

# Overview on Autism Spectrum Disorders

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## INTRODUCTION

Autism Spectrum Disorders (ASD) is a complex developmental disorder characterised by chronic difficulties in social interaction, speech and nonverbal communication, and restricted/repetitive behaviours. Person's experience with ASD and the severity of their symptoms is unique. ASD is typically diagnosed in infancy, with many of the most visible symptoms appearing between the ages of two and three years old. However, some children with autism develop normally until toddlerhood, when they avoid acquiring or neglect previously acquired skills. Autism affects one out of every 59 children, according to the CDC. Boys are three or four times more likely than girls to have autism spectrum disorder. Autism is a chronic illness that lasts a lifetime. Many children with ASD, on the other hand, go on to lead independent, active, and satisfying lives [1].

## Autism Spectrum Disorders Characteristics

Autism varies in intensity and symptom combinations from person to person. Children with autism spectrum disorder have a wide variety of abilities and characteristics; no two children look or act alike. Symptoms may be mild to serious, and they frequently change over time.

There are two types of characteristics associated with autism spectrum disorder.

1) Problems with regular back-and-forth speech, decreased exchange of desires or feelings, difficulties interpreting or reacting to social signals such as eye contact and facial expressions, and deficiencies in developing/maintaining/understanding relationships (trouble making) are all examples of social interaction and communication issues.

2) Hand-flapping and toe-walking, playing with toys in unusual ways (such as lining up cars or tossing objects), speaking in unusual ways (such as using peculiar patterns or pitches in speaking or "scripting" from favourite shows), having a strong need for a consistent routine or structure, displaying extreme interests in activities that are peculiar for a child of a similar age, such as indifference to pain/temperature, excessive smelling/touching of objects, obsession with lights and movement, being overwhelmed by loud noises, and others [2].

## Risk Factors and Diagnosis

Autism symptoms can be reduced and the quality of life for individuals with autism and their families can be improved with early diagnosis and treatment. Autism does not have a medical examination. It is diagnosed by comparing the child's speech and behaviour to those of other children of the same age.

Autism is usually diagnosed by communicating with the infant and asking questions of the child's parents and other caregivers.

It's important to tell your primary care provider if you're concerned that your child or toddler is not developing normally. The Centers for Disease Control and Prevention (CDC) have reported potential autism spectrum disorder red flags in young children, which include:

- By the age of twelve months, he or she has not responded to his or her name.
- By 14 months, he is not pointing at items to demonstrate interest.
- By the age of 18 months, you will no longer be playing "pretend" games.
- Avoiding eye contact or choosing to be alone is also examples of people who avoid eye contact.
- Minor changes causing you to become agitated.
- They flailed their hands, rocked their bodies, and spun in circles.
- Having strange and often strong feelings about the way things smell, taste, sound, and/or look

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Doctors diagnose ASD by observing a person's growth and behaviour. By the age of two, ASD can normally be accurately diagnosed. Many who are concerned should seek evaluation as soon as possible so that a diagnosis can be made and care can begin. In young children, diagnosis is often a two-step procedure [3].

**Stage 1: During well-child visits, general developmental screening is performed**

Every child should see a paediatrician or an early childhood health care provider for a well-child checkup. At their 9-, 18-, 24-, or 30-month well-child appointments, the American Academy of Pediatrics recommends that all children be screened for developmental delays.

If a child is at high risk for ASD or developmental disorders, further testing may be required. Children who have an ASD family member, have certain ASD traits, have older parents, have some genetic disorders, or were born at a very low birth weight are all at high risk.

Children who exhibit developmental issues during the screening phase will be referred to a second level of assessment.

**Stage 2: Additional Evaluation**

This second assessment will be done by a group of physicians and other health professionals who are familiar with ASD diagnosis.

This group may include:

- a. A developmental paediatrician is a doctor who specialises in the development of children.
- b. A child psychologist or child psychiatrist is a specialist who specialises in the development and behaviour of children.
- c. A neuropsychologist is a physician who specialises in the assessment, diagnosis, and treatment of psychiatric, medical, and neurodevelopmental conditions.
- d. A speech-language pathologist is a health care specialist who specialises in communication problems.

The assessment should look at:

- 1. Thinking abilities or cognitive level
- 2. linguistic skills
- 3. Age-appropriate skills are required to complete everyday tasks such as feeding, dressing, and toileting independently.

**Adults' diagnosis**

Adult ASD diagnosis is often more complex than ASD diagnosis in children. Some ASD symptoms in adults may be confused with those of other mental illnesses like anxiety or attention deficit hyperactivity disorder (ADHD).

Adults who experience signs and symptoms of ASD should speak with their doctor and request a referral for an ASD assessment. Adults should be referred to a neuropsychologist, psychologist, or psychiatrist who has experience with ASD while testing for ASD in adults is still being refined. ASD diagnosis has changed in the last few years. The Diagnostic and Statistical Manual of Mental Disorders (DSM) was updated and published in 2013. The way autism is categorised and diagnosed has changed as a result of this revision. People may be diagnosed with one of several conditions using the previous version of the DSM:

- Autism is a condition that affects people who are autistic.
- Asperger's syndrome is a type of autism.
- Pervasive developmental disorder (PDD) is a type of developmental disorder that affects a large number of people

These different disorders have been merged into one diagnosis called "autism spectrum disorder" in the latest updated edition of the DSM (the DSM-5). People who were previously diagnosed with Asperger's syndrome will now be diagnosed with autism spectrum disorder, according to the DSM-5. Despite the fact that the "official" diagnosis of ASD has changed, there is nothing wrong with continuing to work with people who have ASD.

**Prescription Drugs**

Any symptoms associated with ASD can be treated with treatment by a doctor. An individual with ASD who takes medication may have fewer problems with: Irritableness, Aggression is a term that is used to describe, Repetitive acts, and Hyperactivity is a condition in which a person, Attention deficits, Anxiety and depression are two conditions that affect people. Behavioral, psychological, and educational therapies are all available.

Doctors that specialise in clinical, social, educational, or skill-building therapies can be directed to people with ASD [4]. Parents, siblings, and other family members may be involved in these services, which are usually highly organised and intensive. People with ASD can benefit from the following programmes:

- Reduce challenging behaviours
- Increase or build upon strengths
- Learn social, communication, and language skills

#### **Additional tools**

People with ASD will benefit from a variety of social services programmes and other support. Here are several pointers for locating these extra services: To learn about special services or local resources, contact your doctor, local health department, school, or autism advocacy group. Look for a support group for people with autism. Individuals with ASD will benefit from sharing knowledge and experiences.

#### **REFERENCES**

1. <https://www.nimh.nih.gov/health/topics/autism-spectrum-disorders-asd/index.shtml>
2. Nicholas JS, Charles JM, Carpenter LA, King LB, Jenner W, Spratt EG. Prevalence and characteristics of children with autism-spectrum disorders. *Ann Epidemiol.* 2008;18(2):130-136.
3. Mukherjee SB. Autism spectrum disorders-diagnosis and management. *Indian J Pediatr.* 2017;84(4):307-314.
4. Oswald DP, Sonenklar NA. Medication use among children with autism spectrum disorders] *Child Adolesc Psychopharmacol.* 2007;17(3):348-355.