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Autism Spectrum Disorder

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Autism or autism spectrum disorder(ASD)is a neurological condition that can causedifferences in socialisation,communication and behaviour.

ASD is an umbrella term that encompasses three formerly separate conditions that are no longer considered official diagnosis in the current DSM 5.They are Autistic disorder Pervasive developmental disorder-not otherwise specified (PDD-NOS) & Asperger's syndrome

It's a developmental disability that affects the way people communicate, behave, or interact with others. Some shows

signs as young as a few months old. Others seem to have normal development for the first few months or years and then they start showing symptoms. Half of parents noticed issues by the time their child reached 12 months and between 80% and 90% noticed problems by 2 years. They will have symptoms throughout their lives, but can get better as they get older.

The Autism spectrum is very wide. Some people might have very noticeable issues, others might not. If a child is on the spectrum, they might show some social symptoms by the time they're 8 to 10 months old. These may include any of the following:

- They don't respond to their name by their first birthday.
- Playing, sharing, or talking with other people don't interest them.
- They prefer to be alone.
- They avoid or reject physical contact.

COMMUNICATION

About 40% of kids with autism spectrum disorders don't talk at all. 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 singsong voice
- Echolalia (repeating the same phrase over and over)

- Problems with pronouns (saying “you” instead of “I,” for example)
- 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

PATTERNS OF BEHAVIOUR

Children with ASD also act in ways that seem unusual or have interests that aren't typical. Examples of this can include:

- Repetitive behaviors like hand-flapping, rocking, jumping, or twirling
- Constant moving (pacing) and “hyper” behavior
- Fixations on certain activities or objects
- Specific routines or rituals (and getting upset when a routine is changed, even slightly)
- Extreme sensitivity to touch, light, and sound
- Not taking part in “make-believe” play or imitating others’ behaviors
- Fussy eating habits
- Lack of coordination, clumsiness
- Impulsiveness (acting without thinking)
- Aggressive behavior, both with self and others
- Short attention span

LEVELS OF AUTISM

- ❖ Three levels of autism discussed in (DSM-5).
- ❖ level three as “requiring very substantial support,”
- ❖ level two as “requiring substantial support,”
- ❖ level one as “requiring support.”
- ❖ Asperger’ syndrome is the mildest form of autism and is closely associated with level one of ASD.

CAUSES OF AUTISM

The exact cause is unknown.

Some suspected risk factors include

- 1.Having an immediate family member who is autistic.
- 2.Genetic mutations.
- 3.Fragile X syndrome and other genetic disorders.
- 4.Being born to older parents.
- 5.Low birth weight.
- 6.Metabolic imbalances.
- 7.Exposure to heavy metals and environmental toxins.
- 8.Ahistory of viral infections.
- 9.Fetal exposure to the medications valproic acid or Thalidomide.

A controversial 1998 study proposed a link between autism and MMR vaccine. But this has been debunked by other research and was eventually retracted in 2010.

DIAGNOSIS

There's no lab test for it, so doctors rely on observing the behaviors of very young children and listening to the concerns of their parents.

ASD has a very wide range of symptoms. Some people who are "on the spectrum" have severe mental disabilities. Others are highly intelligent and able to live independently. Every child gets an assessment at their 18- and 24-month

Interrogation about milestones.

- Did the baby smile by 6 months?
- Did they mimic sounds and facial expressions by 9 months?
- Were they babbling and cooing by 12 months?

- Are any of their behaviors unusual or repetitive?
- Do they have trouble making eye contact?
- Do they interact with people and share experiences?
- Do they respond when someone tries to get their attention?
- Is their tone of voice "flat"?
- Do they understand other people's actions?
- Are they sensitive to light, noise, or temperature?
- Any problems with sleep or digestion?
- Do they tend to get annoyed or angry?

The responses to these questions are very important in the screening of children.

Other Tests

If child needs more tests, next appointment probably will be with a team of ASD specialists -- child psychologist, speech-language pathologist, and occupational therapist. Consultation will also be required with a developmental pediatrician and a neurologist.

For an official diagnosis, the child must meet the standards of (DSM-5), published by the American Psychiatric Association. The child must have problems with two categories to fall on the autism spectrum.

- The CARS is a diagnostic assessment method that rates individuals on a scale ranging from normal to severe, and yields a composite score ranging from non-autistic to mildly autistic, moderately autistic, or severely autistic.
- ☐ The scale is used to observe and subjectively rate fifteen items.

The CARS-2 is **an update of the Childhood Autism Rating Scale (CARS)**, an older and widely-used rating scale for autism.

Treatment options may include:

- Behavior and communication therapies. Many programs address the range of social, language and behavioral difficulties associated with autism spectrum disorder. ...
- Educational therapies. ...
- Family therapies. ...
- Occupational therapies....
- Other therapies. ...
- Medications.

Treatment and Education of Autistic and Related Communication-handicapped Children (TEACCH).

This treatment uses visual cues such as picture cards to help your child learn everyday skills like getting dressed. Information is broken down into small steps so they can learn it more easily.

The Picture Exchange Communication System (PECS).

This is another visual-based treatment, but it uses symbols instead of picture cards. Your child learns to ask questions and communicate through special symbols.

Famous Autistic personalities

1. Albert Einstein

The great mathematician had trouble concentrating in his school years and was once expelled for his lack of attention in his subjects. When his teachers questioned him, he was famous for counter questioning them with questions they

knew no answers to much to their chagrin. He kept asking questions, but this time, not to people, but to himself and look how many answers he came up with.

2. Charles Darwin

The father of modern biology as we know, as a child who used to spend his time alone, Charles Darwin had autism which gave him the ability to hyper focus and his mind was ever accepting to all the information the world was providing.

3. Michelangelo

Michelangelo, painter, architect, designer and engineer. Multi-talented as he was, it was probably the effect of a slight autistic tendency of on the most classic artists in the world.

4. Bill Gates

The masthead of Microsoft, Bill Gates aka William Gates is known to have had a brilliant understanding of the computer at an age as early as 13.

5. Julian Assange

The famous wiki whistle blower is known to be socially awkward and brilliantly talented.

6. Sir Arthur Conan Doyle

The man who created the greatest crime investigator in the history of the world was known to keep his distance from people.

7. Srinivasa Ramanujan

The man who wrote volumes of mathematics with almost no formal education had difficulty concentrating on any other subject he had to study when he was in London working with one of the greatest mathematicians of that time, G. H. Hardy.

8. Lewis Carroll

The author of *Alice in Wonderland* had difficulty conversing with adults and enjoyed the company of children as compared to his adult peers.