CONDITION

Intellectual disability

Intellectual disability is a lifelong condition that affects learning, reasoning, and everyday practical skills.

WHAT IT IS
Lifelong differences in learning, reasoning, and everyday adaptive skills

BODY SYSTEM
Brain and nervous system

MAIN SYMPTOMS
Slower learning, delayed development, communication difficulties, reduced everyday independence

WHAT CAUSES IT
Genetic changes, pregnancy or birth problems, illness, injury, often unknown

HOW IT IS DIAGNOSED
Intellectual and adaptive functioning assessments with developmental history

MAIN TREATMENT
Education, therapies, healthcare, and practical support

CAN IT BE CURED?
No - lifelong condition, though support builds skills

IS IT AN EMERGENCY?
No - unless there is an immediate health or safety crisis

LONG-TERM OUTLOOK
Lifelong; skills and independence can grow with tailored support

Overview

Intellectual disability is a lifelong condition affecting how a person learns, reasons, solves problems, and manages everyday activities. It begins during childhood or adolescence, known as the developmental period.

The condition involves difficulties in both intellectual functioning and adaptive functioning. Intellectual functioning includes learning, judgment, and problem-solving. Adaptive functioning means the practical, social, and communication skills used in daily life.

Intellectual disability ranges from mild to profound. Some people live independently with occasional support. Others need daily or continuous help with communication, personal care, health, safety, or decision-making.

It is not a mental illness, although mental health conditions can occur alongside it. It also does not describe a person's personality, worth, relationships, or ability to enjoy a meaningful life.

Symptoms

Signs are often noticed when a child learns or develops more slowly than expected. In babies and young children, this may involve sitting, walking, talking, playing, or understanding instructions later than other children. Development differs naturally between children, so one delayed milestone does not confirm intellectual disability.

Older children and adults may have difficulty with:

The pattern differs from person to person. Someone may communicate well but need help with money and safety. Another person may use few spoken words and need support with most daily activities.

New loss of previously learned skills is not an expected feature of a stable intellectual disability. It needs medical assessment.

- Learning new information or applying it in a new situation
- Reading, writing, numbers, planning, or understanding time and money
- Expressing needs or understanding complex language
- Recognizing social cues, risks, or other people's intentions
- Managing personal care, travel, work, household tasks, or appointments

Causes and risk factors

Intellectual disability develops when something affects brain development. In many people, no single cause is found.

Possible causes include genetic or chromosome changes, such as Down syndrome or fragile X syndrome. Some changes are inherited, while others happen for the first time in the child.

Brain development can also be affected by certain infections, alcohol exposure, serious nutritional problems, or harmful substances during pregnancy. Premature birth and severe complications around birth can increase risk, particularly if they injure the brain or limit its oxygen supply.

Causes arising later in childhood include meningitis, encephalitis, a serious brain injury, stroke, severe untreated seizures, or exposure to toxins such as lead.

A family history of a genetic condition may increase risk, but intellectual disability is not always inherited. Parenting style does not cause it.

Diagnosis

Diagnosis is based on a full assessment, not appearance, school performance, or one intelligence quotient, or IQ, score.

A psychologist or another appropriately trained professional assesses intellectual abilities using standardized tests. These may examine reasoning, memory, language, attention, and problem-solving. Results must be interpreted in the context of the person's age, language, education, culture, communication needs, and any hearing, vision, or movement difficulties.

Adaptive functioning is assessed separately. This looks at how the person manages skills in three broad areas:

The assessment also includes developmental, health, family, and education history. Information may come from the person, family members, teachers, carers, or others who know their everyday abilities well.

Medical tests may be offered to investigate the cause. Depending on the circumstances, these can include genetic testing, hearing and vision checks, blood or urine tests, or brain imaging. These tests may identify a cause, but they do not measure the person's abilities or support needs.

In very young children, clinicians may initially use the term global developmental delay when several areas of development are delayed but reliable intellectual testing is not yet possible.

- Conceptual skills: language, reading, numbers, time, and planning
- Social skills: communication, relationships, judgment, and understanding risk
- Practical skills: personal care, travel, work, safety, and household tasks

Treatment and management

There is no treatment that removes intellectual disability itself. Management focuses on building skills, supporting participation, treating related health conditions, and reducing barriers in the person's surroundings.

Support may include speech and language therapy, occupational therapy, physiotherapy, psychological care, and special education services. Communication aids, visual schedules, accessible technology, and step-by-step teaching can make daily activities easier.

Children may benefit from early intervention and an education plan tailored to how they learn. Adults may need support with work, housing, transport, money, relationships, healthcare, or legal decisions. Support should promote choice and independence while providing appropriate safeguards.

