

COMMUNITY MEDICINE

WEEK 5
DR.SAMAR
LECTURE 1

EDITED BY: AMEEN ALSARAS

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

الحمد لله رب العالمين والصلاة
والسلام على نبينا محمد خاتم
الأنبياء وسيد المرسلين وعلى آله
وصحبه أجمعين وبعد

Some terms to be known

- Pre-natal = antenatal = Pre-partum = before birth = during pregnancy
- Maternal mortality: The death of a woman while pregnant or within 42 days (6 weeks) of giving birth (delivery).
- Peri-natal: Period around delivery (3 months before until 1 week after)
- Neo-natal: During 1st month after birth
- Adolescent: 10-19 years old

Maternal and child health

- Maternal and child health (MCH) care is the health service provided to mothers (women in their child bearing age) and children. The targets for MCH are **all women in their reproductive age groups, i.e., 15 - 49 years of age, children, school age population and adolescents.**

- Throughout the world, especially in the developing countries, there is an increasing concern and interest in maternal and child health care.
- We care for them because there is still a huge variance in morbidity and mortality rates. 99% of maternal mortality cases are found in developing countries.
- We have to accomplish social equity.

Learning Objectives MCH

- • Understand the importance and role of MCH care
- • Outline the objectives of the MCH programs
- • Describe major health problems of mothers and children
- • Identify the factors that affect the health of mothers and children

- • Major causes of maternal and child mortality and prevention
- • Recognize the available maternal and child health services
- • Describe the role of these services in preventing maternal and child morbidity and mortality

Objectives of Maternal Child Health Services

- 1-To reduce morbidity and mortality among mothers and children, through health promotion activities rather than curative interventions. (The most important one)
- 2-To improve the health of women and children through expanded use of fertility regulation methods, adequate antenatal coverage, and care during and after delivery.

Unwanted for many reasons such as economical, psychological, etc.

- 3-To reduce unplanned or unwanted pregnancies through sex education and the wider use of effective contraceptives.
- 4-To reduce perinatal and neonatal morbidity and mortality.
- 5-.Promotion of reproductive health and the physical and psychosocial development of the child and adolescent within the family.

*The perinatal period is riskier than neonatal period, and neonatal period is riskier than infancy, and so.

- 6. To reduce the incidence and prevalence of sexually transmitted infections, in order to reduce the transmission of **HIV infection**. (example)
- 7. To reduce the incidence and prevalence of cervical cancer

- 8. To reduce female genital mutilation and provide appropriate care for females who have already undergone genital mutilation
- 9. To reduce domestic and sexual violence and ensure proper management of the victims.
- Violence against women is found everywhere in Jordan.

- 10-To increase political awareness on the need to develop comprehensive intersectoral population policies using all available resources

Justifications for the provision of MCH Care

(Why do we provide MHC care?)

- 1-Mothers and children make up over 1/2 of the whole population.
- Children < 15 years are = 34.3% of the population
- Women in reproductive age (15 – 49) constitute around 20%.

- 2-Maternal mortality is an adverse outcome of many pregnancies.
- 3-Miscarriage, induced abortion, and other factors, are causes for over 40 percent of the pregnancies in developing countries to result in complications, illnesses, or permanent disability for the mother or child.

- 4-About 80 percent of maternal deaths in developing countries are due to direct obstetric causes. They result "from obstetric complications of the pregnant state (pregnancy, labor, and puerperium), from intervention, omissions, incorrect treatment, or from a chain of events resulting from any of the above.

Indirect causes include cancer, accidents, etc.

- 5- Most pregnant women in the developing world receive insufficient or no prenatal care and deliver without help from appropriately trained health care providers. More than 7 million newborn deaths are believed to result from maternal health problems and their mismanagement. **Whereas 0.5 million pregnant women die from labour.**

- 6-Poorly timed unwanted pregnancies carry high risks of morbidity and mortality, as well as social and economic costs, particularly to the adolescent and many unwanted pregnancies end in unsafe abortion. (Unsafe abortions may cause infections or even septicemia)
- 7-Poor maternal health hurts women's productivity, their families' welfare, and socio-economic development.



Physiological changes may affect these chronic diseases and make them riskier. So we might have to change medications and have a better control.

- 8- Large number of women suffers severe chronic illnesses that can be exacerbated by pregnancy and the mother's weakened immune system and levels of these illnesses are extremely high.
- 9- Many women suffer pregnancy-related disabilities like uterine prolapse long after delivery due to early marriage and childbearing and high fertility.

Premature	Low birth weight
Delivered before 36 weeks.	Born weighing less than 2.5kg
*Normal birth weight: 2.5-3.5 kg	
*Premature born babies usually have low birth weight.	

