transsexualism with Gender Identity Disorder (GID) in Adolescents or Adults (32). Retention of the diagnosis by the DSM and its new name including the word “disorder” were perceived by advocates and some healthcare providers as stigmatizing and contributing to societal discrimination (33). DSM-5 work-groups began to deliberate in 2008 whether or not to continue to classify the entity as a psychiatric disorder, and, if so, what to call it. Advocates in favor of retention worried that complete removal of a coded diagnosis for medical classification and billing purposes would limit access to transition care, deny the full impact of dysphoria, and harm transgender individuals who experienced dysphoria (34). Ultimately, the diagnostic entity was retained but its name changed to Gender Dysphoria (GD) (35). Use of this diagnostic label requires that a person meets the specific criteria listed in DSM-5. This is distinctly different from the generic use of the term, *gender dysphoria*, which refers to the distress caused by a discrepancy between one’s experienced gender and one’s assigned gender, whether or not full DSM criteria for GD are met. For clarity here, specific references to the diagnostic entity in this paper will be capitalized or abbreviated (i.e., Gender Dysphoria or GD).

The name change from “Gender Identity Disorder” to “Gender Dysphoria” (36) shifted the focus to the *dysphoria* as the target of diagnosis and treatment rather than *identity* itself. Its retention in DSM-5 preserved diagnostic justification for care and access to third party reimbursement. In DSM-5 the diagnostic criteria were revised so as to include those whose identities fall outside the gender binary (i.e., those who identify their gender as something other than male or female) who had been excluded in the past. In addition, unlike previous versions of the DSM, individuals with intersex conditions also are not excluded from receiving the diagnosis in DSM-5. It is important to note that the GD diagnosis is given only to those who exhibit clinically significant distress or impairment associated with a perceived incongruence between their experienced/expressed gender and their assigned gender, and does not apply automatically to people who identify as transgender. For those who do meet criteria and undergo social and medical transition, active symptoms of GD often lessen or resolve. DSM-5 includes a post-transition specifier that applies to those requiring ongoing care (e.g., hormonal replacement therapy).

To avoid the stigma associated with psychiatric diagnoses, the International Classification of Diseases (ICD) has proposed to replace the ICD 10 diagnosis “Gender Identity Disorder,” with “Gender Incongruence” in its next edition (ICD 11) and to move the diagnosis out of the section on

mental and behavioral disorders to a new section, “Conditions related to sexual health” (37).

EPIDEMIOLOGY

Epidemiological research has employed different measures of transgender populations resulting in varying prevalence rates. Some studies measure the fraction of a population which has received the DSM-IV diagnosis of GID or the ICD 10 diagnosis of Transsexualism, both of which include clinical populations who seek binary transition (male-to female or female-to male). The prevalence reported in DSM-5 ranged from 0.005% to 0.014% for transgender women, and 0.002%-0.003% for transgender men; these estimates were based on people who received a diagnosis of GID or Transsexualism, and were seeking hormone treatment and surgery from gender specialty clinics and, therefore, underestimate the prevalence of all individuals with gender dysphoria or who identify as transgender (35). The prevalence of transgender people receiving gender specialty care in the Netherlands has been estimated at 1:11,900 (0.008%) for transgender women and 1:30,400 (0.003%) for transgender men (38). More recent data of those obtaining surgery in Belgium were similar (39). In Sweden, the prevalence of people seeking surgical and legal gender change has been increasing, especially since 2000; point prevalence in December 2010 was 1:7,750 (0.013%) for transgender women and 1:13,120 (0.008%) for transgender men (40). A somewhat higher percentage, 0.023%, received a diagnosis of GID recorded in the health records of the U.S. Veteran’s Administration (41).

Other studies, rather than measuring the proportion of a population which received a clinical diagnosis, have reported on those who self-identified as transgender or gender incongruent, and found that measuring self-identity yields much larger numbers. In a large Massachusetts population-based phone survey, 0.5% of the population (age 18-64) identified as transgender (42). In another large population-based survey in the Netherlands, 1.1% of those assigned male at birth (age 15-70) reported an incongruent gender identity (stronger identification with a gender other than the one assigned at birth), as did 0.8% of those assigned female at birth (43). Recent surveys of youth showed even higher numbers. In New Zealand, 1.2% of high school students surveyed identified as transgender (44). In a survey of San Francisco middle school students (grades 6-8), 1.3% identified as transgender (45). More study is needed, but these larger numbers may indicate that many transgender people have not been counted in clinical studies, including those with non-binary identities, those not seeking transition care, those receiving hormones outside of clinics specializing in transgender care or by self-administration, and others who identify as transgender when surveyed but do not report gender dysphoria to clinicians. When considering studies and literature that cite prevalence estimates for transgender identity and/or gender dysphoria, one should be cognizant of what is actually being measured (e.g., sur-

veys of self-reported gender identity, clinical records of those receiving the diagnoses of GID or GD or requesting transition services) and how that may narrow or widen the estimate. This must be considered when subsequently translating the prevalence estimate into clinical and epidemiological applications.

