What is Autism?

Autism is a ‘spectrum’ disorder, which means that the symptoms vary between individuals, ranging from mild to severe. People with autism include those who may have significant intellectual disabilities and may require a high level of support in their daily lives, as well as those who may have an average or high intelligence and those who may require a lower level of support.

People on the spectrum may experience persistent difficulties with social communication and social interaction and restricted and repetitive patterns of behaviours, activities or intense interests.¹⁻²

Key facts

Children may show symptoms of autism within their first year and autism may become evident by the age of two or three years. In other cases, autism may be detected later in age, even at adult age.

Recent research indicates that autism affects around 1-2 in 100 people.

Autism is often accompanied by sensory and medical issues such as gastrointestinal (GI) disorders, seizures or sleep disorders, as well as mental health challenges such as anxiety, depression, attention difficulties or hyperactivity.

1% of the general public has epilepsy vs 20–40% of autistic people. Epilepsy may be the leading cause of death in autistic people with a learning disability and their epilepsy can be difficult to manage. It may also be harder to treat their epilepsy with drugs that work in the general population. There is a lack of knowledge regarding drugs that are effective and safe for autistic people with epilepsy. Research studies involving autistic people with and without epilepsy are needed to increase our understanding of how to manage symptoms and prevent these early deaths.
History

The earliest documented cases of autism were described long before autism was named in 1910 by Eugen Bleuler. He derived it from the Greek word autós (αὐτός, meaning "self"), referring to the "autistic withdrawal of the person to his fantasies, against which any influence from outside becomes an intolerable disturbance". Hans Asperger was the first one to use the word autism in its modern sense, investigating in 1938 what was later known as Asperger’s syndrome.

Known causes of Autism

We know that there’s no one cause of autism. Research suggests that autism develops from a combination of genetic and non-genetic, or environmental influences. These influences appear to increase the risk for a child to develop autism. However, it’s important to keep in mind that increased risk is not the same as cause.

Genetic risk factors:

- Autism can be present in members of the same family; it may sometimes be passed on to a child by their parents. A child is also at greater risk of autism if there is a family member with autism. For some children, autism can be associated with a known genetic disorder, such as Rett syndrome or fragile X syndrome. For other children, genetic changes (mutations) may increase the probability of autism.

Environmental risk factors:

- Advanced parental age, viral infections, exposure to certain substances and complications during pregnancy may also play a role.

Presentation

Autism differs from person to person in severity and combinations of symptoms. Each person with autism is likely to have a unique pattern of behavior and level of severity — from low functioning to high functioning. Some autistic people may have average or above average intelligence, some may be able to function without difficulties in day-to-day life, while others may have a learning disability and may experience difficulties in their daily lives and may not be able to look after themselves. A supportive inclusive environment will positively impact their ability to function.

Characteristics of autism spectrum disorder fall into two categories:

Social interaction and communication problems:
- reduced sharing of interests; difficulties understanding their own emotions or difficulties expressing them; not speaking or having delayed speech; avoiding eye contact or wanting to be alone; not expressing emotions or feelings and appearing unaware of others’ feelings.

Restricted and repetitive patterns of behaviours, interests or activities:
- repeating actions over and over again; losing skills they once had; repeating or echoing words or phrases said to them; exhibiting intense interests in activities that are uncommon for a similarly aged child.
Diagnosis

An autism diagnosis involves several evaluations including initial screening or triaging, autism-specific specialist assessment, and is based on behaviour and developmental difficulties. Many children (for example females) do not receive a final diagnosis until they are much older.

This delay means that children with autism might not get the early intervention they need. Early signs of ASD can include, but are not limited to:

• Avoiding eye contact.

• Having unusual and sometimes intense reactions to the way things smell, taste, feel and/or look.

• Not responding to his/her name by 12 months of age.

• Having little interest in other children or caretakers, or preferring to be alone.

• Limited display of language.

• Getting upset by minor changes in routine.

The Modified Checklist for Autism in Toddlers (M-CHAT) is a common screening tool many pediatric offices use. Parents fill out the 23-question survey and paediatricians can then use the responses to identify children who may have an increased risk of developing autism.

It is important to note that screening is not a diagnosis – children who screen positively for autism do not necessarily have it. Additionally, screenings do not always detect every child on the spectrum. Therefore, if there are any developmental concerns and/or behavioural difficulties a full autism assessment should follow. Autism diagnosis requires clinicians trained in autism and a multi-disciplinary approach. Diagnosis should not be based solely on scores from clinical tools but also on clinical judgement.

Monitoring, screening, evaluating, and diagnosing children with ASD as early as possible is important to make sure children receive the services and support needed to reach their full potential.

Treatment

There are no known cures for autism. Rather, for some autistic people, supportive therapies and other considerations can help them reduce some of their social communicative difficulties, difficult behaviours, or alleviate certain symptoms (for example anxiety and depression) to become more independent.

Educational and therapeutic interventions often used include applied behaviour analysis (ABA), developmental models, structured teaching, speech and language therapy, social skills therapy, occupational therapy, and cognitive-behavioural therapy. People diagnosed with autism are often prescribed psychoactive drugs or anticonvulsants, with the most common drugs prescribed being antidepressants, stimulants, and antipsychotics. These drugs are used to treat associated health problems, such as epilepsy, ADHD, anxiety, or depression, although the effectiveness and tolerability of some of these drugs when prescribed to people with autism have shown to be different to non-autistic people.
REFERENCES

6. NICE guidelines 2021

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