### ORIGINAL PAPER

# The DSM Diagnostic Criteria for Gender Identity Disorder in Adolescents and Adults

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**Abstract** Apart from some general issues related to the Gender Identity Disorder (GID) diagnosis, such as whether it should stay in the DSM-V or not, a number of problems specifically relate to the current criteria of the GID diagnosis for adolescents and adults. These problems concern the confusion caused by similarities and differences of the terms transsexualism and GID, the inability of the current criteria to capture the whole spectrum of gender variance phenomena, the potential risk of unnecessary physically invasive examinations to rule out intersex conditions (disorders of sex development), the necessity of the D criterion (distress and impairment), and the fact that the diagnosis still applies to those who already had hormonal and surgical treatment. If the diagnosis should not be deleted from the DSM, most of the criticism could be addressed in the DSM-V if the diagnosis would be renamed, the criteria would be adjusted in wording, and made more stringent. However, this would imply that the diagnosis would still be dichotomous and similar to earlier DSM versions. Another option is to follow a more dimensional approach, allowing for different degrees of gender dysphoria depending on the number of indicators. Considering the strong resistance against sexuality related specifiers, and the relative difficulty assessing sexual orientation in individuals pursuing hormonal and surgical interventions to change physical sex characteristics, it should be investigated whether other potentially relevant specifiers (e.g., onset age) are more appropriate.

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#### Introduction

Transsexualism first appeared as a diagnosis in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III) (American Psychiatric Association, 1980). Besides transsexualism, a separate diagnosis of Gender Identity Disorder of Childhood was also introduced. Instead of classifying transsexualism as an Axis I diagnosis within the chapter Psychosexual Disorders, DSM-III-R (American Psychiatric Association, 1987) classified it as an Axis II disorder, i.e., one of the disorders "typically beginning in infancy, childhood or adolescence." Also included was a diagnosis Gender Identity Disorder of Adolescence or Adulthood, Nontranssexual Type (GIDAANT) for cross-gender identified individuals who did not pursue sex reassignment. A diagnosis Gender Identity Disorder Not Otherwise Specified (GIDNOS) was used for those who did not fulfill criteria for the specific gender identity disorders. In the DSM-IV-TR (American Psychiatric Association, 2000), only one specific diagnosis, Gender Identity Disorder (GID), was included. Here, GID was viewed as basically one Axis I disorder that could develop along different routes and could have various levels of intensity (Bradley et al., 1991).

The DSM has consistently approached gender problems from the position that a divergence between the assigned sex or "the" physical sex (assuming that "physical sex" is a one-dimensional construct) and "the" psychological sex (gender) per se signals a psychiatric disorder. Although the terminology and place of the gender identity disorders in the DSM have varied in the different versions, the distress about one's assigned sex has remained, since DSM-III, the core feature of



the diagnosis. The DSM has also always made a distinction between GID in childhood, adolescence and adulthood, and the category GIDNOS.

In this article, we will review problems and criticisms with the current DSM criteria for GID in post-pubertal individuals. The debate on whether GID should remain in the DSM (e.g., Winters, 2005) is a different one and will be discussed elsewhere by Meyer-Bahlburg (2009). Here, we assume that a diagnosis related to atypical gender identity will not be removed from the DSM. We will not focus on the meta-structure of the DSM diagnoses either, as this will also be addressed by Meyer-Bahlburg (2009). In our review, we will discuss criteria for both adolescents and adults. The current criteria are the same for the two age groups, and there are very few studies on adolescents with GID only. Whenever appropriate, we will address adolescent issues separately.

This review is based on the research literature, information coming from transgender communities (Vance et al., in press), and clinical experience of the authors until June 2009. It does not reflect the discussions and subsequent decisions of the DSM-V subworkgroup on GID, leading to the final recommendations of the workgroup to the APA.

#### Reliability and Validity of the Current Criteria

Important in the decision to maintain a distinct diagnosis is the question whether or not the diagnosis can be made reliably, that is, whether different clinicians assessing the same persons will come to the same diagnoses. As noted earlier, this is especially important for the diagnosis of GID, because one of the most drastic medical treatments, sex reassignment surgery, may ensue from this diagnosis. Unfortunately, in the clinical research literature on adolescents and adults, such inter-rater reliability studies have not been done. Also, no structured interviews assessing DSM-IV-TR GID and GID-NOS diagnoses have been developed, and no comparisons have been made between clinical diagnoses and diagnoses based on structured interviews. This means that there is also a lack of formal validity studies in this area. However, with regard to the diagnosis of transsexualism according to the ICD-10 (World Health Organization, 1992), there is some evidence for diagnostic reliability. According to the German Law for Transsexuals (1980, Bundesgesetzblatt I, 1654), in force since January 1, 1981, all applicants for a legal change of their Christian name (independent of sex reassignment surgery) and/or for a legal change of the personal status as male or female (after sex reassignment surgery) have to be assessed by two independent experts, before the court will rule on such changes. The experts have to confirm the diagnosis of transsexualism according to the diagnostic criteria of the ICD-10, F64.0, which bear a close resemblance to the DSM-IV-TR criteria. In the first decade of the application of the German Law for Transsexuals, more than a 1,000 cases have been processed by the courts (Weitze & Osburg, 1998). Very rarely, the court had to ask for a third, independent expert opinion or to make its decision without consulting a third expert, because the two independent experts did not agree in their evaluation (Pfäfflin, 2009; Weitze & Osburg, 1998).

