



What is Autism?

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What is autism?

Autism is a developmental disorder that causes issues with communication, social, and nonverbal skills. Children or infants with autism may not be able to develop in the typical age appropriate stages due to symptoms that may put them on a different, individual track. Generally, autism symptoms appear in the early stages of childhood (between 2 and 3 years old), even if they are not noticeable [1]. Autism is a spectrum disorder, and the severity of the disorder can range from mild to severe. A child with mild symptoms may continue to be able to communicate or create social relationships, whereas more severe cases can show the inability in establishing friendships, language skills, or motor skills [1].

Oftentimes, ASD can be accompanied with other difficulties such as: intellectual disabilities, motor and coordination issues, physical health problems (sleep disorders or epilepsy), or attention-deficit hyperactivity disorder (ADHD) [2].

The United States' Center for Disease Control (CDC) identifies the following facts and statistics regarding autism:

- Autism impacts every 1 in 68 children in the United States.
- It is shown that autism is more prevalent in boys than girls; about 1 out of 42 boys and 1 in 189 girls are diagnosed with autism in the United States.
- There is no prevalence in race, ethnicity, or socioeconomic groups.
- Studies in Asia, Europe, and North America have identified individuals with ASD with an average prevalence of about 1%. A study in South Korea reported a prevalence of 2.6%.
- In identical twins, if one child has ASD, then the other will be affected about 36- 95% of the time. In non-identical twins, if one child has ASD, then the other is affected about 0-31% of the time.
- If a parent already has a child with autism, they have a 2% to 18% chance of having another child that is affected.
- Children born to older parents have a higher risk of having ASD.

Please remember that the spectrum varies heavily and each case is different. Personal and professional assistance is key when raising an autistic child. There are countless amounts of resources available to those affected and a parent should take full advantage of these. The American Autism Association is here just for that!

What is the DSM-V?

The DSM-V (The Diagnostic and Statistical Manual of Mental Disorders) is a manual created by the American Psychiatric Association (APA) that serves as a guide to doctors in diagnosing mental and behavioral disorders. The fifth and newest version was released in May 2013 at the annual meeting of the APA. The DSM has continuously changed and will continue to change as new research and methods have been developed in order to promote accurate diagnoses.

As mentioned before, Autism is a developmental disorder that affects the brain's normal functioning and as a consequence, the normal development of social and communication skills are interrupted. However, recent changes have been made in May 2013 by the American Psychiatric Association (APA) regarding Autism Spectrum Disorder (ASD) [4]. It is important to know what these changes are so that a parent can apply them to their child as necessary. Previously, a series of developmental disorders were sub-categorized under the ASD; however, the new criteria for autism united the categories. If your child was previously diagnosed with one of the following: autistic disorder, childhood disintegrative disorder, pervasive developmental disorder-not otherwise specified (PDD-NOS) or Asperger syndrome, your child should still meet the conditions for the revamped definition [5].

What causes autism?

Previously, research has been unsuccessful in determining what the primary cause for autism is. As more studies are conducted, it has been found that in certain cases, gene mutation may play a part in autism development; but mostly, a certain risk gene and early environmental factors affect brain development evolving into autism [7]. Even though research on autism has advanced, there is still no concrete evidence proving its cause.

Signs & Symptoms

Symptoms include, but are not limited to the following:

- Problems with changing routines.
- Becoming fixated on a specific object and only speaking on that subject.
- Exemplary skills in one specific area, such as an instrument.
- Consistent deficits in social communication and interactions either currently or in the past.
- Issues in nonverbal communication, such as difficulty making eye contact.
- Unable to build and maintain relationships
- Children may have a tendency to line up toys in an obsessive manner versus conducting regular play, and may lack the common childhood habit of pointing at objects.

Severity can differ based on social communication difficulties and repetitive patterns of behavior [7].

Level 3 (requires extensive support):

- Severe deficits in both verbal and nonverbal social skills, which cause inability to function socially, even on a minimum level.
- Cannot cope with change, and has extreme difficulty changing focus or attention to something else.

