كلية الطب والجراحة

جـــامعة ٦ اكـــتوبر
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Child Heath problems

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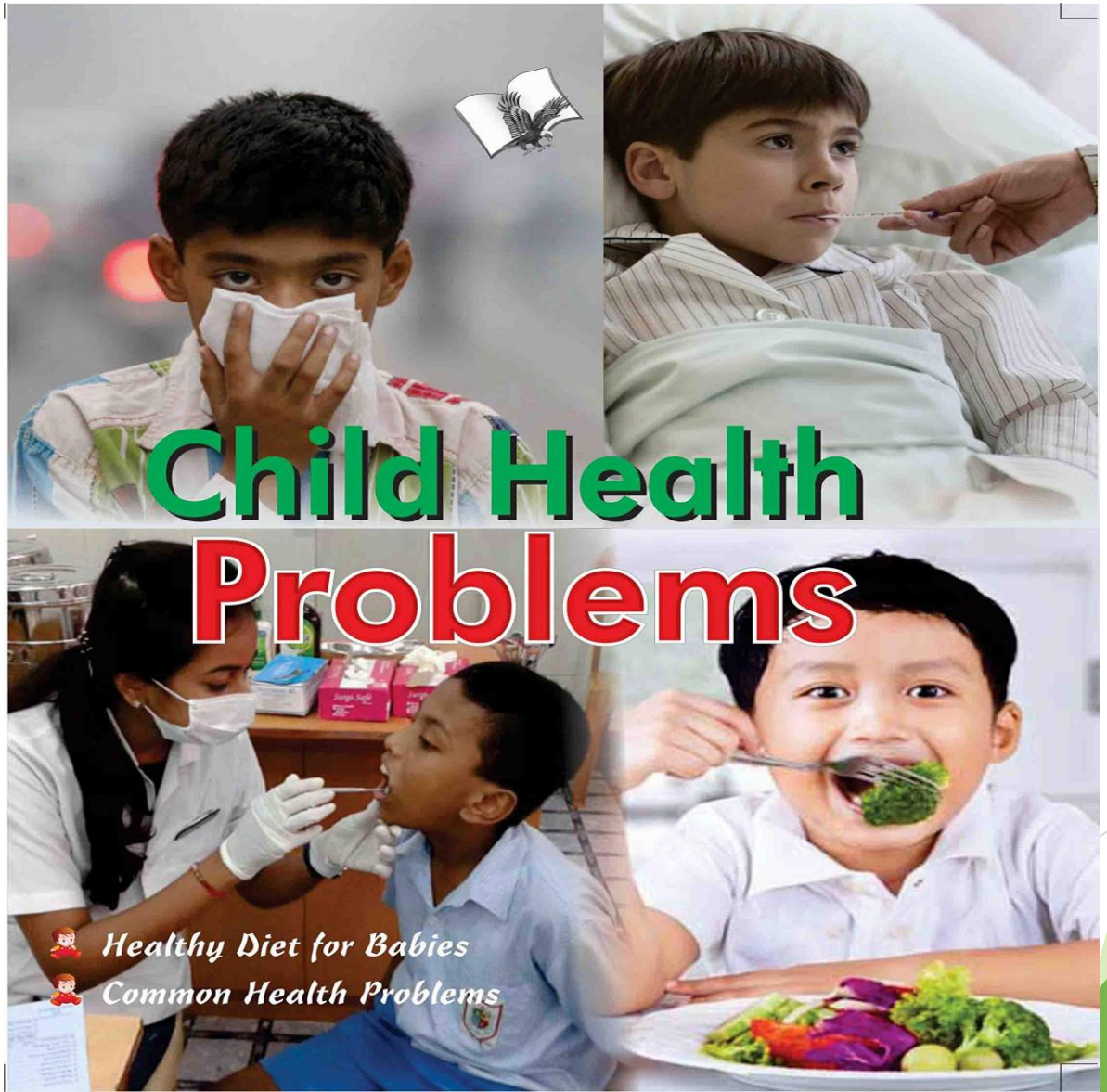

Child Health
Problems
Healthy Diet for Babies
Common Health Problems

Vulnerable groups

- This term is applied to groups of people (children, pregnant women, elderly people, malnourished people, prisoners, migrants and refugees, people who uses drugs, and people who are ill or immunocompromized, etc.) who, due to factors usually considered outside their control, do not have the same opportunities as other, more fortunate groups in society.