- 10- Nutritional problems are severe among pregnant mothers and 60 to 70 percent of pregnant women in developing countries are estimated to be anemic. Women with poor nutritional status are more likely to deliver a low-birth-weight infant.
- We in Jordan are mid-way, with about 30-35% anemia prevalence.

- 11- Majority of perinatal deaths are associated with maternal complications, poor management techniques during labour and delivery, and maternal health and nutritional status before and during pregnancy

- 12-The large majority of pregnancies that end in a maternal death also result in fetal or perinatal death. Among infants who survive the death of the mother, fewer than 10 percent live beyond their first birthday.
- Complications of pregnancy that cause maternal mortality are serious enough to affect the baby and lead to his death

- 13- Ante partum hemorrhage, eclampsia, and other complications are associated with large number of perinatal deaths each year in developing countries plus considerable suffering and poor growth and development for those infants who survive.
- Eclampsia = تسمم الحمل

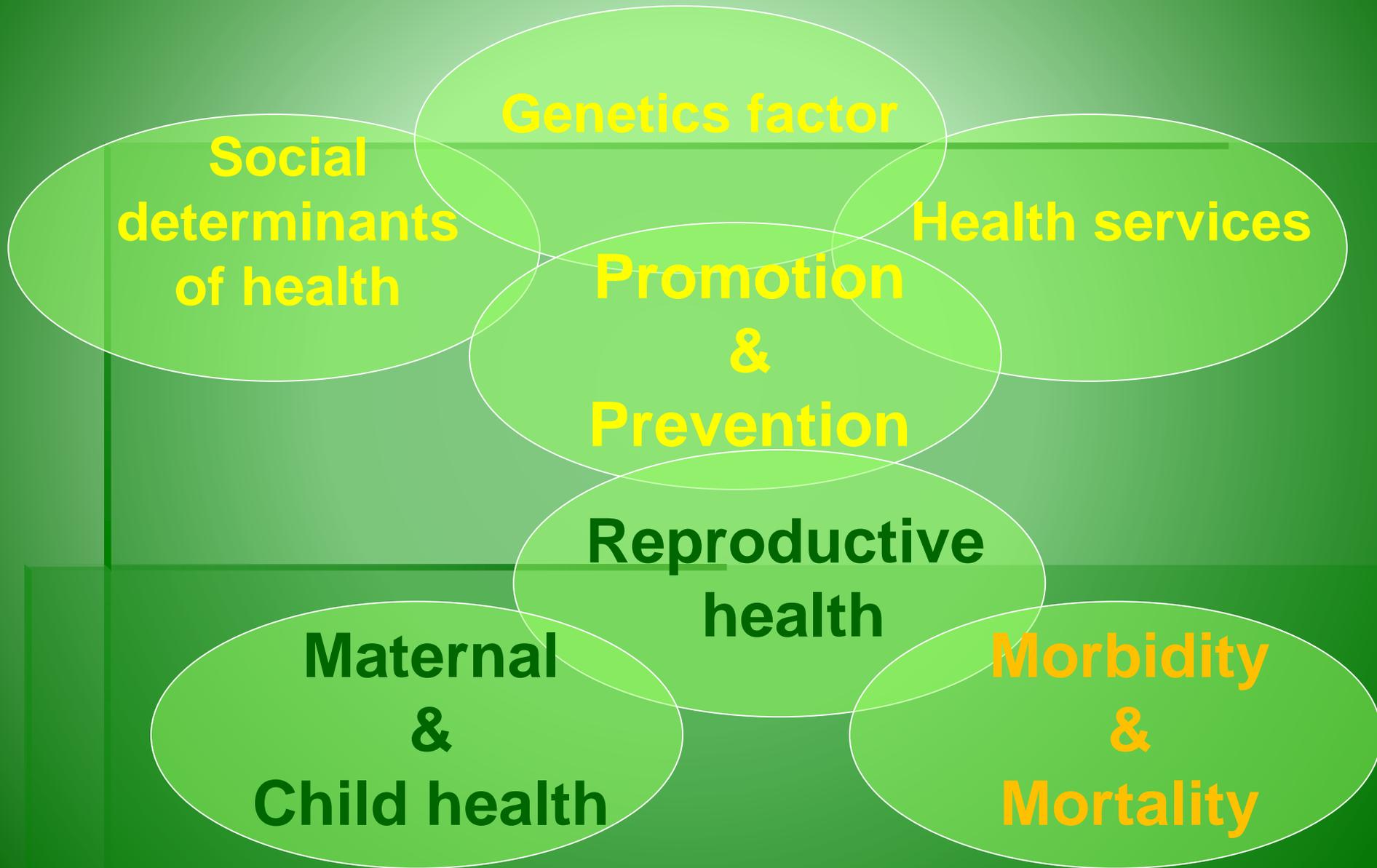
- 14-Physiological changes that the mother and her child pass through
- 15- More sensitive to the environmental factors changes. **Such as nutrition and pollution.**

Maternal Health

Learning Objectives

- • Understand the magnitude of maternal health problems / Maternal Morbidity
- • Describe the factors that affect the health of mothers
- • Describe maternal mortality
- • Outline the major causes of maternal mortality
- • Understand effects of maternal health on children, family and community

Reproductive health universe.