DEVELOPMENT

The chain of processes of sexual differentiation of body, brain, behavior, and development of gender identity is highly complex and only partly understood (46). Given that all mammals, including humans, reproduce sexually, it is no surprise that features of body, brain, behavior, and identity that are related to reproduction show bimodal distributions in the population. As many factors contribute to these processes, it is also no surprise that there are many people who fall between the two poles on one or more of the systems and variables under consideration.

Biological factors

The mammalian embryo is initially sexually bipotential. Early in gestation, “sex determination” occurs, i.e., the differentiation of the bipotential gonadal anlagen into either ovaries or testes. This depends on a complex of interacting factors encoded by numerous genes, including the so-called testis-determining gene SRY, which is normally located on the Y chromosome (47). Subsequently, testicular secretions orchestrate the differentiation of the male internal and external genitalia. Mullerian inhibitory substance, also from the testes, induces regression of female internal genital structures, whereas the 5 alpha-reduced metabolite of testosterone, dihydrotestosterone (DHT), is necessary for the differentiation and development of male external genital structures. In addition, typical male somatic development requires androgen sensitive receptors to mediate androgen’s actions on gene expression. In the absence of the cascade set in motion by SRY, female differentiation usually occurs.

The ovary is relatively quiescent prenatally, but secretes substantial amounts of estradiol for the first 6 to 12 postnatal months; thereafter, the gonads are inactive in both sexes until sex-characteristic hormonal profiles emerge with the onset of puberty. During puberty, the development of secondary sex characteristics depends to varying degrees on the type and amount of steroid sex hormones available in the fetal circulation and their interaction with corresponding steroid-sensitive receptors and genes.

Highly sex-atypical variations in sex steroids, their receptors, or in the genes involved are associated with atypical sexual differentiation of the reproductive tract, and/or the external genitalia as well as of the secondary sex characteristics, resulting in intersex conditions (48).

Similarly, the sexual differentiation of the brain (49, 50) and, subsequently, of gendered behavior is influenced by steroid sex hormones (51) although the number of genes in-

involved in brain differentiation is very much higher than the number involved in gonadal differentiation (52, 53). The role of androgens has been documented in both individuals without intersex conditions but with known variations in the normal range of prenatal androgens as well as in individuals with intersex conditions, including both 46,XX individuals with excess production of prenatal androgens (e.g., in association with adrenal hyperplasia) who exhibit masculinized behavior and 46,XY individuals with reduced androgen synthesis (e.g., due to gonadal dysgenesis) or reduced androgen receptor sensitivity who exhibit a reduction in masculinized behavior (54).

Psychosocial factors

In non-human mammals, and much more so in humans, psychological and social factors have a major additional influence on the behavioral outcome (55). These psychosocial processes in humans include the verbal labeling (e.g., “boy”, “girl”) and nonverbal gender-cuing (e.g., gender-specific clothing and haircuts) of children by parents and others in their social environment and the shaping of gendered behavior by positive and negative reinforcement and later by explicit statements of gender-role expectations. On the part of the child, psychosocial influences include gender-selective observational learning/imitation, the formation of gender stereotypes and of related self-concepts, and self-socialization. The effects of such psychosocial factors on normative gender development have been documented in a vast body of research in developmental psychology (55). However, such psychosocial factors on their own have not been shown to cause long-term shifts in gendered behavior as strong as those seen in individuals with severe intersex conditions or in transsexual individuals without these conditions.

Factors in gender-identity development

Systematic data on gender-identity development are much more limited than those on gendered behavior. Yet, the data available, especially for those with intersex conditions, lead to the conclusion that a definitive biological predetermination of gender identity seems unlikely. Not a single biological factor, but multiple factors (i.e., biological, psychological, and social) appear to influence the development of gender identity (56).

