

# *TYPES OF DISABILITIES-PHYSICAL DISABILITY*



*Prin.Dr.Chandrakant Borse*

*M.V.P.Samaj's Adv.V.G.Hande College of Education,Nashik*



## *What is a Physical Disability?*



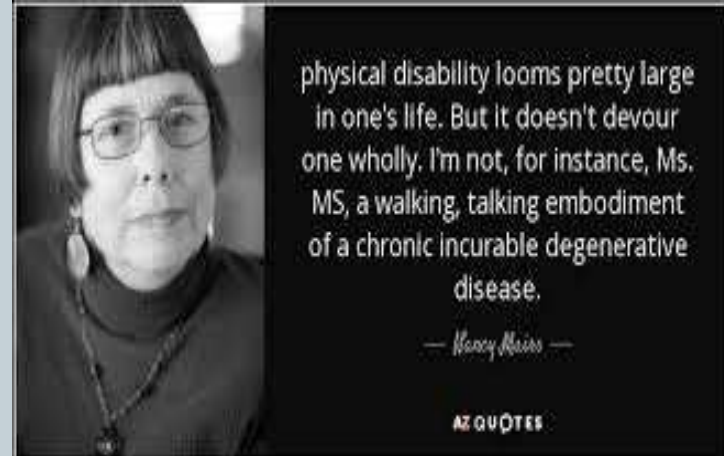
- Simply stated, a physical disability is any type of physical condition that significantly impacts one or more major life activities. That is a pretty broad definition, but the types of physical disabilities, their causes, and the manner in which they impact a person's life are wide-ranging and virtually limitless. Simply stated, a physical disability is any type of physical condition that significantly impacts one or more major life activities. That is a pretty broad definition, but the types of physical disabilities, their causes, and the manner in which they impact a person's life are wide-ranging and virtually limitless.



## *Physical disability*



*A physical disability is a limitation on a person's physical functioning, mobility, dexterity or stamina. Other physical disabilities include impairments which limit other facets of daily living, such as respiratory disorders, blindness, epilepsy and sleep disorders.*



physical disability looms pretty large in one's life. But it doesn't devour one wholly. I'm not, for instance, Ms. MS, a walking, talking embodiment of a chronic incurable degenerative disease.

— Nancy Sorensen —

AZ QUOTES

## *Orthopaedic impairments*



- **Orthopaedic impairments** can dramatically affect quality of life, and even shorten the life span if left untreated. With impaired mobility, affected people may not be able to sit, walk or handle things on their own. Where orthopaedic impairment is already established, physiotherapy, orthopaedic surgery, and providing impaired persons with mobility aids (e.g. braces, walking splints, orthopaedic shoes, and wheelchairs) can greatly improve quality of life.

**Orthopedic Impairment**

- (B) Orthopedic impairment means a severe orthopedic impairment that adversely affects a child's educational performance. The term includes impairments caused by a congenital anomaly, impairments caused by disease (e.g., poliomyelitis, bone tuberculosis), and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns that cause contractures).

© 2014 by Pearson Education, Inc.



## *Cerebral Palsy*



- Cerebral Palsy is considered a neurological disorder caused by a non-progressive brain injury or malformation that occurs while the child's brain is under development. Cerebral Palsy primarily affects body movement and muscle coordination. Though Cerebral Palsy can be defined, having Cerebral Palsy does not define the person that has the condition.



## *Definition of Cerebral Palsy*



- *While Cerebral Palsy (pronounced seh-ree-brel pawl-zee) is a blanket term commonly referred to as “CP” and described by loss or impairment of motor function, Cerebral Palsy is actually caused by brain damage. The brain damage is caused by brain injury or abnormal development of the brain that occurs while a child’s brain is still developing — before birth, during birth, or immediately after birth.*
- *Cerebral Palsy affects body movement, muscle control, muscle coordination, muscle tone, reflex, posture and balance. It can also impact fine motor skills, gross motor skills and oral motor functioning.*

## *What is Cerebral Palsy?*



- Cerebral Palsy is the result of a brain injury or a brain malformation. Individuals with Cerebral Palsy were most likely born with the condition, although some acquire it later.
- It was once thought that Cerebral Palsy was caused by complications during the birthing process. While this does happen, it is now widely agreed that birthing complications account for only a small percentage, an estimated 10 percent, of Cerebral Palsy cases.
- Current research suggests the majority of Cerebral Palsy cases result from abnormal brain development or brain injury prior to birth or during labor and delivery. Accidents, abuse, medical malpractice, negligence, infections, and injury are some known risk factors that may lead to Cerebral Palsy.



