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# Developmental delays and their implications in the life cycle Dr. Rahul Mishra

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### **Developmental Delay**

When you bring your kid to SSM Health, we understand how unsettling it may be to hear that your child may have a developmental delay. On the other hand, it is essential to be aware that this diagnosis may be treated, and that it does not often serve as a reliable indicator of future intelligence. Every kid develops and learns in their own unique way, and our goal is to assist your child in reaching his or her greatest potential. A kid is said to have a developmental delay if, in comparison to children of the same age, he or she has not attained the level of developmental competence that is anticipated of them. Delays are possible in areas such as motor function, speech and language, cognitive abilities, as well as social, play, and recreational capabilities. If a young kid has global developmental delay, it indicates that they are far behind in more than one of these areas of development.

## **Causes of Developmental Delay**

There is not a single factor that contributes to the lag in development. Before, during, and after the birthing process, a kid may be exposed to factors that might potentially contribute to the condition. These could include the following:

- Conditions of a genetic or hereditary nature, such as Down syndrome
- Inborn errors of metabolism such as phenylketonuria (PKU)
- Brain injuries, such as those that might cause shaken infant syndrome
- Extreme psychological and social distress, including symptoms of post-traumatic stress disorder
- The ingestion of some poisonous chemicals, such as lead or alcohol during pregnancy, may cause birth defects.
- There are several very dangerous diseases
- Deprivation of either one's food supply or their surroundings

In some cases, it may not be possible to find the cause of the developmental delay.

### Signs and Symptoms of Developmental Delay

Children may exhibit a wide variety of signs and symptoms of developmental delay, and these signs and symptoms can change based on the particular qualities of the kid. It is possible that you may detect indicators while your kid is still an infant, but it is also possible that you will not notice any symptoms until your child is old enough to attend school. The following are examples of some of the most prevalent symptoms:

- Slower in both learning and development compared to other children of the same age
- A significant delay in achieving developmental milestones such as rolling over, sitting up, crawling, or walking.
- Problems talking or interacting socially with other people
- IQ test results that be significantly below average
- Problems communicating or a tendency to speak too late
- Having difficulty remembering some things
- Inability to make a connection between one's actions and their results
- Problems with logical reasoning and problem-solving are also common.





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• Learning difficulties in school inability to do routine chores such as getting dressed or using the toilet alone without assistance

If there is an underlying medical reason that causes the developmental delay, identification and treatment of that condition may improve your child's developmental skills.

### Fine and gross motor skill delay

The ability to use tiny objects, such as crayons or toys, is a component of fine motor abilities. The development of gross motor abilities necessitates the execution of greater motions, such as leaping, climbing stairs, or tossing a ball. Children develop at varied speeds, but most of them are able to raise their head by the age of three months, sit with the assistance of a few objects by the age of six months, and walk well before their second birthday. By the age of 5, the majority of children have the ability to stand on one foot for at least ten seconds and to use a fork and spoon.

Exhibiting some of the following signs can mean that your child has delays in developing certain fine or gross motor functions:

- floppy or loose trunk and limbs
- stiff arms and legs
- limited movement in arms and legs
- inability to sit without support by 9 months old
- dominance of involuntary reflexes over voluntary movements
- inability to bear weight on legs and stand up by about 1 year old

Falling outside the normal range isn't always cause for concern, but it's worth getting your child evaluated.

#### Speech and language delay

The National Institute on Deafness and Other Communication Disorders Trusted Source asserts that the first three years of a person's existence are the most productive years for acquiring speech and language since this is the period when the brain is actively developing and maturing.

When a new born first demonstrates the ability to convey their needs by crying, this marks the beginning of the process of acquiring language. The majority of new-borns are able to understand the sounds of rudimentary language by the age of six months. Even if the phrases aren't understood well, children should be able to utter two or three basic words between the ages of 12 and 15 months.

By the time they are 18 months old, the vast majority of toddlers are able to utter multiple words. The majority of youngsters are able to construct simple phrases by the time they are 3 years old. There is a difference between speech delay and language delay. To produce sounds with one's voice, one must have well-coordinated muscle movement in the vocal tract, tongue, lips, and jaw.

When youngsters don't utter as many words as would be anticipated for their age, this might cause a delay in their speech development. Children are said to have a language delay if they have trouble comprehending what other people are saying or if they are unable to convey their own views. Language encompasses not just spoken communication but also gesture, signing, and written expression. When dealing with young children, differentiating between speech delay and language delay may be challenging. A kid may have an isolated speech delay if they comprehend what's going on around them and are able to communicate their wants and needs (maybe by pointing or signing), but they don't use as many words as they should.