Level 2 (requires substantial support):

- Strong noticeable issues in verbal and nonverbal social communication skills even with support (ex. Being around a person he or she is familiar with), low initiation of social interactions like starting conversations or participating in them.
- Difficulty in coping with change or other repetitive behavior that occur frequently, which restricts normal functioning.

Level 1 (Requires support):

- Without necessary support, social communication causes obvious difficulties in initiating interactions, as well as unusual response to social cues from others. Can hold a conversation, but may be make an awkward attempt to hold this conversation. Attempts at making friends may also be odd.
- Issues with organization and planning. May have difficulty switching between activities.

Associated Symptoms

Seizure Disorders or Epilepsy

- Occurs in about 39% of people with autism.
- Typically start in early childhood or adolescents but can occur at anytime.
- More common in those that have cognitive challenges.

Gastrointestinal Disorders (GI)

- Includes gastritis, chronic constipation, celiac disease, diarrhea.
- Between 46% to 85% of children with autism have GI problems.
- Due to the pain caused by GI problems, children with autism can experience a change in behavior, such as outbursts or self-inflicted pain.

Pica

- An eating disorder where someone eats things that are not food (chalk, dirt, clay).
- Typical of children that are between 18 and 24 months, however if this occurs past that age, a child should be tested for elevated blood levels of lead.

Social Communication Disorder (SCD)

- Difficulty in the use of spoken and written word, and unusual responses to conversations. May not be able to greet properly.
- SCD limits an individual to establish and maintain relationships, communicate effectively, or progress academically.
- Inability to match the tone of conversation appropriately For example, talking to an adult versus a peer.
- Inability to follow rules, or talk out of turn.

Sleep Dysfunction

- Trouble falling or staying asleep.
- There is some evidence of abnormal levels of melatonin in children with autism, therefore melatonin supplements may be effective in treating a sleeping disorder.

Sensory Integration Dysfunction

- Unusual responses to sensory stimuli
- Even though the information is sensed normally, the way an individual perceives the information can be much different and can cause unpleasant experiences.

Fragile X Syndrome

- Genetic disorder in which the X chromosome has a defect or mutation and can cause an intellectual disability.
- About 1 in 25 children diagnosed with autism also have Fragile X syndrome.

Tuberous Sclerosis

- A rare genetic disorder caused by a genetic mutation in which noncancerous tumors develop in the brain and other organs.
- About 1% to 4% of people with autism also have tuberous sclerosis.
- There is no cure, but the symptoms are treatable.

Additional Mental Complications

- Anxiety, Attention hyperactivity disorder (ADHD), depression, and other mental disorders can accompany autism.
- People with autism have a higher risk of having another mental disorder than someone without autism.
- Treating the additional disorder along with autism has been proven to be successful.

Associated Symptoms

There are no medications that can cure autism, however there are a variety of medications and treatments that can help with the symptoms, such as depression, seizures, or lack of focus [9].

Early intervention in a child's life has proven to be better for long-term development.

Intervention should begin as soon as a diagnosis is given [8]. Varying treatments and therapies include:

Early Intervention Services

- Early intervention occurs between the ages of 0 to 3 and can play a crucial role in the positive development of the child.
- These include therapy that helps the child talk and interact, as well as walk and other common tasks that should normally be developed in early childhood.

Applied Behavioral Analysis (ABA)

- ABA is widely accepted by many professionals and focuses on reinforcing positive behavior by encouraging it while discouraging negative behaviors.

- It teaches new skills and applies those new skills to new situations the child is not familiar with.

Speech and Language Therapy

- Speech therapy can be extremely useful for children or individuals that have difficulty communicating.
- Working with a licensed speech-language pathologist can assist someone in developing communication skills, both verbal and non-verbal (which can include using sign language or picture boards).

Occupational Therapy

- Occupational therapy can teach life skills such as getting dressed, bathing, and eating.
- Occupational therapy helps improve the quality of life so that they may participate in routine daily activities.
- In younger children, occupational therapy focuses on the senses and integration. In older children, it focuses on social behavior and improving independence.

If you or anyone you know has autism or may have autism, please feel free to contact us at any time with further questions. We host our 'Autism Help Hotline' in which we assist families in finding resources, funding, assistance, etc. in their local area. Please feel free to contact us info@myautism.org or 877-654-4483.

