





Lecture Title:	Maternal Morbidity & Mortality					
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Slides	Sheet			Other:		
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## Sheet #25 Hiba Abbadi

# **Maternal Morbidity & Mortality**

Last lecture, we talked about physiological diseases in pregnancy ranging from eclampsia, gestational diabetes and abortions (bleeding).

The most important reasons for abortion in

- -> First trimester is: abortion bleeding
- -> Second trimester: placenta previa
- -> Third trimester: placental abruption (rupture of the placenta)

#### **Psychological problems:**

Many women preconceptionally have some mild forms of low moods and very mild forms of depression, however first pregnancy postpartum depression has to be taken seriously. We have 2 main psychological problems:

- Depression (more common)
- Psychosis (severe)

**Depression (Mild postpartum blues):** physiological reactive depression with no psychotic features. Depression is usually mild, however with a need of psychological support (someone there to be helping mother take care of her child).

-> By 4-6 weeks, symptoms of depression decrease or almost disappear.

**Psychotic depression**: severe depression, mother doesn't take care of her newborn or herself. Sleep disturbance is experienced along with hallucinations and suicidal thoughts. The mother also undergoes anxiety, despair and doesn't live realistically.

You would need to start her on antidepressants and antipsychotic drugs as soon as possible. However, the mother won't be able breastfeed her child. Someone must be there helping her take care of the baby all the time (for the safety of the baby). **Psychosis** has symptoms that might lead to schizophrenia. The first attack is usually post partum. However, psychotic depression isn't caused by just pregnancy; the mother would have had complications with depression before. Psychotic patients are usually diagnosed after delivery and this type of depression is found in around 1% of women. Postpartum psychosis characterized by delusion (wrong thoughts), hallucination, insomnia, preoccupation with the baby, severe depression, anxiety, despair and suicidal impulses. **Symptoms of depression**: low mood, sleep disturbance, unusual appetite, patients not enjoying what they used to enjoy, exhaustion, weakness, motivational loss, irritability, feeling of hopelessness, headaches, asthma & backaches.

Postpartum depression is better off treated when diagnosed earlier since deep depression needs further care.

**Counseling** and psychotherapy is the first step in management of postpartum depression. Sometimes, counseling is enough, and other times it isn't [specifically if the lady has endogenous or psychotic depression since the patients don't listen (occupied by their thoughts)].

Family support is very important to prevent postpartum depression. In Jordan, it is thought of as an alternative to counseling. However, counselors are also important in all preventative centers (e.g. Nutritional, premarital, etc.).

Unfortunately in our country, people only rely on the doctor for advice and don't follow the preventative services provided by skilled and trained persons.

The most common maternal morbidity in Jordan is infections: **urinary tract infections** and **vulvovaginitis**.

**Vulvovaginitis**: infection of the vulva and vagina. Pregnant women are more prone to infection, specifically the ones with gestational diabetes. Infection can reach the cervix and endometrium and therefore cause uterine wall infection=endometritis. However, endometritis is not as common as vulvovaginitis and urinary tract infection. The infection can even go further and reach the pelvis, which would cause pelvic inflammatory disease (one of the important causes of infertility).

**Urinary tract infection:** Is due to short urethra and intimate relationship with the vagina. Experienced in late stages of pregnancy since there is usually pressure from uterus on the short urethra, and also causes urinary stasis.

**Symptoms** of UTI: dysuria, frequency of micturition.

- -> 20% of women experience dysuria within their pregnancy.
- -> E.Coli is the usual cause of the infection and is treated with antibiotics.

Other causes of maternal morbidity are **sexually transmitted diseases**, which are transmitted through sexual contact. They cause pain, infertility and death if not treated.

- -> STD's aren't a major problem in Arab and Islamic communities. However, not all STD's are gonorrhea, syphilis, Aids.. etc.
- -> Chlamydia and herpes are asymptomatic diseases found among married couples in our communities.

**Examples of STDS**: Gonorrhea, syphilis, chlamydia, genital herpes, trichomonas vaginitis. In Irbid, more than 20% of women had chlamydia, however since its asymptomatic, they didn't know.

\*When we prevent maternal morbidity, we decrease maternal mortality.

#### Ratio of mortality to morbidity is 1:16

The following are conferences that were held which the doctor just read of the slides:

ALMA-ATA Conference on primary health care

The Safe Motherhood Conference in 1987

International Conference on Population and Development 1994

Fourth World Conference on Women 1995

These conferences discussed health promotion and maternal health care as well.

The goal of the 2000 Millenium Development Goals was to <u>reduce maternal mortality by two thirds by the time we reach 2015</u>. (From 41 to 12, now it's 19)

Jordan is one of the developing countries that has been facing many problems with maternal morbidity. Maternal morbidity <u>reaches five times that greater</u> of the developed countries, and studies done are very rare in developing countries.

