



Ashtavakra Institute of Rehabilitation Sciences & Research

Formerly Special Art School

App. by Rehabilitation Council of India, Ministry of Social Justice & Empowerment, Govt. of India
Affiliated to GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY
PSP, Institutional Area, Madhuban Chowk, Rohini Delhi-85, Ph : 011-27550012/13
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Dated 12/3/2022

Ref. No. AIRSR/2021-22/3601

Circular

All the students are hereby informed that Special Webinars are organized on Disability *Specialization* by experts from 15th March to 24th March 2022 from 10:00AM onwards.

It is mandatory for all the students to attend.

Mrs. Sarita M. Rastogi
Deputy Director



12/3/2022

- Copy to :
1. Dean Academics.
 2. All Coordinator's & Class Incharges (VI/HI/CP/DB/IDD/MD)
 3. Student Welfare Dept.
 4. IT Department for website updation




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Webinar on Cerebral Palsy

ASHTAVAKRA
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Affiliated to Guru Gobind Singh Indraprastha University, Delhi
A Rated ISO 9001:2000 Certified Institute


Webinar on Cerebral Palsy
Speakers



Ms. Gangotri
Asst. Prof.,
HoD CP, AIRSR
Topic: Introduction of Cerebral Palsy



Mr. Sumit
Asst. Prof. CP,
AIRSR
Topic: Management of Cerebral Palsy



Ms. Geeta Verma
Asst. Prof. CP,
AIRSR
Topic: Locomotor Disabilities

Date: 16th March, 2022
Timing : 10:00 AM To 12:30 PM
Join Us: <https://bit.ly/3JfFXYW>

Event: Webinar on Cerebral Palsy
Date: 16th March 2022
Time: 10:00 AM to 12:30 PM
Venue: Microsoft Teams App

Objective:-

- To create awareness about Cerebral Palsy
- To develop the positive attitude towards the Children with Special Needs

Report

The webinar started with an opening remarks presented by Ms. Gangotri, HOD, Cerebral Palsy Department.

Webinar Session No.1:-

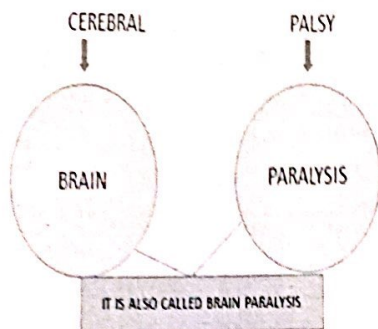
Ms. Gangotri delivered a very informative lecture on "Cerebral Palsy". Some highlights of her presentation were:

- Definition of cerebral palsy
- Causes of cerebral palsy.
- Sign and symptoms of cerebral palsy.
- Classification and types of cerebral palsy.



Cerebral Palsy

The term cerebral palsy divided into two parts :



Definition of Cerebral Palsy

Cerebral Palsy is a collection of motor disorders resulting from damage to the brain that occurs before, during or after birth. The damage to the Child's brain affects the motor system, and as a result the child has poor coordination, poor balance, movement patterns or a combination of these characteristics. Cerebral Palsy (CP) is a **static** disorder of the brain, not a progressive disorder. This means that the disorder or disease process will not get worse as time goes on.

Causes of Cerebral Palsy

PRE-NATAL CAUSES:

- > A viral infection during pregnancy, such as Cytomegalovirus.
- > Abnormal development of the brain during the first trimester of pregnancy.
- > A chromosomal (Genetic) defect.
- > Premature birth of the child.
- > Use of harmful medicines during pregnancy.
- > If mother takes alcohol or any other drug.



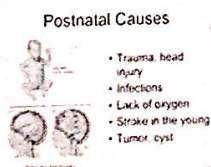
NATAL CAUSES:

- > Low birth weight of the child.
- > Lack of oxygen.
- > Untrained Doctor or Nurses.
- > Labour pain for long duration.
- > A child must cry soon after birth. Delayed birth cry may cause Cerebral palsy.
- > If the birth weight of the baby is below normal (less than 2500 gm) and seen to have any development delay, he may be affected by a Cerebral Palsy.



