Chapter H.3

CHILDREN WITH ATYPICAL GENDER DEVELOPMENT

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Conflict of interest: none declared

Boy with Doll by Aleksandr Vladimirovich Makovsky (1869-1924)

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Suggested citation: Newman L. Children with atypical gender development. In Rey JM (ed), *IACAPAP e-Textbook of Child and Adolescent Mental Health*. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions 2012.

ender dysphoria the sense of discomfort with one's biological sex and assigned gender role - may present in children from the age of 2 years. Some children may express unhappiness at their gender and often may express the desire to change sex. This can have a significant impact on child development in a broad way and also on family functioning. Families vary in their response to a child's cross-gendered preferences or gender questions with some showing acceptance and tolerance and others expressing anxiety and a desire to resolve the issue. There are scarce data available as to the prevalence of this condition in children and there is ongoing debate about the best clinical approach to it. The evidence base about treatment in children is limited and the ethical issues are complex. It is essential when seeing children with gender issues to try and understand the families' ideas and expectations around sex differences and appropriate gendered behaviour, and the way in which these ideas impact on their relationship with their child. The child with atypical gender development faces not only the dilemma of lack of congruence between body and psychological gender identification but also the anxiety that this issue often arouses in parents. Supporting children with gender variance involves family counselling, individual work with the child and attention to the school environment. The use of hormonal interventions around the time of puberty remains controversial but can relieve distress in some children with ongoing gender dysphoria and support psychological interventions.

CONCEPTS OF SEX AND GENDER

The anatomical sex of an infant and parents' own ideas and values about gender and behaviour are key aspects of early parenting. Parents have a range of views about gender which influence interaction with the infant and parenting expectations. Gender identity or sense of being male or female is the end result of biological and psychosocial factors. Theories of infant development have tended to focus on *sex differences* as opposed to *gender development*. More recently, interests have turned to understanding the complex interactions of biology and social experiences or culture that are involved in creating gender.

Concepts of sex and gender exemplify the tensions between biology and culture, and older and newer models of development. In older models, sex is usually seen as genetically influenced and innate, and results in psychological or social differences in males and females or gender roles. Contemporary theories point out that biology always interacts with environment. Biological sex differences are influenced by culture and language and differing social expectations of males and females. Cultural expectations also influence parenting and the earliest interactions with male and female infants.

Biological sex and infant development

The majority of neonates are designated either male or female at birth – or prenatally with the use of ultrasound technology. Biologically, sex has profound implications for infant development for complex reasons. First, there is increasing evidence of differences in male and female brain differentiation, although the extent to which this directly influences observable sex differences in behavior and psychological functioning is unclear. Second, caregivers have their own sets of beliefs and expectations about male and female infants, which influence

Definitions

Contemporary theories distinguish sex from gender

- Sex refers to anatomical and biological (genetic and hormonal) categories of male and female, but even biology is complex and subject to interpretation. In nature, there may well be more than two sexes or at least variability in male and female sexual characteristics
- Gender refers to a prevailing socio-cultural model and defines social expectations
 of masculinity and femininity. These expectations encompass socio-cultural models of
 personality, attitudes and behaviors that are seen as linked to each sex. Gender also
 refers to the social performance indicative of an internal sexual identity the outward
 behaviours of masculinity or femininity as they are socially defined
- Gender identity is a complex mixture of biology, socialization, psychological identification and sexuality. It refers to the individual's sense of himself or herself as a biological, psychological and social male or female. There is ongoing discussion about the neurobiological basis for gender-identity
- Gender role refers to the behaviors, attitudes and personality traits designated socio-culturally as masculine or feminine. Gender role is incorporated in the self as a set of behaviors, attitudes and personality traits designated socio-culturally as masculine or feminine. In children, this is measured by such variables as a preference to associate with same-sex peers, fantasy and play roles and type of play. There is an ongoing controversy over the influence of biological variables such as prenatal sex hormones on observable gender-role behavior
- Sexual orientation is defined by response to sexual stimuli while sexual identity refers to the definition of oneself in terms of sexual preference. Sexual orientation emerges after puberty but is not necessarily congruent with sexual identity. For example, it is possible for a male to be primarily aroused by homosexual stimuli but to have a gender identity of himself as heterosexual.