The development of gender dysphoria and gender transition in individuals without intersex conditions is even less well understood (57). Along with the dramatically increased referrals of gender variant individuals to specialized clinics in Western Europe and North America over the last two decades (58, 59), there has been a diversification of presentations beyond the original ‘transsexual’ who sought change to the ‘other’ gender via treatment with cross-sex hormones and surgeries. Currently many transgender people seek chest but not genital surgery, or only cross-sex hormones, or only a social transition without any medical changes. Many reject the confinement by the binary gender system altogether and simply desire flexibility in gender expression

without formal transition to “the other gender”, as, for instance, connoted by the self-label ‘genderqueer’ (60, 61).

Prospective follow-up studies of children who initially had met criteria for the diagnosis of GID (replaced by GD in DSM-5), showed that the majority of those with onset of GID in early or early-middle childhood “desisted,” i.e., did not continue with GID through adolescence and adulthood, but accommodated to their originally assigned (“natal”) gender, frequently in combination with the development of a homosexual orientation (relative to their natal gender) in adolescence. Some of these “desisters”, however, transitioned later in life (62). The data available do not allow a clear prediction before puberty of which child will persist and transition permanently, and which child will not (63). It is conceivable that with the introduction of stricter criteria for the diagnostic category of GD in DSM-5, the persistence rate will be higher (62), but this needs to be tested by future long-term follow-up studies. In many transgender women, cross-gender expression and identity develop later in adulthood, in some cases preceded by fetishistic cross-dressing in adolescence and with sexual arousal associated with seeing, imagining, or thinking of themselves dressed as a woman, a phenomenon termed autogynephilia (64). This concept of a fetishism-related developmental pathway to transsexualism, however, is the focus of a major disagreement in the field (65, 66). Regardless of their initial sexual orientation, during and after transitioning to their experienced gender, some individuals retain their pre-transition sexual attraction patterns, while others change, and the determinants of either trajectory are not well understood. Importantly, gynephilic attraction and a history of fetishistic arousal do not exclude natal males from eligibility for gender transition services according to current standards of care (67).

In regard to the biological factors that may contribute to the development of gender variance, some individual small-sample studies of transsexuals have produced suggestive findings of (modest) variations in sex steroids, steroid receptors, or steroid-enzyme genes, but overall the results have been inconsistent and/or currently lack replication (46). Thus, at this point, the evidence is insufficient for categorizing transgender identity as a form of CNS-limited intersexuality. Suggestive results have also come from individual neuroanatomic and neurofunctional studies of transsexuals; yet, all are still in need of high-quality replication studies by independent investigators (68, 69). Moreover, the available studies typically show considerable overlap between transsexuals and cisgender controls in the neuroanatomical or neurofunctional indicators of interest, so that they do not yet offer any clinical utility for diagnosis, prognosis, or treatment decisions.

ASSESSMENT AND TREATMENT

Presentations

Transgender adults present for psychiatric services for a variety of reasons. Specific aspects of the assessment and type

of treatment offered depend on the nature of the clinical concerns. Data are lacking regarding the relative commonality of reasons for seeking mental health care among transgender adults receiving these services. The literature regarding particular clinical presentations, such as consultation with adults seeking to obtain hormonal and surgical services, is extensive; however, many people who are transgender pursue psychiatric treatment for reasons that may be unrelated to their gender identity and gender expression, such as primary psychiatric illnesses (e.g., bipolar disorder), or partially related, such as the sequelae of childhood trauma.

Transgender presentations commonly seen in psychiatric practice include the following (7, 67): Exploration of identity and life direction, including gender identity and expression; treatment of the distress associated with experiences of gender-related abuse and stigmatization, and their sequelae; assistance in managing the process of gender transition, which may be similar to adjustment concerns that may arise in other multifaceted life changing processes; couple or family treatment, which may or may not be related to gender transition; consultation prior to initiation of hormonal treatments, surgical procedures, and at other crucial points in the gender transition process; consultation on referral from another mental health professional, endocrinologist, or primary care clinician for evaluation of potential co-occurring psychiatric illness; treatment of conditions related to gender dysphoria, such as depression or substance abuse; and treatment of co-occurring psychiatric conditions unrelated to the gender dysphoria.