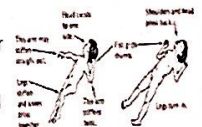
POST-NATAL CAUSES:

- > Malnutrition.
- > Head trauma from shaken baby syndrome (Child Abuse) during the first year of life.
- > Lack of vaccination
- > Accidentally



SIGN & SYMPTOMS OF CEREBRAL PALSY

- > delays in reaching motor skill milestones, such as rolling over, sitting up alone, or crawling
- > variations in muscle tone, such as being too floppy or too stiff
- > difficulty walking
- > neurological problems, such as seizures, fits, epileptic attack.
- > Feeding or swallowing difficulties
- > Child has difficulty bringing his or her hand together
- > Child does not roll over in either direction
- > Hand to mouth coordination is difficult for the child



MANAGEMENTS TECHNIQUES FOR CHILDREN WITH CEREBRAL PALSY

- > Physical therapy and occupational therapy.
- > Casts, splints and muscle strengthening.
- > Speech pathology.
- > Cognitive-behavioral therapy.
- > Special Education.
- > Inclusive Education.
- > Assistive and Adaptive Devices.
- > Orthosis & Prosthetics (Eg. Kafo, Afo, Hkafo etc.)
- > Individual and Family Counselling.
- > Medications.



Some other Specific Management Techniques

Body structure and functions intervention:

- > Stretch Intervention.
- Casting
- Splinting
- > Strengthening Intervention.
- > Electrical Stimulation.
- > Medical Intervention and Medications.
- Deep Brain Stimulation (DBS)
- Medications.
- Alcohol Injection



NUTRITIONAL INTERVENTION:

- > Oral Nutritional Support.
- > Eterna! Feeding.



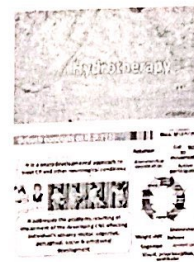
ACTIVITY AND PARTICIPATION INTERVENTION:

- > Upper Limb Specific Intervention.
- > Lower Limb Specific Intervention.
- > Speech/Language and Oral Motor Intervention.
- > Goal directed Therapy and Functional Therapy.
- > Fitness Training.



ADJUNCT THERAPIES/INTERVENTION ACCESSED BY CHILDREN WITH CEREBRAL PALSY:

- > Bio-feedback.
- > Hydrotherapy.
- > Hyper-baric Oxygen Therapy.
- > Massage.
- > Neurodevelopmental Therapy.
- > Sensory Integration.
- > Suit Therapy.
- > Play Therapy.



Webinar Session No.2:-

Mr. Sumit, Faculty, CP Department shared a very valuable information regarding "Management of Cerebral Palsy". Some highlights of his presentation were:

- Assistive technology for children with cerebral palsy.
- Therapeutic intervention for children with special needs.
- Adaptation and accommodation for children with physical limitation.
- Barrier free environment.
- Use of ICT.

ACCESS AND A BARRIER-FREE ENVIRONMENT

1. To ensure barrier free environment for children with disability we must consider the following factors:

- For children who are on a wheelchair
- Who use a rollator or walker
- Crutches or walking sticks of various types.

2. Access for getting in and out of the school.

3. Getting on and off transportation (ramp, seat belts)
4. Moving within the school and in different class rooms
5. Going to toilet and play ground
6. Eating and drinking
7. Furniture
8. Creating a supportive environment in the school by changing attitude of other students, teachers and other staff who are in contact with children with disability.



