What is cognitive impairment?

Cognitive impairment, also referred to as intellectual disability, describes the condition of a child whose intellectual functioning level and adaptive skills are significantly below the average for a child of his chronological age. It is the most common developmental disorder, occurring in approximately 12 of every 1000 children.\(^1\) Varying levels of developmental delays may be identified in a child’s social skills, emotional development, communication capabilities, physical function, and academic skill sets.\(^2\)

The Center for Disease Control defines cognitive impairment among 8-year-old children by a score of 70 or below on an test of intellectual capability, more commonly known as an IQ test.\(^1\) Levels of cognitive impairment severity are defined by specific IQ ranges.\(^2\)

- Mild Cognitive Impairment – IQ of 50 to 70
- Moderate Cognitive Impairment – IQ of 35 to 55
- Severe Cognitive Impairment – IQ 20 to 40
- Profound Cognitive Impairment – Below 20

Cognitive impairment can be caused by a number of factors. Many instances of cognitive impairment are the result of genetic or chromosomal disorders. Cognitive impairment can also be attributed to injuries or illnesses that occur during pregnancy or early infancy. Extreme malnutrition, inadequate medical care, and exposure to environmental toxins can lead to cognitive impairments as well.\(^2\) With many possible causes, it is often difficult to cite a specific single cause of a cognitive impairment in a child.

Symptoms

Signs of cognitive impairment can be recognized as early as 2 years of age. These symptoms will occur at varying levels depending on the severity of the disorder.\(^1\)

- Delays in reaching early childhood developmental milestones
- Difficulty retaining information and learning simple routines
- Confusion and behavior problems in new situations or places
- Short attention span
- Lack of curiosity
- Difficulty understanding social rules
- Sustained infantile behavior into toddlerhood or preschool years
- Difficulty understanding consequences of actions
- Limited and/or inconsistent communication skills
- Lack of age-appropriate self-help and self-care skills
Supporting the Child’s Success

Children with a cognitive impairment can be successful in school and lead fulfilling lives. They may just need individualized help in learning new skills. Extra time, repeated instruction, and appropriate modeling will help them as they master important life skills, such as appropriate hygiene, personal safety, and social manners. In order to promote independence and developmental progress, parents and educators should be patient and give children the time they need to learn new skills.

Breaking down tasks into smaller steps can be a helpful learning tool for children with cognitive impairments. For instance, getting dressed can be broken down for the child into very small simple steps: Shirt on, buttons, pants on, zipper, button, tuck in shirt, belt, socks, etc. Walk the child through each part of the task, encouraging him to do it independently and praising at success each step. This process, referred to as task analysis, can be used to teach proper hygiene techniques, household chores, or any other skills.

Parents can also support success by staying involved in their child’s academic learning. Know the topics being taught in the classroom and find ways to integrate learning at home. For instance, when the child is learning to tell time, periodically ask them for the time. When he is learning about money, take him to grocery. Point out prices and let him help with the checkout process.

Social activities in the community can serve as a valuable learning tool as well. Children with cognitive impairment can model the behavior of their peers, improve social skills, experience new and different settings and most importantly, have fun. To support the child’s success, family members and the professionals providing services to the child should work together to understand his strengths, weaknesses, and interests.

Next Steps

Finding out that a child has a cognitive impairment can be an emotional adjustment. Parents may need time to work through feelings of grief, disappointment or anxiety. Once they have had time to adjust, parents can reach out to connect with other families of children with a cognitive impairment. They should talk to their own families and friends to explain the child’s need and gain their support. They can also begin to gather the information they will need to raise their child. Resources on specific topics such as language development, positive behavior management, early intervention and family dynamics may be especially useful. Quality educational programs, a stimulating home environment, good health care, and positive support from family, friends and the community enable people with a cognitive impairment to lead happy and fulfilling lives.

Cognitive impairment is one of the qualifying disabilities for special education and related services under the Individuals with Disabilities Act (IDEA). For children three years and older, the local educational system should be contacted for more information on eligibility and special services.
Looking to the Future

Siskin Children’s Institute is here to serve as a resource to families as they learn about their child’s diagnosis. Please contact our Outreach and Resource Center to learn more about cognitive impairment and take advantage of the resources, referrals, and training programs that we can provide to your family.

Helpful Websites

- American Association on Intellectual and Developmental Disability (www.aaidd.org)
- Centers for Disease Control (www.cdc.gov)
- The CDC publishes a series called “Learn the Signs. Act Early.” Included in this series is an Intellectual Disability Fact Sheet which includes a very brief explanation of the definition of intellectual disability and the first step to take to get help.
- KidsHealth (www.kidshealth.org)
- An easy-to-read guide to understanding intellectual disabilities can be found on this website. It focuses on the causes of intellectual disabilities and what to expect in the early years of school. The title is “What ‘Mental Retardation’ Means”.
- National Dissemination Center for Children with Disabilities (www.nichcy.org)
- The Arc (www.thearc.org)

1. Center for Disease Control
4. NICHCY (2008)