# *Types of Cerebral Palsy*



## *1. Spastic cerebral palsy*

- Spastic cerebral palsy is the most common type.
- A person with spastic CP develops tight muscles in some parts of the body that are unable to relax. Affected joints become stiff and hard to move. Usually, a person has problems controlling movements, poor coordination and balance, and difficulty talking and eating.
- In cerebral palsy, spasticity is due to damage to the motor cortex of the brain before, during or after birth.

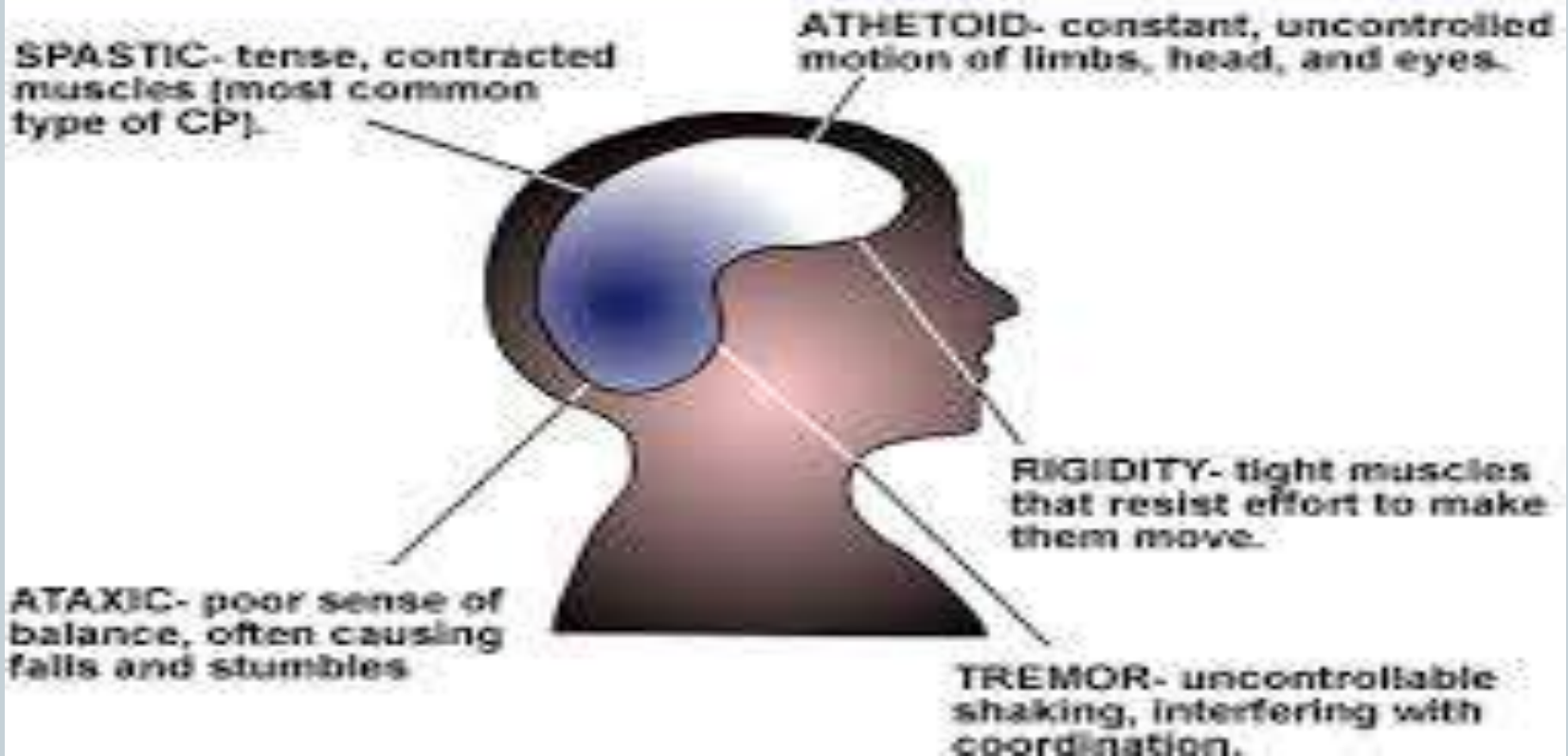




## *Types of Cerebral Palsy*



### **TYPES OF CEREBRAL PALSY**



Contd...