Validity of the DSM diagnosis can, perhaps, also be inferred from studies that have been conducted to evaluate sex reassignment as a treatment procedure (see Pfäfflin & Junge, 1992, 1998 for studies until 1990; Gijs & Brewaeys, 2007 for studies between 1990 and 2007). Since the publication of the DSM-IV in 1994, five of these follow-up studies explicitly mention the use of DSM diagnoses (Bodlund & Kullgren, 1996, Lawrence, 2003; Lobato et al., 2006; Rakic, Starcevic, Maric, & Kelin, 1996; Smith, van Goozen, Kuiper, & Cohen-Kettenis, 2005). In these studies, the mean follow-up period ranged from 12 to 60 months; 976 participants were approached and 428 participated in the follow-up studies, a response rate of about 50%. In about 3%, unsatisfactory results were reported. It should be noted that an "unsatisfactory result" does not necessarily imply post-operative regret about the sex reassignment or a wish to live in the original gender role again (Kuiper & Cohen-Kettenis, 1998). Some participants in follow-up studies were just very dissatisfied with the surgical complications, unhappy about losses in their lives (family, friends), or experienced little acceptance in their social environments. However, even if all unsatisfactory results are included, sex reassignments based on DSM diagnoses primarily resulted in satisfying results, in terms of alleviating the discomfort about one's sex or the "gender dysphoria." Although diagnosis and response to sex reassignment are not very closely connected, and the reported findings are certainly no "proof" of the correctness of the diagnosis, they suggest that the elements of the DSM diagnosis are clinically useful. This not only applies to the DSM-IV-TR criteria, but also to the earlier DSM diagnoses, because studies prior to 1990 have shown similar results (Pfäfflin & Junge, 1992, 1998). The conclusion has to be drawn with reservation, though, because it is conceivable that non-participants in follow-up studies were misdiagnosed.

Core aspects of GID (gender dysphoria and gender identity) have also been measured in a dimensional way. Since the publication of the DSM-IV, these included the Gender Dysphoria Interview and the Gender Dysphoria/Identification Questionnaire reported on by Zucker et al. (1996), the Gender Identity/Gender Dysphoria Questionnaire for Adolescents and Adults (GIDYQ-AA) by Deogracias et al. (2007) and Singh et al. (2009), and the Utrecht Gender Dysphoria Scale (UGDS) by Cohen-Kettenis and van Goozen (1997). The first



instrument was used in a study on women with congenital adrenal hyperplasia (CAH), but no data were reported on persons attending gender identity clinics. The reliabilities of the GIDYQ-AA and UGDS are high: a Cronbach's alpha for the GIDYO-AA of .97, and for the UGDS of .66-.80 in one sample, and .78-.92 in another. The lower alphas on the UGDS were only found among control subjects, which may be related to the lower variability of gender dysphoria in these groups. Both instruments showed good discriminant validity, when adolescents and adults with and without a GID diagnosis were compared. Sensitivity and specificity rates of 90.4% and 99.7% were reported on the GIDYO-AA, using a cut-point of 3 on a 1-5 point scale. These studies indicate that gender dysphoria can be reliably and validly measured. However, these instruments are only now beginning to be used in clinical practice.

#### **Problems with the Current Diagnostic Criteria**

Apart from more general concerns regarding the GID diagnosis for adults, a number of problems specifically relate to the current criteria (Appendix 1). These problems concern (1) the similarities and differences between the terms transsexualism and GID, (2) the inability of the current criteria to capture the spectrum of gender variance phenomena, (3) the potential risk of unnecessary physically invasive examinations to "rule out" intersex conditions if the C criterion remains part of the diagnosis, (4) the necessity of the D criterion for a GID diagnosis, and (5) the fact that the diagnosis still applies to postoperative transsexuals.

# Similarities and Differences Between the Terms Transsexualism and GID

The appearance of the diagnosis "transsexualism" in the DSM-III (American Psychiatric Association, 1980) occurred approximately 50 years after estrogens and androgens became available and after considerable progress had been made in the field of genital surgery and anesthesiology. It had, therefore, become possible for individuals to pass socially and (partially) anatomically as a member of the other gender in an unprecedented way (Bullough, 2007). Reports on Christine Jorgensen, an American who underwent hormonal and partial surgical sex reassignment from male to female in Denmark (Hamburger, Strürup, & Dahl-Iversen, 1953), were celebrated upon her return to the U.S. for having had a "sex change." Initially, neither she nor her doctors had intended the "sex change" but wanted to "cure" Jorgensen's "homosexuality." At the time, homosexuals were considered to suffer from an abnormal sex drive, and castration was seen as a way of helping them to reduce their libido and allowing them to feel more at ease (Hertoft & Sörensen, 1979). Only afterwards, when the case became public, did the team accept the results as a "sex change." The treatment created not only sensational stories in the public press, but also criticism from psychiatric circles (Meyerowitz, 2002; Ostrow, 1953; Wiedeman, 1953). The treating physician, Hamburger, was accused of complying with the patient's demands rather than offering psychotherapy to treat the "sexual perversion." This was the beginning of a still ongoing, territorial struggle between clinical disciplines for the domination of the field. Because, in the early years, there were no official standards of care issued by a professional organization, (surgical) treatment quality differed widely. At the time, neither eligibility requirements for sex reassignment nor diagnostic procedures were based on multidisciplinary consensus. Diagnosis and eligibility decisions were not standardized: "Centers in the Western hemisphere offered surgical sex reassignment to persons having a multiplicity of behavioral diagnoses applied under a multiplicity of criteria" (Walker et al., 1985, p. 80). Due to concern about this unfavorable situation, The Harry Benjamin International Gender Dysphoria Association (HBIGDA, in 2009 re-named the World Professional Association for Transgender Health [WPATH]), the first international professional organization in the field, distributed the Standards of Care (SOC) for the treatment of gender dysphoric persons in 1979 (first published by Walker et al., 1985). The aim of these standards was to set minimal standards for the assessment and determination of eligibility for hormonal and surgical interventions, thereby providing optimal care (Coleman, 2009). The same concern for quality health care and the conviction that psychiatrists or mental health professionals with sufficient knowledge of psychopathology should make the decision about the sex reassignment applicant's eligibility contributed to the inclusion of the diagnosis in the DSM-III.

After the introduction of the first published version of HBIGDA's SOC (Walker et al., 1985), referral for hormonal and/or surgical interventions was made dependent on the DSM diagnosis of "transsexualism" by those who used the SOC, because it was feared that individuals not meeting the criteria would not benefit from the medical interventions and be at risk for postoperative regret.