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Due to the fact that delayed speech and language development may result from impaired hearing, a hearing test is often part of the diagnostic process. A speech-language pathologist is often recommended for children who are experiencing delays in their speech and/or language development. Intervention at an early stage may be very beneficial.

### **Autism spectrum disorder**

Autism spectrum disorder, sometimes known as ASD, is an umbrella term that refers to a group of neurodevelopmental problems. Persons with autism may have different ways of thinking, moving, communicating, and processing their senses than neurotypical people.

Autism is characterised by a discernible lag in the development of social skills and language, and it is often diagnosed in early infancy.

At each of your child's well check-ups, your child's doctor will inquire about his or her level of development. In point of fact, the American Academy of Paediatrics advises that a test for autism spectrum disorders be performed on all children at the ages of 18 and 24 months using standardised screening methods. There is a possibility that a kid won't show any symptoms until they are between the ages of 2 and 3, but the symptoms might appear at any moment. There is a wide range of signs and symptoms associated with autism spectrum disorder (ASD), but some of the more common ones include impaired speech and language abilities, as well as difficulties communicating and connecting with others.

Because of the individual nature of each person with autism, the symptoms and the ways in which individuals perceive them may vary significantly.

## Some symptoms include:

- not being responsive to their name
- dislike of cuddling or playing with others
- lack of facial expression
- inability to speak or difficulty speaking, carrying on a conversation, or remembering words and sentences
- repetitive movements
- development of specific routines
- coordination problems

There is no cure for ASD, but therapies and other approaches can help give your child extra tools to communicate, relieve stress, and, in some cases, manage daily tasks.

### Causes and chances of developmental delay

The Centers for Disease Control and Prevention report that around 17 percent of children between the ages of 3 and 17 have one or more developmental impairments. Trusted Source The majority of developmental disorders are present at the time of a child's conception, although others may manifest themselves later in life as a result of infections, injuries, or other circumstances.

It may be challenging to identify the causes of developmental delay, and a wide range of factors might be contributors to the condition. There are diseases that have their roots in genetics, such as and others. A developmental delay may also be caused by an infection or other difficulties that occur during pregnancy and delivery, as well as by preterm birth.

A number of other primary medical issues, including the following, may potentially be the underlying cause of developmental delay.





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- autism spectrum disorders (ASDs)
- cerebral palsy
- fatal alcohol spectrum disorders
- Landau Kleffner syndrome
- myopathies, including muscular dystrophies
- genetic disorders, such as Down syndrome and fragile X syndrome

Keep in mind that children mature at varying speeds, so it's likely that what you see to be a delay in your child's development can really be typical for them. However, if you are worried about your kid, it is essential to get him or her assessed by trained specialists.

Children who are of school age and have been given a diagnosis of developmental delay may be eligible for specialised treatment. The nature of these services varies depending on the specifics of the place. Find out what services are offered by speaking with both your family doctor and the school district where your child attends school. Your kid may make better academic progress and accomplish more overall if they get specialised education, particularly if they begin this kind of instruction at a younger age.

Treatments for developmental delays might vary greatly depending on the kind of delay that has been diagnosed. Physical therapy, behavioural therapy, and educational therapy are some of the therapies that may be used to assist with autism spectrum disorder (ASD) and other forms of delayed development.

In some circumstances, a doctor could recommend taking medicine. It is essential to have an examination and diagnosis from a physician in order to devise a treatment strategy that is tailored specifically to your kid.

#### Outlook

A child's development is influenced by a wide variety of genetic and environmental variables, any one of which might lead to a delay in that development. It is possible for children to experience developmental delays even when the mother has a healthy pregnancy and receives appropriate care during and after the pregnancy. Even though it might be difficult to identify the reasons of delays, there are a variety of therapies and support services that can be of assistance. If you are able to detect a delay in your child's development as soon as possible, it will be beneficial for their growth into adulthood.

#### Conclusion

A kid is said to have a developmental delay if he or she has not attained the level of developmental competence that is anticipated of them. Delays are possible in areas such as motor function, speech and language, cognitive abilities, as well as social, play, and recreational capabilities. If your child is showing signs of delays in certain fine or gross motor functions, it's worth getting them evaluated. Fine motor skills include the ability to use tiny objects, such as crayons or toys, while gross motor skills require the execution of greater motions like leaping, climbing stairs or tossing a ball. There is a difference between speech delay and language delay. To produce sounds, one must have well-coordinated muscle movement in the vocal tract, tongue, lips, and jaw. A speech-language pathologist is often recommended for children who are experiencing delays in their speech and/or language development. There is no cure for autism, but therapies and other approaches can help give your child extra tools to communicate, relieve stress, and manage daily tasks. Around 17 percent of children between the ages of 3 and 17 have one or more developmental impairments. A child's development is influenced by a wide variety of genetic and environmental variables, any one of which might lead to a

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