

## **Hans-Werner Gessmann**

### **Gender dysphoria**

Gender dysphoria (GD) is the distress that individuals feel because of discrepancies between their gender identity and the sex assigned at birth. Until 2013, with the release of the DSM-5, the diagnostic label gender identity disorder (GID) was used. To remove the stigma associated with the term disorder, the condition was renamed.

People with gender dysphoria are frequently recognized as transgender. Gender nonconformity, which does not always lead to dysphoria or distress, is not the same as gender dysphoria. According to the American Psychiatric Association, The critical element of gender dysphoria is "clinically significant distress." Evidence from studies of twins suggests that genetic factors and environmental ones cause gender dysphoria. Gender dysphoria treatment may involve supporting the individual through changes in gender expression. Hormone therapy or surgery is mostly to help with these changes. Counselling and psychotherapy are the most opted/preferred treatment processes.

### **Children with Gender dysphoria**

Gender dysphoria in those assigned male at birth tends to follow one of two broad trajectories: early-onset or late-onset. In childhood, early-onset gender dysphoria is behaviorally visible. In this group, gender dysphoria will sometimes desist, and they will identify for a while as gay or lesbian, followed by recurrence of gender dysphoria. In adulthood, this group is generally sexually drawn to members of their native sex. Late-onset gender dysphoria in early childhood does not include visible signs, but some have reported wishing to be the opposite sex in childhood that they did not report to others.

#### Prevalence

None of the numerous epidemiological studies on the prevalence of psychiatric disorders in children and youth have examined Gender Dysphoria (or Gender Identity Disorder – the former diagnostic label). Accordingly, estimates of prevalence have been based on less sophisticated approaches.

#### Self-identification as transgender

In a random sample of 2730 Grade 6–8 students from San Francisco in the USA, Shields et al.16 found that 1.3% self-identified as 'transgender' in response to the question 'What is your gender?', with the other response options being female or male. To my knowledge, this is the only random sample of children to which this question has been asked.

## Parent report

Parent-report questionnaires are widely used in clinical child psychology and psychiatry to establish the prevalence of various behavioural phenomena. The Child Behavior Checklist (CBCL), a parent-report behaviour problem questionnaire with excellent psychometric properties, is one of the most widely used measures of this type. In the 1999 standardisation sample of the CBCL for children ages 6–18 years, 17 of 118 items, one item pertains to gender identity ('Wishes to be of opposite sex'). For children, 6–12 years of age ( $n = 1822$ ), less than 1% of parents of non-referred boys and 1.2% of non-referred girls endorsed this item as either 'somewhat or sometimes true' or 'very true or often true' on a 0–2-point response scale. The percentages were higher for referred boys and girls (2.7% and 4.7% respectively). In the prior 1991 CBCL standardisation sample (Achenbach 1991), 1% of parents of 4- to 11-year-old non-referred boys and girls endorsed this item compared with 3% and 5% of referred boys and girls ( $n = 2402$ ). Thus, two consistent findings emerge: (1) the item is endorsed more often for girls than for boys; and (2) it is endorsed more often for referred than for non-referred children.

From the one study in which children were given the option of self-identification as transgender and the CBCL datasets, one could argue that the percentages reflect a liberal, upper-bound estimate of caseness – it is highly unlikely that all children who either self-identify as transgender or whose parents report that their child expresses the wish to be of the other gender would meet formal DSM criteria for Gender Dysphoria. In the study by Shields et al., for example, it is not clear how children understood the response option of 'transgender' and, on this point, qualitative exploration is needed.

## Adolescents with Gender dysphoria

The epidemiological picture for adolescents with gender dysphoria is similar to that of children in that there are no formal studies.

### Self-identification as transgender

In a 2012 random sample of 8166 high school students from New Zealand, Clark et al.<sup>26</sup> found that 1.2% answered 'yes' to the question 'Do you think you are a transgender?', which was followed by a definition of the term. Another 2.5% reported that they were not sure about their gender, and 1.7% reported that they did not understand the question. More recently, Eisenberg et al. sampled in 2016 81 885 high school students in Grades 9 and 11 in the state of Minnesota, who were asked,

'Do you consider yourself transgender, gender-queer, gender-fluid, or unsure about your gender identity?' For birth-assigned females, 3.6% answered yes to this question, and the corresponding percentage for birth-assigned males was 1.7%.

## Parent-report

In the 1999 standardisation sample of the CBCL for children aged 13–18 years ( $n = 1388$ ), 0% of parents of non-referred boys and 1.2% of non-referred girls endorsed the item pertaining to the wish to be of the other gender. The percentages were higher for referred boys and girls (3.0% and 6.3% respectively).

In the prior 1991 CBCL standardisation sample ( $n = 1818$ ), 0% of parents of 12- to 18-year-old non-referred boys and girls endorsed this item compared with 2% and 5% of referred boys and girls. Thus, two consistent findings emerge: (1) the item is endorsed more often for girls than for boys; and (2) it is endorsed more often for referred than for non-referred children.

Over the past two decades, many studies have contributed to a better understanding of the mechanisms underlying normal and abnormal sexual differentiation.

One of the most important discoveries was the identification of the sex-determining region Y (SRY) gene by Sinclair and collaborators in 1990. Another important development in the field was the identification of oogenesis genes on chromosome 1, including wingless-type MMTV integration site family, member 4 (WNT4), which is involved in female foetal genital development, and R-spondin 1 (RSPO1), which modifies the expression of WNT4.2 SRY— which is located on the Y chromosome— alters expression of both WNT4 and RSPO1.

Thus, it has been suggested by some investigators that the term 'sex chromosomes' should be replaced by the terms 'X chromosome' and 'male sex chromosome' (Y chromosome). However, presence of the SRY gene does not unequivocally determine gender.

Although many important aspects of phenotypic sexual differentiation have been clarified, the phenomenon of psychosexual differentiation requires further investigation. Psychosexual development determines gender identity (whether the individual sees themselves as male or female), gender role (interest in gender-typical possessions and display of gender-typical temperaments or behaviours), and sexual orientation (desires, fantasies, and erotic attractions). The criteria described in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition for gender dysphoria our desire to be the opposite gender, frequently being mistaken for the opposite gender, desire to live or be treated as the opposite gender, presence of feelings and reactions that are typical of the opposite gender, and persistent discomfort or sense of inappropriateness with current gender.

## References

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