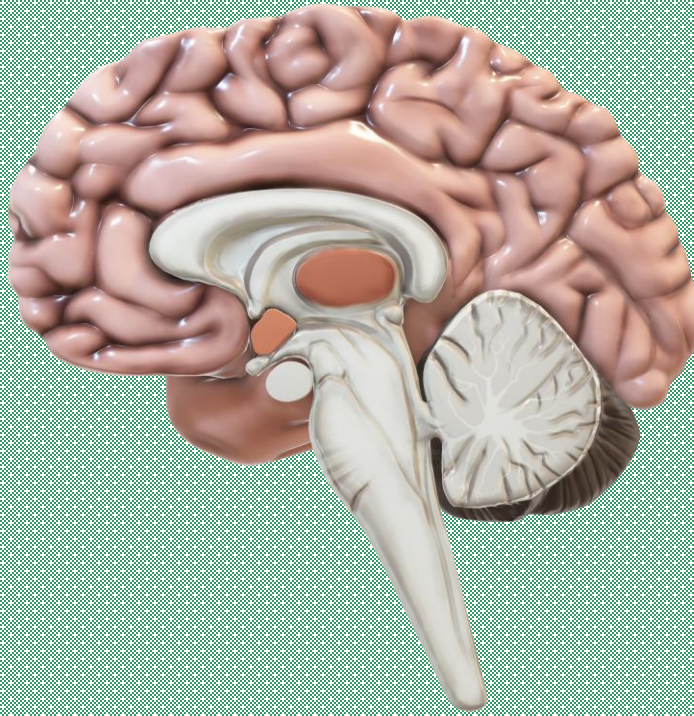
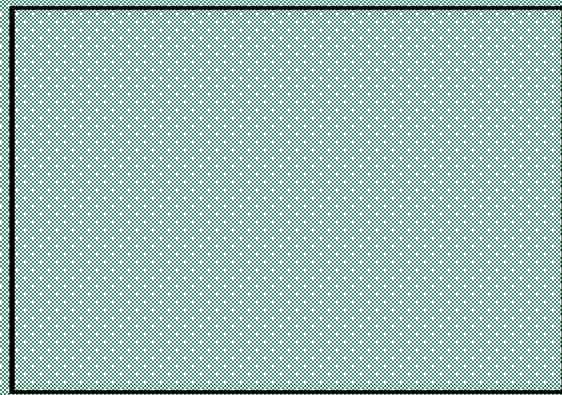
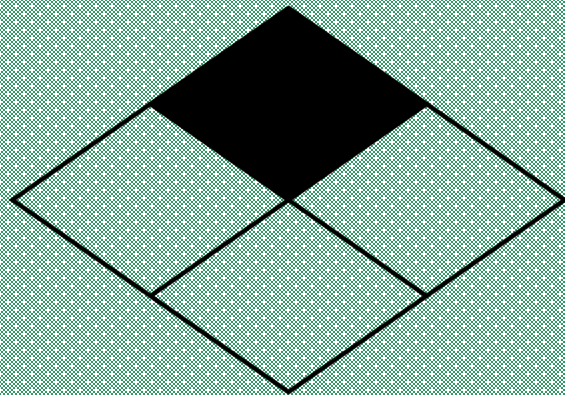
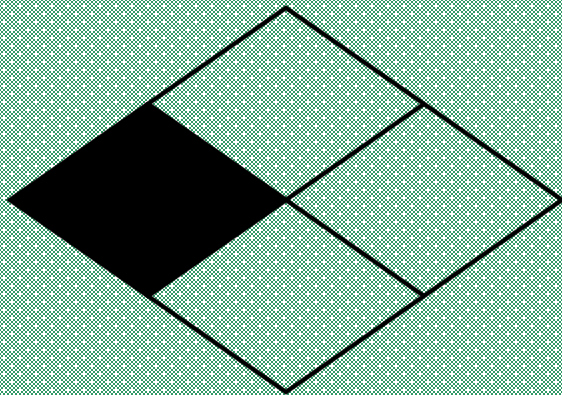
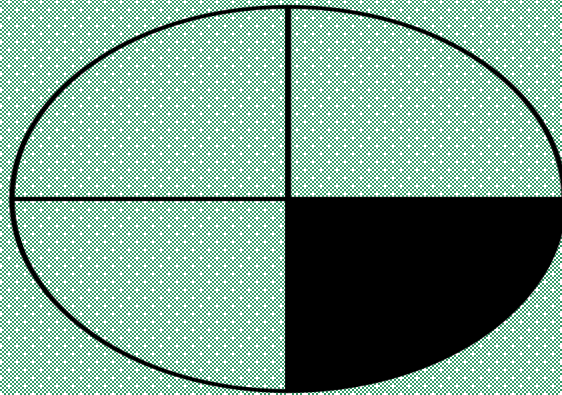
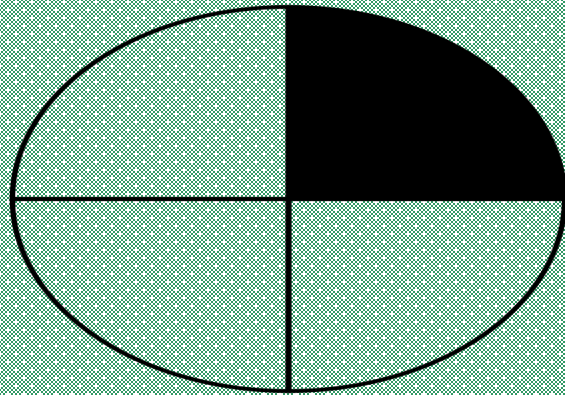
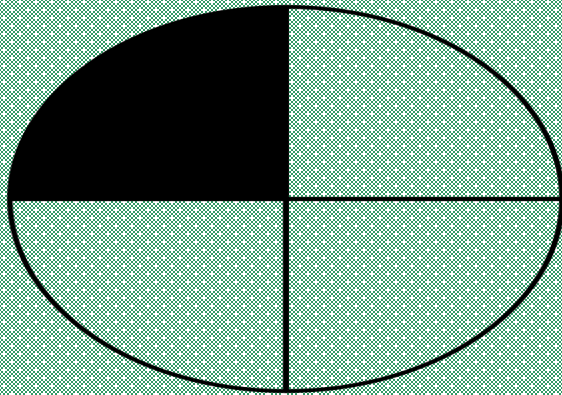
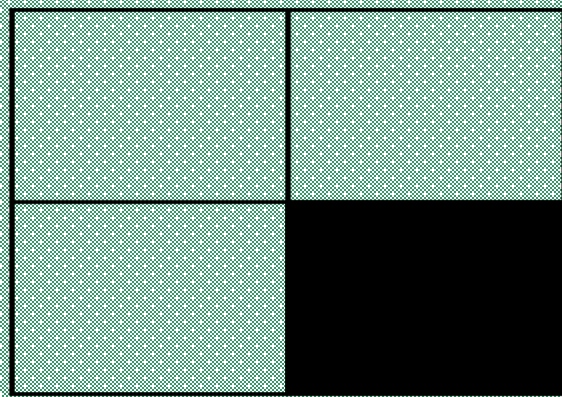
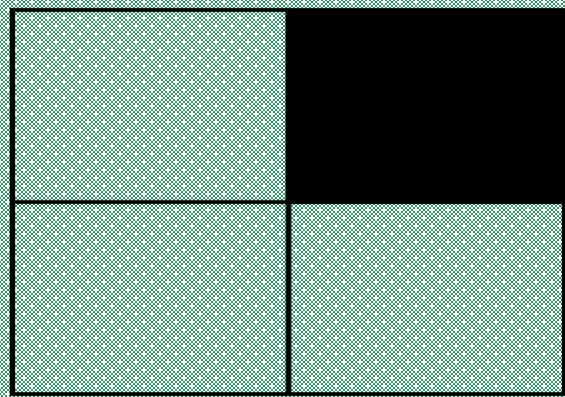
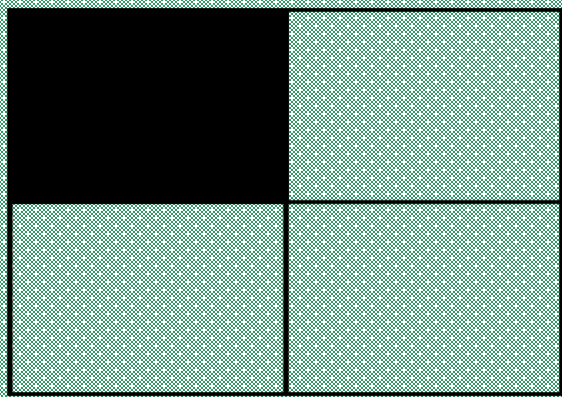


