as a result of iron and/or folate deficiency and of malaria and other parasitic diseases

20 to 50% of women, and even more in some areas, are considered as anemic.

below 11 gr/ dL

60 percent of pregnant women in developing countries (other than China) had nutritional anemia (despite efforts in iron supplementation, fortification and dietary modification)

Another risk to expectant women is malaria. It can lead to anemia, which 1) increases the risk for maternal mortality (making women more susceptible to infection and less able to withstand infection or the effects of hemorrhage) And infant

2)developmental problems for babies.

Long term morbidity in women
 levels may be associated with low birth weight.

PATHOPHYSIOLOGIC CAUSES:

1) HEMODILUTION : HB concentration decreases in pregnant women (many women function well and do not require iron supplementation)

2) IRON DEFICIENCY is responsible for 95% of anemia of pregnancy

and during lactation; giving rise to Megaloblastic anemia

3) FOLATE DEFICIENC1 due to Increased turnover or requirements of folate can occur during pregnancy because of the transfer of folate to the fetus-

RISK FACTORS of anemia

1)Twin or multiple pregnancy
 2)Poor nutrition, especially multiple vitamin deficiencies
 3)Smoking, which reduces absorption of important nutrients
 4)Excess alcohol consumption, , leading to poor nutrition
 5)Any disorder that reduces absorption of nutrients
 6)Use of anticonvulsant medications

Region% of women Hb<11 Europe17% North America 17% Developed 18% Latin America 39% World 51% Africa 52% Asia (except Japan) 60%

Pregnant women should take iron tablets for at least 90 days during pregnancy to prevent anemia and other complications
Half of women (49%) received the recommended 90 days of iron supplements;
22% received no iron supplements during their last pregnancy

What increase the risk of a woman developing UTIs?

The short urethra & its intimate relationship with the vagina UTIs aetiology in pregnancy

1)immunocompromise in pregnancy
2)Urinary catheterization, frequently performed during labor , may introduce bacteria leading to UTI

3)In the postpartum period, changes in bladder sensitivity and bladder overdistention may predispose to UTI
4)The organisms which cause UTI in pregnancy are the same uropathogens -they have proteins found on cell surface which enhance bacterial adhesion leading to increase virulence - seen in non

pregnant individuals 5)Hormonal effects of progesterone also may cause smooth muscle relaxation leading to dilation

and urinary stasis, and vesicoureteral reflux (VUR) increases 6)During pregnancy, urinary tract changes predispose women to infection. Ureteral dilation is seen due to compression of the ureters from the gravid uterus

Gestational Diabetes mellitus

is high blood sugar that develops during pregnancy and usually disappears after giving birth.

It can occur at any stage of pregnancy but is more common in the second half. (It occurs when body cannot produce enough insulin)

Gestational diabetes can cause problems to the mother as well as her baby during and after birth(But the risk of these problems happening can be reduced if it's detected and well managed)

The prevalence of GDM (varies between 1% and 14%) in all pregnancies depending on the genetic characteristics environment of the population under study,

screening and diagnostic methods employed As well as on prevalence of type 2 diabetes mellitus Risk factors for gestational diabetes (GDM)

1)age 2)family or personal history 3)excess weight 4)non white race

gestational diabetes that's not carefully managed can lead to uncontrolled blood sugar levels and cause problems for the mother and her baby, including an increased likelihood of needing a C -section to deliver

Complications that may affect the mother who has GDM

1)induced labor & Caesarean section
 2)polyhydramnios (the excessive accumulation of amniotic fluid that surrounds the baby in the uterus during pregnancy
 3)premature birth
 4)pre-eclampsia
 5)type 2 diabetes

Sexually transmitted diseases

Each year, there are about 330 million new cases of STD & 1 million case of AIDS in the world

Examples of STDs 1) Gonorrhea 2) syphilis 3) Chlamydia 4) Genital herpes 5) Trichomonas vaginatis

1/3 of ever married women and all men have heard about STI rather than AIDS 11% (From men who have heard about STI) report having had an STI in the year before the survey. Men's self report of STIs is highest in Aqaba (24%) and Balqa (21%).