Different ways to create above Accessible and barrier free environment

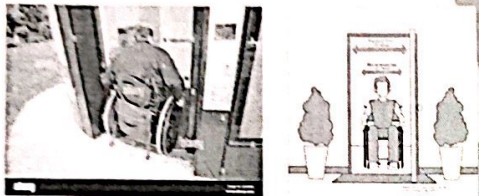
► Ensuring ramps of suitable gradients



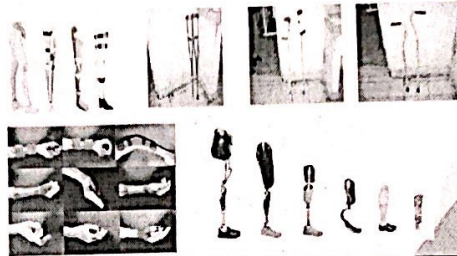
► Providing suitable graded steps with convenient handrails in the corridors, passageways to assist in continuous movement.



► Wide doors and enough space inside the bathroom for easy access for wheelchair users clearly marked.



► Teaching simple skills to all staff and peer groups for helping children with disability in proper use of crutches and orthosis (assistive devices) and prosthesis (artificial limbs) if any.



► Teaching staff and students about wheelchair transfers, pushing, locking and unlocking with a positive attitude.



► Ensuring unobstructed flooring including slip resistant corridors and an accessible playground for all children who are using assistive devices.



► Providing appropriate furniture for individuals.



1. Floor Seat

A floor seat is a simple seat that is suitable for children and families who sit on the floor at home or for classroom activities in junior classes, such as eating and playing. It is most suitable for small or young children. The floor seat gives support at the back and sides. If the head is not steady, it can be made higher at the back to give the child support at the back of his head.



2. Box Seat

The same type of seat as the floor seat can be made at a higher level for the child who does not sit on the floor. The measurements for the height of the seat from the floor should then be included.



If you want to move the child around in the box seat, castors can be attached to the bottom of the seat so that it moves easily.



3. Potty Chair

If the child cannot sit or has unsteady sitting balance, it is often very difficult for him to use the toilet whether it is western or Indian style. It is also useful for children who are not toilet trained and need to be taken to the toilet very regularly.



4. Ramped Seat

Children who tend to slip forward on the seat often benefit if a ramp is fitted to the seat to prevent slipping. It is more comfortable than a pommel and often adequate to keep the child in place. If the child still slips forward even with the ramp, then a pommel may be required.