The previous DSM and ICD diagnoses of "transsexualism" closely linked the diagnosis of transsexualism to hormonal and surgical sex reassignment. The diagnosis was often used as little else than a search for the "true transsexual," in order to refer the person for hormone and surgical treatment. This use gave rise to the criticism that diagnosis and treatment options were too closely connected. However, the current GID diagnosis is often still used as if it were identical with the diagnosis of transsexualism. For example, in a paper by Sohn and Bosinski (2007, p. 1193): "Transsexualism is defined as a strong and persistent cross-gender identification with the patient's



persistent discomfort with his or her sex and a sense of inappropriateness in the gender role of that sex ...(DSM-IV-TR)" (our emphasis). Clinicians who have to make sex reassignment surgery decisions indeed have the need for a diagnosis specifically addressing the seriousness of the condition (Bower, 2001). Although it may be that the current GID diagnosis for adolescents and adults intended to indicate a condition as serious as transsexualism, the criteria are, in fact, somewhat broader. For instance, the A criterion can be met if only one of the symptoms—"stated desire to be the other sex," "frequent passing as the other sex," "desire to live or be treated as the other sex," or "the conviction that he or she has the typical feelings and reactions of the other sex"—is fulfilled. With regard to the B criterion, only a persistent discomfort with one's sex or a sense of inappropriateness in the gender role associated with that sex is required. This implies that a man can meet the two core criteria if he only believes he has the typical feelings of a woman and does not feel at ease with the male gender role. The same holds for a woman who only frequently passes as a man (e.g., in terms of first name, clothing, and/or haircut) and does not feel comfortable living as a conventional woman. Someone having a GID diagnosis based on these subcriteria clearly differs from a person who identifies completely with the other sex, can only relax when permanently living in the other gender role, has a strong aversion against the sex characteristics of his/her body, and wants to adjust his/her body as much as technically possible in the direction of the desired sex.

In adolescents and adults, the persistent discomfort with one's sex or sense of inappropriateness in the gender role of that sex is, according to the DSM-IV-TR, manifested by symptoms such as a preoccupation with getting rid of one's primary and secondary sex characteristics (e.g., request for hormones, the surgery, or other procedures to physically alter sexual characteristics to simulate the other sex) or the belief that he or she was born the wrong sex. The current formulation thus indicates that the wish to completely alter one's body (e.g., a complete sex reassignment) is optional for having a diagnosis. Again, this implies that individuals having varying degrees (and perhaps types) of cross-gender identification and discomfort with their sex characteristics, which constitutes a broad range of gender variant people, may all fulfill the DSM criteria for GID. Yet, in publications on GID, virtually no attention is paid to the severity of the condition. It might be argued that other DSM diagnoses (e.g., mood disorders) also cover variations in severity. In the case of some mood disorders, however, this aspect is explicitly addressed. We believe that, in the case of a treatment as drastic as sex reassignment, which is a unique treatment in psychiatry, the diagnosis on which treatment decisions are based should be either as specific and unequivocal as possible or, alternatively, it should be made much more explicit than hitherto in the DSM-IV and DSM-IV-TR that the gender identity related diagnosis covers a broad area of conditions comprising much more than transsexualism (see below).

The Inability of the Current Criteria to Capture the Spectrum of Gender Variance Phenomena

A second problem with the current criteria is that gender identity, gender role, and gender problems are conceptualized dichotomously rather than dimensionally. For instance, the accompanying DSM-IV text states that adults with GID are preoccupied with their wish to live as a member of the other sex, manifested as an intense desire to adopt the role of the other sex or to acquire the physical appearance of the other sex through hormonal or surgical manipulation. Within the GID criteria, a concept such as "cross-gender identification" also assumes that there are only two gender identity categories, male and female. As Bockting (2008) points out, "Transsexuals were candidates for a change in sex...and the emphasis of the Real Life Test was on 'passing' in 'the opposite' gender role" (p. 214). However, gender problems come in many forms and they may reflect gender identities other than male or female.

Bockting (2008) asked 1,229 U.S. transgendered persons to describe their transgender identity. Besides the more classical binary view on transgenderism, reflected in responses such as "female-to-male" and "male-to-female," "formerly transsexual," "woman with a correctible birth defect," and "displaced male," a number of responses reflecting more of a continuum or categories different from male/female were also given. Examples of this more gender diverse view are "in-between and beyond," "shemale," "bigender/two-spirit," "third gender," "genderless," gender neutral," "pan-/poly-/or omnigendered," "gender fluid," "intergendered," "M2T dyke tomboy," "butch queen," "75% female but no plans on surgery or hormones," and "androgynies." In contrast to the traditional binary view, gender variance may be conceptualized, as gender variant people apparently already do, as a multidimensional or sometimes idiosyncratically conceptualized, multicategorical construct (e.g., Cole, Denny, Eyler, & Samons, 2000).

The gender issues of some, but not all, gender variant people will signify distress as a result of a "discrepancy between anatomic sex and gender identity" (Bornstein, 1994; Ekins & King, 2006; Lev, 2007; Røn, 2002), but it is unlikely that all gender variant people fulfill current GID criteria. In those who do experience distress, this may vanish once they have accepted one of the previously mentioned definitions as an adequate definition of themselves and are able to live accordingly. In others, some distress may remain, resulting in a life-long search for new adaptations. In again others, the behaviors may be an expression of persisting gender variant identities, but not necessarily complete cross-gender identities (e.g., Diamond & Butterworth, 2008; Lee, 2001).



The person's awareness of one's (more or less complete) atypical identity has also resulted in different treatment goals. For instance, a group of individuals reporting to have a "third," "other" or "nor male nor female" gender identity seek contact with medical professionals to have surgical or chemical castration only (Johnson, Brett, Roberts, & Wassersug, 2007; Wassersug, Zelenietz, & Squire, 2004). Indeed, clinicians in gender identity clinics are increasingly confronted with treatment goals other than complete sex reassignment. Hage and Karim (2000) reported that, even in the years that their gender identity clinic in Amsterdam did not offer partial treatment, only 138 of 352 female-to-male applicants for sex reassignment surgery, who were referred for treatment over 20 years, underwent phalloplasty. Of the 1,049 male-to-female applicants, 24% had hormone therapy but no genital surgery. A considerable number of "sex reassignment surgery applicants" were apparently not pursuing genital surgery at all. Because sex reassignment surgery is covered by insurance in the Netherlands, it is unlikely that the choice of no surgery or partial surgery was due to financial reasons. Although this lack of interest in genital surgery may partly be explained by caution because of the less than optimal surgical results, gender identity related motives may also play a role.

