Asperger Syndrome

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Abstract

What are the fundamental behaviour and ability characteristics that are examined in a diagnostic assessment for Asperger syndrome? This paper describes those characteristics using the framework of the new DSM-5 diagnostic criteria and also describes the additional characteristics recognised by clinicians as well as variations in expression according to age and gender. The person with Asperger syndrome has the classical features of autism without intellectual disability or impairment of formal language abilities. The features include deficits in social communication and interaction, in non-verbal communication and in understanding and maintaining relationships, together with insistence on sameness, inflexible adherence to routines or ritualised behaviour and highly restricted, fixated interests. In some individuals, the social deficits can lead to frustration and anger or to social withdrawal. Although the difficulties in social interaction should not be underestimated, the ability to focus on the area of interest, coupled with intellectual ability that is either within the normal range or above average, has produced some of the most highly-achieving individuals in society.

Introduction

Although the eponymous term 'Asperger syndrome' has been in clinical and common usage since the early 1980s, the recent Diagnostic and Statistical Manual of Mental Disorders: 5th Edition, DSM-5, has replaced this simple term with the new diagnostic category of Autism Spectrum Disorder Level 1, without accompanying intellectual or language impairment (1). For simplicity and continuity, this article will continue to use the term Asperger syndrome.

The essential characteristics of Autism Spectrum Disorder (ASD) in the new DSM-5 are deficits in social communication and interaction and restricted, repetitive patterns of behaviour, interests or activities. However, clinicians need to know how these characteristics are expressed and whether there are any additional characteristics or variations in expression according to gender. This article will explore the complex clinical presentation of Asperger syndrome using the structure of the new DSM-5 diagnostic criteria.

Deficits in social communication and social interaction

The underlying assumption in the diagnostic criteria is that someone who has Asperger syndrome has difficulty 'reading' people and social situations. There are various adaptations to this characteristic: the tendency to be shy and introspective, avoiding or minimizing participation in social interactions or conversations; or, conversely being conspicuously intrusive and intense, dominating the interaction and being unaware of social conventions such as personal space. In each example, there is an imbalance in social reciprocity.

Clinical experience has identified a third strategy for coping with difficulties with social reasoning, and that is to observe social interactions avidly, to analyse social behaviour intellectually and to achieve social inclusion by imitation, wearing a social 'mask', and using an observed and practised social 'script'. This is a compensatory mechanism often (but not exclusively) used by girls who have Asperger syndrome, who are thus able to express superficial social abilities (2).

Discussion with parents or relatives indicates a greater need for social guidance than one would expect considering the person's intellectual abilities, a history of social errors or 'faux pas' and intense anxiety in social situations. This can be due to several factors, such as a failure to understand social

conventions, difficulty reading another person's thoughts, feelings and intentions (Theory of Mind abilities), and a tendency to appear rude, insensitive, and socially naïve and 'clumsy'. While socializing can be enjoyable and energizing for young typical children, those who have Asperger syndrome can be reluctant to socialize with their peers, and often feel exhausted after engaging in social play. Adults who have Asperger syndrome can gradually learn to read social cues and conventions, such that the signs of deficits in social-emotional reciprocity are not conspicuous during short social interactions.

Asperger syndrome also has a 'signature' language profile. This can include impaired pragmatic language abilities (i.e. the 'art' of conversation, such as attentive listening), a tendency to engage in monologues and a failure to follow conversational rules. There may also be a tendency to make literal interpretations, become greatly confused by idioms, figures of speech and sarcasm, and demonstrate unusual prosody: for example, a child may use an accent based on the voice of a television character, or an adult may speak with an unusual tone, pitch and rhythm. All these characteristics affect the reciprocity and quality of conversation.

A deficit in emotional reciprocity can be explored by examining whether the person shows reciprocal affect in facial expressions, body language and tone of voice. The clinician can tell a story of personal experiences and assess whether the person was 'in tune' with the clinician's feelings and experiences by the use of nodding, reciprocal smiles and facial expressions, and complimentary sounds or utterances.

Deficits in nonverbal communicative behaviours

A distinct characteristic of Asperger syndrome is a difficulty reading someone's body language, facial expressions, gestures and voice to indicate specific thoughts and feelings and then incorporating that information in the conversation or interaction. Examples are not reading the nonverbal signals that indicate 'Not now, I am busy', or 'I am starting to feel irritated'. We now have specific tests to assess an adult's ability to 'Read the Mind in the Eyes' (3) that can be incorporated into the diagnostic assessment. The clinician can note whether the person consistently gives eye contact at key points in the interaction and whether he or she is able accurately to read facial expressions that clearly indicate emotional states.