their perceptions of and interactions with their infants. Finally, different social and cultural groups have complex and variable expectations and definitions of masculinity and femininity, which define appropriate behaviors, personality attributes and social roles. These definitions change over time. For example, in Western culture there has been a significant change in gender roles with less clear boundaries between male and female roles. Infants develop a sense of gender identity or a self- definition as male or female in the first 2-3 years of life, and this is influenced by biological, psychological and socio-cultural factors. There are ongoing debates over the relative importance of these factors in producing observable differences between males and females but it is clear that differences are evident in infancy.

Disorders of sex development

Deviations in the normal steps of sexual differentiation can result in socalled disorders of sex development with disruption of internal or external sexual structures. There are a variety of conditions, some with unusual external genitalia and others with poorly developed internal sexual structures. Some neonates have *ambiguous genitalia*, most commonly masculinization of the external genitals of a female infant due to exposure to male hormones in utero where an excess of androgen is produced by the adrenal gland (i.e., congenital adrenal hyperplasia). Other conditions include ovo-testicular disorders of sex development and complete androgen insensitivity syndrome – a condition where a 46,XY infant has female external genitalia. The clinical question in relation to disorders of sex development is how to decide to what sex the infant should be assigned. Money and Ehrhardt (1968) studied the rearing of children with disorders of sex development in the 1950s and concluded the sex of rearing – upbringing – was the most important factor in producing a "successful" outcome as male or female. They also stated that attempting to change gender after the age of 2.5 years was *not* likely to be successful. More recently this has been challenged by the concept of "brain set" and the biological factors underlying gender identity.

Significance of cultural variations

The significance of these cultural variations is that they raise the possibility of alternative models of the relation between sex and gender and suggest that there is no fixed relation between the body, psychological identification and the social manifestations of gender. It has also been argued that cultural context determines whether gender variation is seen as a *disorder* needing treatment or an understood and tolerated variation. For the clinician it is important that adoption of a Western model and formulation of gender identity and development does not preclude an understanding of possible alternative frameworks, and a particular normative model of gender development is not rigidly imposed on children and families seeking to understand gender variation.

It is clear that, whether or not gender variability is seen as a mental disorder, it is strongly influenced by cultural expectations of gender behavior. What is seen in one culture as problematic may not be seen in the same way by another culture. The important consideration is whether concerns about gender behavior have an effect on the infant's social relationships and functioning.

CLINICAL PRESENTATIONS

No reliable data exist for estimating the incidence of gender dysphoria and gender-identity disorder (GID) in the general population. In developed, western countries, boys are referred for treatment more often than girls (ratio of 5:1) but it is not clear if this is the result of greater tolerance of gender variant behaviours in young girls, and a corresponding social anxiety about so-called effeminate boys. Longitudinal studies suggest that not all childhood gender dysphoria is associated with a trans-sexual outcome (Zucker, 1995), and there are ongoing discussions about the relationship of childhood gender dysphoria and adolescent and adult-type cross-gender identification and trans-sexuality. It is possible that there are several developmental pathways to cross-gendered identification in children and that this is not a unitary condition. As discussed below, neurobiological theories tend to see gender as an outcome of brain functioning, whilst psychological theories have focused on early development of identity within the context of attachment relationships and see gender issues arising in this context.

Regardless of etiology, children with gender dysphoria present with a range of cross-gendered fantasies and behaviors and show preference for games, activities and clothes usually assigned to the opposite sex. Young boys around 2-3 years of age may be interested in persistent cross-dressing and are very attentive to details of female fashion, behaviors and mannerisms. Some of these little boys may show clear preference for playing with girls and prefer dolls and home themes in play. They identify with female characters in stories and films and prefer characters such as Cinderella or Snow White. They show little interest in boy-type activities or

Mary

Mary, aged 2 years, was born with multiple pelvic abnormalities, including an imperforate anus, ambiguous external genitalia with penile agenesis, and urinary system abnormalities. Examination of chromosomes showed the infant to be 46.XY and an ultrasound examination showed internal undescended testes. Mary needed emergency surgery to the urinary system and bowel and was raised as female having later genital surgery. At the age of two, Mary is a secure child with female appearance who enjoys "female-type play" but also "rough and tumble" activities. While there is some evidence that male and female brains develop differently in utero, socialization is a very important influence on gender identity.