Age group life course categories

A good start to life	**Newborns** (under 28 days of age - newborn infant), **infants** (up to 1 year)
Optimal development	**Children**, including young children (1–4 years) and older children (5–9 years) *(49)* **Adolescents** (10–19 years) *(50)* **Young people** (10–24 years) *(51)*, **youth** (15–24 years) *(52)*
Adult health and well-being	**Adults** (from 30–44 and from 45–59) including pre-pregnancy
Healthy ageing	**Older people** (ages 60 and over) *(44)*

Life stage descriptor	Tier 1 age groups	Tier 2 age groups
Preconception	Preconception	–
Fetal	Prenatal	Conception to birth
Newborn (neonatal)	Birth to <1 month	Birth to <1 month
Infant	1 to <3 months	1 to <12 months
	3 to <6 months	
	6 to <12 months	
Toddler	1 to <2 years	1 to <2 years
Early childhood	2 to <3 years	2 to <6 years
	3 to <6 years	
Middle childhood	6 to <11 years	6 to <11 years
Early adolescence	11 to <16 years	11 to <16 years
Late adolescence	16 to <21 years	16+ years

Under 5 Child Health Problem

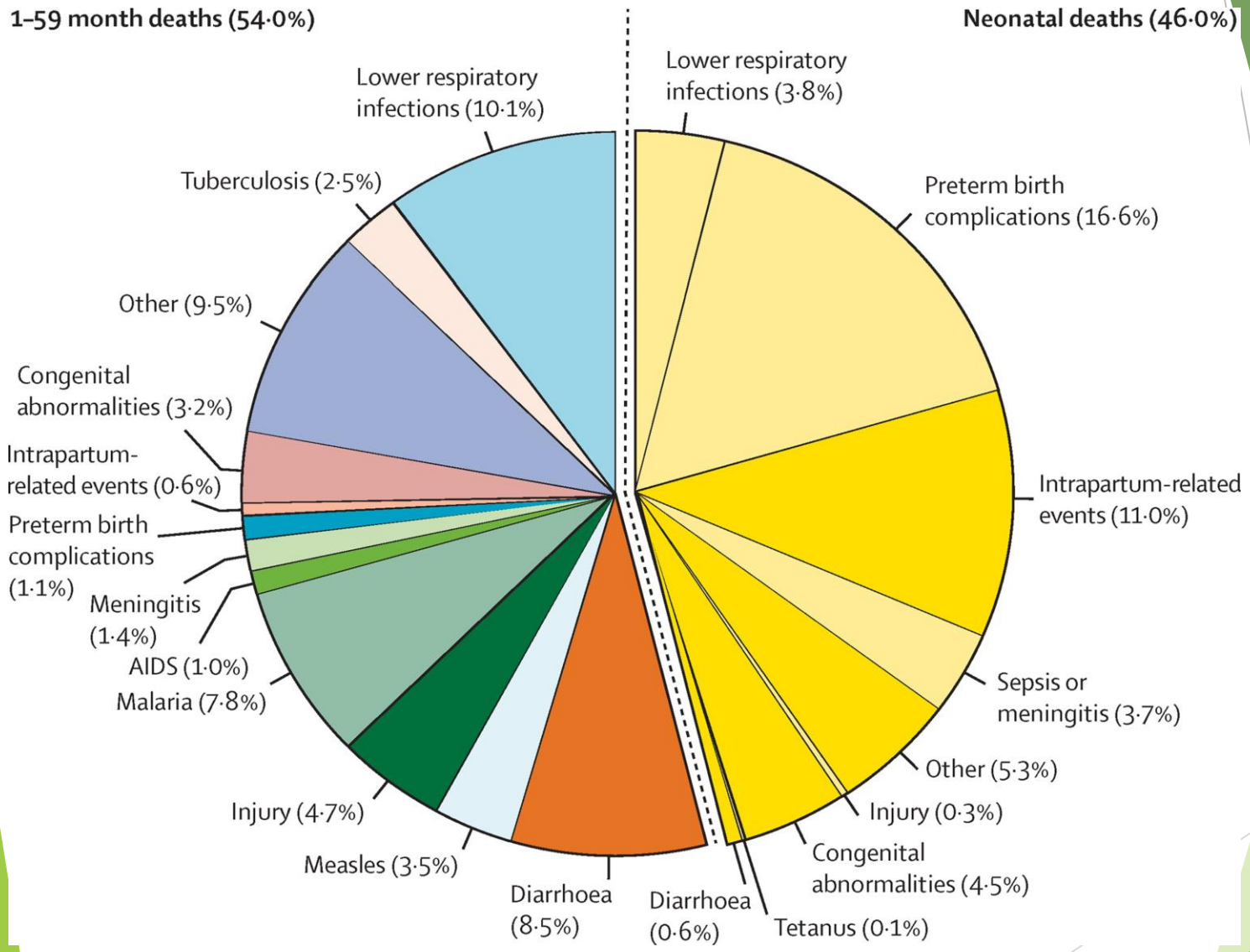
- **1 - 18 month**

  Infants .

  Neonates.

  Postneonates.

- **1 - 4 years**


1–59 month deaths (54·0%)
Neonatal deaths (46·0%)
Lower respiratory infections (10·1%)
Tuberculosis (2·5%)
Other (9·5%)
Congenital abnormalities (3·2%)
Intrapartum-related events (0·6%)
Preterm birth complications (1·1%)
Meningitis (1·4%)
AIDS (1·0%)
Malaria (7·8%)
Injury (4·7%)
Measles (3·5%)
Diarrhoea (8·5%)
Lower respiratory infections (3·8%)
Preterm birth complications (16·6%)
Intrapartum-related events (11·0%)
Sepsis or meningitis (3·7%)
Other (5·3%)
Injury (0·3%)
Congenital abnormalities (4·5%)
Tetanus (0·1%)
Diarrhoea (0·6%)

A **Morbidity**.

B **Mortality**.

They vary according to child age category

1- Neonatal Morbidity

A Prematurity.

B Cong. Malformation.

C Infectious diseases.

D Injuries including birth injuries

1.Prematurity / Pre-term and LBW

- Prematurity is defined as less than 37 weeks of gestation in humans
