

AUTISM SPECTRUM DISORDERS



**World Health
Organization**

REGIONAL OFFICE FOR THE **Eastern Mediterranean**

What are autism spectrum disorders?

Autism spectrum disorders are neurodevelopmental disorders, meaning they are caused by abnormalities in the way the brain develops and works.

There are a range of different disorders covered by this term, including conditions that used to be considered separate such as autism and Asperger's syndrome. Some people still use the term "Asperger's syndrome". It is generally thought to be at the milder end of the ASD spectrum.

People with autism spectrum disorders have problems in social behaviour and communicating with others; they tend to engage in solitary interests and activities which they do repetitively.

In most cases, autism spectrum disorders become apparent during the first 5 years of a person's life. They begin in childhood and tend to persist into adolescence and adulthood. Globally, 1 in 160 children has an autism spectrum disorder, and they are more commonly diagnosed in boys than girls.

People with autism spectrum disorders often also have other conditions, including epilepsy, depression, anxiety and attention deficit hyperactivity disorder (ADHD).

The level of intelligence and cognitive functioning of people with autism spectrum disorders is extremely variable, ranging from profound impairment to superior functioning.

Common signs and symptoms of autism spectrum disorders

Every person with an autism spectrum disorder has a unique pattern of behaviour, but there are some common signs and symptoms:

- **Communication problems** (difficulty using or understanding language) such as delayed speech development and limited vocabulary for their age, repeating a set of words or phrases, focusing attention and conversation on a few topic areas, monotonous and flat speech.

- **Difficulty in social interaction.** This includes having trouble in making friends and interacting with people, difficulty understanding facial expressions, difficulty understanding their own and other people's emotions, not making eye contact, not wanting to be cuddled, not answering when called or refusing to do things when asked.
- **Repetitive behaviours and following strict routines.** This may include repetitive body movement such as hand flapping and repetitive motions with objects like spinning the wheels of a toy car, performing activities that could cause self-harm such as biting or head-banging, sticking to the same routine every day and having difficulty adjusting to even minor changes.
- **Sensory sensitivity.** Being over- or under-sensitive to sounds, lights, touch, tastes, smells, pain and other stimuli.

What causes autism spectrum disorders?

Over the last two decades, extensive research has studied whether there is any link between childhood vaccinations and autism spectrum disorders. The results of these researches are clear and unanimous: **vaccines do not cause autism.**

It seems that certain genes which a child inherits from its parents are involved in ASD. Autism spectrum disorders run in families, and if one child has one, their siblings are more likely to have one as well.

Some environmental factors may contribute to autism spectrum disorders, for example being born prematurely (before 35 weeks of pregnancy), being exposed to alcohol in the womb, being exposed to certain medicines (e.g. sodium valproate – used in epilepsy treatment) in the womb.

When to seek help for your child

As noted above, autism spectrum disorders usually begin in childhood. We already mentioned some important signs. There are also some key behaviours in a child's development which may not occur if a child has an autism

spectrum disorder. Their absence can be a red flag alerting parents of the need to seek professional help:

- *By 6 months:* Few or no big smiles or other warm, joyful and engaging expressions.
- *By 9 months:* Little or no back-and-forth sharing of sounds, smiles or other facial expressions.
- *By 12 months:* Little or no babbling and cooing; little or no back-and-forth gestures such as pointing, showing, reaching or waving; little or no response to name.
- *By 16 months:* Not saying single words.
- *By 18 months:* Not playing “make-believe” or pretend.
- *By 24 months:* Not saying two-word phrases.
- Losing language skills or social skills at any age.

If you are concerned that your child is showing possible signs of autism, contact your family doctor or pediatrician to introduce you to a psychologist or psychiatrist for specific assessment and evaluation. There is no blood or radiological test to confirm the diagnosis; the doctor will do specific examinations, interviews and psychological tests. However, if they are concerned that another disease may accompany the ASD, they may also test for that disease.

Treating autism spectrum disorders

Autism spectrum disorders are a lifelong problem and cannot be cured, but there are ways to make life easier for someone with autism and their family.

Medication: In some cases, a psychiatrist may prescribe medication to help with extreme self-harm, aggression or repetitive behaviours. Other indications are depression, anxiety, or ADHD.

Behavioural and cognitive interventions: Interventions can improve the functioning of the child. Examples include speech therapy, occupational therapy, behaviour and communication therapy, educational therapy, and family training and support to enable family members to live with and support a child with ASD.

Potentially harmful treatment approaches

Understandably, when there is no cure for a condition, parents may get frustrated and try whatever people around them, the media or websites offer them. Always contact your doctor before trying supposed treatments as some can be dangerous. The methods that are known to be potentially harmful are:

- chelation therapy – this can be very dangerous; some children treated with chelation therapy have died
- hyperbaric oxygen treatments
- intravenous immunoglobulin (IVIG) infusions.

How can you help a child with an autism spectrum disorder?

Having a child with an autism spectrum disorder can be stressful and time-consuming for the whole family and put economic pressure on the family. In addition to your children, you also need to take care of your physical and emotional health. Your role as a parent is crucial; you need to find out as much as possible about ASD. These tips can help you and your child achieve better communication and a healthier life:

- Provide a consistent structure and routine for their daily life.
- Use your child’s name so they know you’re addressing them.
- Keep background noise to a minimum.
- Speak simply, slowly and clearly.
- It may be useful to accompany what you say with simple gestures or pictures.
- Allow your child extra time to process what you have said.
- If possible, let them attend mainstream schools, though they will need extra help at the school for their specific educational needs and to manage their emotions in relation to others.

- There may be a special school in your city for children with autism spectrum disorders who are unable to go to mainstream schools.
- Unstructured situations, such as breaks and lunchtimes, can be very difficult to handle for some children with ASD. Teachers and school staff must be alerted to prevent any bullying or exploitation of these children during breaks.
- Connect with other parents of children with autism – join online forums or attend support groups.

How can teachers help a child with an autism spectrum disorder?

These days, more and more children with autism spectrum disorders attend mainstream schools. Teachers need to be prepared to provide them with a safe and protective environment. Teachers may get special training to help children with ASD, but there are simple tips you can follow as a teacher to help a child with an autism spectrum disorder in the classroom:

- Make a routine in their everyday school activities and follow it consistently. Prepare them for any predictable change
- Use visual supports to help them better understand school routines and everyday activities.
- Communicate with them in a simple and clear way, giving them time to process the information.

- Make the classroom environment comfortable for them. For example, if the background noise in the class distracts or scares a student with ASD, consider giving them ear defenders to block out the noise.
- Students with autism spectrum disorders are vulnerable to bullying, so try to respond to any bullying immediately.
- Raise the awareness about autism among your students and teach them to accept people with different conditions.
- A child with an autism spectrum disorder can become anxious when being in a place with a lot of sensory stimuli like a classroom. Set a safe and quiet place for them to go to when they feel anxious in this situation; give them an exit pass card to show so that they can leave the class to go there. Make sure this is not the same place that you sent students for a punishment timeout (if you have such a corner at all).
- Stay in touch regularly with parents/care-givers. They know their child best and may be able to suggest interventions to use.

This is one of a series of factsheets produced by the World Health Organization (WHO) to give the general public more information about mental disorders and how they can be treated. You can download all the factsheets free of charge from the WHO website at: www.emro.who.int/mnh.