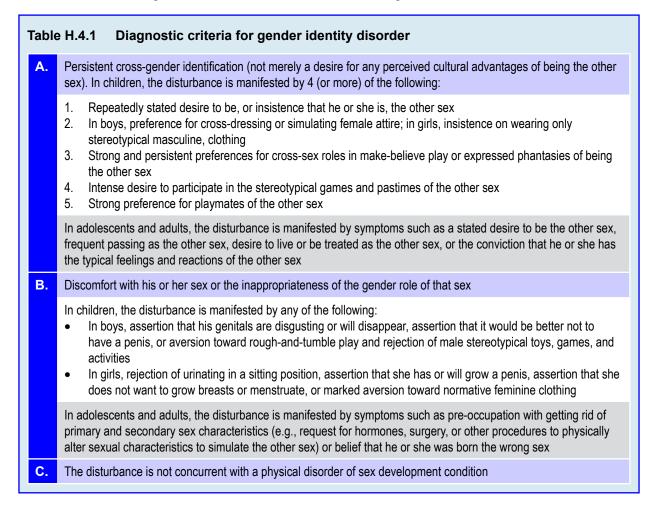
typical rough-and-tumble play. That type of play is usually persistent and difficult to discourage. Older boys may make more direct statements regarding their desire to be a girl or experience of "really being" a girl in a boy's body. The majority of these boys are aware of their anatomical sex but feel it is incorrect or a mistake and some develop marked aversion to their genitals and attempt to hide them.

In girls with GID the presenting issues are very similar, with young girls identifying with male activities and behaviors and often expressing the belief that they will grow a penis in the future. At school they prefer to play with boys and may insist on going to the boy's bathroom and wear boys' or gender-neutral clothes. They experience distress if they are made to wear girls' clothes or join in girls' activities such as games.

Clearly these experiences can be confusing and distressing for the child who immediately has a sense of being different from their peers. Young children might express their confusion openly but in the face of teasing or bullying have a sense of a secret that could be potentially dangerous. Whist some children confide in parents and family, families themselves are often confronted and confused by their child's issues and may also experience anxiety about how the extended family and community will respond.

DIAGNOSIS

The diagnosis of GID remains controversial although both DSM-IV and ICD-10 include this diagnosis. The DSM-IV criteria refer to a strong identification



with and preference for the gender role characteristics of the other sex (Table H.4.1) while ICD-10 has separate criteria for girls and for boys. The revision of DSM-IV currently underway proposes to change the name from "gender identity disorder" to "gender incongruence" because the latter is seen as a descriptive term that better reflects the incongruence between what identity one experiences or expresses and how one is expected to live based on one's assigned gender. The revision also proposes to emphasize "gender incongruence" in contrast to cross-gender identification per se in the diagnostic criteria.

Differential diagnosis

In young children around 2.5—3.5 years of age gender becomes part of self-definition and the social world. The child can label self and peers according to gender by around 28 months (Fagot, 1995) and this is related to the development of same-sex play preference. In typical development, gender becomes integral to a positive self-concept. Prior to this it is common for young children to express the wish to be *all sexes* and have the characteristics of both genders. A small boy for example may wish to give birth or grow breasts and still remain a boy, and a girl may wish to grow a penis. The wish to be both genders is generally given up but may be accompanied by anger and envy. This should not be seen as a GID where the wish is to be the opposite sex and there may be aversion to the assigned sex.

It is also important to look at the context of development of cross-gender interests and wishes, as transient wishes may occur in the context of anxiety, particularly as this relates to the mother as primary attachment figure. In some cases the child may be anxious about the availability of the mother and seek comfort in adopting a female role, in other cases the child may be anxious about the mother's acceptance of their gender. This may occur for example if the mother has experienced trauma or assault by a male figure. These dynamics can impact on the child's experience of gender and may represent unresolved issues relating to gender and sexuality in the mind of the parent. It is significant that studies find an association between GID and maternal depression and anxiety in the child's first three years of life (Zucker, 1995).