When the policy of this clinic changed and individuals requesting partial treatment were not a priori rejected for assessment and treatment, "atypical" treatment wishes were more often explicitly formulated at application. Some natal females, for instance, wish to have a metaidoioplasty, but keep their neoscrotum open, as they still want to use their vaginal opening for sexual contact. Natal males may want to have estrogens and breast enlargement surgery, but no vaginoplasty. Such treatment goals may reflect a gender identity other than a complete cross-gender identity. In the years 2007 and 2008, about 10% of the Amsterdam applicants for medical treatment desired partial medical treatment (certain hormones and/or certain types of surgery only). Although the first versions of the SOC of the WPATH only focused on "complete" (that is, feminizing/masculinizing hormone treatment and surgery) sex reassignment for transsexuals, the current version (Meyer et al., 2001) acknowledges the spectrum of gender variant developments and accompanying wishes for medical interventions other than "complete sex reassignment." Rather than determining if a person is a "true" transsexual and thus eligible for a complete sex reassignment, hormone therapy and surgery are seen as separate treatment options in their own right. Yet, many professionals still do not medically treat persons who do not completely fulfill GID criteria.

The heterogeneity of gender variant individuals suggests that dimensionality in the diagnosis would be a much better reflection of the gender variance spectrum than the current categorical one.

The Potential Risk of Unnecessary Physically Invasive Examinations to "Rule Out" Intersex Conditions If the C Criterion Remains Part of the Diagnosis

The C criterion of the diagnosis, "The disturbance is not concurrent with a physical intersex condition," was included because gender dysphoria in individuals with and without intersex conditions (now called disorders of sex development or DSD; Hughes, Houk, Ahmed, Lee, & LWPES/ESPE Consensus Group, 2006) differ in a number of ways. Meyer-Bahlburg (1994, in press) demonstrated differences between the groups in prevalence, age of onset or presentation, sex ratio, and associated or predictive factors. Because gender dysphoria does occur in individuals with DSD and gender identity was not considered to be entirely dependent on biological factors, gender dysphoric individuals with DSD were classified as having a GIDNOS diagnosis.

Some advocate deleting this criterion (e.g., eminism.org). They state that clinicians now sometimes perform physically invasive (and probably expensive) examinations with the only purpose to "rule out" DSD. Clinically, this makes no sense. In adolescents or adults, a simple examination will show whether there are symptoms of primary or secondary sex characteristics possibly indicative of DSD. In their absence, "invasive" diagnostic procedures do not have to be performed. Only in their presence, which is rare, "invasive procedures" may be necessary, because they may have significant implications for the person's understanding of their gender issues as well as important implications for genital surgery and sometimes for hormone treatment or cancer risk assessment.

#### The Necessity of the D Criterion for a GID Diagnosis

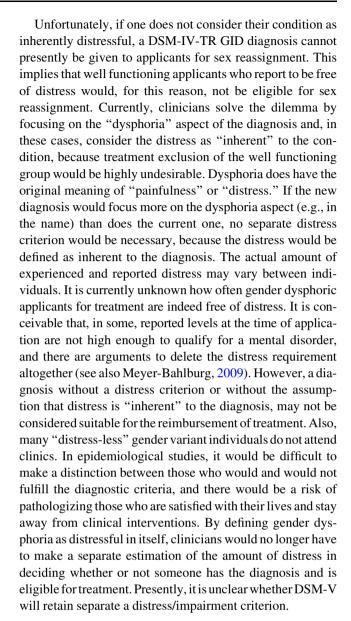
In the DSM-IV and DSM-IV-TR, the point A (cross-gender identification) and B criteria (discomfort with one's assigned sex) are necessary in order to be able to make the diagnosis. The question is whether the D criterion (impairment or distress) is equally necessary. Applicants for sex reassignment indeed often experience their gender dysphoria as unbearable and as having a tremendous negative impact on their lives. Even if they have satisfying social and family contacts and are successful at work, the burden of their gender dysphoria may impede or even damage their functioning. A relationship between psychological or social impairment and GID is also suggested by reports on a relatively high prevalence of psychiatric problems among individuals with GID (e.g., Bodlund, Kullgren, Sundblom, & Höjerback, 1993; De Cuypere, Janes, & Rubens, 1995; Hepp, Kraemer, Schnyder, Miller, & Delsignore, 2005). This may have various causes. Social stigma is one possible factor (e.g., Nuttbrock et al., 2009), difficulty of getting appropriate treatment, or rejection by



family and friends (Factor & Rothblum, 2007; Ryan, Huebner, Diaz, & Sanchez, 2009) are other ones, as well as the experienced incongruence between one's gender identity and physical characteristics, which may be disconcerting in itself.

High percentages of psychiatric comorbidity, however, are not always found. In many studies, transsexuals were found to generally function well psychologically in the nonclinical range (e.g., Cole, O'Boyle, Emory, & Meyer, 1997; Gómez-Gil, Trilla, Salamero, Godás, & Valdés, 2009; Haraldsen & Dahl, 2000; Mate-Kole, Freschi, & Robin, 1990; Miach, Berah, Butcher, & Rouse, 2000; Seikowski, Gollek, Harth, & Reinhardt, 2008; Smith, van Goozen, & Cohen-Kettenis, 2001; Smith et al., 2005). Indeed, clinically, one may see applicants who are employed, have relationships, and function socially without any problems, yet very strongly desire sex reassignment. They state that they do suffer from the incongruence between their anatomic sex and gender identity, but that it does not interfere with their lives to the point that they are not able to function satisfactorily. This implies that impairment is not necessarily associated with gender dysphoria, although older applicants may have experienced periods in their lives in which they did not function well.

Absence of impairment is most clearly illustrated by some of the adolescents who want sex reassignment. In the Netherlands, adolescents are eligible for pubertal delay with GnRH analogues if they are fulfilling criteria for GID from early childhood on, have reacted with an increase of the gender dysphoria to the first pubertal changes, have no psychological problems that may interfere with the diagnostic work-up or with treatment, can be adequately supported during treatment, and demonstrate knowledge and understanding of the treatment and its consequences (Cohen-Kettenis, Delemarre-van de Waal, & Gooren, 2008). The ones who had supportive parents, who knew already in childhood that they could have puberty delaying treatment soon after the first physical signs of puberty and prior to crosssex hormone treatment, and who had accepting peers and teachers usually do not remember any impairment, distress or suffering in childhood or early adolescence. At the time of referral, all want to live in the other gender role (something they often already do before their referral to gender identity clinics) and strongly desire hormone and surgical treatment, but, probably because of this lack of impairment or even current distress, adolescent applicants for sex reassignment as a group function psychologically better than adult applicants (de Vries, Kreukels, Steensma, Doreleijers, & Cohen-Kettenis, 2009). Their functioning is in sharp contrast to that of adolescents living in less accepting environments, and who may be at high risk for self-harm and suicidal behavior (Di Ceglie, Freedman, McPherson, & Richardson, 2002; Grossman & D'Augelli, 2007).