The diagnostic assessment for Asperger syndrome will need to include an evaluation of the ability to understand and express emotions using nonverbal communication. It will also need to screen for problems with the regulation of intense emotions and the possibility of an additional mood disorder. Asperger syndrome is associated with an increased risk of developing an anxiety disorder or clinical depression (4-8). Sometimes the pathway to a diagnostic assessment for Asperger syndrome is the development of an anxiety disorder or depression in adolescence or adulthood with a subsequent detailed developmental history indicating the characteristics of Asperger syndrome.

Deficits in developing, maintaining and understanding relationships

The clinician needs to explore the number, quality and duration of friendships and relationships throughout childhood, adolescence and the adult years. Children who have Asperger syndrome display a particular developmental sequence in making and keeping friends. In the early school years, the child may not be motivated to socialize with peers, having discovered aspects of life (such as collecting insects or reading about the Titanic), that are more enjoyable than socializing. The child may be content with long periods of solitude, preferring to be engaged in a special interest. For those who do actively want to play with their peers, social play in the early school years tends to be more action than conversation, with friendships between typical children being transitory, and social games relatively simple with clear observable rules. The child who has Asperger syndrome may appear to be able to make and maintain the superficial friendships of early childhood. However, brave attempts to improve social integration are often ridiculed and the naïve and socially immature child with Asperger syndrome may be deliberately shunned. Children who have Asperger syndrome are extremely vulnerable to being teased, rejected, humiliated and bullied by their peers (9,10).

In adolescence, friendships are based on more complex interpersonal rather than practical needs, someone to confide in rather than someone with whom to play ball or make-believe games with dolls. It is at this stage of development that the gap in social understanding and integration with peers becomes the most conspicuous. The adolescent who has Asperger syndrome can be overwhelmed by the changing and increasingly complex nature of friendship, leading to feelings of isolation and loneliness. A teenager who has Asperger syndrome explained that 'I would rather be alone, but I can't stand the loneliness'. There can be a delay of several years in romantic experiences and a lack of progress in the 'dating game'. However, some adults who have Asperger syndrome can succeed in achieving a lifelong relationship. Their partner may have an understanding of Asperger syndrome, either because they share some of the same characteristics, or because they are naturally talented and intuitive in understanding the characteristics: they 'see the heart not the behaviour' (11). The non-Asperger partner has to make considerable changes and adjustments in his or her expectations of a relationship, and sometimes takes on a 'maternal' role (2). The couple may benefit from relationship counselling specifically designed for couples where one or both partners have Asperger syndrome (12).

Insistence on sameness, inflexible adherence to routines or ritualized behaviour

Family members are often concerned that routines and rituals are imposed in daily life, with the person showing great agitation if thwarted from imposing and completing a particular routine or ritual. Variety is not the spice of life for someone who has Asperger syndrome. There is a determination to maintain sameness. High levels of anxiety can result if routines are changed. This diagnostic criterion may actually be a mechanism for coping with high levels of anxiety (2). Rituals and routines are soothing and relaxing. It may be that specific events have been associated with, or perhaps created anxiety. Sometimes there are painful sensory experiences that are to be actively avoided. The consequent high levels of anxiety may lead to the person becoming controlling and oppositional, and using tantrums and emotional blackmail: in other words, displaying signs of Oppositional Defiant Disorder.

Highly restricted, fixated interests that are abnormal in intensity or focus

The clinician makes note of the person's range of interests, collections and hobbies as well as the acquisition of information on a specific topic, throughout childhood and the adult years. An example of an interest that is unusual in terms of focus could be the collecting of photographs of drain covers, and one that is unusual in intensity, would be an interest in horses where the person has a desire to have her bedroom in the stable.

The special interests all have a 'use by date', from hours to decades, and have many functions (2) such as being a 'thought blocker' for anxiety, an energy restorative after the exhaustion of socializing, or an extremely enjoyable activity that is an antidote to depression. The interest may involve the creation of an intricate alternative world that may be more accommodating of the characteristics of Asperger syndrome. The special interest can also create a sense of identity and achievement, as well as provide the potential for making like-minded friends who share the same interests. The sense of well-being can become almost addictive, leading to concern that the interest is dominating the person's time at home to such an extent that it is preventing engagement in other activities.

Hyper- or hypo-reactivity to sensory input

The new DSM-5 is an improvement on the previous DSM as it includes reference to sensory sensitivity as one of the 'hallmark' characteristics of ASD. Sensory sensitivity can be a lifelong problem with sensitivity to distinct sensory experiences that are not perceived as particularly aversive by peers. These can include specific sounds, especially 'sharp' noises such as a dog barking or someone shouting; tactile sensitivity on a specific part of the body; and aversive reaction to specific aromas, light intensity and other sensory experiences. In contrast, there can be a lack of sensitivity to

some sensory experiences such as pain and low or high temperatures. The child or adult can feel overwhelmed by the complex sensory experiences in particular situations such as shopping malls, supermarkets, birthday parties or school playgrounds. Sometimes, social withdrawal is not due to social confusion, but to an avoidance of sensory experiences that are perceived as unbearably intense.