Assessment of the child and family should also examine the family's and cultural understanding of gender behavior and attitudes towards gender nonconformity. Some families react with anxiety if a boy shows typically female interests and this may relate to an underlying anxiety about potential homosexuality. There is cultural variation in tolerance for cross-gender behavior which influences both family response and presentation for treatment (Newman, 2002).

Theories of atypical gender development

It is likely that there are several developmental pathways to GID in childhood and that not all childhood GID is related to trans-sexuality in adulthood. Both psychological and biological models of the condition have been proposed and these may well be describing somewhat different conditions. Biological theories have focused on processes of brain sexual differentiation as male or female and the influence of pre- and peri-natal sex hormone exposure. It is proposed that there can be a discrepancy between genital differentiation and brain sex differentiation underlying trans-sexuality, presumably resulting in early-onset cross-gender identification.



Click on the picture to access Mermaids, UK site that provides information and support for children and teenagers with gender identity issues

Other models have examined sexually dimorphic brain nuclei in the hypothalamus which are hypothesized to influence gender identity and sexual orientation. Small studies of the brain of male-to-female transsexuals have reported small volumes within the range of typical females (Zhou et al, 1995) and the opposite was found in a female-to-male case. These findings, whilst interesting, do not amount to a direct endorsement of possible mechanisms for this difference.

Current psychological theories look at vulnerabilities for the development of GlD along with factors in parenting and attachment that may shape the development of gender dysphoria. Coates and Person (1985) describe GID boys as having temperamental anxiety and vulnerability to separation as well as frequent trauma in the relationship with the mother in early childhood, including maternal depression and family disruption or conflict. They propose that the child experiences separation anxiety and identifies with the mother to avoid losing her. Zucker (1995) also argues that children with GlD may be predisposed to anxiety and that this is exacerbated in the context of an insecure attachment relationship. They note that some families may reinforce cross-gender behavior and interests, and those particular aspects of the parents' gender issues influence their response to the child. For example, mothers with issues related to masculinity and perception of male aggression may be less rewarding of typical male behaviors. Fathers in some families have been described as distant and not providing positive male role models for boys with GID.

Several studies have found significant rates of psychological disorder in parents of children with GlD including personality disorder, maternal post-natal depression and indications of maternal emotional unavailability (Marantz & Coates, 1991). These, however, are very general factors associated with a range of attachment problems and mental health or developmental outcomes and cannot be seen as providing a specific model of the development of GID.

ASSESSMENT ISSUES

Increasingly, there have been challenges to both the notion of a purely sociocultural construction of gender identity and to the idea that a binary biological sex determines psychological aspects of gender. This increasing complexity points to the need for a bio-psychosocial understanding that can take into account interactions between biological and psychosocial factors in mediating gender identity.

In clinical practice, when assessing children with gender dysphoria and their families, these debates are frequently a focus of discussion. Parents are often focused on supporting their child and react in a protective way. Some parents support a biological model of etiology and find exploration of other factors difficult. Initially, it is important to explore the families' particular understanding of gender and gender variance and how this may be influenced by cultural belief systems. Table H.4.2 lists issues in cross-cultural assessment of GlD.In clinical practice, when assessing children with gender dysphoria and their families, these debates are frequently a focus of discussion. Parents are often focused on supporting their child and react in a protective way. Some parents support a biological model of etiology and find exploration of other factors difficult. Initially, it is important to explore the families' particular understanding of gender and how this may be influenced by cultural belief support a biological model of etiology and find exploration of other factors difficult. Initially, it is important to explore the families' particular understanding of gender and gender variance and how this may be influenced by cultural belief systems. Table H.4.2 lists issues in cross-cultural assessment of GID.

Table H.4.2Issues in cross-cultural assessment of gender identitydisorder

- How does this culture understand the differences between male and female?
- What account is given of the development of male and female individuals? Are differences and roles "innate" or "learned"?
- Are all individuals male or female, or are alternative positions possible?
- What does the religious/spiritual context say about gender roles and positions? Are there taboos against the violation of gender roles and gender change?
- Does the culture separate questions of sexual orientation from gender, or is gender variation seen as signifying potential homosexuality?
- What are the cultural attitudes towards homosexuality and gender variation?
- Does the culture have an assigned place for gender-variant individuals?
- What attitudes exist about sex-modifying procedures and the involvement of medical/ surgical systems in interventions aimed at gender change?