# The Fact that the Diagnosis Still Applies to Postoperative Transsexuals

In a postoperative and hormonally treated individual, the treatment has changed some sex characteristics and has facilitated living in the desired gender role. However, the treatment has not changed the (natal) sex of that person. Because the A criterion refers to nonconformity to one's natal sex, it still applies to post-treatment individuals. After treatment, the person will still "pass" frequently as "the other sex," desire to live or be treated as "the other sex," or feel that he or she has the typical feelings and reactions of "the other sex." The desire for hormone treatment, or the belief that he or she was born the wrong sex, which are both indicators of the B criterion, are not likely to change after treatment either. Without a change in



formulation of the criteria or a specific statement in the text addressing this issue, even post-surgical individuals will continue to fulfill the criteria for GID and thus can be diagnosed with a mental disorder for the rest of their lives. As having a mental disorder diagnosis may have adverse implications for employment, insurance, etc., the diagnosis should exclude treated individuals who are no longer gender dysphoric. This could be done either by changing the formulation of the criteria or explicitly excluding this group from the diagnosis in the text. Those who seek psychological treatment postoperatively do not need a gender dysphoria-related diagnosis. Instead, other diagnoses, such as adjustment disorder or depression, may be more appropriate. For postoperative hormone treatment, other medical diagnoses, such as hypogonadism, may be used in a similar way.

#### **Core Criteria**

If one were to adjust the current criteria set, what criteria would be good candidates? In the DSM-III, the core criteria of transsexualism were (A) a discomfort and inappropriateness about one's anatomic sex and (B) the wish to be rid of one's own genitals and live as a member of the other sex (Appendix 1). In the DSM-III-R, they were (A) a sense of inappropriateness about one's assigned sex and (B) a persistent preoccupation with getting rid of one's primary and secondary sex characteristics and acquiring the sex characteristics of the other sex. In the DSM-IV and DSM-IV-TR versions, they were (A) a cross-gender identification and (B) a discomfort with his or her sex. In the past and current DSM versions, three aspects were considered relevant: (1) gender identification, (2) gender role, and (3) physical aspects. Interestingly, in earlier DSM versions, a cross-gender identification was not a separate criterion, but apparently inferred from the desire to live as a member of the other sex (combined with the discomfort about one's own sex). Thus, the core criteria for transsexualism (DSM-III and DSM-III-R) or GID (DSM-IV and DSM-IV-TR) have always consisted of combinations of the following elements (see also Table 1):

- 1. Cross-gender identification (1)
- 2. Desire to live as a member of the other sex (2)
- 3. Sense of inappropriateness in the gender role belonging to one's natal sex (2)
- 4. Discomfort about one's assigned sex (2)
- 5. Desire to have sex characteristics of the other sex (3)
- 6. Discomfort about one's anatomic sex (3)
- 7. Wish to get rid of one's natal sex characteristics (3)

The GIDNOS diagnosis in the DSM-III-R and DSM-IV-TR, and the diagnosis GIDAANT in the DSM-III-R, were meant to be used for all other types of clinically relevant gender variance.

Considering the fact that the above criteria seem to have been clinically useful (primarily when making sex reassignment decisions) in the past, and that no other criteria have been proposed thus far, there seems to be no need for entirely new criteria to indicate gender dysphoric conditions. Criteria which do not have a dysphoric component (e.g., "desire to live as a member of the other gender") should be modified to prevent unnecessary pathologizing of non-clinical gender variance (Winters, 2009).

#### **Dimensionality of the Diagnosis**

An important disadvantage of categorical diagnoses is loss of information (Helzer, Kraemer, & Krueger, 2006). This is one of the reasons that there is a growing interest in adding dimensional components to DSM diagnoses, whenever appropriate. For example, anxiety could be measured by using an anxiety scale, but only those scoring above a certain cut-off level would qualify for the diagnosis. As stated earlier, gender variance or transgender phenomena are very heterogeneous. Trying to force the whole variety of conditions into one discrete category has already created disadvantageous clinical decisions. In the DSM-IV-TR, one may fulfill the GID diagnosis if one's GID is manifested by "partial" treatment goals (e.g., some form of surgery only). However, such partial treatment is often refused, because GID is still considered to be identical to the former transsexualism diagnosis and, for this condition, (complete) sex reassignment is seen as the treatment of choice.

Although not all gender variance requires clinical attention, many conditions, ranging from mild to extreme, do. The clearest example of extreme gender dysphoria consists of the category that is still often labeled as transsexualism. For these gender dysphoric conditions, a dimensional diagnosis could be made in various ways. One possibility would be to just add up some or all of the already existing indicators. Some would need to be adjusted, because of the earlier mentioned criticisms. For instance, natal sex and the present somatic/genital situation are not distinguished in the current criteria, which led to the problem that even postoperative well-adjusted individuals can still be diagnosed with the current GID diagnosis.

If the adjusted criteria would be used again, the new diagnosis should consist of the following indicators<sup>1</sup>:

Strong sense of discomfort with the gender role associated with one's assigned gender

<sup>&</sup>lt;sup>1</sup> These criteria do not include the subsequent workgroup discussions. They likely do not reflect the final criteria.