Psychiatrists should be aware that transgender identity and other forms of gender variance are no longer considered evidence of psychological pathology, but are now regarded as aspects of human diversity (7, 8, 35). Psychiatric symptoms experienced by people who are transgender may be evidence of distress related to chronic stigmatization, often referred to as “minority stress” (70, 71); GD in need of treatment; or co-occurring illness, such as bipolar disorder or major depressive disorder. The autism spectrum disorders may be more prevalent among transgender children and adults than among their cis-gender peers (72, 73). Psychiatrists who work on transgender treatment teams often play a crucial role in the evaluation and treatment of patients with co-occurring serious or persistent mental illness.

Assessment

Clinical evaluation of adults with gender dysphoria is currently based on expert consensus (67, 74) and varies with the nature of the clinical concern. Persons whose gender transition occurred many years ago and who are seeking treatment for another problem may need much less attention to the gender history (awareness, identity development, expression) than those who are beginning gender transition and exploring options for subsequent gender presentation. Earlier life experiences of “gender shaming” and punishment may again become relevant in later crises; conversely,

some people find over-emphasis on previous gender experiences inadvertently stigmatizing. It is important to avoid the assumption that co-existing mental health symptoms are due to GD unless that relationship is clear. There are no formal guidelines for evaluation of clinical concerns that are not directly related to gender dysphoria or gender transition; usual clinical principles apply in those situations. Some people with GD develop the belief that depression or other problems will resolve with transition, though that may not occur. It can be useful to discuss the multi-factorial etiologies of psychiatric illness, such as depression, early in the course of treatment, and to establish clear goals.

Practice guidelines have primarily focused on clinical evaluation as part of the gender transition process. Aspects of the evaluation (and early phases of treatment) recommended in the WPATH Standards of Care and other sources include the following [italicized headings from the WPATH SOC 7 (67)]:

Assessment of the gender dysphoria: Useful areas of exploration may include age of awareness of gender difference from same-sex peers; experience of negative affect or self-perception (e.g., dysphoria) related to gender difference, distress with development of unwanted secondary sex characteristics during puberty, or associated concerns; experiences of gender-related shame and stigmatization; associated mental health symptoms and coping mechanisms; management of gender expression over the life course, and sources of support, such as family, partners, and transgender peers. Exploration of factors such as educational achievement, employment, peer and romantic relationship history and parenting can provide needed context for this information.

Providing information regarding options for gender identity and expression, and possible medical interventions: Many adults seeking medical services in support of gender transition are already quite knowledgeable about the potential effects of hormonal and surgical treatments, as well as possibilities for gender transition, nonconforming gender expression, and other alternatives. However, inaccurate information is also readily available on-line and through other sources, and a detailed discussion is usually warranted. This discussion can also foster the development of a therapeutic environment that will facilitate progress from consideration of options to readiness to take action to address the dysphoria in a manner that will increase life satisfaction and self-esteem. Persons who reside in rural areas may also lack in-person peer support and experience greater need for affirming, face-to-face discussion about gender experience and choices for expression.

Assess, diagnose, and discuss treatment options for coexisting mental health concerns: Adults who are transgender or gender nonconforming may suffer from psychiatric illnesses that are related to the GD itself, such as depression and anxiety disorders; to maladaptive coping, such as substance abuse and eating disorders, or to experiences of maltreat-

ment or victimization. In one recent epidemiological study conducted in 4 European countries, mood and anxiety disorders were significantly more common among transgender adults than in the general population, with combined lifetime prevalence approaching 70% (75). Children who are nonconforming in gendered appearance or behavior are often bullied or abused in other ways, and adults may suffer from posttraumatic stress disorder or other sequelae.

Gender transition can be successfully managed despite co-occurring psychiatric illness in most cases, but will usually require extra support and multidisciplinary clinical care. Medical education and psychiatric training can provide an excellent background for developing expertise in managing psychiatric medications in cases involving concurrent use of estrogen or testosterone preparations; differentiating between hormonal effects, medication effects, unrelated subjective experience and psychiatric symptoms; and distinguishing between gender concerns that may arise as epiphenomena of serious mental illness from GD; and treating co-occurring psychiatric illness during transition. Cases have been reported in which delusions about sex and gender occurred as a result of major mental illness and abated with treatment (76, 77) but these are rare. Most people seeking treatment of GD are in fact suffering from that condition, with or without mood and anxiety symptoms. Comprehensive psychiatric evaluation is crucial in cases involving GD and co-occurring serious mental illness.