5. Pelvic Strap

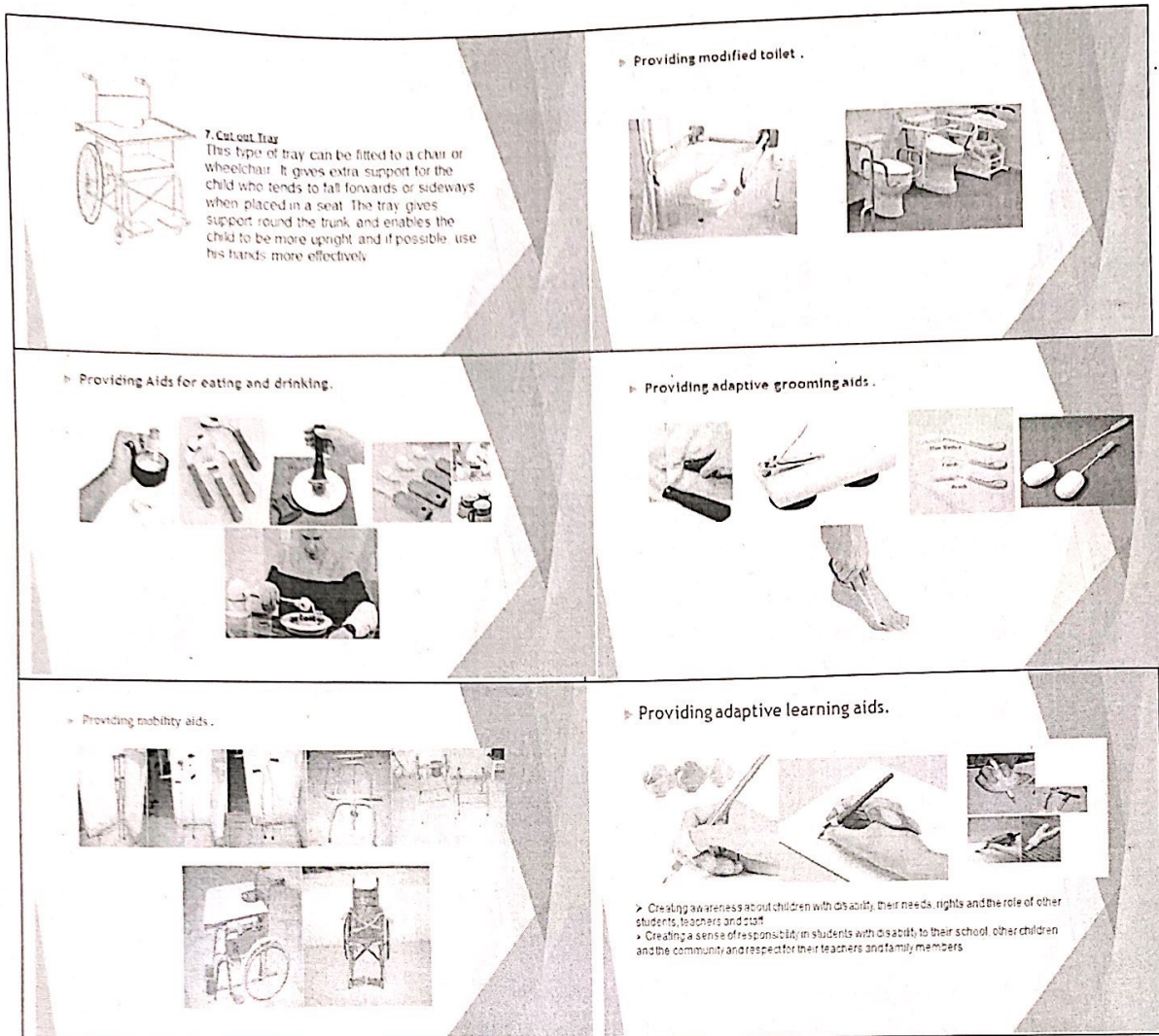
A pelvic strap gives added support and stability for children who tend to slip forward in the seat. It is also a safety factor, as the child cannot fall out of the seat if left alone. The pelvic strap is always fixed at the back and below the level of the seat so that it comes upwards and around the waist.



6. Floor Table

This type of table is very useful for children who sit on the floor. It is simple to make and does not take up too much space. If children have difficulty in sitting, it gives a support in front on which they can lean. They will be able to use their hands more effectively.

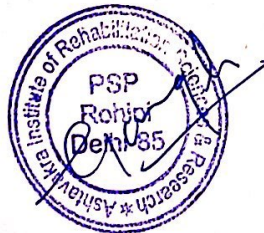




Webinar Session No.2:-

Ms. Geeta Verma, Faculty, CP Department shared a brief information regarding "Locomotor Disabilities". Some highlights of her presentation were:

- Definition of Locomotor Disabilities.
- Types of Locomotor Disabilities.
- Sign and symptoms of Locomotor Disabilities.
- Causes of Locomotor Disabilities.
- Management of Locomotor Disabilities.



DEFINITION

- A person's inability to execute distinctive activities associated with moving, both personally and objects, from place to place, and such inability resulting from afflictions of musculoskeletal and, or nervous system, has been defined as the locomotor disability. (acc. to RCI)



MEANING

- Locomotor disability affects the body structure resulting the limitation of motor activities. It is a problem related to body and health, so that general mutual activity in society decreases and special survival programme is required by society.

CAUSES



- Chronic diseases such as diabetes, cardiovascular disease, arthritis and cancer cause the majority of long-term disabilities.
- Lifestyle choices and personal behaviour such as obesity, physical inactivity, tobacco use, alcohol consumption, illicit drugs that lead to non communicable diseases are also becoming major contributing factors.
- Air pollution, occupational disease, poor water supply, sanitation, and personal and domestic hygiene, malnutrition also contribute for disability.