Table 1 Core criteria of transsexualism or GID in DSM-III to DSM-IV-TR

	DSM-III (transsexualism)	DSM-III-R (transsexualism)	DSM-IV-TR (GID)
Cross-gender identification			A-criterion
Desire to live as a member of the opposite sex	B-criterion		(as symptom of A-criterion)
Sense of inappropriateness in gender role belonging to one's sex			B-criterion
Discomfort about one's assigned sex		A-criterion	
Desire to have sex characteristics of the other sex		B-criterion	(as an example of a symptom of B-criterion)
Discomfort about one's anatomic sex	A-criterion		B-criterion
Wish to be rid of one's own sex characteristics	B-criterion	B-criterion	(as symptom of B-criterion)

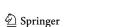
- Strong discomfort with one's primary and/or secondary sex characteristics, because they do not match one's gender identity<sup>2</sup>
- Strong desire to be rid of one's primary and/or secondary sex characteristics, because they do not match one's gender identity
- 4. Strong desire for primary and/or sex characteristics that match one's gender identity
- Distress caused by a strong desire to live in the gender role of the other gender and/or to be perceived by others as a member of the other gender (or some alternative gender different from one's assigned gender)
- Distress caused by a strong identification with the other gender (or some alternative gender different from one's assigned gender)

The difference between a diagnosis, such as this one, and the earlier DSM diagnoses is that, in previous versions, one needed to fulfill all primary criteria to have the diagnosis. In this conceptualization, in principle one could have a diagnosis if only one of the criteria is fulfilled. The required number of indicators to differentiate gender dysphoric from non-gender dysphoric individuals needs, of course, to be investigated in further studies.

Because it is possible that one only needs to fulfill one criterion in order to be gender dysphoric, the prevalence of this condition, which would be heterogeneous in type and intensity, would probably be much higher than the current estimates of transsexualism or GID (Zucker & Lawrence, 2009). As in the case of homosexuality, a high prevalence of gender dysphoria in the general population would raise more questions on whether the condition should be considered a mental disorder (Drescher, 2009).

To further dimensionalize the diagnosis, one may even consider assigning weights to each of the elements. For some

<sup>&</sup>lt;sup>2</sup> For young adolescents, this criterion also refers to anticipated sex characteristics (Winters, 2009).



criteria, "completeness" or "extremeness" would be appropriate; for others, "intensity," "duration," or "persistence." However, it would be very difficult to obtain clinician agreement on such aspects, and probably unnecessarily complicate diagnosis making. The accompanying text should state explicitly that the diagnosis no longer applies to persons who had their hormonal and/or surgical treatment. For postoperative individuals with regret, adjusted formulations are necessary. If the criteria would be used for individuals with DSD (but see Meyer-Bahlburg, 2009), the formulation of the criteria would also have to be adapted for this group.

In a consensus meeting on the DSM-V of the WPATH, held in Oslo, June 2009, it was stated that separate criteria for adolescents should be considered. As in many other diagnoses, the clinical management may differ considerably between the two age groups. However, specific adolescent issues (e.g., pubertal delay as a diagnostic aid) are more appropriately addressed in the supporting text than in a separate set of diagnostic criteria.

#### The Concept of Gender Dysphoria

If a gender variance-related diagnosis would stay in the DSM, a more appropriate term or name should be selected. This term needs to fulfill a number of requirements. The term should (1) clearly express the heart of the problem, the discontent with one's physical sex characteristics and/or assigned gender, and not be applicable to gender variant individuals without this discontent; (2) be dimensional; it should be possible to have more or less complete forms of the condition; (3) allow fluctuations, i.e., increase as well as decrease over time, and, finally, (4) it should be acceptable and non-stigmatizing to those who fulfill criteria 1-6 of the revised diagnostic criteria. Considering these requirements, "gender dysphoria" seems an appropriate term. This was also concluded in the earlier mentioned WPATH consensus meeting on the DSM-V. It is clear what someone with gender dysphoria suffers from, one can be more or less gender dysphoric, one can suffer from it, but, with or without treatment, some or all criteria may no longer be applicable. It further seems that the term is relatively well-accepted in the transgender community, although some may prefer even more neutral terms, such as "gender discordance," "gender discordance," "gender discomfort" or "gender incongruence."

## **Gender Dysphoria and Treatment Decisions**

As with other diagnoses, treatment and diagnosis are not related in a simple way. What is considered suitable will depend on the specific combination of symptoms, as well as other, non diagnosis-related aspects. For instance, someone who is distressed because of a strong desire to live in the gender role of the other gender might qualify for some form of psychotherapy. However, someone fulfilling this criterion and also having a strong desire to be rid of his or her primary and/or secondary sex characteristics, who applies for breast removal would probably not be helped by psychotherapy only. Whether a cut-off point for the previous diagnosis of transsexualism would be desirable and what this cut-off point should be remains to be investigated.

#### **Specifiers**

DSM-IV (American Psychiatric Association, 1994) and DSM-IV-TR require, for sexually mature individuals with a diagnosis of GID, to specify to whom they feel sexually attracted. They offer four alternatives, i.e., sexually attracted to males, to females, to both, and to neither. This subdivision is largely based on the work of Blanchard and colleagues (e.g., Blanchard, 1989; Blanchard, Clemmensen, & Steiner, 1987). These specifiers were recently challenged by Veale, Clarke, and Lomax (2008), but their critique was rebuked by Lawrence and Bailey (2008) and by Lawrence (in press).

Looking at the history of transsexualism, the development of gender identity clinics with the availability of sex reassignment surgery, and the diversity of social and cultural contexts in which such services were and are offered, it is obvious that social and cultural biases have greatly influenced diagnostic criteria and the access to hormonal and surgical treatment.

When in the mid-1960s, the first gender identity clinic was established at the Johns Hopkins University Clinic in Baltimore, transsexuals were described as being rather asexual (e.g., Money & Ehrhardt, 1970; Pauly, 1965). In an early paper, transsexualism was characterized as "an escape from...sexual impulses" (Worden & Marsh, 1955, in Meyerowitz, 2002). Benjamin (1966) asserted that "Many transsexuals have no overt sex life at all, their sex drive being low to begin with and,

in the case of MTFs, diminished sometimes to zero by estrogen" (p. 49). This picture was certainly related to the ramifications of the McCarthy era and its anti-sexual bias. Data from Sweden from the 1970s about regrets after sex reassignment surgery also characterized transsexuals as having a weak sexual libido (Wålinder, Lundström, & Thuwe, 1978). This thinking about the sexuality of transsexuals has also influenced treatment decisions. For instance, the first treatment programs for transsexuals in Australia strictly excluded MTF transsexuals if they had a history of active engagement in "homosexual" encounters (Ball, 1981; Ross & Need, 1989). Lundström (1981) reported long marriages and high sexual partner mobility to be predictors of poor outcome. Wålinder et al. (1978) warned to be cautious when applicants for sex reassignment surgery show a strong sexual interest or have heterosexual experience, because this may indicate "a lower intensity of transsexual symptomatology and consequently ambivalence towards sex reassignment" (p. 19). On the other hand, Benjamin (1966) identified various forms of sexual activity before sex reassignment surgery as positive predictors for outcome, and the results he reported confirmed this. It is likely that, depending on the criteria of access to treatment in a specific treatment facility, applicants adjust their biographical data with regard to sexuality. This makes the quality of the information, especially when given during clinical assessment, questionable.