INTRODUCTION TO INTELLECTUAL DISABILITIES



Dr. Angel Selvaraj
Assistant Professor
Jindal Institute of Behavioural Sciences
O.P. Jindal Global University



2	5	6	28
4	9	9	77
3	7	6	?

Find Odd One Out

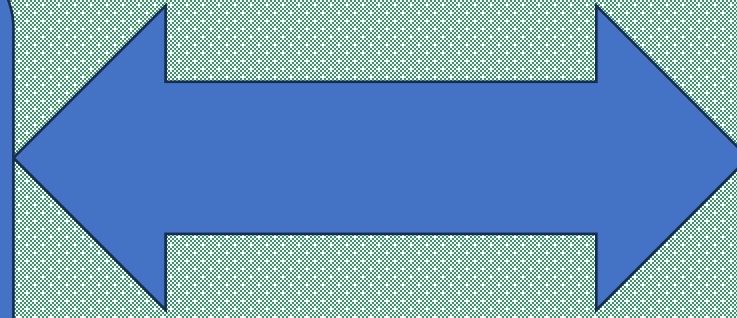


TERMINOLOGY

- INTELLECTUAL DISABILITY – MENTAL RETARDATION
- Disorders of Intellectual Development – ICD 11 (DID)

Intellectual Disability

Intellectual Functioning



Adaptive Behaviour

Definition of RPWD ACT 2016

Intellectual disability , a condition characterized by significant limitation both in intellectual functioning (reasoning, learning, problem solving) and in adaptive behaviour which covers a range of every day, social and practical skills.

3 Areas of Adaptive Functioning

- 1. Conceptual** – language, reading, writing, math, reasoning, knowledge, memory.
- 2. Social** – empathy, social judgment, communication skills, the ability to follow rules and the ability to make and keep friendships.
- 3. Practical** – independence in areas such as personal care, job responsibilities, managing money, recreation, and organizing school and work tasks