Distress or behavior that challenges others can sometimes be a way of communicating pain, fear, sensory overload, frustration, or an unmet need. Assessment should look for these causes rather than assuming the behavior is simply part of the disability.

Medicines do not treat intellectual disability. They may be used for a separate condition, such as epilepsy, depression, attention-deficit/hyperactivity disorder, or a sleep disorder. Regular review helps ensure that any medicine remains useful and is not causing avoidable side effects.

Complications

Intellectual disability does not automatically cause poor physical health. However, some underlying conditions also affect the heart, hearing, vision, movement, swallowing, or risk of seizures.

Communication barriers can make pain and illness harder to recognize. People may also face bullying, exploitation, abuse, social isolation, or difficulties accessing suitable healthcare and education.

Anxiety, depression, sleep problems, and other mental health conditions can occur. A noticeable change in sleep, appetite, communication, activity, or behavior may be the first sign of physical or emotional distress.

Families and carers may experience financial, practical, or emotional strain. Respite care, benefits advice, peer groups, and coordinated services can help.

Prevention

Intellectual disability usually cannot be prevented once it is present. Genetic causes and many changes that happen early in development cannot be prevented.

Some acquired causes may be less likely with good care before, during, and after pregnancy. This includes recommended vaccination, avoiding alcohol during pregnancy, taking folic acid as advised, treating infections, and attending prenatal care. Newborn screening can identify certain treatable conditions before they cause serious harm.

Preventing head injuries, reducing children's exposure to lead, and treating serious infections promptly may also reduce some risks.

Genetic counselling cannot prevent an inherited condition, but it can explain test results, recurrence chances, and reproductive options without directing a family toward a particular choice.

Living with it and what to expect

Intellectual disability is lifelong, but people continue to learn throughout life. Communication, self-care, social, work, and practical skills may improve with teaching, experience, accessible environments, and consistent support.

The condition itself is not usually progressive. A person should not steadily lose abilities simply because they have intellectual disability. Loss of skills, a major change in behavior, or reduced independence should be assessed for causes such as pain, illness, medication effects, depression, sensory loss, or a neurological condition.

Support needs often change at major transitions, including starting school, leaving education, beginning work, moving home, or getting older. Planning ahead can reduce disruption.

Some adults live independently or with occasional assistance. Others live with family, in supported housing, or in settings with continuous care. Relationships, hobbies, community activities, education, and paid or voluntary work can all be important parts of life. The right balance of support and choice is individual.

When to get medical help

Arrange a routine assessment if a child is not meeting several developmental milestones, is having persistent learning difficulties, or needs much more help with everyday skills than expected for their age. Hearing and vision problems should also be checked because they can affect communication and learning.

Seek prompt medical advice for:

Use emergency services for immediate danger, serious injury, severe breathing difficulty, loss of consciousness, or thoughts or actions involving immediate self-harm or harm to someone else. A first seizure, or repeated or prolonged seizures without recovery, also needs emergency help.

Routine follow-up may include reviews of development, communication, education or work

support, mental health, medicines, hearing, vision, dental health, and any condition linked to the underlying cause.

- Loss of previously learned language, movement, or self-care skills
- A major unexplained change in sleep, eating, mood, or behavior
- New swallowing difficulties, repeated choking, or unexplained weight loss
- Possible medication side effects
- Signs of neglect, bullying, exploitation, or abuse

Common questions

Is intellectual disability the same as autism?

No. Intellectual disability affects intellectual and adaptive functioning. Autism mainly affects social communication and involves restricted or repetitive patterns of behavior or interests. A person may have either condition or both.

Is intellectual disability the same as a learning disability?

Terminology differs between countries. In the United Kingdom, learning disability often means intellectual disability. In the United States, learning disability usually refers to a specific difficulty such as dyslexia, which can occur in someone with otherwise typical intellectual functioning.

Does a low IQ score always mean intellectual disability?

No. Diagnosis also requires significant difficulty with adaptive functioning that began during the developmental period. Test results can be influenced by language, culture, education, anxiety, hearing, vision, movement, and the way the test is given.

Can intellectual disability get worse with age?

It is usually not progressive, and many people gain skills over time. Some underlying genetic or neurological conditions may change with age. Any new loss of skills or independence needs assessment rather than being assumed to be part of the disability.

Can someone with intellectual disability live independently?

Some people can, either fully or with occasional help. Others need regular or continuous support. Independence depends on everyday abilities, health, safety, available services, and whether housing, transport, work, and communication are accessible.

Is intellectual disability inherited?

Sometimes. Certain genetic causes can be inherited, while others occur as new genetic

changes. Many cases have a non-genetic cause or no identified cause. Genetic assessment may clarify the cause and the chance of it occurring in other family members.

Sources

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