- Prior to 32 weeks is considered a very premature birth
- Less than 28 weeks is extremely premature

- A baby born before 37 completed weeks of gestation irrespective of birth weight.

Babies with a birth weight of less than 2500 g, irrespective of the period of their gestation are classified as low birth weight babies.

- Incidence : 15 % in Egypt
- **Causes of Prematurity / Preterm** .
  - Idiopathic.
  - Induction of premature labor .
  - Premature rupture membrane.
  - Polyhydraminos.
  - Placenta previa.
  - Accidental hemorrhage.

Maternal Causes:-

- Genitourinary infection.
- Pyelonephritis.
- Hypertension.
- Diabetes.
- Anemia.
- Uterine abnormalities.

- **Fetal Causes**
- Twins.
- Cong. anomalies.
- Intra – uterine fetal death (I U F D).
- Erythroblastosis fetalis.
- (Rh. incompatibility)
- Fetal infection

Health Problems Related to Prematurity

Take place during last trimester.

- Maturation and function of fetal organs.
- Development of body stores of nutrients.
- Transfer of antibodies from mother to fetus.

After birth

- Impaired regulation of body temperature.
- Immaturity of the immune system.(Pneumonia and Septicemia)
- Deficiency of body store of nutrients and poor suckling leads to malnutrition

- **Immaturity of lung** RDS.
- **Improper management of RDS by highly concentrated O2 supply** retrolental fibroplasia and blindness.

2. Congenital Anomalies and Malformation

- Could be a cause of perinatal mortality.
- Those with anomalies incompatible with life will die during infancy and early childhood.
- Can lead to handicapped conditions

Causes of Cong. Malformation

Genetic factors.

- gene mutations &
- Chromosomal abberrations.

That may be:-

- inherited .
- familial or
- acquired due to exposure to mutagens e.g Down's syndrome

Infections: e.g

- Maternal rubella in 1st Trimester.
- Syphilis.
- Toxoplasmosis.
- Cytomegalovirus.
- Other viral infections. (TORCH)

Malnutrition.