If applicable, assess eligibility, prepare and refer for hormone therapy/surgery or surgeries: Most surgeons and insurers require mental health evaluation prior to gender transition-related surgeries; specifics vary between different practices and plans, but often include documentation from a psychiatrist or doctoral level psychologist. Documentation of the WPATH SOC 7 criteria of persistent “gender dysphoria,” capacity for informed consent and the sufficient control of co-occurring mental and physical health conditions may be done by the mental health provider or an experienced primary care provider prior to beginning hormone therapy (2). Current criteria for GD (35) should be used. Surgical criteria are similar, though genital procedures are usually not performed prior to hormone therapy of 12 months’ duration. Fertility preservation, such as cryopreservation of sperm, should also be discussed (78). WPATH SOC7 criteria for referral for gender confirming hormone treatments and surgeries are shown in Table 2.

Treatment

The Report of the American Psychiatric Association Task Force on Treatment of Gender Identity Disorder (7) concluded that with subjective improvement as the primary outcome measure, the existing evidence base combined with clinical consensus is sufficient for the development of a psychiatric practice guideline for adults with GID. Areas for specific recommendations were similar to those listed above, plus distinguishing between GID with concurrent psychiat-

TABLE 2. WPATH SOC7 Criteria and Referrals Needed for Gender-Affirming Hormone Therapy and Surgery in Adults

Criteria for Hormone Therapy (One Referral*)
<ol style="list-style-type: none"> 1. Persistent, well-documented gender dysphoria; 2. Capacity to make a fully informed decision and to consent for treatment; 3. Age of majority in a given country 4. If significant medical or mental health concerns are present, they must be reasonably well-controlled.
Criteria for Surgeries
<p>Criteria for mastectomy and creation of a male chest in female to male patients and breast augmentation (implants/lipofilling in male to female patients (One Referral*))</p> <p>Identical to criteria for hormone therapy</p> <p>Criteria for hysterectomy and salpingoophorectomy in female to male patients and for orchiectomy in male to female patients (Two Referrals*)</p> <ol style="list-style-type: none"> 1. Persistent, well-documented gender dysphoria; 2. Capacity to make a fully informed decision and to give consent for treatment; 3. Age of majority in a given country; 4. If significant medical or mental health concerns are present, they must be well controlled. 5. 12 continuous months of hormone therapy as appropriate to the patient's gender goals (unless hormones are not clinically indicated for the individual). <p>Criteria for metoidioplasty or phalloplasty in female to male patients and for vaginoplasty in male to female patients (Two Referrals*)</p> <ol style="list-style-type: none"> 1. Persistent, well-documented gender dysphoria; 2. Capacity to make a fully informed decision and to consent for treatment; 3. Age of majority in a given country; 4. If significant medical or mental health concerns are present, they must be well controlled; 5. 12 continuous months of hormone therapy as appropriate to the patient's gender goals (unless hormones are not clinically indicated for the individual). 6. 12 continuous months of living in a gender role that is congruent with the patient's identity.

* Insurance carriers have varied requirements regarding the credentials of those who provide referrals letters as well as for the duration and type of provider-patient relationship and treatment. According to the WPATH SOC7 (67), mental health professionals with the competencies described within the SOC7 are best prepared to conduct assessments of gender dysphoria and provide referrals; however, "these tasks may instead be conducted by another type of health professional who has appropriate training in behavioral health and is competent in the assessment of gender dysphoria, particularly when functioning as part of a multidisciplinary specialty team that provides access to feminizing/masculinizing hormone therapy."

ric illness and gender manifestations that are not part of GID but epiphenomena of other psychopathology; educating family members, employers and institutions about gender variance, and additional specifics regarding clinical and administrative documentation (DSM-IV-TR terminology was used in this document).

Specifics of clinical practice can be somewhat flexible depending on resource availability. The objective of treatment is alleviation of emotional distress and improvement in quality of life. Meaningful outcome measures concern subjective improvement and lack of regret regarding medical interventions, such as hormone treatment effects and surgeries (7), as gender dysphoria is a subjective experience without any reliably associated biomarker.

