

What is Autism?

Autism is a spectrum disorder, and although it is defined by a certain set of behaviors, children and adults with autism can exhibit any combination of these behaviors in any degree of severity. Two children, both with the same diagnosis, can act completely different from one another and have varying capabilities.

You may hear different terms used to describe children within this spectrum, such as autistic-like, autistic tendencies, autism spectrum, high-functioning or low-functioning autism, more-abled or less-abled; but more important than the term used to describe autism is understanding that whatever the diagnosis, children with autism can learn and function normally and show improvement with appropriate treatment and education.

Every person with autism is an individual, and like all individuals, has a unique personality and combination of characteristics. Some individuals mildly affected may exhibit only slight delays in language and greater challenges with social interactions. They may have difficulty initiating and/or maintaining a conversation. Their communication is often described as talking at others instead of to them. (For example, monologue on a favorite subject that continues despite attempts by others to interject comments).

Characteristics

People with autism also process and respond to information in unique ways. In some cases, aggressive and/or self-injurious behavior may be present. Persons with autism may also exhibit some of the following traits:

- Insistence on sameness; resistance to change
- Difficulty in expressing needs, using gestures or pointing instead of words
- Repeating words or phrases in place of normal, responsive language
- Laughing (and/or crying) for no apparent reason showing distress for reasons not apparent to others
- Preference to being alone; aloof manner
- Tantrums
- Difficulty in mixing with others
- Not wanting to cuddle or be cuddled
- Little or no eye contact
- Unresponsive to normal teaching methods
- Sustained odd play
- Spinning objects
- Obsessive attachment to objects
- Apparent over-sensitivity or under-sensitivity to pain
- No real fears of danger
- Noticeable physical over-activity or extreme under-activity
- Uneven gross/fine motor skills
- Non responsive to verbal cues; acts as if deaf, although hearing tests in normal range.

For most of us, the integration of our senses helps us to understand what we are experiencing. For example, our sense of touch, smell and taste work together in the experience of eating a ripe peach: the feel of the peach's skin, its sweet smell, and the juices running down your face. For children with autism, sensory integration problems are common, which may throw their senses off they may be over or under active. The fuzz on the peach may actually be experienced as painful and the smell may make the child gag. Some children with autism are particularly sensitive to sound, finding even the most ordinary daily noises painful. Many professionals feel that some of the typical autism behaviors, like the ones listed above, are actually a result of sensory integration difficulties.

Misconceptions

There are also many myths and misconceptions about autism. Contrary to popular belief, many autistic children do make eye contact; it just may be less often or different from a non-autistic child. Many children with autism can develop good functional language and others can develop some type of communication skills, such as sign language or use of pictures. Children do not "outgrow" autism but symptoms may lessen as the child develops and receives treatment.

One of the most devastating myths about autistic children is that they cannot show affection. While sensory stimulation is processed differently in some children, they can and do give affection. However, it may require patience on the parents' part to accept and give love in the child's terms.

Causes

There is no known single cause for autism, but it is generally accepted that it is caused by abnormalities in brain structure or function. Brain scans show differences in the shape and structure of the brain in autistic versus non-autistic children. Researchers are investigating a number of theories, including the link between heredity, genetics and medical problems. In many families, there appears to be a pattern of autism or related disabilities, further supporting a genetic basis to the disorder. While no one gene has been identified as causing autism, researchers are searching for irregular segments of genetic code that autistic children may have inherited. It also appears that some children are born with a susceptibility to autism, but researchers have not yet identified a single "trigger" that causes autism to develop.

Other researchers are investigating the possibility that under certain conditions, a cluster of unstable genes may interfere with brain development resulting in autism. Still other researchers are investigating problems during pregnancy or delivery as well as environmental factors such as viral infections, metabolic imbalances, and exposure to environmental chemicals.

Autism tends to occur more frequently than expected among individuals who have certain medical conditions, including Fragile X syndrome, tuberous sclerosis, congenital rubella syndrome, and untreated phenylketonuria (PKU). Some harmful substances ingested during pregnancy also have been associated with an increased risk of autism. Early in 2002, The

Agency for Toxic Substances and Disease Registry (ATSDR) prepared a literature review of hazardous chemical exposures and autism and found no compelling evidence for an association; however, there was very limited research and more needs to be done.

The question of a relationship between vaccines and autism continues to be debated. In a 2001 investigation by the Institute of Medicine, a committee concluded that the “evidence favors rejection of a causal relationship... between MMR vaccines and autistic spectrum disorders (ASD).” The committee acknowledged, however, that “they could not rule out” the possibility that the MMR vaccine could contribute to ASD in a small number of children. While other researchers agree the data does not support a link between the MMR and autism, more research is clearly needed.

Whatever the cause, it is clear that children with autism and PDD are born with the disorder or born with the potential to develop it. It is not caused by bad parenting. Autism is not a mental illness. Children with autism are not unruly kids who choose not to behave. Furthermore, no known psychological factors in the development of the child have been shown to cause autism.

Diagnosis

There are no medical tests for diagnosing autism. An accurate diagnosis must be based on observation of the individual’s communication, behavior, and developmental levels. However, because many of the behaviors associated with autism are shared by other disorders, various medical tests may be ordered to rule out or identify other possible causes of the symptoms being exhibited. At first glance, some persons with autism may appear to have mental retardation, a behavior disorder, problems with hearing, or even odd and eccentric behavior. To complicate matters further, these conditions can co-occur with autism. However, it is important to distinguish autism from other conditions, since an accurate diagnosis and early identification can provide the basis for building an appropriate and effective educational and treatment program.

A brief observation in a single setting cannot present a true picture of an individual’s abilities and behaviors. Parental (and other caregivers’ and/or teachers’) input and developmental history are very important components of making an accurate diagnosis.

Early Diagnosis

Research indicates that early diagnosis is associated with dramatically better outcomes for individuals with autism. The earlier a child is diagnosed, the earlier the child can begin benefiting from one of the many specialized intervention approaches treatment and education

Source: *Autism Society of America - autism-society.org*