Another problem concerning the usefulness of sexualityrelated GID specifiers regards the stability of sexual orientation. In the discussion on homosexuality (of individuals without GID), the stability or instability of sexual orientation has been a matter of debate. Recently, prospective studies in non-transsexual samples of women suggest that there is considerable fluidity in sexual orientation, especially for women (Diamond, 2000; Diamond & Butterworth, 2008). In the 1990s, the question arose if the preferences for the gender of sex partners would also change in the course of hormonal and surgical treatment (e.g., Daskalos, 1998; Lawrence, 1999, 2005). As Lawrence (1999) points out, it is extremely difficult to assess such changes in individuals with a GID diagnosis, as they preoperatively might give information only to be admitted to hormonal and surgical treatment. However, there is no doubt that changes as to the preferred gender of sex partner do occur (De Cuypere et al., 2005; Lawrence, 2005; Schroder & Carroll, 1999; some 30 in a sample of more than 1,200 GID patients seen by F.P.).

Over the years, various sexuality related subcategories have been proposed (e.g., Blanchard, 1989; Blanchard et al., 1987; Buhrich & McConaghy, 1978; Freund, Steiner, & Chan, 1982; Money & Gaskin, 1970–1971; Sørenson, 1981; for a review, see Lawrence, in press). In clinical writings, there seems to be agreement that transsexual subtypes do exist, although there is no agreement on the number and kind of relevant subtypes.



Although sexual orientation subtyping may be of interest to researchers in the field, no clinical decisions are currently based on this classification. Also, in the transgender community, there is strong resistance against subtyping on the basis of sexual orientation and activity and even against having to give this information for scientific purposes only. This was also concluded by clinicians attending the WPATH consensus meeting (Oslo, June 2009). The term autogynephilia, which is used for one subtype, is considered highly offensive by some (e.g., Winters, 2005, 2008). The finding that "homosexual" and "nonhomosexual" subgroups differed in psychological functioning (Smith et al., 2005) could not be replicated in a yet unpublished recent study at the same gender identity clinic. The first study was conducted in the early 1990s, when relatively few people had Internet access and applicants were not well informed about the fact that this topic was hotly debated (Smith et al., 2005). It is therefore likely that, more than 10 years later, the increased awareness regarding the sexual orientation issue has led to less reliable reports of sex reassignment applicants on their sexual orientation. Considering the disadvantages and few, primarily research related, advantages of this subdivision, one should reconsider sexual orientation as a specifier.

In the DSM-IV-TR, it is noted that the developmental routes are different for transsexual individuals with a very early crossgender identification (childhood) versus those who report cross-gender identification starting after puberty. In a subsequent study, such developmental routes were confirmed by Smith et al. (2005). In children around the age of 3 years, one may observe cross-gender behaviors without this being a clear cut predictor for later gender dysphoria or the wish for sex reassignment in adulthood. The children act differently than their same-sex peers, but are not yet able to mentalize and to verbalize their feeling of "otherness." It seems that only when this feeling of being different is verbalized by the child and incorporated in the child's sense of self that this increases the likelihood of later transgenderism. But even then, factors influencing the ongoing development in prepuberty and puberty may still play a decisive role as to the persistence of such feelings of "otherness." While the first large prospective study of young children (feminine boys who fulfilled some or all of the GID criteria) showed that in nearly all the gender dysphoria disappeared (Green, 1974, 1985, 1987), more recent data demonstrate that about 10-25% will continue to be gender dysphoric (Drummond, Bradley, Peterson-Badali, & Zucker, 2008; Wallien & Cohen-Kettenis, 2008; Zucker & Bradley, 1995). With regard to sexuality, it was found that transsexuals attracted to partners of their natal sex more often belonged to the early onset group than the ones attracted to partners of the other sex. It is likely that there is an overlap between the groups, but this would have to be confirmed by more, preferably prospective, research, as retrospective data of adults regarding the date of onset of their feeling of being different are not reliable. Such research should perhaps even differentiate between onset in various phases (e.g., very early childhood [before the age of about 3 years], childhood until puberty, adolescence, and adulthood) as it is conceivable that more than the two currently described routes exist. It should also be precise as to what exactly is considered to be "early onset": the presence of certain cross gender behaviors and/or preferences, anatomic dysphoria or a full GID diagnosis. Future research will have to show also whether making a distinction between the subgroups is clinically useful.

Although there are no convincing data on the clinical utility of both subtypes, for research purposes it does seem to be important to make a distinction between subtypes. For instance, in etiological research, which is still in a not very advanced stage, one may need to take the distinction into account. It would also be worthwhile to investigate the relationship between onset age and sexual orientation more extensively. If they are highly correlated and onset age has proven its clinical utility, onset age rather than sexual orientation could be used.

Lawrence (in press) compared sexual orientation versus age of onset as specifiers for the diagnosis of GID, using seven criteria: (1) Is the specifier unambiguous? (2) Can it be easily ascertained? (3) Can it be ascertained reliably? (4) Does it facilitate concise, comprehensive clinical description? (5) Does it provide prognostic value for treatmentrelated outcomes? (6) Does it provide predictive value for comorbid psychopathology? (7) Does it facilitate research and offer heuristic value? While Lawrence concludes that only the second of these questions is confirmed for the age of onset specifier, Lawrence found confirmation of all seven questions for the sexual orientation specifier. It is no surprise that Lawrence concluded that the sexual orientation specifier is superior to the age of onset specifier, and should remain in the DSM. However, Lawrence also indicates that onset age has hardly been studied, because, historically, there was more scientific interest in sexual orientation than in onset age. Considering the need for a better understanding of the phenomenon of gender dysphoria, one might therefore draw just the opposite conclusion: that it is the importance of onset age for the long-term development of gender dysphoric individuals we need to know much more about. Lawrence also does not address the possibility that sexual orientation has become so controversial that, in a clinical setting, the information given by applicants for medical interventions may have become invalid. For these reasons, it is likely that a specifier focusing on onset age, provided that it is clearly defined and well measured, will contribute even more to our understanding of gender dysphoria than sexual orientation.