Treatment of GD is individually based. Psychotherapy is often useful, such as for the concerns described above. However, many people successfully transition gender with little or no psychotherapy. Many transgender adults need some combination of hormonal treatment and surgical procedures for relief of GD, but some experience relief with change in gender presentation or expression without any medical treatment or with adjustment in hormonal profile without surgery. In addition to those described above, some aspects of treatment include:

Assessment of suicide risk and suicide prevention. This is especially important during periods of heightened vulnerability, such as when the identity is disclosed to family, and more broadly (7, 79). Terada et al. (80) and Heylens et al. (75) suggest that gender dysphoria may be a risk factor for suicidality, independent of other psychiatric conditions. Suicide prevention may include psychotherapy with a "trans-positive" perspective, community support, and treatment of depression or other psychiatric illness with pharmacotherapy and other somatic modalities, or hospitalization, as indicated. Psychiatrists who provide inpatient care are often able to promote education and training about transgender and gender variance for the members of the medical, nursing

and therapy staffs. Similarly, psychiatrists who refer to therapists (e.g., for dialectical behavioral therapy or cognitive therapy) may need to provide education to those who lack experience working with transgender patients.

Facilitation of hormonal treatment. Though supplementation of estrogen, or testosterone, carries some risk of significant medical complications (74) both have been associated with alleviation of mood and anxiety symptoms in treatment of GD (81, 82). In addition to assessing appropriateness of hormonal treatment, as described above, psychiatrists can take an active role in educating patients about the effects of hormonal change and safe use of hormonal preparations, and can advocate with insurance carriers for coverage of these medications.

Facilitation of surgical treatment. Similar data regarding alleviation of specific psychiatric symptoms through gender confirming surgeries alone is not available, but review of the available literature (7) demonstrates both the benefit of surgery in alleviating GD and the rarity of postsurgical regret. Discrimination by insurance carriers has been rampant over time, as demonstrated by specific transgender exclusions, despite the opposition of the American Psychiatric Association (83) and other professional organizations (e.g., (67, 84)). For example, many plans cover hysterectomy if performed for a variety of non-malignant gynecological conditions, but not for treatment of GD among transmen. Though some progress has been made in recent years, additional advocacy is needed, both on behalf of individual patients and systemically, as will be discussed at the end of this paper.

Advocacy within the hospital or health system environment. Many transgender persons report negative experiences in hospitals, clinics and mental health centers (3). In addition to anti-transgender discrimination by members of the health professions and support staffs, structural problems also create difficulties for gender nonconforming people. The use of electronic health records can be problematic due to the binary (male/female) gender signifiers available in the software menus, the relative lack of privacy, and the difficulty in limiting who has access to the gender history, including history of gender transition. Psychiatrists and other professionals who work in large health systems can draw attention to these problems and help to facilitate improvement in the details of the electronic record. Other health system problems, such as the need for education about gender identity among persons in support services, including patient registration and financial services, and fair handling of complaints, can often be addressed through offers of assistance by members of the professional staff, including psychiatrists (see Box 1).

Provision of mental health care over time. Many transgender persons seek mental health treatment on an intermittent basis, such as while contemplating gender transition, at key points in the transition process, and subsequently, if symptoms worsen or important events occur. The knowledge that the psychiatrist remains available when needed is often helpful in maintaining stability and making personal progress over time.

Gender variation represents a normal aspect of human diversity, but GD can cause significant suffering and require treatment. Psychiatry provides a unique combination of medical and mental health education and skills that can be valuable in the care of people who are exploring gender identity, transitioning gender, or needing treatment for co-occurring psychiatric illness. Clinical consensus documents can offer general guidelines for care, though additional research will be helpful in providing more specific guidance over time. Treatment of GD should be patient centered, clinically flexible and individually determined.

BOX 1. A Welcoming Environment and Culturally Competent Care

Transgender patients have often suffered negative experiences in medical settings and the resulting discomfort may interfere with engagement in health care (3). A welcoming environment and employing principles of culturally competent care help create a sense of safety and provide a basis for the development of a therapeutic alliance (100).

Here are recommendations for creating a welcoming environment and providing culturally competent care

- 1) Creating a welcoming environment is the responsibility of all staff members a patient may encounter, including receptionists and registration clerks, housekeeping personnel (e.g. when a patient is using the restroom), social workers, nursing staff, and physicians. Training ideally should be provided to all staff.
- 2) Patients should be able to use the restroom consonant with their gender identity, and have the option of a single person restroom when available.
- 3) Preferred names should be prominent in electronic health records and other charts. Staff should be trained to look for preferred names before calling the patient's name. When different from the preferred name, using the legal name of the patient not only may be viewed as disrespectful, but might reveal the transgender identity of the patient as transgender to others in the waiting room.
- 4) If not known, clinicians should ask the patient's preferred name and pronouns, then use them, and chart them for future reference. "They/them" may be preferred non-gendered pronouns, especially for patients with non-binary gender identities.
- 5) The clinician should follow the patient's lead in describing gender identity and goals for transition, without predetermined assumptions of binary gender or transition outcome.
- 6) Gender dysphoria may or may not be the presenting symptom for a transgender patient. As with any patient, an exploration of the patient's concerns on initial evaluation should determine the degree of focus on gender dysphoria versus other presenting problems.