## ***2. Nonspastic (extrapyramidal) cerebral palsy***

- The nonspastic forms of cerebral palsy include dyskinetic cerebral palsy (subdivided into athetoid and dystonic forms) and ataxic cerebral palsy.
- \*Non-spastic cerebral palsy (CP), known by its medical name extrapyramidal, is a form of CP marked by weakened and unstable muscle tone as well as sudden, jerky movements, and variations of muscle tone, ranging from stiff to loose. There are two major types of non-spastic CP, divided into sub-categories depending on the symptoms and the severity of the disorder. All forms of non-spastic CP account for 20% of the CP cases in the United States.



Contd...



### *3. Dyskinetic cerebral palsy*

- Dyskinetic cerebral palsy is associated with muscle tone that fluctuates between being loose and tight. In some cases, rapid and jerky or uncontrolled slow continuous movements occur involuntarily. These movements most often affect the face and neck, hands, feet, arms, legs, and sometimes the torso.



Contd...



#### ***4. Ataxic cerebral palsy***

- Ataxic cerebral palsy is the rarest type of cerebral palsy and involves the entire body. Abnormal body movements affect the trunk, hands, arms, and legs. Ataxic CP causes problems with:  
Balance.
- Precise movements. For example, the person may reach too far or too close to touch objects and may also have poor hand control (intention tremor).



Contd...



## ***5. Mixed cerebral palsy***

- Some children have symptoms of more than one type of cerebral palsy. For example, spastic legs (symptoms of spastic diplegic CP) and problems with facial muscle control (symptoms of dyskinetic CP) may both develop.
- Total body cerebral palsy affects the entire body to some degree. Complications of cerebral palsy and other medical problems are more likely to develop when the entire body is involved rather than isolated parts. Total body cerebral palsy may include any of the following.....

## *Several types of cerebral palsy*



- **Spastic cerebral palsy**

- **Spastic hemiplegia**

- A child with spastic hemiplegia will typically have spasticity (muscle stiffness) on one side of the body - usually just a hand and arm, but may also involve a leg. The side that is affected may not develop properly. The child may have speech problems. In the majority of cases intelligence is not affected. Some children will have seizures.

- **Spastic diplegia**

- The lower limbs are affected, and there is no or little upper body spasticity. The child's leg and hip muscles are tight. Legs cross at the knees, making walking more difficult. The crossing of the legs when the child is upright is often referred to as scissoring.

Contd..



- **Spastic quadriplegia**

The child's legs, arms, and body are affected. This is the severest form of spastic cerebral palsy. Children with this kind of cerebral palsy are more likely to have mental retardation. Walking and talking will be difficult. Some children have seizures.

- **Ataxic cerebral palsy**

The child's balance and depth perception are affected. Depth perception refers to a person's ability to judge where objects are in relation to where he/she is. It is the least diagnosed type of cerebral palsy. The child will find it difficult to tie his/her shoelaces, button up shirts, cut with scissors, and other fine motor skills. Because of balance difficulties, the child may walk with the feet far apart. There may be *intention tremors* - a shaking that starts with a voluntary movement, such as reaching out for a toy, the closer he/she gets to the toy the worse the tremors become. Most children with ataxic cerebral palsy are of normal intelligence and have good communication skills. Some may have erratic speech.

Contd..



**\*Athetoid or dyskinetic (or athetoid dyskinetic) cerebral palsy**

This is the second most common type of cerebral palsy. Intelligence will nearly always be normal, but the whole body will be affected by muscle problems. Muscle tone is weak or tight - causing random and uncontrolled body movements. The child will have problems walking, sitting, maintaining posture, and speaking clearly (tongue and vocal cords are hard to control). Some children drool if they have problems controlling facial muscles.

