

## MCH 5&6 Summary.

### **Adolescence (Youth)**

from the greek word "adolescere" meaning "to grow" or "to grow to maturity".

-It's a period of **transition** from childhood to adulthood or from puberty to maturity which involves both mental and physical growth.

-Adolescents are no longer children yet not adults.

-Characterized by rapid physical growth, significant physical, emotional, psychological and spiritual changes.

### **The length of this period varies,**

-Can start at 9 and end at 18.

-Can start at 14 and end at 25.

### **WHO defines adolescents as individuals between 10-19,**

Adolescence: 10-19.

Early Adolescence: 10-13.

Middle Adolescence: 14-16.

Late Adolescence: 17-19.

Early Adolescence (10-13):	Middle Adolescence(14-16):	Late Adolescence(17-19):
<p>Increased <u>growth rate</u> (starts first in the hands and feet and later in the limbs).</p> <p>They start Initiating <u>independence</u> from family and desire <u>privacy</u>. There may be a clash between the wish for their autonomy and parental authority.</p>	<p><u>Peak</u> of the <u>height</u> and velocity curve is seen here.</p> <p><u>Auxiliary hair</u> and <u>sweat glands</u> develop.</p> <p>All of this is influenced by genetic factors and nutritional status.</p> <p>*Note: Any chronic illness can delay puberty.</p>	<p>The body approximates the <u>young adult</u> and development of <u>sex characteristics</u> is completed.</p> <p>During this, <u>career decisions</u> are finally traced.</p> <p>The child gradually returns to the family.</p>

A scientist called **G. S. Hall** views adolescence as a period of heightened "**Storm and stress**".

He viewed it as a period of inevitable turmoil اضطراب that as we said takes place during transition.

this "**Stormy phase**" has three aspects:

**1-Conflict with parents**, as adolescents tend to rebel against their parents and seek greater independence and autonomy.

**2-Mood disruption** and shifts in emotions, due to hormonal changes and psychological stress.

**3-Risky behavior**, due to neurological needs for stimulation & emotional Immaturity.

<b><u>Biological growth &amp; development:</u></b>	<b><u>Characteristics of Adolescence.</u></b>	<b><u>The search for Self,</u></b>
<p>-Beginning of puberty, specific hormones released, development of sexual characteristics.</p> <p>-Complexion (skin) problems.</p> <p>-Growth spurts., voice changes.</p>	<p><b><u>Increased decision making</u></b> by oneself.</p> <p><b><u>Undefined status</u></b> (unclear social expectations, some are treated like children and some like adults).</p>	<p>-&gt; establishing personal norms and priorities what's important.</p> <p>-&gt;preparing for future roles. Anticipatory socialization is learning the rights, obligations, and expectations of a role to prepare for assuming that role in the future..</p>
<p><b><u>Increased pressure</u></b> from parents, friends and teachers.</p> <p><b><u>PEER PRESSURE is the strongest!</u></b></p>	<p><b><u>PEER PRESSURE</u></b>, adolescents are susceptible to peer Influence for several reasons like,</p> <p>1- adolescents look at their peers to understand social norms to align their behavior with their group - a process known as <b>Peer socialization</b>.</p> <p>2- A potential outcome of aligning with peers from adolescents' p.o.v is gaining social status.</p> <p>3-Adolescents tend to be hypersensitive to <u>negative effects</u> of social exclusion. So, they may conform to a group norm to avoid unpleasant social outcome (being left behind) and this might outweigh the potential negative consequences associated with health risk or illegal behaviors.</p>	

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### Changes that take place during adolescence period :

1-Biological changes, onset puberty. 2-Cognitive changes, emergence of more advanced cognitive abilities. 3-Emotional changes, self image, intimacy, relation with adults and peers' group. 4-Social changes, transition into new roles in society.

### but Why do we focus this much on adolescence? Why Is it that important!

-The Jordanian population contains 52% people below the age of **20!**

-The problems of adolescence are multi-dimensional in nature and require holistic approach.

-This period is critical because it might affect later health problems. A large number of adolescents in the developing world are out of school, malnourished, get married early, working in vulnerable situations, and are sexually active.