- (Infectious diseases) such as tuberculosis, hiv/aids, and other sexually transmitted diseases; neurological consequences of some diseases such as encephalitis, meningitis, and childhood cluster diseases (such as measles, mumps, and poliomyelitis) contribute to disability.
- Injuries due to road traffic accidents, occupational injury, violence, conflicts, falls and landmines have long been recognized as contributors to disability

SYMPTOMS



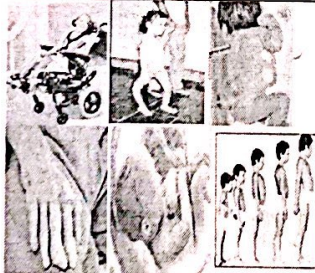
- Delays in reaching motor skills milestones, such as pushing up on arms, sitting up alone or crawling.
- Favouring one side of the body, such as reaching with only one hand or dragging a leg while crawling.
- Difficulty walking, such as walking on toes, a crouched gait, a scissors-like gait with knees crossing, a wide gait or an asymmetrical gait.
- Excessive drooling or problems with swallowing.

- Difficulty with sucking or eating.
- Delays in speech development or difficulty speaking.
- Difficulty with precise motions, such as picking up a crayon or spoon.
- Seizures.
- Tremors or involuntary movements.



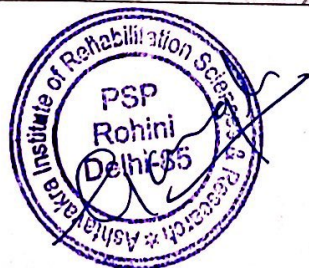
TYPES

- Cerebral Palsy
- Poliomyelitis
- Spina Bifida
- Leprosy Cured Person
- Undeveloped Organ
- Muscular Dystrophy
- Congenital Anamolies



(A) CEREBRAL PALSY

- "Cerebral palsy" means a group of non-progressive neurological condition affecting body movements and muscle coordination, caused by damage to one or more specific areas of the brain, usually occurring before, during or shortly after birth.



(B) POLYOMYELITIS

• Poliomyelitis is an acute infective disease caused by the poliovirus. Poliovirus enters the human body through the mouth and alimentary tract. Poliovirus selectively damages some special areas in the nervous system, the most commonly affected area being the anterior horn of the spinal cord. There is no sensory involvement. Poliomyelitis occurs mostly in, young children. It is uncommon in adolescents and adults. The clinical picture ranges from inapparent illness to extensive paralysis of the muscles, respiratory failure and even death.



(C) SPINA BIFIDA

• Spina bifida is a birth defect that occurs when the spine and spinal cord don't form properly. It falls under the broader category of neural tube defects. The neural tube is the embryonic structure that eventually develops into the baby's brain and spinal cord and the tissues that enclose them. The neural tube forms early in pregnancy, and it closes by the 28th day after conception. In babies with spina bifida, a portion of the neural tube fails to develop or close properly, causing defects in the spinal cord and in the bones of the spine.



(D) LEPROSY CURED PERSON

- "Leprosy cured person" means a person who has been cured of leprosy but is suffering from—
- (i) loss of sensation in hands or feet as well as loss of sensation and paresis in the eye and eye-lid but with no manifest deformity;
- (ii) manifest deformity and paresis but having sufficient mobility in their hands and feet to enable them to engage in normal economic activity s



(E) UNDEVELOPED ORGANS

- In some children undeveloped organ are found at birth which is known as focomalia. The development of legs and arms stop in this condition, in such children special type of aids are required for the proper functioning of the upper body.

(F) MUSCULAR DYSTROPHY

• The Muscular Dystrophies are a Heterogeneous group of Inherited disorders with gradual degeneration of the Muscle Fibbers. MD is a progressive condition, which means it gets worse over time. It often begins by affecting a particular group of muscles, before affecting the muscles more widely. MD is caused by changes (Mutations) in the genes responsible for the structure and functioning of a person's muscles



(G) CONGENITAL ANOMOLIES

- Congenital anomalies are also known as birth defects, congenital disorders or congenital malformations. Congenital anomalies can be defined as structural or functional anomalies (for example, metabolic disorders) that occur during intrauterine life and can be identified prenatally, at birth, or sometimes may only be detected later in infancy, such as hearing defects.