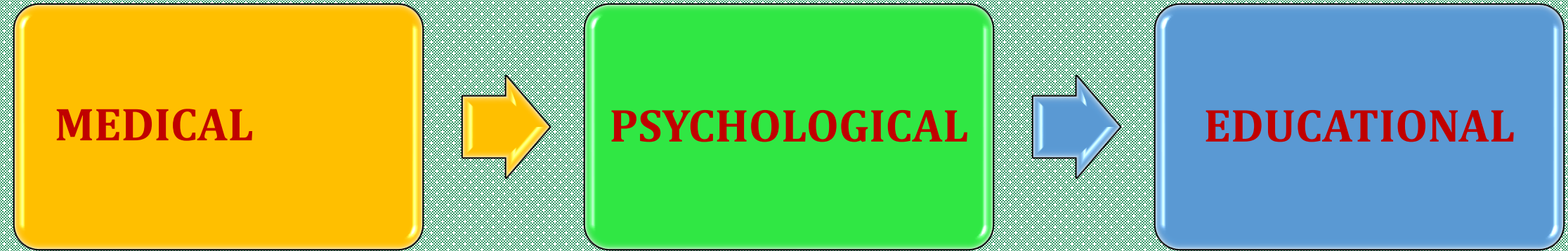
DSM V- Definition

DSM-5 defines intellectual disabilities as neurodevelopmental disorders that begin in childhood and are characterized by intellectual difficulties as well as difficulties in conceptual, social, and practical areas of living. The DSM-5 diagnosis of ID requires the satisfaction of three criteria:

1. **Deficits in intellectual functioning**—“reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience”—confirmed by clinical evaluation and individualized standard IQ testing ([APA, 2013](#), p. 33)
2. **Deficits in adaptive functioning** that significantly hamper conforming to developmental and sociocultural standards for the individual's independence and ability to meet their social responsibility; and
3. The **onset** of these deficits during childhood.

https://youtu.be/OWcdB_3EhCo?si=ScGSJFmN5Nbco0uu

Classification of Intellectual Disabilities



Medical Classification – Based on Etiology

1. Infection and Intoxication
2. Mental and physical problems
3. Metabolism and nutrition
4. Mental diseases
5. Unknown factors from birth
6. Genetic disorders
7. Diseases during pregnancy
8. Psychosis
9. Environmental factors
10. Other factors

PSYCHOLOGICAL CLASSIFICATION

Severity Category	Approximate Percent Distribution of Cases by Severity	DSM-IV Criteria (severity levels were based only on IQ categories)	DSM-5 Criteria (severity classified on the basis of daily skills)	AAIDD Criteria (severity classified on the basis of intensity of support needed)	SSI Listings Criteria (The SSI listings do not specify severity levels, but indicate different standards for meeting or equaling listing level severity.)
Mild	85%	Approximate IQ range 50–69	Can live independently with minimum levels of support.	Intermittent support needed during transitions or periods of uncertainty.	IQ of 60 through 70 <i>and</i> a physical or other mental impairment imposing an additional and significant limitation of function
Moderate	10%	Approximate IQ range 36–49	Independent living may be achieved with moderate levels of support, such as those available in group homes.	Limited support needed in daily situations.	A valid verbal, performance, or full-scale IQ of 59 or less
Severe	3.5%	Approximate IQ range 20–35	Requires daily assistance with self-care activities and safety supervision.	Extensive support needed for daily activities.	A valid verbal, performance, or full-scale IQ of 59 or less
Profound	1.5%	IQ <20	Requires 24-hour care.	Pervasive support needed for every aspect of daily routines.	A valid verbal, performance, or full-scale IQ of 59 or less

EDUCATIONAL CLASSIFICATION

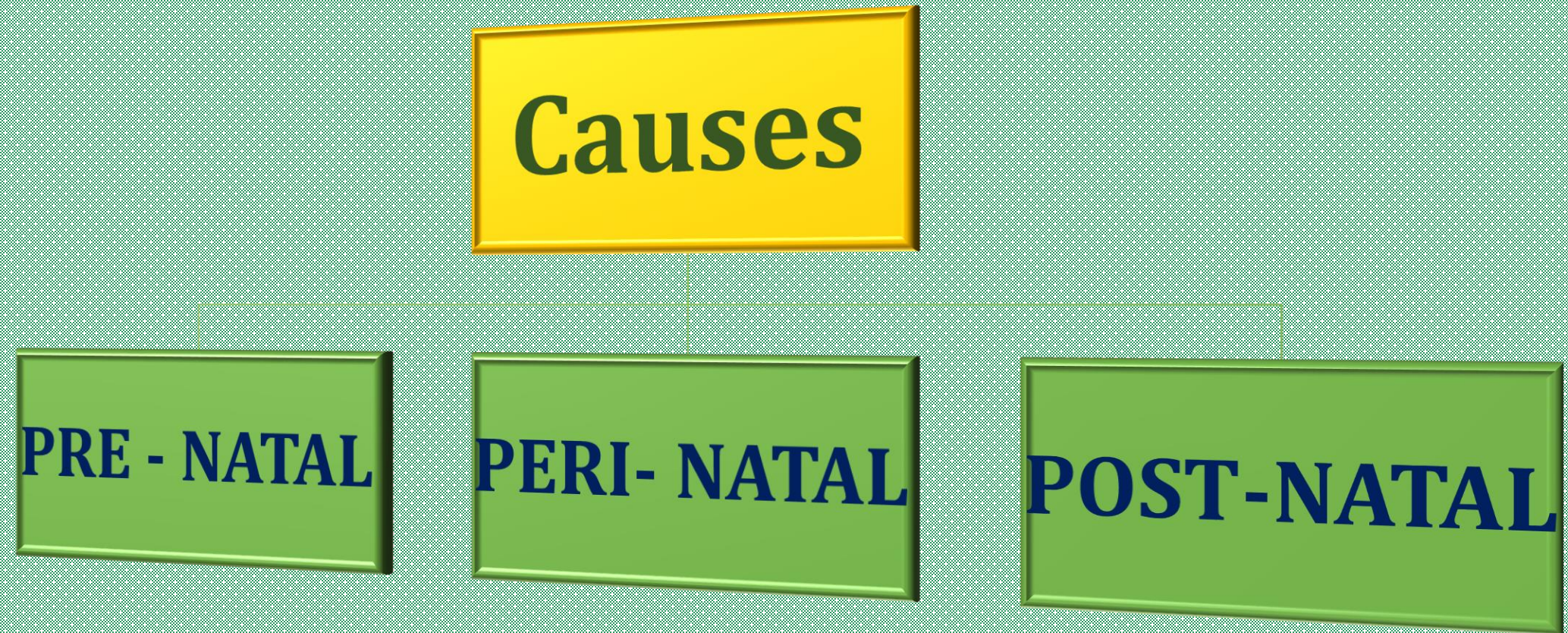
Terminology	IQ range	Educational expectation
Educable	IQ 50 to 70	<ul style="list-style-type: none">• Minimum educability in the academic, subjects and in reading, writing, spelling, arithmetic and so forth.• Capacity for social adjustment to a point where he can get along independently in the community.• Minimum occupational adequacy to such a degree that he can later support himself partially at the adult level.