Causes of maternal morbidity in Jordan

Urinary tract infections Vaginal infections Anemia Early and late bleeding Hypertension Gestational diabetes Preeclampsia Multiple pregnancy Thyroid disorders Disseminated intravascular coagulopathy Heart & kidney Disease

Maternal mortality : The death of a woman whilst pregnant or within 42 days of delivery or termination of pregnancy, from any cause related to, or aggravated by pregnancy or its management, but excluding deaths from incidental or accidental causes

Maternal mortality ratio as the rate is not calculated using an(accurate count of all pregnancies that can result in a maternal death), (with stillbirths not included and infants in multiple birth sets over represented in live birth figures)

500,00 women die as a result of pregnancy each year (it is a statically indicator that shows the greatest disparity between developed and developing countries)

Maternal mortality is much higher in developing countries compared to developed nations owing to lack of adequate medical care; high prevalence of infectious diseases , higher total fertility rate and due to health care system difference.

Maternal death in sub Sarhan and Africa are 200 times higher the industrial countries

Adolescent pregnancy carries a higher risk due to : 1)incomplete development of the pelvis 2)hypertensive disorders

Concern for maternal mortality is not only for the mother's life it is also related to seven million newborns who die annually as a result of maternal health problems The health and socio economic impact on children, families, and communities

The major cause od pregnancy and child death to women in 1997 is severe bleeding

3/4 of maternal deaths are due to **direct** complications of pregnancy and childbirth, such as

severe bleeding, infection, unsafe abortion, hypertensive disorders (eclampsia) , and obstructed labor.

Women also die of **indirect** causes aggravated by pregnancy, such as malaria diabetes hepatitis, and anemia

Over 99 percent of maternal deaths occur in Asia and Africa.

The United Nations Millennium Declaration committed world leaders to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women

The MDGs were derived from this Declaration, and had specific targets and indicators. The MDGs have been superseded by the Sustainable Development Goals, a set of 17 integrated and indivisible goals that build on the achievements of the MDGs but are broader, deeper and far more ambitious in scope

Post 2015 UN development agenda MDG 1: eradicate extreme poverty and hunger MDG 2: Achieve universal primary education MDG 3: promote gender equality and empower women MDG 4: reduce child mortality MDG 5: improve maternal health MDG 6: combat HIV/AIDS, malaria and otherdiseases MDG 7: ensure environmental sustainability MDG 8: develop a global partnership for development

في سلايدة مهمة تكملة هاد الموضوع هيها تحت اول وحدة

MMR 41 per 100,000 in >>2000 to 12 per 100,000 in >>2015

Maternal death per 100,000 Sudan > Yemen >Egypt

Direct causes of maternal mortality in Jordan 1)hemorrhage 2)thromboembolism 3)septicemia

Indirect MMR in Jordan in 2007 (26.3%)

Delivery 3W When, Where and Who 3cs

Clean hands
Clean delivery service
Clean cutting of the cord How : Normal or CS

69% of women give birth public facility 30% in private facility 1% in home

Post natal Observe physical status Advise, and support on breast feeding Provide emotional and psychological support. Health education on weaning and food preparation. Advise on Family Planning

83% of women age 15-49 received postnatal check ups within 2 days of delivery

86% of newborn

12% of women received no check ups 13% of new born relieve no check ups

Improve maternal health Targets and Indicators

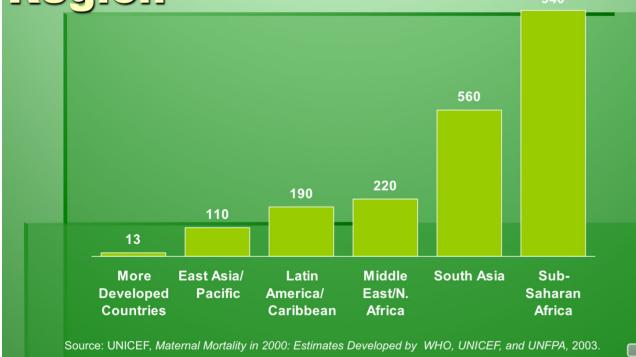
- Target 5a: Reduce by three quarters the maternal mortality ratio
 5.1 Maternal mortality ratio
- 5.2 Proportion of births attended by skilled health personnel
- Target 5b: Achieve, by 2015, universal access to reproductive health
- 5.3 Contraceptive prevalence rate5.4 Adolescent birth rate
- 5.5 Antenatal care coverage (at least one visit and at least
- four visits)5.6 Unmet need for family planning

Young adolescents face a higher risk of complications and death as a result of pregnancy than other women.