Reproductive Health

(an important part of PHC)

- Reproductive health care is defined as the constellation of methods, techniques and services that contribute to reproductive health and well-being through preventing and solving reproductive health problems.

- It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted diseases.

Reproductive health as PHC Service

- . Reproductive health care in the context of primary health care should include: family-planning counseling, information, education, communication and services;.

The doctor hasn't even read this slide...

- education and services for prenatal care, safe delivery, and post-natal care, especially breast-feeding, infant and women's health care; prevention and appropriate treatment of infertility; . .

- prevention of abortion and the management of the consequences of abortion; treatment of reproductive tract infections; sexually transmitted diseases and other reproductive health conditions;

- and information, education and counseling, as appropriate, on human sexuality, reproductive health and responsible parenthood.

***Referral can be to secondary or tertiary health care services.**

- **Referral** for family-planning services and further diagnosis and treatment for complications of pregnancy, delivery and abortion, infertility, reproductive tract infections, breast cancer and cancers of the reproductive system, sexually transmitted diseases and HIV/AIDS should always be available, as required.

Some indicators of health status of women

- 1-Maternal Mortality Rate /100,000 (15-49 years death due to Pregnancy , Labor and post partum period)The most sensitive indicator for maternal health..
- 2- Malnutrition among women in reproductive age group
- 3-Teen-age pregnancy

- 4- Low birth weight deliveries (<2.5kg.)
- 5-Weight gains during pregnancy
Normal (8-11 Kg.)
- 6-% of women visited ANC clinics.
- 7-% of Labor attended by Medical Staff.
- 8-% of women receiving family Planning Services.
- While in developed countries these numbers can reach 100%

Maternal health and developing countries.

- Most women do not have a good access to the health care and sexual health education services.
- A woman in sub-Saharan Africa has a 1 in 16 chance of dying in pregnancy or childbirth, compared to a 1 in 4,000 risk in a developing country – the largest difference between poor and rich countries of any health indicator.
- **Sweden has nearly 0%.**

- **At the level of preconception and prenatal care, pregnancy complications and childbirth are the leading causes of death among women of reproductive age.**
- **Less than one percent of these deaths occur in developed countries, showing that they could be avoided if resources and services were available.**
- **In Jordan, cancer is the leading cause of death in reproductive age women.**

General Consideration

- More than **150 million** women become pregnant in developing countries each year and an estimated **500,000** of them die from pregnancy-related causes. Maternal health problems are also the causes for more than **seven million** pregnancies to result in stillbirths or infant deaths within the first week of life.

- Far too many women still suffer and die from serious health issues during pregnancy and childbirth. In 2015, an
- estimated **303 000** women worldwide died due to maternal causes. (WHO 2018)
- Maternal mortality isn't counted easy so in Jordan it takes place every 10 years at best.

- Almost all of these deaths (99%) occurred in low and middle-income countries (LMIC), with almost two thirds
- (64%) occurring in the WHO African Region (2). Reducing maternal mortality crucially depends upon ensuring that
- women have access to quality care before, during and after childbirth.

- Maternal death, of a woman in reproductive age, has a further impact by causing grave economic and social hardship for her family and community.

- Other than their health problems most women in the developing countries lack access to modern health care services and increases the magnitude of death from preventable problems.

Maternal mortality.

- Critical indicator of population health reflecting the overall state of maternal health as well as quality and accessibility of PHC available to pregnant women and infants. Maternal mortality ratio is measured per 100 000 live births.
- Measuring maternal mortality accurately is difficult except where comprehensive registration of deaths and of causes of death exists.

Global scenario-Maternal health

- *Each year, **more than half million women die** from causes related to pregnancy & childbirth*
- *For every such death there are **20 others who suffer** pregnancy related illnesses or other adverse outcome (obstetric fistula, uterine prolapse)*
- *Around **10 million women annually suffer** from complications of pregnancy*
- *On average, **each day~1500 women die** from causes related to pregnancy & child birth*
- ***80% of maternal deaths could be avoided** by access to essential maternity & basic health services*