GENDER VARIANT PATIENTS WITH INTERSEX CONDITIONS

GD and patient-initiated gender transition occur with increased frequency in individuals with intersex conditions (85). They may develop from late pre-school age through late adulthood and vary from 0% to about two thirds of such persons, depending on the specific intersex syndrome, its severity, the gender originally assigned, and the postnatal sex-hormone history (86). GD in individuals with intersex conditions differs from GD in the absence of an intersex condition in presentation and clinical context including medical implications (87). Persons with the combination of

GD and intersex condition encounter fewer barriers to legal gender reassignment, and the barriers to hormonal and surgical treatments are much lower, because hormone administration is often required as part of routine intersex care, infertility is quite common, and genital surgery with the aim of reinforcing gender assignment frequently performed already in infancy or early childhood, followed by additional surgical modifications in adolescence or young adulthood. Decisions regarding hormonal and surgical procedures are complicated by the highly variable somatic presentations of the many diverse intersex conditions. Thus, to be fully effective, the mental-health provider needs to be informed about the medical aspects of the condition at hand (e.g., (48, 88) as well as about the available data on long-term gender development and other psychological outcomes of such patients (e.g., for congenital adrenal hyperplasia (CAH) (89)). Moreover, intersex conditions are frequently associated with stigma, which may result in shame and maladaptive coping mechanisms on the part of the patients as well as their parents, and even in medical settings (90).

Gender Evaluation

In DSM-5, the diagnostic category, GD, has been re-defined and now also applies to patients with intersex conditions (35). The questionnaires and interview schedules developed for the assessment of gender development in transgender individuals who do not have an intersex condition (91, 92) apply to those with these conditions as well, but need to be complemented by detailed medical, surgical, and related psychosocial histories including the histories of disclosure to the patient of her/his medical condition and surgical history and the patient's understanding of the implications.

Decisions on Gender Reassignment

For patients with intersex conditions, GD usually raises the question of transition to the "other" gender, and all issues of relevance to transgender persons without these conditions should also be considered here. Yet, the situation is often more complex than in GD in the absence of an intersex condition. Factors contributing to such decisions, apart from the gender-behavior history, may be the awareness of the discrepancy between assigned gender and biological factors such as chromosomes or anatomic factors such as gonads, gender-atypical secondary sex characteristics such as breast development in males or hirsutism and masculine body built in women, and related psychosocial effects like being misidentified as the other gender or frank stigmatization. Different cultures and even subcultures within a given country may differ in the roles (including rights) associated with either gender, and in the salience and weight of criteria used in decision making on gender reassignment (93). When discussing gender options, clinicians need to consider the legal regulations of the country they work in as well as the religious and other ideologies that can influence the gender perspectives of parents and patients, especially when those are immigrants or visitors from foreign countries; thus, both

a detailed exploration of parents' and patients' viewpoints as well as their psychoeducation about gender and issues related to their intersex condition need to be included (56).

As other transgender patients do, patients with a intersex condition and gender dysphoria also may benefit from a detailed discussion of the patient's expectations from the gender transition: the social effects from public gender change as well as the medical and social effects of the attendant changes in hormone treatment and, if desired, of genital surgery. Some of the expectations may be quite unrealistic, and after detailed discussion, some patients may desire only some hormonal and/or surgical changes, or decide against physical and legal gender change altogether and pursue other ways of resolving gender-related concerns.

Medical treatments

Many patients with both an intersex condition and GD will be agonadal in later adolescence or adulthood, either because they were born that way (e.g., in syndromes involving gonadal dysgenesis) or due to surgery, for instance, for the prevention of gonadal malignancy. In those with intact gonads (especially 46,XX CAH raised female), loss of fertility may be another issue for consideration. Persons who are agonadal are usually on hormone replacement therapy by the time of late adolescence. Cessation of that treatment, change to treatment with hormones of the other gender, patient education for informed consent, and the monitoring of treatment effects is the task of the endocrinologist. Also, the technical aspects of genital surgery are more complex than in patients receiving gender confirming genital surgeries who do not have intersex conditions. Both the external genitalia and the internal reproductive tract in intersex conditions typically differ from what most surgeons are familiar with in transgender patients without these conditions. In addition, many patients with intersex conditions have already undergone one or more genital surgeries by late adolescence. The resulting postsurgical anatomy constitutes an additional challenge for the surgeon performing gender confirming surgery, and a good sex-functional outcome may be more difficult to achieve.