Trainable	IQ 20 to 49	<ul style="list-style-type: none"> • Learning self-care in activities such as eating, dressing, undressing, toileting and sleeping. • Learning to adjust in the home or neighborhood, though not to the total community and, • Learning economic usefulness in the home or a sheltered workshop or in institution.
Custodial	IQ Below 20.	<ul style="list-style-type: none"> • Unable to be trained in self-care, socialization or economic usefulness • Needs constant help in taking care of his/her personal needs. • Requires almost complete supervision throughout his life since he is unable to survive without help

CLASSROOM PLACEMENT OPTIONS

Level of Placement	Chronological Age	Mental Age
Pre Primary	3 - 6 years	Up to 5 years
Primary	7 - 10 years	5 - 7 years
Secondary	11 – 14 years	7 - 9 years
Pre Vocational	15-below 18 years	9+ years

CAUSES OF INTELLECTUAL DISABILITY



PRENATAL CAUSES

- **Maternal Age** – below 18 years or above 35 years
- **Genetic /Inherent Causes**
- **Chromosomal Disorder** – Trisomy 21 (Downs Syndrome), Fragile X Syndrome.

https://www.youtube.com/watch?v=r_2rmDYfz4

<https://www.youtube.com/watch?v=7je-RGC73T4>

<https://www.youtube.com/watch?v=FFPqvQ3e0eg>





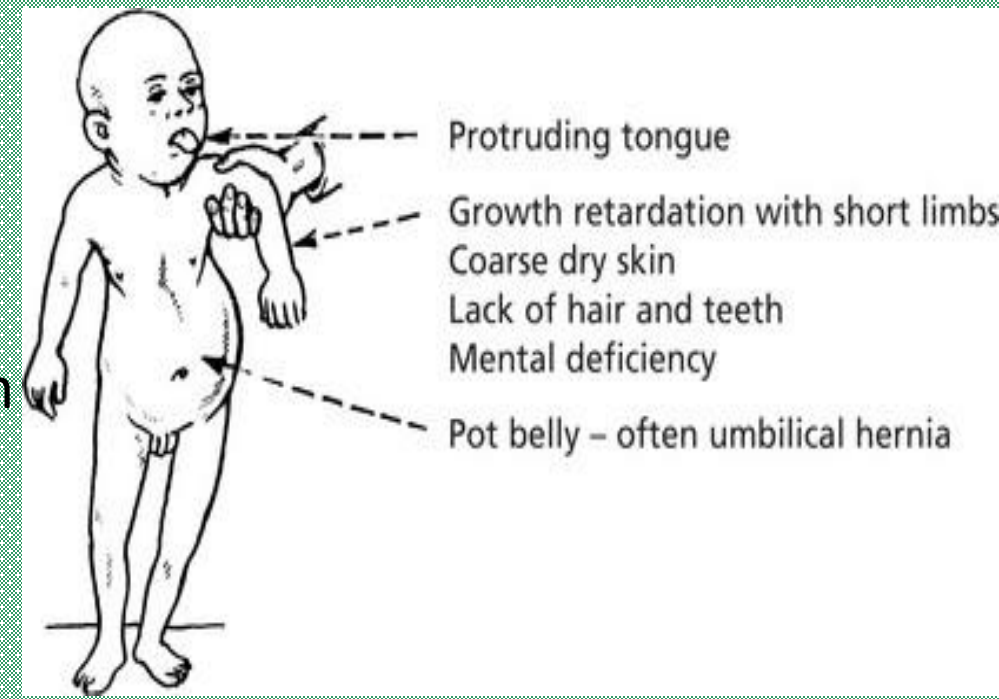
**FRAGILE
X
SYNDROME**



- **Consanguineous Marriage**
- **Attempted Abortion, Threatened Abortion**
- **Multiple Pregnancies**
- **Maternal Malnutrition** – iodine deficiency – Cretinism
- **RH incompatibility**