Maternal Morbidity is harder to study than that of maternal mortality. In Jordan, the Higher Population council obtained financial support from UNFPA and conducted a study in **2005**. The following were the results of the study:

Causes of maternal morbidities in Jordan: LOOK AT THE SLIDES (from most common to rarest) \*the doctor mentioned to know the first 4 and last 4.

- -> The <u>highest disease</u> is the <u>urinary tract infections along with vaginal infections</u>. After that come anemia, bleeding, and then hypertension (which was #1 global wise for all populations).
- -> The <u>least</u> important was <u>Heart Disease</u> (even though it's one of the most important deathly diseases among all populations).

The overall general morbidity rate during all pregnancy labor, delivery and postpartum was **60.8%** which is very high.

- -> Morbidity rate for the current pregnancy was **41.3%**.
- -> About **34.5%** suffered from at least one morbidity during current labor and delivery.
- -> Current postpartum, around **18.7%** of women suffered from one or more morbidities.
- \*Since these rates deal with Jordan, it's very important you know them all!
- -> The rate of cesarean sections was also high, **27.7%** & in **2007 was 18.5%**. \*(Remember we said that cesarean sections in Jordan are high; mean that the health status is low).
- ->Rates of anemia at enrollment and delivery were 20.1% and 26.3% respectively (Hb<11gm/dl)
- \*Any rate above 5% means a high morbidity rate

Because these rates were high, policies were made for the supplementation of iron and folic acid to pregnant ladies

However, most cases of anemia were mild anemia (Hb  $^{\sim}$  10-12 gm/dl), only about 5.9% of women had hemoglobin levels less than 10 gm/dl.

<u>Urinary tract infections (20.2%)</u> with <u>genital infections (19.4%)</u> made up about **40%** of the morbidities during current pregnancies.

New topic:

#### **Family Planning Services**

- o Enable women and men to limit family size
- Safeguards individual health and rights
- Preserves planet's resources
- o Improve the quality of the life for the individual women, their partners and their children
- Prevents unwanted or risky pregnancy
- Decreases incidence of congenital abnormalities
- Controls world population size

- o Improves all aspects of life standards (economical, educational and health psychological)
- For women, decreases morbidity and mortality since there will be spacing and mother can restore nutrients (she needs about 2-3 years to get back to normal), therefore family planning improves quality of life.
- Decreases infant mortality rates (remember the infant is more sensitive)
- o Improves all aspects of life standings economically, educational, health and psychologically.

Lactation usually lasts for 6 months-1 year. Lactation is a physiological stress (hard for mother to be pregnant and lactating at the same time).

**Family planning definition:** (the doctor read it straight from the slides)

Respects the right of each family to decide on the number of children they desire, but aiming to protect the health and welfare of the family, offers counseling and means for <u>deliveries</u> to occur at optimum ages (20 to 35 years), in optimal numbers (less than 5) and at optimal intervals (at least 2 years).

## **Family Planning Counseling:**

Needs to be:

- o Great
- Reassuring
- Explain: need to explain to the woman the type of contraceptives with side effects (you need to choose the right method for each woman)
- Answer: answering all questions
- Giving right method of contraception: (T/Rx)

Jam3eyet Tanzeem El Osra (our main contraceptive center which is private covers more than 60% of family planning services)

### Choosing Methods depends on:

- 1) **Personal Consideration**: Giving a contraceptive to a woman with one child will differ than giving it to one with 7 children, or if the woman is sick.
- 2) Effectiveness of method (pills are 99%)
- 3) Safety
- 4) Cost: Usually very cheap or about free [in Jam3eyet El Osra (3-5JDs)]

When giving counseling on family planning, you need to:

- 1) Obtain a detailed history of the woman
- 2) Information on all available methods
- 3) All practical points related to the use of the selected method must be discussed in detail.

## **Main Contraceptive Methods:**

A) Traditional Methods or Natural Methods (Breastfeeding, Safe period to avoid ovulating, withdrawal)

## B) Modern Methods (Pills, Norplant, etc.)

The most important traditional method is breastfeeding.

### **Lactation Amenhorrhea Method (LAM):**

The woman can use this method if breastfeeding is <u>exclusive</u>, constant and <u>satisfying to the baby</u> and <u>her menstrual period has not returned</u> since delivery. Risk of pregnancy is only 1.8%.

- -> Advantages of breast-feeding: cheap method.
- -> No side effects.

#### **Modern Methods:**

<u>Hormonal</u>: contraceptive pills (can be estrogen and progesterone (mixed), or progesterone only)

-> Side effects however are many. Therefore, a detailed history is taken from the woman to see if she can tolerate the side effects.

Side effect of mixed pill = thrombophilic phenomena, side effects of progesterone only pill are less.

\*Please take a look at the slides since they cover extra information and reinforce everything written here.