

## Sexuality and Gender Issues in Autistic Youth: A Series of 6 Cases and a Literature Review

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### Abstract

### Case Report

Autism Spectrum Disorder (ASD) involves challenges in social communication and repetitive behaviors, impacting daily functioning. Individuals with ASD face unique difficulties regarding sexuality, often experiencing mismatches between sexual development and social maturity, leading to potential inappropriate behaviors. Social competence deficits may limit their understanding of sexuality, increasing risks of offending or victimization. Gender differences in sexual behavior are evident, with males showing earlier and more frequent sexual activity, while females demonstrate greater flexibility in sexual orientation. This paper presents six clinical cases highlighting the diverse experiences of sexuality and gender identity in autistic individuals, offering insights into the complex interactions between ASD, gender, and sexual behavior.

**Keywords:** Sexuality- gender dysphoria- autism spectrum disorder- gender variance.

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## INTRODUCTION

The DSM-5 TR describes autism spectrum disorder (ASD) as characterized by persistent deficits in social communication and reciprocal social interaction, along with restricted, repetitive patterns of behavior, interests, and activities. These symptoms manifest from early childhood and affect daily functioning. The extent of the functional impact varies according to individual and environmental factors, and current interventions may mask certain difficulties in specific contexts. The term "spectrum" reflects the diversity of presentations, which vary depending on the severity of the disorder, developmental level, and chronological age.

Sexuality in individuals with ASD presents unique challenges. While people with ASD undergo the physical process of puberty at approximately the same time as their neurotypical peers, they continue to experience cognitive and psychosocial difficulties due to the core features of ASD. Sexual drive in individuals with ASD is not always accompanied by social maturity, potentially leading to inappropriate behaviors. Many parents of children with autism have described inappropriate sexual behaviors.

Although individuals with ASD may acquire social skills as they age, they often enter adolescence and adulthood with insufficient social competence. Poor

social competence and limited peer relationships frequently mean that individuals with ASD have fewer opportunities to acquire accurate information about sexuality. As a result, some individuals may engage in inappropriate sexual or courting behaviors, and they may also be at a higher risk of unintentional sexual offending or victimization.

Research suggests that males tend to report more interest and desire in sexuality and adopt sexual behaviors at an earlier age, more frequently, and with a greater number of partners compared to females. However, despite having less permissive attitudes, females, including those with ASD, often exhibit greater flexibility in their sexual orientation and are more influenced by changing social gender norms. This highlights a complex interaction between gender, sexuality, and ASD.

Various neurobiological and psychosocial theories have been proposed to explain the increased gender and sexual diversity among individuals with autism. For instance, increased prenatal exposure to testosterone has been linked to the development of male-associated traits, behaviors, and sexual preferences, particularly in females with ASD. However, this theory does not fully explain the variations in gender and sexual identity seen among males with ASD. On the

psychosocial side, the cognitive rigidity characteristic of ASD may lead to inflexible beliefs about gender roles, which could contribute to the development of a transgender identity or non-normative sexual behaviors.

Thus, the diversity of sexual and gender experiences in autistic individuals requires an autism-informed framework to better understand both how others perceive gender-related experiences and needs, and how individuals with autism themselves comprehend gender and sexuality.

In this work, we present a case series of 6 autistic patients who exhibit unique characteristics in relation to sexuality and gender, offering further insight into the complex relationship between ASD, gender identity, and sexual behavior.

## CASE REPORTS

### 1. Patient 1: 8-year-old male (sex assigned at birth)

The patient was referred for psychiatric consultation at the request of his parents, who were concerned about effeminate behavior. He demonstrated stereotypic behaviors, restricted interests, and social interaction abnormalities, consistent with ASD. He showed delayed language development, with his first words spoken at 18 months and full sentences at age four. Despite acquiring motor skills on time, his social integration at school was difficult, and he often remained isolated with poor verbal communication.

In recent months, his mother noticed that he played with dolls, engaged in feminine role-playing games, and often wore makeup and heels. During the psychiatric interview, the patient could not differentiate between female and male dolls, referring to a male figurine as "alien" when asked about its sex. He also lacked knowledge about sexuality and gender differences.

### 2. Patient 2: 17-year-old female (sex assigned at birth)

This patient was brought to consultation by her mother, a psychology intern, who became concerned about her daughter's behavior during consultations with other children. The patient exhibited symptoms of ASD, including social withdrawal, restricted interests, and isolation. Her mother had also observed gender-nonconforming behaviors.

The patient described herself as asexual, showing no interest in sexual relationships or marriage. She expressed a desire to have no genital organs, wanting them "erased." Her style of dress is consistently unisex, leaning more toward masculine, with oversized black clothing and a simple bob haircut. She does not put effort into styling her hair and feels comfortable with this presentation.

### 3. Patient 3: 17-year-old male (sex assigned at birth)

Like the first patient, this patient was referred for effeminate behavior that concerned his parents. He exhibited feminine mannerisms, startled reactions, a soft voice, and consistently wore unisex clothing. His haircut was a bob, similar to Patient 2. Around 18 months prior to his consultation, the patient expressed a desire to transition to female and was eagerly awaiting his 18th birthday to undergo gender-confirmation surgery. He described experiencing distress in his body, feeling as though he had always been a girl, but only recently coming to understand his gender identity. Despite this, the patient identified as asexual, with no interest in sexual relationships or desires.

### 4. Patient 4: 13-year-old male (sex assigned at birth)

This patient presented with hyperactivity and learning difficulties, including challenges with reading and writing. During the interview, ASD traits were observed, such as stereotyped behaviors, restricted interests, and difficulties in social interaction. The patient was unable to differentiate between boys and girls or understand their respective roles, he struggled to comprehend what makes someone a "boy" or "girl." Although he imagined a future where he would marry a woman and have children.