<b>Demographic Rationale</b>	-1/5 individuals in the world is an adolescent, aged 10-19. -Most of them live in developing countries representing up to 1/4 of the population.
<b>Public Health Rationale</b>	-> <u>Mortality</u> , About 1.4 million occur in <u>low and middle</u> income countries. *Death rates and leading cause of death <b>vary</b> by <u>region and sex</u> . *Death rates <b>rise</b> sharply from <u>early adolescence to young adulthood (20-24)</u> .  -> <u>Morbidity</u> , In 11 countries out of 64 with available data, a quarter of the adolescent girls are <u>underweight</u> . In 21 countries out of 41 countries with available data, a third of adolescent girls are <u>anemic</u> . 2.2 million adolescents are living with <u>HIV</u> . 40-70% ever married girls aged 15-19 reported that they <u>experienced emotional, physical or sexual violence</u> by their current or most recent husband or partner.  -> <u>Behaviors</u> , unhealthy habits that will lead to disease and death in later life such as unprotected sex, <u>physical inactivity</u> , use of tobacco, alcohol and illicit drugs.
<b>Economic Rationale</b>	Socio-economic deprivation: a cause & consequence of adolescent pregnancy.
<b>Human Rights Rationale</b>	<u>The right to</u> : -have highest level of health possible & to access the required health services. -have greater access to education and greater ability to make personal & professional choices. -have access to appropriate informatics from the media & to be protected from harmful info. -seek, receive info. and ideas.

End of MCH 5 ♥

## MCH 5&6 Summary.

### Infant and Child Care

-Perinatal Care of the infant, (prematurely, Congenital abnormalities, Birth injuries, and neonatal infections. Good Nurseries).

**NOTE:** Immaturity related conditions and congenital anomalies are the two main causes of infant deaths in high-income countries.

#### **A- W.B.C (Well Baby Clinic).**

1-Physical examination (Scheduled visits).

2-Growth and development evaluation.

3-Vaccination.

4- Nutrition.

5-Health Education.

◆ Some definitions :

**1-Child Mortality:** (between first birth and 5th birthday).

**2- Infant mortality [** which includes neonatal deaths (between birth and day 28) + postneonatal deaths (deaths of children aged between 28 days and one year) ]

(Under-five-mortality is the **probability** of dying before fifth birthday, so between 0 and 59 months ).

**3-Perinatal Mortality**

which includes still births and early neonatal deaths (deaths of live births within first seven days of life).

#### **General Notes:**

\*2/3 of infants die during first 28 days after birth (neonatal period)

\*98% of all neonatal deaths occur in developing countries.

\*Rates of the above are per **1000**, for example, Neonatal mortality rate is the number of deaths of children aged less than 28 days in a given year per **1000** live births.(other rates are also per 1000).

\*Perinatal mortality rate (PNM) is a useful overall measure of  $\square$  perinatal health and the quality of health care provided to pregnant women and newborns.

\*\*Neonatal mortality rates are especially sensitive to events during pregnancy, delivery and the neonatal period, and to the care given to mothers and their babies.

One factor affecting neonatal mortality rate is the number of babies born before **24** weeks of gestation.

\*\*Post neonatal mortality is thought to be influenced to a greater extent by parental circumstances, including their socioeconomic position, and the care they provide for their infant.

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### Causes of Perinatal Mortality:

#### **1-Low Birth Weight (<2500 g) :**

- Important factor predisposing for PNM.
- perinatal mortality rate for low-birth weight babies is five to thirty times higher than for fetuses or infants of normal weight.
- serious neurological problems and hearing and visual defects and may be subject to slow development throughout life.

#### **Causes of low birth weight include:**

- preterm birth (<37 weeks gestation).
- short stature (height) of mother.
- low pre-pregnancy weight.
- inadequate weight gaining during pregnancy.
- anemia
- Infections during pregnancy including reproductive tract infections and other infections like malaria (in sub-Saharan specifically).
- antepartum hemorrhage.
- eclampsia

#### **2-Umbilical Cord Prolapse.**

#### **3-Asphyxia.**

#### **4-Birth injury.**

#### **5-Neonatal tetanus.**

#### **6-Sepsis.**

#### **7-Congenital anomalies.**

#### **8-Complicated Labors (Prolonged, obstructed, breech, transverse).**

#### **9-Maternal Age.**

#### **10-Maternal anemia.**

**11-Maternal health problems like renal problem, diabetes, hypertensive disorders.**

**12-Maternal infections.**

**13-Placental insufficiency.**

**14-Ruptured uterus.**

**B-Day Care of Children.** *a primary need outside home.*

**C- Health of the school age child.**

**D- Care of adolescents.** *youth clinics (psychological problems, contraception, smoking, drug addiction ...)*

**E-Handicap children.** *(physically and mentally).*

### **Basic needs of a newborn that can help ensure a healthy starts in life:**

*During labor and delivery,*

*A-Skilled attendance, provide safe management of normal delivery and timely referral for complications.*