#### Recommendations

Considering the criticisms regarding the A and B criteria, there are two possibilities.

- One possibility is to leave the criteria as they are, but to make them more stringent. This means returning to the dichotomy of the DSM-III and III-R, where only the former "transsexuals" had the diagnosis, and different or less extreme types of gender dysphoria were all included in NOS-like diagnoses or had no diagnosis at all. Although most of the criteria and indicators would remain the same, the ambiguity would have to be taken out of the formulations. Also, other adjustments (e.g., name change, exclusion of the postoperative group, more focus on the dysphoria) would be needed. For less experienced clinicians who have yet to make sex reassignment eligibility decisions, it would be easier to work with this type of binary classification than with the DSM-IV-TR type, where a GID diagnosis includes extreme as well as less extreme forms of gender dysphoria, and a GIDNOS diagnosis comprising yet other forms of gender dysphoria. However, such a dichotomy would disregard the wide variety of gender identity related phenomena clinicians encounter. It would also still be of little help for treatment decisions and research regarding the heterogeneous conditions included in the other, NOS diagnosis. Finally, it would maintain the use of the diagnosis in the obsolete search for the "true transsexual" or "ideal surgical candidate."
- 2. Another possibility would be to accommodate the increasing awareness of, and empirical support for, the variety of gender dysphoric conditions. This could be done by means of a more dimensional approach using, somewhat adjusted indicators that have been part of the earlier DSM diagnoses. This approach allows for different degrees of gender dysphoria, and makes more explicit that a diagnosis not necessarily implicates eligibility for sex reassignment. By giving the diagnosis the name of gender dysphoria, distress would be an aspect of the diagnosis, making an extra distress/impairment criterion redundant.

Because of the strong resistance against sexuality related specifiers, which may result in a still increasing unreliability of collected data, and the relative difficulty assessing sexual orientation in individuals pursuing hormonal and surgical interventions to change their sex characteristics, closer investigation of onset age as a potential specifier is warranted.

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# Appendix 1: Diagnostic Criteria of Gender Identity Disorders in the DSM (Adolescent and Adult Criteria)

#### DSM-III

Transsexualism (302.5x)

- Sense of discomfort and inappropriateness about one's anatomic sex.
- B. Wish to be rid of one's own genitals and to live as a member of the other sex.
- C. The disturbance has been continuous (not limited to periods of stress) for at least 2 years.
- D. Absence of physical intersex or genetic abnormality.
- E. Not due to another mental disorder, such as Schizophrenia.

Subclassification by predominant prior sexual history:

- 1 = asexual
- 2 = homosexual (same anatomic sex)
- 3 = heterosexual (other anatomic sex)
- 4 = unspecified

Atypical Gender Identity Disorder (302.85)

This is a residual category for coding disorders in gender identity that are not classifiable as a specific Gender Identity Disorder.

#### DSM-III-R

Transsexualism (302.50)

- A. Persistent discomfort and sense of inappropriateness about one's assigned sex.
- B. Persistent preoccupation for at least 2 years with getting rid of one's primary and secondary sex characteristics and acquiring the sex characteristics of the other sex.
- C. The person has reached puberty.

Specify history of sexual orientation: asexual, homosexual, heterosexual, or unspecified.

Gender Identity Disorder of Adolescence or Adulthood, Nontranssexual Type (GIDAANT) (302.85)

- A. Persistent or recurrent discomfort and sense of inappropriateness about one's assigned sex.
- B. Persistent or recurrent cross-dressing in the role of the other sex, either in fantasy or actuality, but not for the purpose of sexual excitement (as in Transvestic Fetishism).



- C. No persistent preoccupation (for at least 2 years) with getting rid of one's primary and secondary sex characteristics and acquiring the sex characteristics of the other sex (as in Transsexualism).
- D. The person has reached puberty.

Specify history of sexual orientation: asexual, homosexual, heterosexual, or unspecified.

302.85 Gender Identity Disorder Not Otherwise Specified

Disorders in gender identity that are not classifiable as a specific Gender Identity Disorder.

Examples:

- Children with persistent cross-dressing without the other criteria for Gender Identity Disorder of Childhood
- Adults with transient, stress-related cross-dressing behavior
- 3. Adults with the clinical features of Transsexualism of less than 2 years' duration
- People who have a persistent preoccupation with castration or penectomy without a desire to acquire the sex characteristics of the other sex

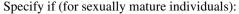
#### DSM-IV and DSM-IV-TR

#### Gender Identity Disorder

- A. A strong and persistent cross-gender identification (not merely a desire for any perceived cultural advantages of being the other sex)
  - In adolescents and adults, the disturbance is manifested by symptoms such as a stated desire to be the other sex, frequent passing as the other sex, desire to live or be treated as the other sex, or the conviction that he or she has the typical feelings and reactions of the other sex.
- B. Persistent discomfort with his or her sex or sense of inappropriateness in the gender role of that sex.
  - In adolescents and adults, the disturbance is manifested by symptoms such as preoccupation with getting rid of primary and secondary sex characteristics (e.g., request for hormones, surgery, or other procedures to physically alter sexual characteristics to simulate the other sex) or belief that he or she was born the wrong sex.
- C. The disturbance is not concurrent with a physical intersex condition.
- D. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Code based on current age:

302.85 Gender Identity Disorder in Adolescents or Adults



Sexually Attracted to Males

Sexually Attracted to Females

Sexually Attracted to Both

Sexually Attracted to Neither

Gender Identity Disorder Not Otherwise Specified (302.6)

This category is included for coding disorders in gender identity that are not classifiable as a specific Gender Identity Disorder. Examples include

- 1. Intersex conditions (e.g., partial androgen insensitivity syndrome or congenital adrenal hyperplasia) and accompanying gender dysphoria
- 2. Transient, stress-related cross-dressing behavior
- Persistent preoccupation with castration or penectomy without a desire to acquire the sex characteristics of the other sex

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