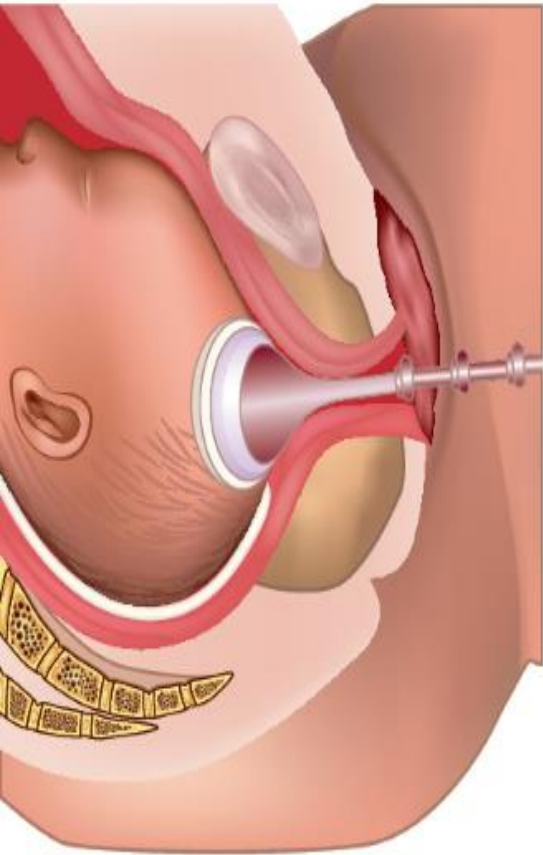
<https://www.youtube.com/watch?v=4hCzGhQPrzk>

- **Maternal Infections – TORCH**
- **Maternal Ill health – Asthma , hypertension, diabetes, high fever, anemia.**
- **Maternal use of drugs, alcohol, tobacco**
- **Maternal exposure to radiation - X rays**
- **Pollutants**
- **Accidents**
- **Emotional Stress**