*B-Support and care, promote family support and a baby and woman-friendly environment for birth and maternal and new-born care.*

*C-Infection control, ensure clean delivery, including clean surface, hands, blade, and cord tie.*

*D- Management of complications, identify and manage complications, including bleeding, high blood pressure, prolonged labour, and **foetal distress**.*

### **Continuum of Care**

is a core principle of programmers for maternal, newborn, and child health, and a mean to reduce burden of half a million maternal deaths. And addressing stillbirths and neonatal mortality requires interventions across the continuum of care (preconception, antenatal, intrapartum, immediate postnatal period, and after).

-Reduced antenatal visits may be associated with an increase in perinatal mortality, compared with standard care.

**Check slide no.21 if you want :) it's full of numbers and percentages..**

## MCH 5&6 Summary.

### Evidence-based Antenatal Interventions that Reduce Perinatal Morbidity and Mortality :

#### Nutritional Interventions:

Folic Acid	reduces risk of <b>neural tube</b> defects that account for a small proportion of stillbirths or neonatal deaths.
Dietary advice and balanced energy supplementation	<u>Balanced energy and protein supplementation (BES)</u> , defined as a diet that provides up to <b>25</b> percent of total energy <u>in the form of protein</u> , is an important intervention for the prevention of adverse perinatal outcomes in populations with high rates of food insecurity and maternal undernutrition.
Maternal calcium supplementation	WHO recommends to take calcium supplementation <u>from 20 weeks' gestation</u> i populations in which calcium intake is low in order to reduce <b>hypertensive disorders</b> in pregnancy. It's also associated with significant reduction in neonatal mortality and risk of pre-term birth.
Maternal zinc supplement	Results in a small but significant reduction in preterm birth.

#### Antenatal Treatment of Maternal Infections:

Tetanus	Immunizing pregnant women or women of childbearing age with <b>at least two doses</b> of tetanus toxoid was estimated <u>to reduce mortality from neonatal tetanus</u> by 94 percent.
Syphilis	Untreated syphilis increases the risk of <u>still births</u> . Evidence of the effect of antenatal syphilis detection combined with treatment with penicillin suggests a significant reduction in <u>stillbirths, pre-term births, congenital syphilis, and neonatal mortality</u>
Malaria	Effective prevention strategies for malaria include prophylactic (preventive) antimalarial drugs through: <u>A-intermittent preventive treatment (IPT)</u> which is a control strategy aimed at reducing the burden of malaria in high risk groups, pregnant women and children. it improved mean birthweight and reduce the incidence of low birthweight and neonatal mortality. <u>B-Insecticide-treated bed-nets (ITNs)</u> which reduces fetal loss.
HIV	Most children with HIV acquire it from their mothers, and <b>Antiretroviral Therapy (ART)</b> is vital in preventing <u>vertical</u> (mother-to-child) <u>transmission</u> . Short ART courses commencing before labor, with treatment extended to newborns during the first week of life, have been shown to significantly reduce mother-to- child HIV transmission
Diabetes Mellitus and Gestational Diabetes Mellitus (GDM)	Optimal blood glucose control in pregnancy lowered the risk of perinatal mortality Lifestyle change is a essential component of management of GDM and may be enough for the treatment of many women! However, medications should be added if needed to achieve glycemc targets.

#### ملحوظة مهمة :

المحاضرة فيها كثير أرقام وحسب كلام الدكتورة مش مطلوبين لذلك ما ضفت نسبة كبيرة منهم.. لو حابيين ارجعوا لسلايدات وشوفوهم والموجودين هون مش بالضرورة كلهم حفظ بس المهم تفهموا الفكرة مش الرقم نفسه ينحفظ  
لو في أي خطأ بتمنى تسامحوني وتنبهوني  
بالتوفيق في دراستكم ولا تنسوننا من صالح دعائكم

Done by: Lubna Alnatour.