Cross-cultural assessment

A major aspect in the assessment of gender dysphoria in multicultural contexts is how best to establish the particular model of sex-gender and gender deviance held by the child and family. Planning appropriate intervention can only occur when it is seen how the family understands gender variation and how it will be managed within the cultural framework of the family. It is also important that the child be supported in his overall social context and in managing what may be a cultural "gap" between the family and mainstream social values. The examples in the boxes illustrate some of the complexities of cross-cultural assessment of GID.

Several issues and dilemmas are raised in Michael's case:

- Should Michael's family be encouraged to view Michael's development as disturbed and his cross-gender identification as pathological, even though they currently do not see it as such?
- Should the school environment be one that discourages Michael from expressing his cross-gendered interests even though he can express these at home?
- Is it possible to *change* Michael's family's understanding of gender identity and is it ethical to attempt to do this?

In practice, a key issue is working with Michael's stated difficulties with his peers and academic performance. Regardless of his family's acceptance of him, Michael is attempting to adapt to a peer group and community in which his experience is unusual and his position as cross-gendered may have negative effects on his ongoing development.

In the case of Sam, he is exhibiting gender-aberrant behavior as defined by his family's cultural understanding of appropriate male behavior. The immediate clinical concern is the degree of hostility directed towards Sam and the difficulty of engaging Sam's father. It may be necessary to involve culturally representative clinicians (if available) and to encourage involvement of all family members in initial negotiations in relation to an intervention framework. It is important to acknowledge and respect the family's concerns about Sam's development, and to contain immediate anxiety by offering appropriate support and to be cautious in "challenging" the family's understanding of Sam's *disorder* as biological in origin.

Michael

Michael is a 3-yearold boy referred by his preschool for assessment as he has clear crossgender identification and behaviors. Michael's family is from Thailand; they have been residing in Australia for 12 months. The parents are non-Englishspeaking Buddhists and describe a belief system ascribing positive value to gender transition and an acceptance that some children are born as a "third gender". Michael's parents are aware that he is being teased at preschool and is having difficulties with his peers. There are adult transsexuals in the extended family. Michael is not discouraged from crossgendered behavior and the school has found it difficult to discuss these issues with Michael's parents

Sam

Sam is a 4-year-old boy from an Arabic family who presents with concerns that he is effeminate and "homosexual". Sam has some cross-gender interests but does not meet diagnostic criteria for GID. The family culture is one of significant homophobia and rigid models of gender-role behaviour. Sam's father is seeking genetic and hormonal investigation of Sam believing that he has a biological disorder. He has been physically punishing Sam for his behavior.

As these examples illustrate, the cultural context influences both the presentation and understanding of gender dysphoria and gender-aberrant behavior. Non-normative gender-role behavior may in one context be seen as unproblematic variation (Michael's case), while in another it may be defined as a disorder (Sam). Different cultures will formulate concepts of *gender disorder* according to varying models of sex-gender and the development of gender identity. They will also vary in their understanding of the stability or fluidity of gender identity and degrees of accommodation of gender transition. In some contexts it will be possible to adopt alternative or additional gender positions.

Child assessment

Assessment of a child with gender issues needs to distinguish between crossgendered behaviors (toy, play preference and peer activities) and identification (identity statements, role and fantasy play) and establish the degree of dysphoria or distress. Not all children express aversion towards their own bodies or a clear desire to change their body, and some children will be reluctant to disclose these feelings.

A comprehensive assessment involves exploration of parents' understanding and functioning, child's gender identity and overall child development. Several instruments are available including the Gender Identity Interview (Zucker, 1995) and the Gender Male Questionnaire (Igntema & Cohen-Lettens, unpublished). For young children, instruments focus on the ability to identify male and female and the capacity to understand the stability of gender. The Draw-a-Person test can provide important qualitative information regarding the child's gender concepts (Rekers et al, 1990).