PERI – NATAL CAUSES

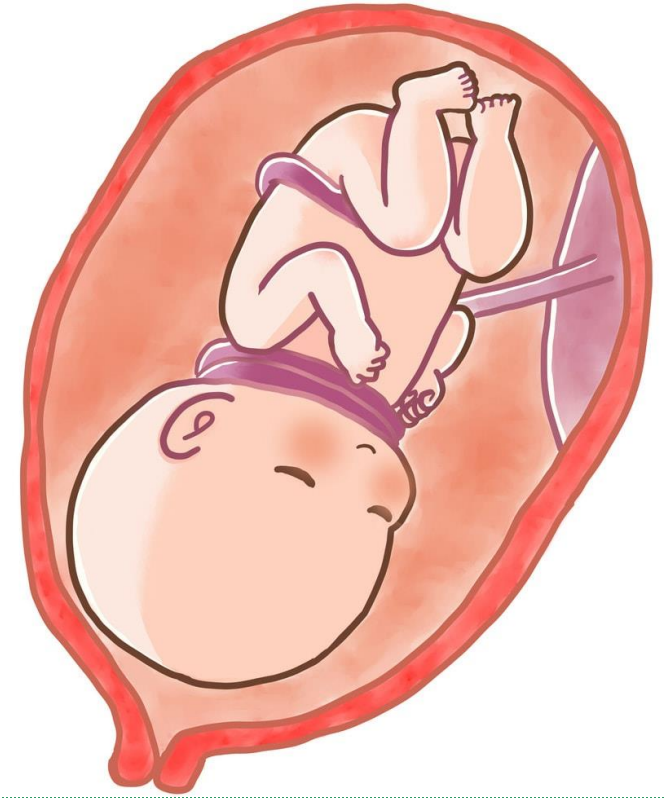
Vacuum-assisted birth



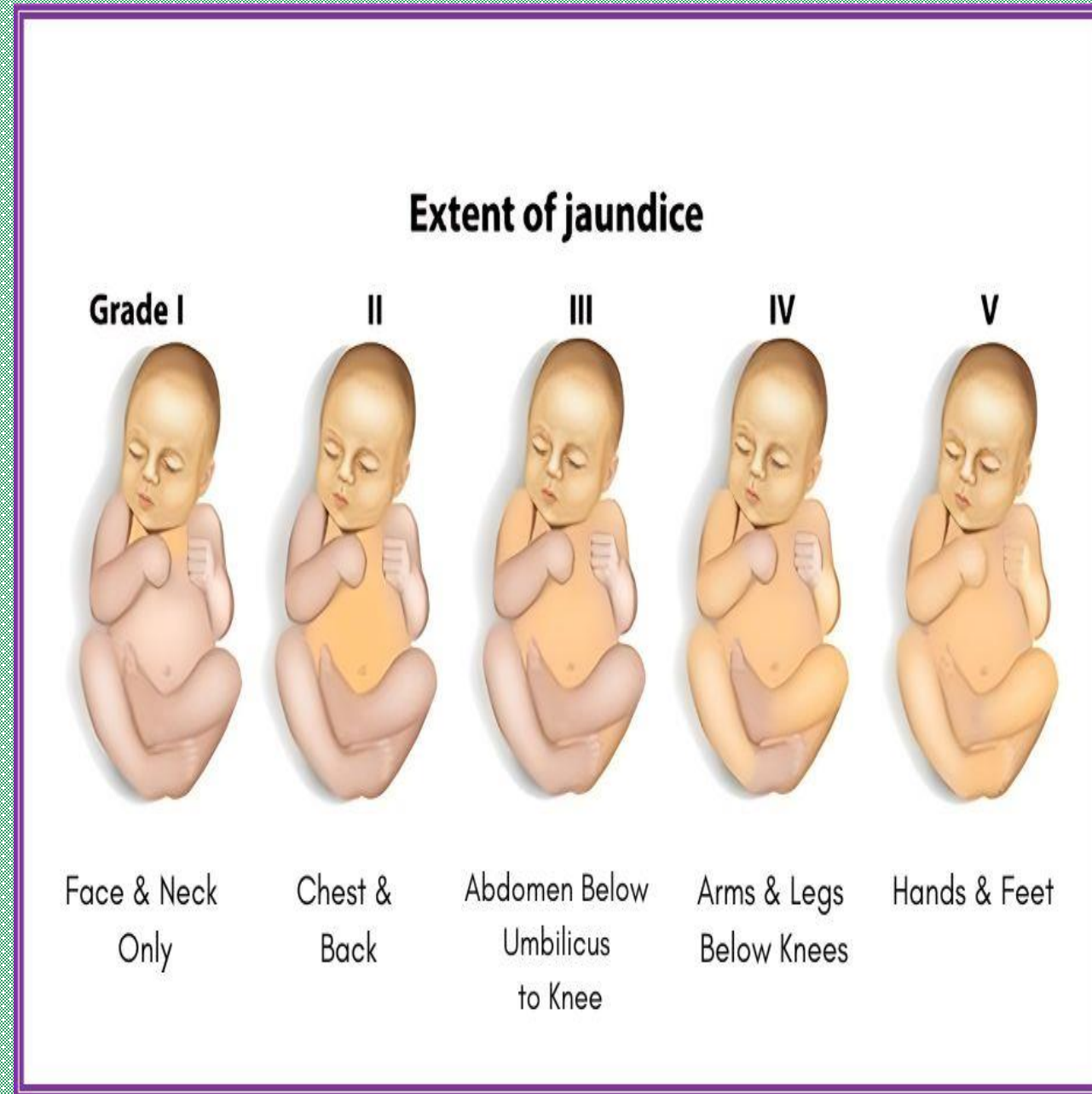
Forceps-assisted birth



- Premature /Postmature Birth
- Prolonged Labour
- Delated Birth Cry
- Low Birth Weight
- Umbilical Cord around the neck
- Instrumental Delivery
- Use of unsterilized or crude instruments
- Birth trauma



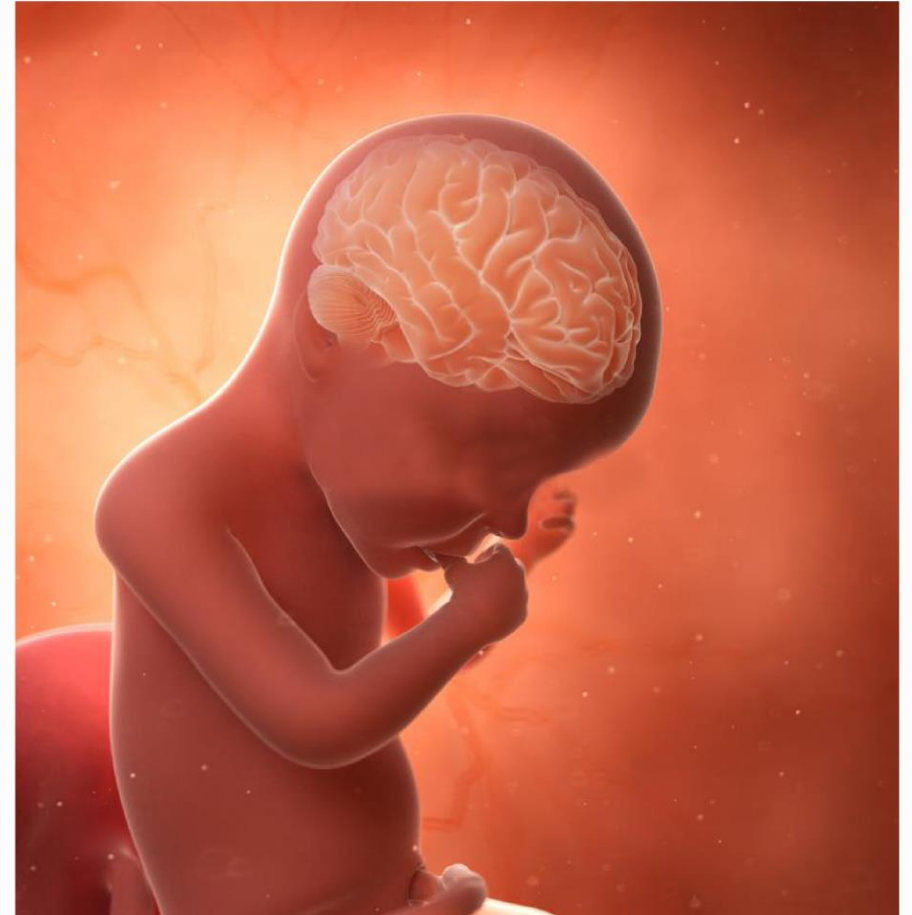
- Hypoxia
- Anoxia
- Birth asphyxia
- Jaundice due to Rh – Incompatibility
- Septicemia – Blood Poisoning by bacteria
- Hypoglycemia -