DEFORMITY DUE TO INJURY

- Due to injury of any organ or due to an accident, the hands or legs either become twisted or stop functioning. But severe deformations normally caused due to injury of the spinal cord. There can be two types of injury to the spinal cord.
- 1) Complete injury
 - 2) Partial injury

Learning Outcome

- The students learned about Cerebral Palsy.
- The Students developed positive attitude towards Children with Special Needs (Divyangjan)
- The student gained knowledge regarding management of cerebral palsy students in an inclusive setup.
- The students gained insights into ICT tools available for educating students of special needs.





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LIST OF BENEFICIARIES

S.No.	Enrollment No.	Name of the Participants
1	URMI AGRAWAL	00352312520
2	DEEPIKA	01252312520
3	RUHI	01952312520
4	BHAWNA	01152312520
5	ANKUR BHARDWAJ	00652312520
6	AASHIMA AGARWAL	00852312520
7	HIMANSHI DHINGRA	01852312520
8	ANKIT CHHIKARA	00152312520
9	NIKITA ARORA	00952312520
10	TANNU MALIK	01452312520
11	PARUL JINDAL	00552312520
12	UMA KUMARI	01352312520
13	SAKSHI	00452312520
14	MANASVI	00252312520
15	MUSKAN RANA	01752312520
16	MANISHA	02352312520
17	HIMANI BENIWAL	01552312520
18	MINKU	02252312520
19	AASHIMA NANDA	01052312520
20	INDU NIGAM	02052312520
21	SHIVANI	35252312520
22	VANDANA SHARMA	35152312520
23	SANCHITA KHANNA	01652312520
24	SHRISHTI SINGHAL	00352312420
25	VANSHIKA	01052312420
26	MANISHA TIWARI	00452312420
27	MONIKA SHARMA	01252312420
28	JYOTI NAHARIA	00652312420
29	SONALI SWAROOP	00152312420
30	HIMANI SHARMA	00752312420
31	ABHISHEK RAGHAV	01152312420
32	SAKSHI JOSHI	00552312420
33	NAMAN KUMAR	00252312420
34	MANMEET KAUR SETHI	01352312420
35	SAFEZ MALIK	00852312420
36	SANJAY	01552312420
37	SUMIT	01852312420
38	AAKANSHA SINGH	02152312420
39	MUSKAN WADHWA	02252312420





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40	KIRAN KUMARI	01652312420
41	SALONI	01952312420
42	DIVYA GUPTA	01752312420
43	LAKSHMI HARIKA AKEY	00952312420
44	SANA	02052312420
45	SHELIKA MADAN	01452312420
46	NITI MEHRA	35252312420
47	POOJA KUMARI	01052312220
48	TANU	01452312220
49	KHUSHALI	01552312220
50	PRATIBHA	01652312220
51	VARSHA MEENA	00352312220
52	PRIYANKA SHARMA	00952312220
53	VIBHA GUPTA	00552312220
54	TEENA KHANNA	00152312220
55	KOMAL SHARMA	00252312220
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58	MEGHA BISHT	01252312220
59	NIRUKTA TRIPATHI	00452312220
60	BHAVIKA	01152312220
61	SHIVANI YADAV	00752312220
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63	SAKSHI YADAV	01952312220
64	KAJAL RATHEE	35152312220
65	KAVITA	35252312220
66	SHELLY JAIN	02052312220
67	VIKAS KUMAR	00352312621
68	MOHIT MANN	01052312621
69	POOJA	00152312621
70	NITESH	01352312621
71	MONIKA SHARMA	00952312621
72	POOJA BHASIN	00752312621
73	ASMA ANJUM	00652312621
74	NEHA KUMARI	01152312621
75	PARUL MAHESHWARI	00552312621
76	AYUSH SHARMA	00252312621
77	KESHIKA GUPTA	00452312621
78	ANJALI KUMARI	00852312621
79	ALSABA	01252312621
80	PREETI	35152312621