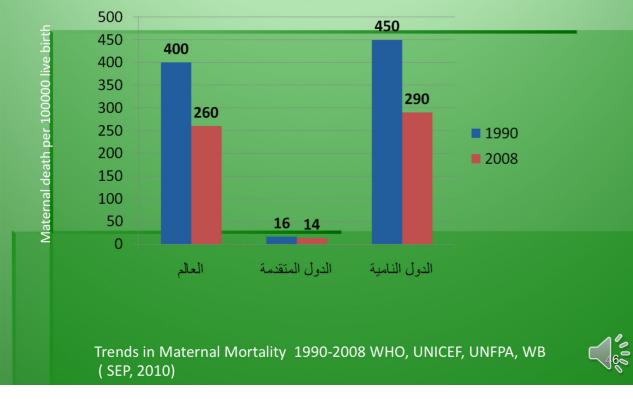
- Skilled care before, during and after childbirth can save the lives of women
- and newborn babies.

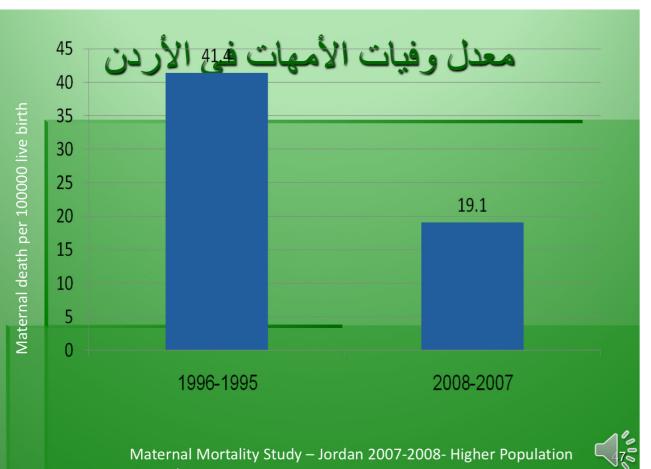
While high-quality, accessible health care has made maternal death a rare event in more developed countries, the lack of such health care has fatal consequences for pregnant women in less developed countries.

Maternal Mortality, by Region



اتجاهات معدل وفيات الأمهات عالميا

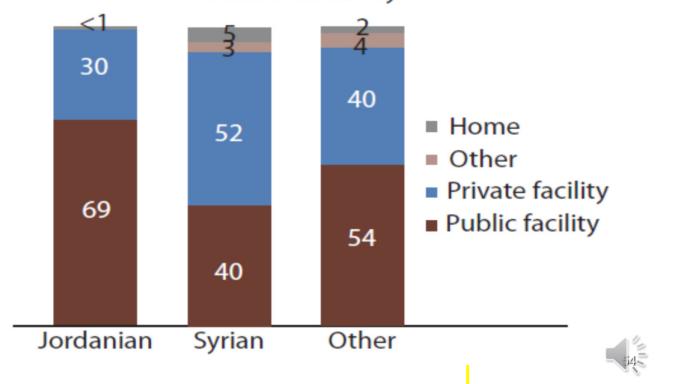






Place of Delivery by Nationality

Percent distribution of live births in the five years before the survey



Maternal Mortality General Consideration

- Maternal mortality is the leading cause of death among women of reproductive age in most of the developing world.
- Globally, an estimated 500,000 women die as a result of pregnancy each year. It is the statistical indicator, which shows the greatest disparity between developed, and developing countries.

Maternal mortality in developing countries is given least attention, despite the, fact that almost all of the suffering and death is preventable with proper management. Maternal mortality constitutes a small part of the larger maternal morbidity and suffering, because for every maternal death there are a lot of women suffering from acute and chronic illnesses during pregnancy, delivery and 6 weeks after.

Maternal mortality is much higher in developing countries compared to developed nations owing to lack of adequate medical care; high prevalence of infectious diseases, higher total fertility rate and due to health care system difference.

Countries with high maternal mortality ratio have less reliable vital statistics registry system; as a result level of maternal mortality is usually underestimated and little information is available regarding locally specific risk factors for maternal death

Causes of Maternal Mortality Pregnancy and Childbirth-Related Deaths to Women, by Cause, 1997