INTERVENTION ISSUES

Treatment approaches for children with gender dysphoria or GID vary according to the theoretical understanding of the condition and findings on assessment. Coates (2006), for example, states that there are likely to be multiple pathways to childhood GID and that not all have been adequately described in the literature. Treatment needs to be adapted to the needs of the particular child and family.

Approaches to intervention range from behavioral strategies aiming to reduce the expression of cross-gendered behavior, to psychoanalytic approaches which seek to explore the psychological function and meaning of cross-gender identification. Broader psychosocial interventions include family psychoeducation and support and school-based interventions. There is ongoing debate about the purpose of treatment (and what is being treated), but also a recognition of *gender difference* as having major developmental impact and of the importance of early intervention.

Behavioral approaches in the 1970s and 1980s saw GID as a result of inappropriate learning experiences and aimed to reinforce gender behaviors and skills. Cross-gender behaviors are discouraged and the family is trained in the application of reinforcement of gender-typical behavior such as appropriate walking and athletic skills in boys. The relationship with the same-sex parent is encouraged to provide a role model. There are clearly several questions raised by this type of approach: the ethics of attempting to behaviorally control psychological identification; the potential for negative impact on self- esteem; and the rather



Click on the picture to access True Colours, an Australian site for young people who experience transsexualism

narrow focus on external behavior, which does not look at broader developmental issues.

More recent approaches combine behavioral strategies with a psychodynamic understanding and work with the family to support the child's overall development. Meyer-Bahlburg (1985) describes working with parents to support the father-son relationship, promote gender-neutral interests and activities and support the child's peer relationships. Freedman et al (2011) focus less on changing the child's gender identity than on addressing developmental issues and family functioning. This way includes, for example, addressing anxiety about separation, insecure attachment and depressive symptoms commonly found in boys with GID (Coates & Person, 1985; Zucker, 1995).

Puberty-blocking hormones

The use of puberty-blockers (Gonadotrophin Releasing Hormone analogues, GnRH) allows reversible suppression of "puberty hormones" and the associated physical changes of puberty. The rationale for their use is largely psychological, based on observations of the distress and depression that may accompany body change in transgendered adolescents. Suppression of puberty can reduce immediate anxiety and distress and supports ongoing psychological intervention and counseling.

The US Endocrine Society Clinical Practice Guideline (2009) recommends use of GnRH analogues no later than Tanner stages 2-3 to suppress puberty in adolescents with a clear diagnosis of GID and introduction of cross-gender hormone treatment at 16 years of age.

Geddes (2008) points out that some children will not continue to have transgender feelings or cross- gender identification into adulthood although the proportion that reverts to their original sex is unclear. Few trials have explored the long-term effects of delaying puberty in this age group and there are also concerns about the capacity to make informed decisions about this issue at 12 or 15 years of age.

Debate is ongoing about the most appropriate treatment strategy for GID, particularly about the use of early hormonal treatment. The guidelines of the British Royal College of Psychiatrists (1998) support the use of (reversible) self-steroid inhibitors where indicated with the aim of reducing distress and increasing the ability to conduct psychiatric treatment. Others have cautioned against the use of puberty blockers on the grounds that these treatments will impact on emerging sexual identity which may be involved in a significant number of adolescents struggling with ego-dystonic homosexuality (Korte et al, 2008). It is also relevant that the course of GID in children is variable and plastic and that progression to trans-sexual development cannot be easily predicted in individual cases.

For younger children, work with families may support parents and provide important strategies for helping the child with gender variance problems manage ongoing developmental challenges and the broader social environment. Group approaches to parental support may be effective in reducing perceived isolation. Freedman et al (2011) note the importance of treating the cycle of secrecy around gender questions and enabling the child and family to tolerate uncertainty in gender-identity development.

Click on the picture to access the site of the Gender Identity Research and Education Society (GIRES)

Clinical management of children with gender issues often involves integrated psychological, social and biological interventions. In the current state of knowledge physical interventions are used cautiously and following comprehensive assessment. Providing parents and families with a clear, planned and staged model of treatment is important and may help them deal with and ameliorate the child's distress.

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