Support groups

As is often seen in individuals with uncommon medical conditions, many people with intersex conditions experience varying degrees of isolation and loneliness. Therefore, linking them to existing intersex support groups by internet or face-to-face meetings can be very beneficial. Despite the emotional relief that support groups can provide, such contacts may sometimes cause additional concerns. For instance, the composition of the group (e.g., the syndromes represented within the group, the personalities of some group members, or the goals of the group) may not meet the individual's expectations, and the information provided may not always be accurate. Thus, some monitoring of the patient's experience with the chosen group is recommended.

CURRENT SOCIAL ISSUES: STIGMATIZATION AND ACCESS TO CARE

Transgender health advocates have worked to address societal discrimination against transgender people, including stigmatization of identity, discrimination in schools, workplaces, and health care, and to improve access to care. Increasingly, this advocacy has been embraced by major institutional and governmental agencies.

One large online survey, the National Transgender Discrimination Survey (3) showed that rejection, discrimination, victimization, and violence against transgender people occur in a multitude of settings and negatively affect transgender people across the life span. Transgender youth are often harassed and assaulted in schools, which is associated with dropping out and subsequent impoverishment. Many transgender people are harassed at work or lose jobs due to their gender identity and expression. Discrimination extends to health care settings, where patients may be refused care or treated disrespectfully, or do not have access to care.

U.S. public policy has contributed to the lack of access to care. A report by the National Center for Health Care Technology of the HHS Public Health Service issued in 1981, titled "Evaluation of Transsexual Surgery," deemed these procedures "experimental," and recommended that Medicare not cover transition-related care. This was formalized in a 1989 Health Care Financing Administration National Coverage Determination (31). Exclusion of transgender healthcare in private insurance as well as Medicaid and Medicare was near universal in the decades to come. A lack of funding for clinical care and for research led to the closing of transgender care programs at academic institutions in the years following the 1981 report.

Transgender health insurance exclusions are now rapidly being removed. This trend started with increasing numbers of employers in the last 15 years adding transition care to health coverage. Starting in 2013, some states have ruled that transgender health care exclusions are discriminatory and have banned them state-regulated health insurance. In 2014, the 1981 Medicare policy was reversed, removing categorical exclusions for transgender care (94). In 2015, the U.S. Department of Health and Human Services moved to end categorical exclusions for transgender care from all insurance and care providers who accept federal funding or reimbursement (95); and since 2016, insurers in the Federal Employees Health Benefits Program must include transition-related coverage for transgender federal employees (96); however, much work remains to actualize these policy changes, so that transgender people can access necessary care.

WPATH SOC 7 (67) has attempted to improve access to care by including the informed consent model for hormone administration. In multidisciplinary clinics providing transgender care, primary care providers can assess for and diagnose longstanding GD that might benefit from treatment with hormones and administer hormones without referral from a mental health professional. However, patients with

co-occurring mental health conditions should be referred to mental health providers when appropriate. Alternatively, in most clinical settings the initial assessment of GD should come from a mental health professional. WPATH has advocated for the depathologization of transgender identity, the medical necessity of transgender care, and for improved access to legal gender change (67).

The American Psychiatric Association has also attempted to reduce stigma and improve access to care. As discussed above, the DSM-IV diagnosis of GID, regarded as stigmatizing by many transgender health and advocacy groups, was replaced with GD in DSM-5 (97). In addition, the American Psychiatric Association approved position papers on discrimination and access to care. Its statement on discrimination against transgender and gender variant individuals (98) opposes all private and public discrimination on transgender individuals, and its statement on access to care for transgender and gender variant individuals (83) urged the removal of all categorical health care exclusions for transgender people and advocated for the expansion of access to care.

CONCLUSION

Increased access to care must be accompanied by culturally competent research in transgender health, recommended by the Institute of Medicine (5) and outlined in the NIH's Strategic Plan to Advance Research on the Health and Well-being of Sexual and Gender Minorities (99). Expanded and improved education of health care providers is necessary, and the American Association of Medical Colleges has produced guidelines for curricular and climate change to improve transgender health (2). Principles of culturally competent care for transgender patients should be included in residency training as well.

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