### 5. Patient 5: 21-year-old male (sex assigned at birth)

This patient had never sought medical consultation but was described by a family member, a psychology intern, who noticed clear signs of ASD from a young age. These signs included hypersensitivity to noise, restricted interests, social isolation, and interactional abnormalities. The patient expressed no interest in sexuality or sexual relationships and had never engaged in sexual activity. He described himself as having no sexual desires.

### 6. Patient 6: 12-year-old male (sex assigned at birth)

This patient presented with school difficulties and encopresis. During the interview, ASD traits were identified, including social withdrawal, restricted interests, and stereotyped behaviors. His family was concerned about his effeminate behavior, and the patient himself expressed a strong desire to become a woman when he grows up. He eagerly anticipated growing older so that this change could occur.

## DISCUSSION

Historically, the development of sexuality in individuals with autism spectrum disorder (ASD) has been largely overlooked. It was once assumed that individuals with ASD were sexually immature or uninterested in sexual matters. However, recent studies have shown that many people with ASD do, in fact, experience sexual interest, engage in various sexual behaviors, and seek romantic and sexual relationships. Nonetheless, a significant portion of this population also

identifies as asexual, demonstrating the wide range of sexual experiences among individuals with ASD.

The case reports presented in this study highlight a similarly diverse range of sexual and gender-related behaviors in individuals with ASD. Several patients (Patients 1, 3, and 6) exhibited gender nonconforming behaviors, such as effeminate mannerisms, a preference for playing with dolls, and expressions of a desire to transition to a female identity. These behaviors are consistent with findings in the literature, which show a higher prevalence of gender dysphoria (GD) in individuals with ASD compared to the general population. De Vries *et al.*, (2010) found that 7.8% of children referred to gender identity clinics also had ASD, a significant overrepresentation.

Research on prenatal exposure to androgens suggests that this factor may influence gender identity, gender roles, and sexual orientation. Women with ASD, for instance, often display more masculine behaviors in both childhood and adulthood. This was reflected in Patient 2, who demonstrated a preference for unisex and masculine clothing, as well as an asexual orientation, which has been similarly documented in the literature. Lower libido and sexual drive, reported by several of our patients (Patients 2, 3, and 5), are also well-established findings in individuals with ASD, who tend to report reduced sexual interest and arousal.

In addition to gender nonconforming behaviors, several patients in our case series identified as asexual, with no interest in sexual relationships or desires. Asexuality is more prevalent in individuals with ASD compared to the general population. This may be linked to the broader social and cognitive challenges faced by individuals with ASD, including difficulties in forming social relationships and understanding social norms related to sexuality and gender.

Patients 4 and 6 also presented with ASD traits, such as stereotypic behaviors, restricted interests, and difficulties in social interaction, all of which may complicate their understanding of gender roles and sexuality. For example, Patient 4 was unable to differentiate between boys and girls or understand their respective roles, reflecting the cognitive rigidity and difficulty with abstract social concepts often seen in individuals with ASD.

Moreover, the overlap between ASD and gender dysphoria (GD), as seen in Patients 3 and 6, is supported by multiple studies that suggest an association between the two conditions. The extreme male brain theory of autism proposes that increased prenatal testosterone may contribute to hyper-masculinization in cognition and behavior, which could explain some of the gender identity challenges faced by autistic individuals. Pasterski *et al.*, (2014) observed that individuals with ASD who experience GD often express this dysphoria

after puberty, which was consistent with Patient 3's experience of understanding his gender identity later in adolescence.

In terms of sexual behaviors, solitary sexual activities, particularly masturbation, are commonly reported by individuals with ASD and are considered developmentally appropriate. However, fewer individuals with ASD report sexual behaviors with a partner, as seen in our case series. Some high-functioning individuals with ASD may have experiences comparable to their neurotypical peers, but many face difficulties in initiating romantic relationships or navigating appropriate social behaviors, leading to inappropriate courting behaviors or actions perceived as socially unacceptable.

The relationship between ASD and gender variance (GV) is becoming increasingly recognized in the literature, with studies showing that individuals with ASD are significantly more likely to express feelings of GV than typically developing individuals. This is distinct from gender dysphoria, as GV does not necessarily involve distress, but it nonetheless highlights the complexity of gender identity in individuals with ASD.

## CONCLUSION

Sexuality in individuals with autism spectrum disorder (ASD) is increasingly recognized as a normative and integral aspect of development, challenging earlier assumptions of sexual immaturity or disinterest. Our findings, consistent with existing literature, reveal that individuals with ASD experience a wide range of sexual behaviors, orientations, and gender identities. However, the social and communication impairments central to ASD may influence the way these individuals understand and express their sexuality. Difficulty in interpreting social cues, emotions, and nonverbal behaviors can hinder their ability to navigate sexual and romantic relationships. Additionally, inadequate access to appropriate sexual education further complicates this issue, leaving many autistic individuals without the necessary knowledge and tools to engage in healthy sexual behaviors.

However, while this study contributes valuable insights, there remains a significant need for more in-depth research. Future studies should focus on understanding the unique challenges faced by individuals with ASD in terms of sexuality and gender identity. Comprehensive, longitudinal research is essential to explore the underlying mechanisms linking ASD to gender variance and sexual behavior. Additionally, developmentally appropriate educational interventions and support systems must be designed to address the specific needs of this population. In conclusion, a more nuanced understanding of sexuality in individuals with ASD will help promote their well-being and ensure they receive the care and guidance they deserve.

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