JAUNDICE
IN
NEONATES

Anoxia and Hypoxia

- + **Anoxia**
The absence of oxygen
- + **Hypoxia**
Low levels of oxygen

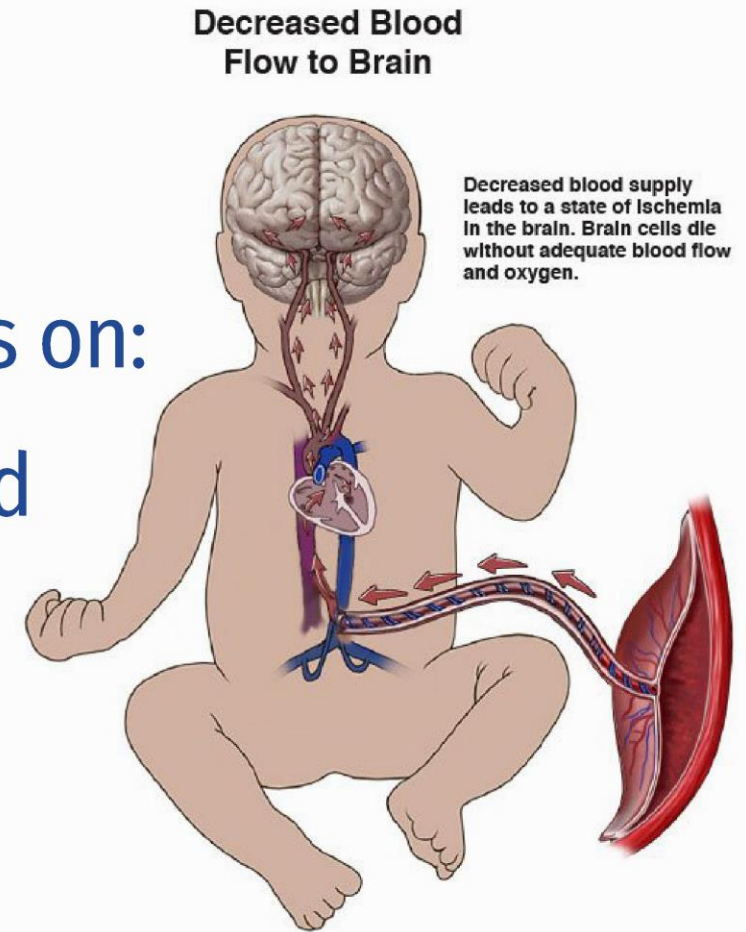


Birth Asphyxia

Birth asphyxia occurs when there is a lack of oxygen and blood flow to the brain.

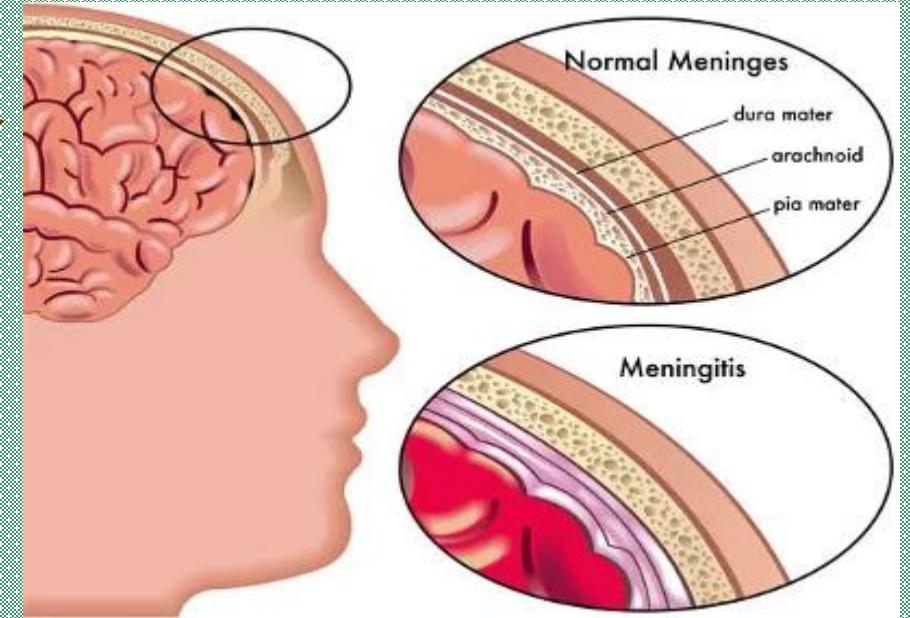
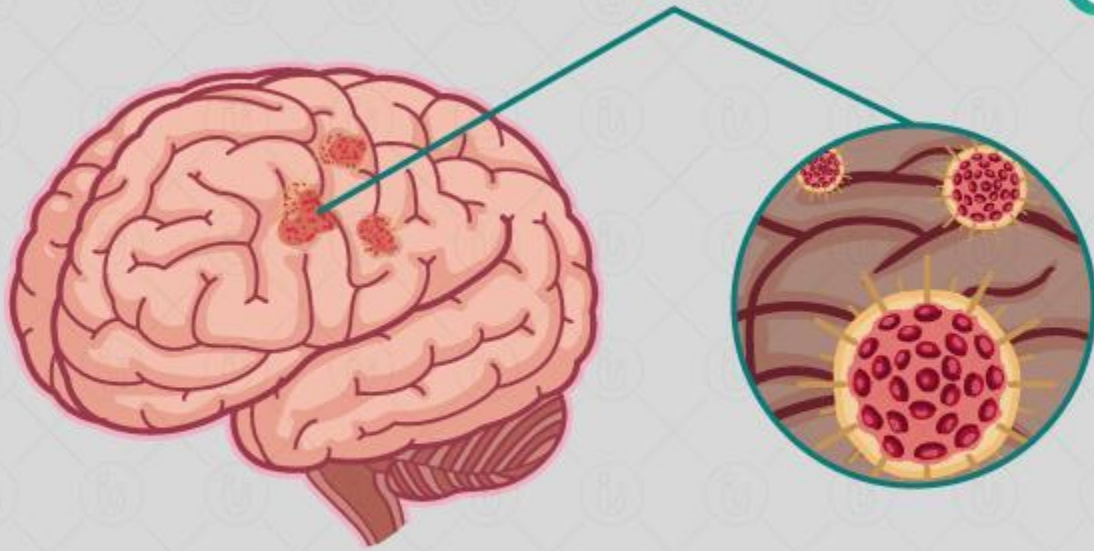
The amount of damage this causes depends on:

