Physical & Mobility Impairments: Information & News

Synopsis:

A physical impairment might be defined as a disabling condition or other health impairment that requires adaptation.

Definition: Defining the Meaning of Mobility Impairment

Mobility impairment is defined as a category of disability that includes people with varying types of physical disabilities. This type of disability includes upper or lower limb loss or disability, manual dexterity and disability in coordination with different organs of the body. Disability in mobility can either be a congenital or acquired with age problem. This problem could also be the consequence of disease. People who have a broken skeletal structure also fall into this category of disability.

Main Document

Physical and Mobility Impairments

A physical impairment might be defined as a disabling condition or other health impairment that requires adaptation. Persons with physical impairment disabilities often use assertive devices or mobility aids such as crutches, canes, wheelchairs and artificial limbs to obtain mobility.

The physical disability the person experiences may be either congenital, or a result of injury, muscular dystrophy, cerebral palsy, amputation, multiple sclerosis, pulmonary disease, heart disease or other reasons. Some persons may experience non-visible disabilities that may include respiratory disorders, epilepsy, or other conditions.

NANDA defines physical and mobility impairment as a limitation in independent, purposeful physical movement of the body or of one or more extremities. According to them, the alteration in the person's mobility may be either temporary, or more permanent. Most of the diseases and rehabilitative states involved in physical and mobility impairments do involve a degree of immobility. These are often associated with things such as leg fractures, strokes, morbidity obesity, trauma, and Multiple Sclerosis, for example. NANDA states that longer life expectancy among Americans will increase the incidence of disease and disability in America. Shorter hospital stays are finding more people being transferred to rehabilitation facilities, or simply sent to their homes for physical therapy.

Mobility is related to changes in a person's body as they age as well. Loss in muscle strength and mass, less mobile and stiffer joints, as well as gait changes affect a person's balance and may significantly comprise their mobility. Mobility is crucial to the maintenance of independent living among Seniors. If a person's mobility is restricted, it may affect their activities of daily living.

Mobility Impairments Include: Cerebral Palsy

The term, 'Cerebral Palsy,' is used to describe a group of chronic conditions which affect body movements and...
muscle coordination in persons affected with the disorder. Cerebral Palsy causes damage to one or more particular areas of the person's brain, and usually occurs during fetal development or before, during, or shortly after birth; although the damage may be done during infancy. Cerebral Palsy disorders are not caused by problems in the person's nerves or muscles. Faults in the development or damage to motor areas in the person's brain disrupt their brain's ability to control posture and movement. Cerebral Palsy is not progressive, although secondary conditions like muscle spasticity may develop that can worsen or improve over time, or may remain the same. Cerebral Palsy is not a communicable disease. Cerebral Palsy is not curable, but therapy and training may help to improve function.

Spina Bifida

Spina Bifida is a form of neural tube defect. Neural tube defects involve incomplete development of the brain, spinal cord, and/or their protective coverings, which are caused by the failure of the fetus' spine to close properly during the first month of pregnancy. Children who are born with Spina Bifida may have an open lesion on their spine where notable damage to their nerves and spinal cord has happened. The nerve damage is permanent, although the opening in the spine can be surgically repaired. The damage to the child's nerves may result in various degrees of paralysis in their lower limbs. In cases where there is no lesion present there is still the potential for the presence of improperly formed or missing vertebrae, as well as nerve damage. Persons with Spina Bifida often experience a form of learning disability in conjunction with physical and mobility disability. There is currently no cure for Spina Bifida; the nerve tissue can neither be repaired nor replaced. Treatment for Spina Bifida may involve surgery, physiotherapy, and medication. Many persons with Spina Bifida use assistive devices including braces, crutches, or wheelchairs.

Muscular Dystrophy

'Muscular Dystrophy,' describes a group of genetic diseases which are characterized by progressive weakness and degeneration of the person's skeletal or voluntary muscles used to control movement. Heart muscles, as well as some additional, involuntary muscles, are affected by some forms of Muscular Dystrophy. Some forms of Muscular Dystrophy affect a person's organs as well. Duchenne is the form of Muscular Dystrophy that affects children most commonly; Myotonic Muscular Dystrophy is the most common form of the disease affecting adult populations. There are some forms of Muscular Dystrophy that appear in infancy or childhood, while other forms may not appear until a person reaches middle age or older. Muscular Dystrophy has the potential to affect persons of any age group. There is no specific treatment for any form of Muscular Dystrophy. Both Physical therapy and corrective orthopedic surgery may improve a person's quality of life.

Heart Defects

During early pregnancy, as the heart begins to form, a heart defect may develop as well. These defects might affect the function and mechanics of a person's heart. Some of the children who develop heart defects show symptoms of them promptly after being born. Others do not show any symptoms until early childhood. Some heart defects prevent the person's heart from pumping adequate amounts of blood to their lungs or additional parts of their body, potentially leading to heart failure. Other heart defects may cause the person's skin to turn a pale gray or blue in color soon after they are born, or during their infancy; a condition referred to as, 'Cyanosis.' The cause of congenital heart defects is not clear.

There are some environmental factors that are known to contribute to the formation of congenital heart defects,
such as viral infections that are contracted by the mother during the early stages of pregnancy. Some medications, taken by the mother during pregnancy, may also cause congenital heart defects in children. Some of the medications that are associated with congenital heart defects in children include Accutane, certain anti-seizure medications, Lithium, Trimethoprim, and Folic Acid.

**The characteristics of physical and mobility impairments involve many different things.**

Persons with physical and mobility impairments may experience deficits in motor and/or fine motor functioning, locomotor and non-locomotor functioning. There is the potential for deficits in cognitive, social, and adaptive behavior skills, as well as impairments in language, vision, hearing or other sensory areas. Persons with physical and mobility impairments may experience stiffness and/or spasticity, as well as loss of muscle strength. They may need help with learning, or activities of daily living.

Persons with physical and mobility impairments may need assistance with mobility, transfers, and ambulation. They may have a limited range of motion, and be reluctant to attempt movement, or experience a perceptual or cognitive impairment. They may experience pain, discomfort; depression or anxiety. Persons with these impairments may require prolonged bed rest, and have medical restrictions. They may have musculoskeletal or neuromuscular impairments as well.

Facts: Mobility Impairments & Students

Mobility impairments can impact students in several ways. Some students may take longer to get from one class to another, enter buildings, or maneuver in small spaces. In some cases physical barriers may inhibit entry into a building or room. Accessible transportation may also be required for students to get to fieldwork sites. Mobility impairments can be permanent or temporary. A broken bone or surgical procedure can temporarily impact a student's ability to walk independently and travel between classroom buildings in a timely manner. Likewise, some students may be ambulatory with a walker for short distances within a classroom, but may need a wheelchair or scooter for longer distances.

Statistics: U.S. Physical Impairment

Non-institutionalized adults 18 years and older: Difficulties in physical functioning:

- Number of adults unable (or very difficult) to walk a quarter mile: 17.2 million
- Percent of adults unable (or very difficult) to walk a quarter mile: 7.3%
- Number of adults with any physical functioning difficulty: 35.2 million
- Percent of adults with any physical functioning difficulty: 15.0%

Non-institutionalized adults 18 years and older: Basic or complex activity limitations:

- Number of adults with at least one basic actions difficulty or complex activity limitation: 73.5 million (2012)
- Percent of adults with at least one basic actions difficulty or complex activity limitation: 31.9% (2012)

Non-institutionalized adults 65 years and older: Need help with personal care:

- Percent of adults 65-74 years who need help with personal care from other persons: 3.3%
- Percent of adults 75 years and over who need help with personal care from other persons: 10.5%