

Facts

Developmental disabilities are severe, chronic conditions that result from mental and/or physical impairment (such as mental retardation, epilepsy, autism, cerebral palsy, or some similar condition) which occur before age 22 and are likely to continue indefinitely.

The disabilities substantially limit three or more of these areas: self-care, receptive and expressive language, learning, mobility, self-direction, capacity for independent living, and economic self-sufficiency. There is a continuous need for individually planned and coordinated services.

There are nearly four million Americans with developmental disabilities. Approximately 17% of U.S. children younger than 18 years old has a developmental disability, with about 2% of school-aged children having a serious developmental disability, such as mental retardation or cerebral palsy, and needing special education services or supportive care.

Signs & Symptoms

Developmental disabilities is a broad term which includes a diverse group of physical, cognitive, psychological, sensory and speech impairments. A reliable diagnosis requires assessment by a knowledgeable physician or psychologist. The signs and symptoms of the various types of developmental disability differ greatly:

Cerebral Palsy— is a disorder of movement or coordination caused by an abnormality of the brain. About half of those with cerebral palsy must use a device to get around, such as a walker, wheel chair or braces. Almost 70% has other disabilities as well, including mental retardation. Depending on the degree of the disability, people with cerebral palsy may need specialized medical care, social or educational services, or other assistance throughout their lives, from both their families and communities.

Down syndrome— Individuals with Down syndrome are usually smaller, and their physical and mental development is slower, than children who do not have Down syndrome. Although there are distinct physical characteristics associated with Down syndrome (flattening of the back of the head, slanting eyelids, small skin folds at the inner corner of the eyes, depressed nasal bridge, slightly smaller ears, small mouth, hands and feet), not every child with Down syndrome has all the characteristics. Some may have only a few, and others may show most of them. There is also a wide variation in

mental abilities and developmental progress in children with Down syndrome. Although the majority function in the mild to moderate range of mental retardation, some children with Down syndrome are severely mentally retarded, while others are not mentally retarded at all, but function in the borderline to low average range. Motor development is slower and language development takes longer than for those without Down syndrome.

Autism has many degrees of severity. People with autism have impairments in the senses, thinking abilities, language/communication, and social interactions. Children with autism might not respond to their names, avoid looking at other people, or ignore much of what goes on around them. Unusual responses to their surroundings, including sounds, touch or other sensory stimulation, are common for individuals with autism. Many children with autism engage in repetitive movements, such as rocking, spinning, hair twirling, and finger flicking.

Causes

Several hundred causes have been discovered, but in nearly one-third of the people affected, the cause is unknown. Some of the most common causes are genetic irregularities, problems during pregnancy, at or after birth, or environmental factors.

- **Genetic irregularities**— These result from abnormal genes from parents, errors when genes combine, or from other disorders of the genes caused during pregnancy by infections, overexposure to x-rays, and other factors. More than 500 genetic diseases are associated with mental retardation. Down Syndrome is an example of a disorder which occurs sporadically and is most often due to the presence of an extra chromosome. It is a non-inherited disorder that affects physical and mental development. Tests during pregnancy can help detect the disorder. Fragile X Syndrome is a leading cause of inherited mental retardation. It involves a single gene located on the X chromosome. Genetic testing can identify people who have the syndrome and those who carry the gene, but do not have the disorder.
- **Problems during pregnancy**— Fetal Alcohol Syndrome (FAS) is the leading cause of mental retardation in the U.S. It occurs in some children whose mothers drank alcohol during pregnancy. Children with Fetal Alcohol Syndrome have physical, behavioral, and mental birth defects. Other risks include other drug use, smoking, malnutrition, certain environmental

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contaminants, and illnesses of the mother during pregnancy. Infections during pregnancy that can lead to mental retardation include cytomegalovirus (CMV), rubella, chicken pox, HIV (the virus that causes AIDS), and other sexually transmitted diseases.

- **Problems at birth**— Although any birth condition of unusual stress may injure the baby's brain, being born too soon/early and having a low birth weight lead to serious problems more often than any other conditions.
- **Problems after birth**— Childhood diseases such as whooping cough, chicken pox, measles, and Hib disease can damage the brain, as can accidents, such as a blow to the head, or nearly drowning. Lead, mercury, and other environmental toxins can cause irreparable damage to the brain and nervous system.
- **Poverty and cultural deprivation**— Children in poor families may become mentally retarded because they are not fed properly enough, disease-producing conditions, inadequate medical care and environmental health hazards. Also, children in disadvantaged areas may be deprived of many common cultural and day-to-day experiences that other children have. Current research suggests that such under-stimulation can result in irreversible damage and become a cause of mental retardation.

Treatment

Currently there is no effective treatment or cure for developmental disabilities available. Recent advances in molecular biology in the area of Down syndrome offer hope, however, that the mechanism of how genes interfere with normal developmental sequences may one day be understood, resulting in a rational approach to medical therapy.

At the same time, significant advances in research have been made in ways to prevent developmental disabilities. Early prenatal care, measures taken prior to and during pregnancy, childhood vaccinations, and newborn screenings prevent thousands of cases from developing disabilities each year. Other interventions, such as removing lead from the environment, child safety seats, bicycle helmets and early intervention programs with high-risk infants and children have shown remarkable results in lowering the number of those with developmental disabilities.

For those who have developmental disabilities, early intervention programs, preschool nurseries, and integrated special education strategies have demonstrated that youngsters with developmental disabilities can participate in many learning experiences which can positively influence their overall functioning.

Research has shown that environmental enrichment and assistance to the families will result in progress that is usually not achieved by those infants who have not had such educational and stimulating experiences. Therapies, or interventions, can also be designed to help treat symptoms in each individual.

Helping Someone with Developmental Disabilities

A network of state government, local communities, and the private sector exists to help people with developmental disabilities reach their maximum potential through increased independence, productivity, and community integration. Generally, there are five major public resources available to provide services and support to people with disabilities. These are schools, Community Mental Health Service Programs (CMHSP), the Family Independence Agency (FIA), Michigan Rehabilitation Services (MRS) within the Department of Career Development, and advocacy programs. These resources attempt to address all elements of the life cycle, including: prevention, diagnosis, early intervention, therapy, education, training, employment, community living and leisure opportunities.

Because of the importance of early intervention, parents who suspect their child has a developmental disability should seek professional help as soon as possible.

Several publications, organizations, and support groups exist to help individuals and families understand and cope with developmental disabilities. A wealth of information can be found in libraries and bookstores or by searching the internet. Good starting points include: The Arc, at www.thearc.org, or (817) 261-6003; The Arc Michigan, at www.arcim.org, or (800) 292-7851; the National Institute of Mental Health, at www.nimh.nih.gov; or, the National Information Center for Children and Youth with Disabilities, at www.nichcy.org, or 1-800-695-0285.

For people living in Crawford, Grand Traverse, Leelanau, Missaukee, Roscommon and Wexford Counties, assistance and information for people with developmental disabilities and their families is also available by calling Northern Lakes Community Mental Health, at 1-800-492-5742 or (231) 922-4850.

Sources:

The Arc Michigan

Department of Health and Human Services

Administration for Children and Families:

Administration on Developmental Disabilities

National Center on Birth Defects and Developmental Disabilities

National Institute of Neurological Disorders and Stroke

National Institutes of Health