- + How long the infant was oxygen-deprived
- + How low oxygen levels are
- + How quickly treatment is started



Post Natal Causes

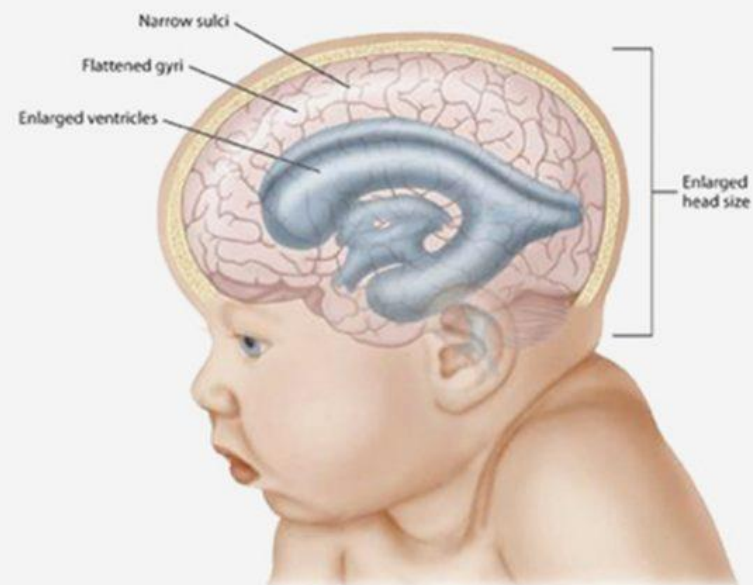
- **Trauma/Injury** – Hard fall, head injury
- **Infections** – Meningitis, Encephalitis



- Hydrocephalus



No Hydrocephalus



Hydrocephalus

Microcephalus

Baby with typical head size



Baby with microcephaly



Baby with severe microcephaly



- Malnutrition
 - Poor Environment – Lack of Stimulation
 - Accidents
 - Jaundice
 - Metabolic disorders – PKU
 - <https://www.youtube.com/watch?v=wJnhoU0IJjc>
-
- Poisoning – Lead, Mercury
 - https://www.youtube.com/watch?v=L-crRQLn_p0
 - Infections – High Fever
 - Epilepsy

Prevention

- To have a healthy baby, the pregnant woman should:
 - ❖ have regular medical check-ups
 - ❖ follow medical advice
 - ❖ stay away from people who have an infectious disease like measles, mumps
chicken pox
 - ❖ not take medication without prescription
 - ❖ not attempt abortion on her own or by an unqualified person
 - ❖ have a nutritious and adequate diet
 - ❖ be careful and avoid accidents
 - ❖ stay happy

- **To prevent mental retardation occurring during birth**

- ❖ **have the delivery conducted at the hospital. If the delivery is conducted at home, it must be attended to by a well-trained midwife (*'dai'*).**
- ❖ **make sure the child cries immediately after birth, as that is the first breathing by the child.**
- ❖ **immediately get medical help, if the pregnant woman has untimely abdominal pain, or any other sign of a problem.**

• **The following precautions must be taken after the child is born to prevent Intellectual Disability:**

❖ **If the child has low birth weight or looks abnormal or his development seems to be slow, do not waste time. Immediately seek doctor's advice.**

❖ **When a child develops fever, immediately bring it down by sponging the child with a wet cloth. Get medical attention immediately.**

❖ **If the child has fits, get medical attention immediately. Do not ignore the child or waste time with superstitious practices.**

❖ **From birth onwards, infants must receive a nourishing, nutritious and balanced diet. The diet should include nutrients such as proteins, vitamins and minerals.**

The child should be breast fed for six months or even longer, if possible. However, supplementary foods should be introduced from four months onwards.

- ❖ **Children must be immunized against infectious diseases at the recommended ages. If the child still gets an infection, medical help must be sought as soon as possible to prevent the condition from becoming worse.**
- ❖ **See to it that small children do not roll over and fall off the bed or cot.**
- ❖ **Do not leave them alone near staircases, etc.**
- ❖ **Children must never be hit on the head when being disciplined, as such blows can cause damage. In fact, children should never be hit at all.**

PREVALENCE AND INCIDENCE

- The National Sample Survey Organization (NSSO) estimates that currently 1.8% of the total Indian population is disabled, yet the data may not be completely accurate. The prevalence of intellectual disability has been estimated at 1-4% i.e. about 20 people per 1000 in the population.
- However, recent census data reported that 2.21% of the population has some form of disability and among them, only 2.7% has mental illness, and 5.6% has mental retardation. Census Data 2011. Data on Disability. Office of the Registrar General and Census Commissioner, India. 2013. [Last cited on 2016 Jun 23].
- Person with Mental Retardation/Intellectual Disability 0.2 % in the statistics carried out in 2018 (: NSS Report No. 583: Persons with Disabilities in India)

CHARACTERISTICS OF INTELLECTUAL DISABILITY

- The general characteristics of children with Intellectual Disability are:
- 1. Delayed development in developmental milestones.
- 2. Poor language development.
- 3. Short attention span and poor communication.
- 4. Poor motor integration and coordination.
- 5. Poor social skill.
- 6. Poor memory.
- 7. Poor in thinking, generalization, reasoning and imagination.
- 8. Poor or delayed concept formation.
- 9. Poor in scholastic or in academics.
- 10. May be associated with a typical physical feature i.e. small head/ large head, small eye etc.

REFERENCES

- http://www.wbnsou.ac.in/online_services/SLM/MED/B8_ID.pdf
- https://www.ncbi.nlm.nih.gov/books/NBK332877/table/tab_9-1/?report=objectonly
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