

AUTISM SPECTRUM DISORDER (ASD)

Description

Autism spectrum disorder (ASD) is a broad term used to describe a group of neurodevelopmental disorders. These disorders are characterized by problems with communication and social interaction. People with ASD often demonstrate restricted and repetitive patterns of behavior. It can look different in different people. It's a developmental disability that affects the way people communicate, behave, or interact with others. It can be very mild or very severe. Some children who are on the spectrum start showing signs as young as a few months old. Others seem to have normal development for the first few months or years of their lives and then they start showing symptoms. The autism spectrum is very wide. Some people might have very noticeable issues, others might not. The common thread is differences in social skills, communication, and behavior compared with people who aren't on the spectrum.

Causes

The exact cause of ASD is unknown. The most current research demonstrates that there's no single cause.

Some of the suspected risk factors for autism include:

- having an immediate family member with autism
- genetic mutations
- fragile X syndrome and other genetic disorders
- being born to older parents
- low birth weight
- metabolic (*chemical processes in body*) imbalances
- exposure to heavy metals and environmental toxins
- a history of viral infections
- fetal exposure to the some medications

Symptoms

If your child is on the spectrum, he might show some social symptoms by the time he's 8 to 10 months old. These may include any of the following:

- He can't respond to his name by his first birthday.
- Playing, sharing, or talking with other people doesn't interest him.
- He prefers to be alone.
- He avoids or rejects physical contact.
- He avoids eye contact.
- When he's upset, he doesn't like to be comforted.
- He doesn't understand emotions - his own or others'.
- He may not stretch out his arms to be picked up or guided with walking.

About 40% of kids with autism spectrum disorders don't talk at all, and between 25% and 30% develop some language skills during infancy but then lose them later. Some children with ASD start talking later in life.

Most have some problems with communication, including these:

- Delayed speech and language skills
- Flat, robotic speaking voice, or singing voice
- Echolalia (repeating the same phrase over and over)
- Problems with pronouns (e.g. saying "you" instead of "I")
- Not using or rarely using common gestures (pointing or waving), and not responding to them
- Inability to stay on topic when talking or answering questions
- Not recognizing sarcasm or joking

Treatment

There are no "cures" for autism, but therapies and other treatment can help people feel better or make their symptoms less. Many treatments involve therapies such as:

- behavioral therapy
- play therapy
- occupational therapy
- physical therapy
- speech therapy

Massages, weighted blankets and clothing, and meditation techniques may also induce relaxing effects. However, treatment results will vary. Some people on the spectrum may respond well to some approaches, while others may not.

Alternative treatments for managing autism may include:

- high-dose vitamins
- chelation therapy, which involves flushing metals from the body
- melatonin to address sleep issues

Research on alternative treatments is mixed, and some of these treatments can be dangerous. Before investing in any of them, parents and guardians should see the research and financial costs against any possible benefits.

Teaching Methods

1. Use Simple, Concrete Language
2. Give Limited, Clear Choices
3. Be Gentle in Criticism
4. Applied Behavior Analysis (ABA)

ABA is a systematic approach that assesses and evaluates a student's behavior and applies interventions (actions taken/group discussion) to try and alter behavior. From understanding a behavior's function to controlling the student's environment, ABA has been shown to be successful in shaping students' behavior. Elements of Applied Behavior Analysis include:

- Intervention designed by a trained behavior analyst
 - Development of treatment goals that emphasize achieving greater independence for the student both now and in the future
 - Training for parents and guardians so ABA can be continued in the home
 - Abundant positive reinforcement (rewards and praises) for desired behaviors
 - An absence of reinforcement for behaviors that delay or prevent learning or may lead to harm
5. Solve Sensory Problems
 6. Discrete Trial Teaching (DTT)

Also known as the Lovaas Model, DTT uses positive reinforcement to focus on changing skills and behaviors by breaking each one down into smaller steps that are taught along with prompts until the student masters the steps required to

perform a particular skill or behavior. Based on the research and wisdom in Applied Behavior Analysis, DTT makes use of five primary techniques:

- Identification of the component parts of a particular skill or behavior
- Instructing the student in those component parts until each individual part is learned
- Intensive training sessions
- The use of prompts early on in the intervention and the decreasing use of prompts as the student learns
- Utilization of positive reinforcement to increase learning of component parts and skills.

As research into ASD continues, how the world looks for these students will become clearer. Based on what is known of that world so far, these systems and techniques work for both teachers and the children and adolescents they're teaching.
