

Autism

Autism is an umbrella term for a group of complex disorders, resulting from abnormalities in development of the central nervous system. Autism is now recognized as not being a single disorder, but a spectrum of conditions characterized by social impairments, communication difficulties, sensory issues, and restricted, repetitive, and stereotyped patterns of behavior. Individuals with autism face serious difficulties in communicating and forming serious relationships, in using language and abstract concepts, and some of them also develop serious cognitive deficits. The severity of these features varies greatly.

In most cases of autism, the onset of the condition is within the first few years of life. Two distinct forms of the condition are recognized, in terms of disease progression. In the more common form, the earliest symptoms appear within the first year, and the condition progresses linearly. In a small subset of patients, however, initial development is normal, but is followed by a regression in social, emotional and communication skills within the second or third year of life.

The number of diagnosed cases of autism has skyrocketed in the past few decades. From a condition that was barely recognized five decades ago, it has reached a stage where about one in every 100 children is expected to be affected by it.

Risk factors

There are several risk factors that make a child more at-risk for autism. There is a certain genetic component involved, as is seen from a greater chance of autistic children having other autistic siblings. In addition, children with other genetic conditions, such as tuberous sclerosis and Fragile X Syndrome, have a higher chance

of being autistic. It is not yet clear what the exact genes involved in this process are. However, these genes are expected to play a major role in processes that decide which genes get turned on or off during brain development, maintain the junctions between the nerve cells, or regulate the process of protein formation. On the other hand, the environmental factors that may contribute to autism are also many. These include fetal exposure to certain medications, being born to older parents, and being an extremely pre-term baby. No one of the above mentioned features is a definite risk factor for autism. However, they do increase the chances for being affected by the condition.

An interesting facet of autism is that boys are about four times more likely to develop the condition compared to girls. Researchers believe that one of the factors contributing to this may be the difference in various hormone levels between the sexes.

Diagnosis and Management

A proper diagnosis of autism needs an evaluation of the child by trained personnel. Parents and primary care physicians need to observe whether children are attaining age-appropriate developmental milestones. Specialists in developmental evaluation and early intervention use special developmental assessment tools to make a proper diagnosis of autism.

There is no known cure for autism. However, early intervention makes a lot of difference to the likely course of the condition. Children with autism respond very well to structured programmes, such as early interventional behavioural training and management programmes. Some children might require speech, occupational and/or physical therapy. The earlier the

intervention is, the better the result. In fact, a subset of these children may respond well enough to not be classified as autistic anymore. Some others may remain with some mild symptoms, while some may be diagnosed with a high-functioning form of autism, called Asperger's Syndrome.

Autism in the Arab World

Until very recently, Autism had been an extremely neglected condition in the Arab World. This situation is changing with organizations like The Emirates Autism Society, Shafallah centre in Qatar, the Dubai

Autism Centre, and the Egyptian Autistic Centre raising awareness and providing better treatment and management options for the condition. However, studies on autism are still lacking in this part of the World. There are very few reliable reports on the prevalence of autism in Arab countries, and reported rates vary widely, due mainly to differences in the selection criteria. Within the Arabian Gulf region, studies have shown that parental age over 30 years, lead poisoning and delivering via caesarean section are risk factors for autism. On the other hand, exclusive and prolonged breast feeding was shown to provide some sort of protection against developing autism.

Neurodevelopment delay is best dealt with early. Check with your child's doctor if the child shows any of the following signs

1-year

- Doesn't crawl
- Can't stand when supported
- Doesn't search for things that she sees you hide
- Doesn't say single words like "mama" or "dada"
- Doesn't learn gestures like waving or shaking head
- Doesn't point to things
- Loses skills he once had

2-years

- Doesn't use 2-word phrases (for example, "drink milk")
- Doesn't know what to do with common things, like a brush, phone, fork, spoon
- Doesn't copy actions and words
- Doesn't follow simple instructions
- Doesn't walk steadily
- Loses skills she once had

3-years

- Falls down a lot or has trouble with stairs
- Drools or has very unclear speech
- Can't work simple toys (such as peg boards, simple puzzles, turning handle)
- Doesn't speak in sentences
- Doesn't understand simple instructions
- Doesn't play pretend or make-believe
- Doesn't want to play with other children or with toys
- Doesn't make eye contact
- Loses skills he once had

Adapted from CDC's "Learn the Signs. Act Early" program.