- Iodine — Cretinism.
- Folate — Neural Tube defect.
- Zinc — CNS malformation

Diabetes Mellitus:-

- use of oral anti-diabetic for control of diabetes.

Drugs:-

- esp. in the first trimester

- **Live vaccines.**
- **Radiation at therapeutic level.**
- **Smoking.** - due to effect of Co on the placental and fetal blood vessels.

Prevention of cong. Malformation.

- **Genetic counseling**:-

  - during → premarital care &
    pregnancy care

- **Premarital cure:-**

  - Vaccination against rubella.
  - Examination for syphilis.
  - H.E to avoid exposure to the risk factors.

- **Antenatal care:-**

  H.E to prevent exposure to teratogens.

- **Secondary prevention:-**

  Early detection.

  Management.

- **Tertiary prevention:-**

  Rehabilitation of disabled child.

3- Neonatal Infection.

- Could be acquired during :
- Gestation(congenital).
- Perinatal → in-utero infection.
  → infection during passage in birth canal.
  → after birth (1st month after birth).

Summary of Neonatal Infection

Infection acquired after Birth	Perinatal Infection	Congenital Infection
❑Tetanus neonatorum ❑Omphalitis ❑Diarrhea ❑Acute respiratory tract infection	❑Virus B hepatitis ❑Virus C hepatitis ❑Herpes Simplex ❑AIDS ❑Ophthalmia neonatorum ❑Group B streptococcal infection ❑Chicken pox	❑Congenital Syphilis ❑Rubella ❑Toxoplasmosis ❑Cytomegalovirus ❑Malaria ❑Chicken pox

Tetanus Neonatorum

- Due to infection of umbilical stump.
- From articles and dressings.
- Common in rural areas.
- Unsafe delivery.

TETANUS NEONATORUM

- Also called as 8th day disease
- Rare before 2 days & after 2 weeks
- **C/F:- E**xcessive cry, refusal to feed apathy, mouth slightly kept open due to pull of neck muscles
- Opisthotonus in extension
- Constipation, Apnea
- Touch provoked seizure

Prevention of tetanus neonatorum

(safe and clean delivery at home and hospital)

- Proper training of birth attendants.
- Aseptic cutting and dressing of the umblical cord .
- Vaccination of pregnant mothers with tetanus toxoid.

Omphalitis

- Due to infection of umbilical stump by:-

  (staphylococci , streptococci & other organisms)

- Can lead to septicemia and death .

- It is due to unclean delivery.

- Can be prevented by clean delivery and asepsis

Ophthalmia neonatorum

- Infection of conjunctiva during passage in birth canal (Perinatal).
- Most common agent is Chlamydia trachomatis.
- Manifestations appear 5-15d after birth.
- May have chronic course .
- Most serious is gonococcal infections , wh.
  manifestations appear 1- 5d after birth.

Prevention of ophthalmia neonatorum

- Chemoprophylaxis eye drops.
- Penicillin / tetracyclin eye drops.
- Within 1 hour after birth.
- ANC for detection and management of reproductive tract infections (RTIS).

Diarrhea and ARI.

- Acquired after birth.
- More serious.
- Less frequent in neonatal period than post neonatal period.

II- Postneonatal and Children Morbidity.

They include:-

- Infection.
- Malnutrition disorders.
- Accidents.

Diarrhea .

1- Prevention of diarrhea:

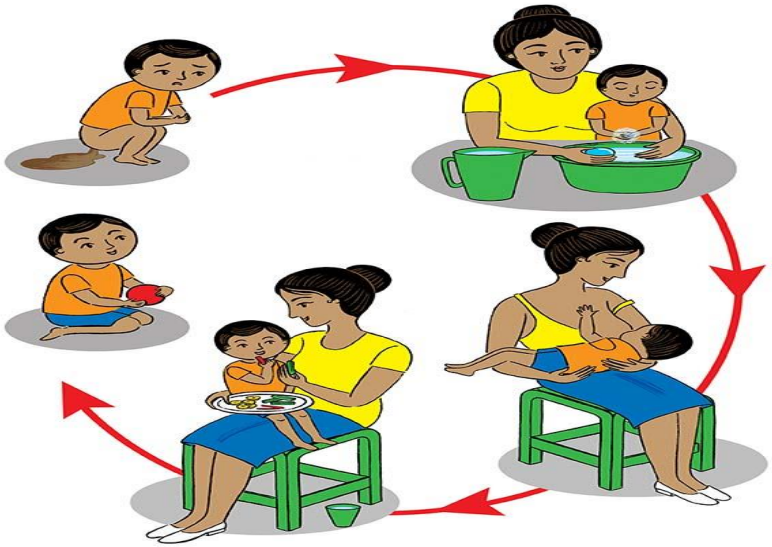
Health education: about

- Promotion and technique of breast feeding.
- Sanitary measures for food safety related to food preparation and keeping.
- Personal hygiene with emphasis on hand washing .
- Environmental sanitation.

2- Control of diarrhea.

- Case assessment to classify the degree of dehydration.

- Case management including oral rehydration solution to prevent mortality from dehydration.



Acute Respiratory Infection (ARI)

Prevention.

1- Health promotion.

2- Promotion of breast feeding.

3- Proper ventilation, and reduction of exposure to overcrowd places.

4- Immunization against measles and whooping cough.

Control Measures for ARI

- Case assessment: diagnosis of pneumonia, for example, depends on the presence of fast breathing and chest in-drawing.

- Case management and referral to hospital if needed.

Malnutrition

- Protein–energy malnutrition (PEM)

- Iron deficiency anemia

- Ricketes

- Ariboflavinosis

- Vit. A Deficiency

Accidents

- At birth or

  - After that time

  - At home or outside.

  - Falls.

Accidents At birth

- Sometimes during the birth process, the baby may suffer a physical injury that is simply the result of being born. This is sometimes called birth trauma or birth injury.
- **causes birth injury**

A difficult birth or injury to the baby can occur because of the baby's size or the position of the baby during labor and delivery. Conditions that may be linked to a difficult birth include

- Large babies. Birthweight over about 8 pounds, 13 ounces (4,000 grams).
- Prematurity. Babies born before 37 weeks (premature babies have more fragile bodies and may be more easily injured).
- Cephalopelvic disproportion. The size and shape of the mother's pelvis is not adequate for the baby to be born vaginally.
- Dystocia. Difficult labor or childbirth.
- Prolonged labor
- Abnormal birthing presentation. An example of this is a buttocks first (breech) delivery.
- Maternal obesity

Summary of Types of childhood morbidity & causes of mortality

1-4 years old	Post-neonatal	Neonatal	Health Problems
► Diarrhea. ► ARI ► Malnutrition: Iron deficiency anemia, protein energy malnutrition, vitamin A deficiency, Iodine deficiency, rickets. ► Injuries.		▼ Pre-term and low birth weight. ▼ Congenital anomalies. ▼ Injuries. ▼ Infections.	Morbidity

1-4 years old	Post-neonatal	Neonatal	Health Problems
►Diarrhea. ►ARI. ►Injuries. ►Others		▼Preterm. ▼Congenital abnormalities. ▼Birth injuries. ▼Tetanus neonatorum. ▼Septicemia. ▼Diarrhea. ▼ARI.	Mortality

Factors contributing to less than 5 years health problems.

1-Socioeconomic status of the community.

- The availability and accessibility of quality health services specially maternal and child health care services.
- Sanitation and access to safe water supply.
- Adequate food supply.

- Income level.
- Literacy / education.
- Access to information through mass media.
- Gross Domestic Product (GDP) per capita (an indicator measuring the economic status of the community).

2- Family factors:

- Housing conditions: sanitation and the immediate environment.
- Family size.
- Crowding inbox: average number of individuals per room.
- Socioeconomic condition of the family: education, occupation and income of parent.
- Food availability and habits.

- Cultural factors and habits.
- Health awareness and life style.
- Health condition of the different family members.
- Previous infant and child death in the family.
- Maternal age, maternal death.

3- Child factors:

- Sex of the child.
- Serial order.
- Birth spacing.
- Health problems of mother during pregnancy.

- Condition of the newborn.
- Non-breast fed children.
- Improper weaning practices and malnutrition.
- Repeated infections.

Thank you