Additional characteristics

The DSM-5 diagnostic criteria have not included some characteristics identified by experienced clinicians. These can include intense emotions, a different learning style and motor clumsiness.

Children who have Asperger syndrome are often referred to clinicians before or after a diagnosis for guidance and treatment for intense emotions. There can be a tendency to 'catastrophise', especially if the child or adult cannot solve a problem or there is an unanticipated change in expectations. The response can be extreme agitation, panic or despair which can lead to a referral for emotion management strategies and/or medication. A characteristic that may not cause clinical concern, but may be an issue for parents, is the person's limited ability to express and enjoy affection that is appropriate to the situation and the relationship. While there are Cognitive Behaviour Therapy (CBT) programs for the management of anger, anxiety and depression for children and adolescents who have Asperger syndrome (13) there are also CBT programs to enable the appropriate expression of love and affection (14).

Teachers and psychologists have identified different learning styles, and learning and attention problems in children and adolescents who have Asperger syndrome (2). These can lead to impairment in executive functioning and daily living skills, despite having an IQ in the normal range. There can be a tendency to focus on and be distracted by details, have a 'one track mind', and be fearful of making a mistake. However, there can be an excellent memory for facts and information and an ability to recognize patterns and errors. There can also be disturbances in movement skills, such as clumsiness in gait and coordination, and difficulties with handwriting, running fluently and catching a ball. In contrast, there can be particular ability in some solitary practice sports such as golf, swimming, horse-riding and ice-skating.

Gender differences

Girls who have Asperger syndrome are primarily different – not in the core characteristics of ASD, but rather in their reaction to being different (2). Girls and women who have Asperger syndrome often use more constructive coping and adjustment strategies than boys to camouflage their social confusion, and may achieve social success by observing and imitating others, creating an alternative persona, or escaping into the world of imagination in solitary fantasy play, reading fiction or being with animals rather than peers. These coping and camouflaging mechanisms may mask the characteristics of Asperger syndrome for some time, such that girls tend to slip through the diagnostic net during the primary school years. However, there is a psychological cost that may become apparent only in adolescence. It is emotionally exhausting to be constantly observing and analysing social behaviour, trying not to make a social error. Adopting an alternative persona can lead to confusion with self-identity and low self-esteem. The stress, strain, and exhaustion of intellectually analysing social situations and acting 'normal', and the failure to make lasting friendships, can result in the development of depression or borderline personality disorder. The clinician diagnosing or treating the mood or personality disorder may subsequently identify the characteristics of Asperger syndrome. Psychologists and psychiatrists therefore need a paradigm shift in their recognition of the female presentation of Asperger syndrome to ensure earlier diagnosis and access to effective understanding and support.

Concluding comments

Although Asperger syndrome can result in significant social difficulties it can also be associated with high achievement, especially in the individual who is of superior intelligence and makes good use

of the intense focus on a particular subject to become a respected "expert" in that area. It has been suggested that a proportion of high-achieving academics may have features of Asperger syndrome, for example. Some people with Asperger syndrome think of themselves as being at considerable advantage over neurotypicals (i.e. those who do not have Asperger syndrome) because, unlike the neurotypicals, they do not "waste their time socialising" but instead enjoy themselves being occupied in their preferred activity or area of interest; why waste your time socialising in the pub when you can be at home doing something really interesting like writing a computer program? Some of the greatest advances in science and the arts have been achieved by those who have the characteristics of Asperger syndrome. In short, some of the apparent disadvantages can be turned into advantages. The challenges, especially the social difficulties of having Asperger syndrome, should not be underestimated but neither should the capacity of some people to turn features of this condition to positive advantage.

GP Comment.

What have I learned from this paper?

1. As a General Practitioner, parents may approach me if their child's behaviour is noted to be unusual. The school may also ask parents to see their GP if there are concerns about behaviour.

2. What I have learned from this paper is the new DSM-5 diagnostic criteria which will be a useful tool in identifying children who may have autism spectrum disorder level 1 (Asperger syndrome).

3. It is important to be aware of the predisposition towards other mental disorders like anxiety, depression and to treat these appropriately.

4. It is also interesting the difference in presentation in females which may make Asperger syndrome more challenging to diagnose.

5. As a health commissioner, it has also drawn to my attention the need to make sure we have the skills-base necessary to provide support to this group of patients.

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