**\*Hypotonic cerebral palsy**

Muscle problems will appear much earlier. The baby's head is floppy, and he/she cannot control the head when sitting up. Some parents have described their child's movements as similar to that of a rag doll. The baby gives only a moderate amount of resistance when an adult tries to move their limbs. The baby may rest with his/her elbows and knees loosely extended, compared to other infants whose elbows/knees will be flexed. Some babies may have breathing difficulties

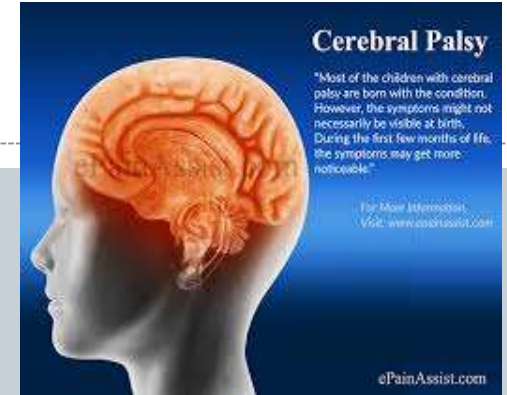


# Causes of Cyrebral Palsy



- **Brain development** begins shortly after conception. A relatively small number of cells divide and multiply into billions of cells. A small strip of tissue rolls into a neural tube. One end develops into the brain, the other into the spinal cord. Throughout, different types of cells form, group, and migrate to form various regions of the brain. The brain is considered fully developed two to five years after birth.
- **Brain defects** are irregularities in the brain structure that typically cause impairment. Defects can occur from malformation, injury, or disease. The degree of impairment often is linked to the severity of damage. A brain sometimes compensates for defects, in essence, by “rewiring” to bypass or compensate for damaged areas. For this reason, beginning treatment as early as possible is typically recommended.
- **Brain malformations** are defects that occur through abnormal development of the brain. Although defects can occur anytime during fetal development, the first 20 weeks are most vulnerable; any malformation that occurs while the neural tube is forming can have permanent consequences. Brain malformations may result in undeveloped areas, abnormal growth, or improper brain division into hemispheres and lobes.
- **Brain lesions** are defects that occur from injury or disease. Causes during fetal development can include bleeding in the brain, infections, toxins, asphyxia, and many others. Lesions typically result from an incident or event that causes brain tissue death. Holes, which often fill with liquid, are left behind to form cysts.

# Causes of cyrebral palsy



- premature birth (less than 37 weeks)
- low birth weight (small for gestational age)
- blood clotting problems (thrombophilia)
- an inability of the placenta to provide the developing feotus with oxygen and nutrients
- RH or A-B-O blood type incompatibility between mother and baby
- infection of the mother with German measles or other viral diseases in early pregnancy
- bacterial infection of the mother, foetus or baby that directly or indirectly attacks the infant's central nervous system
- prolonged loss of oxygen during the pregnancy or birthing process, or severe jaundice shortly after birth.

# The impact of physical disability on learning



Students may be affected in the following ways:

- When there is limited time to move between venues, students may miss the beginning of a class.
- Fatigue is common for many of these students. Using facilities that others take for granted, such as toilets, food-outlets, libraries and lecture rooms, may be a major undertaking.
- Some students may experience functional difficulties: an inability to write using a pen; reduced writing speed; involuntary head movements which affect the ability to read standard-sized print; and reduced ability to manipulate resources in the learning environment. They may have difficulty turning pages or using standard computers.
- Students may have frequent or unexpected absences from class owing to hospitalisation or changes in their rehabilitation or treatment procedure. Earlier periods of hospitalisation may have meant gaps in schooling.
- Students with a long-standing mobility disability may have experienced gaps in their schooling due to periods of hospitalisation. This may have affected their confidence in learning.
- Students with a mobility impairment may have fewer opportunities for interaction with other students. Feelings of separateness in the learning environment may have an impact on learning.

# THANKS



#3

CP is caused by damage to the part of your *Brain* that controls your muscles

