



University of Jordan  
Faculty of Medicine



Medical Committee  
The University of Jordan





# Community Medicine



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## Community lecture # 16

### Maternal and child health services

Today we are going to study very important topic concerning PHC services which is the maternal child health services.

**-maternal child health services are very important here in Jordan**

**because:**

1- Children and child bearing women are a large category in Jordan where they constitute more than 50% of the population (before, they used to constitute about 65% then it dropped) and this is why we have to give the priority to maternal child health services:

- Children below 15 years are about 35%-40% (later the dr. said that they were 43% and now they are 35%)
- Child bearing aged women are about 15%-20% (later she said 10%-15%)
- Both together constitute 50%-60%

2- Because they are under physiological stresses (both child and mother) why?

- Pregnant women: have psychological and physiological factors, need more rest than normal women, and need better nutrition.
- Growing child: they are developing physically and psychologically and their immune system is developing during the first 5 years, that's why they need vaccination during their first years. Also, The growth of the nervous system during the first 2 years, growth of the body and skills during the first 5 years.

3-usually because they are under physiological stress they are more sensitive to environmental factors and these environmental factors are:

- Change in the temperature (they are more affected).
- Nutritional factors (where they have special needs).
- Pollution whether air pollution, water pollution or whatever.

## **- What are the main objectives of maternal child health services?**

1- Reduce the morbidity and mortality rates for both mother and child but we are concerned more with reducing the morbidity why? Because:

- Morbidity rate is higher than mortality rate where:

Maternal morbidity= 16 per 1000

Maternal mortality= 19 per 100000

Note: infant mortality is higher than maternal mortality

- Also not every disease will lead to death it may be complications without death

2- improve the health of women to get ready for a healthy pregnancy because if we have healthy pregnancy then we will have a healthy newborn and if we have a poor and a complicated pregnancy then we will have a poor health child( note: complications of pregnancy affect the fetus more than the mother)

3- Reduce unplanned, unwanted, risky, or complicated pregnancy due to social, psychological, and health problems (family planning is important in maternal and child health services).

4- Promotion of the productive health in the physical and psychological development and adolescence of the child within the family (healthier psychosocial development).

5-increase political awareness on the need to develop comprehensive intersectoral population using all the available resources:

- So we have to know the available resources and accordingly we put the policy of maternal child health services
- Certain communities include in their MCH services policy determination for the number of children each family can have (example: if you have another child above the determined no. you will have to pay everything including his health care, health insurance and education, etc.). Such policies are not present in Jordan instead we have certain other policies, for example, the application of vaccines by special school vaccine cards (an important policy).

Note: fast growing populations have higher % of children below 15 years and less % of elderly.

- **What are the statistical figures that reflect the situation of maternal and child health services in any community?**

1- the most important one is the infant mortality (we have what we call neonatal mortality, which is death during the first month, but this is not studied well in Jordan where we usually depend on the infant mortality rate but in the developed countries where the infant mortality rate is almost zero so such countries study the neonatal rate)

- neonatal mortality is more sensitive than infant mortality (the risk to die in the first day is more than the first week more than the first month more than the first year)

2- Child mortality from (1-5) years: child mortality is not more than 1/4 of the infant mortality (for example if infant mortality is 20 then child mortality is not more than 4-5)

3- Vaccination rate: it is one of the most important preventive services during childhood because infectious diseases in any community start during the first 5 years so vaccination rate of children is an important factor that reflects how maternal child health services are going in any community.

4- Maternal mortality: it is the death of women during pregnancy or delivery or within 6 weeks after delivery

- come after infant mortality in the importance
- maternal mortality is calculated per 100000

5- Percentage of mothers vaccinated (tetanus vaccine) الكزاز

- tetanus vaccine is given to pregnant women to prevent neonatal tetanus (Tetanus after birth)
- Usually neonatal tetanus is transmitted through unsterilized instruments used during labor.
- tetanus that happen normally (in adults) is due to contaminated wounds

- tetanus in adults is not fatal disease but in relation to neonates it is a fatal disease if not treated properly
- this factor (tetanus vaccination) is not of that much importance in Jordan because 99% of labor is in hospital (sterilized instruments) but it is of more importance in the countries (developing) where most of the labors are at home because at home we are not sure whether the instruments are completely sterile or not.

#### 6- Percentage of women visiting ANC (antenatal care clinics): عيادات الحوامل

- When the percentage of visiting the ANC became 100% (in developed world) the maternal mortality started dropping to zero and infant mortality to 4 or 5.
- ANC has a direct relation with maternal and infant mortality rate why? because many of pregnancy diseases are detected during ANC
- Higher % of ANC visiting means less mortality for both child and mother

#### 7- Rate of doctors: this determine the quality of all health services not just maternal child health services.

#### 8- Rate of nurses and midwives

- In Jordan midwives are not enough and not skilled enough to cover the normal labor or the normal antenatal services so such services are covered by practitioners or specialized doctors (أطباء النسائية والتوليد). our policy in Jordan mentioned that midwives cannot do normal labor
- In countries like UK their policy says that midwives are skilled enough to do normal labor and doctors are responsible for more complicated pregnancies or cesarean sections or obstructed labors.

#### 9- What is important in labor is:

- Who attend the labor (doctor / nurse ...etc.)
- Where: (hospital / home ...etc.)
- When : ( term / preterm )

Note: in the case of preterm the infant and neonatal mortality is high

10- Percentage of women receiving family planning services (the better planning services we have the less fertility, the less maternal and child mortality and morbidity)

## - Contents of maternal child health:

1- Maternal services

2-infant and child services

## - Maternal services include:

### 1- Premarital services : ( خدمات ما قبل الزواج )

- In Jordan it is a recent service and mainly its aim is the genetic diseases (especially thalassemia) and this comes as a result of policy which makes thalassemia test obligatory before marriage.
- premarital services have several aspects not just the genetic ones.

### 2- Preconceptional services (after marriage, before pregnancy ):

Such services allow the women to be ready for pregnancy and to know risky factors associated with pregnancy (risky pregnancy) and these services are:

- 1- Education: it's very important to council women before pregnancy and this is achieved by Asking her if she is ready for pregnancy or not?
- 2- Suitable age to get pregnant :
  - If the woman is 18 years or less ( in some developing countries) you should advise her not to get pregnant
  - If the woman gets married when she is 28 or 30 years then you should advise her to get pregnant before reaching 35 age.
  - So the pregnancy below 18-20 or above 35 is risky
- 3- Weight (the physical status): obese women when they get pregnant they may face the following problems:
  - Diabetes
  - preeclampsia (toxemia during pregnancy): تسمم الحمل

- One of the most important causes of maternal death but now it became of less importance why? Because the maternal health services are now better and the coverage of ANC became more, for example in the ANC:

They are now diagnosing:

- 1- Hypertension
- 2- obesity
- 3- Proteinuria: presence of protein in the urine

- As a result of all of these, it won't reach preeclampsia, so it will decrease.

Note: if the body mass index of the women is more than 27 then you should Advise her to lower it to 25 then become pregnant, for a healthier pregnancy.

4- Diagnosis for any disease (heart disease, renal problems, epilepsy bronchial asthma)

### **3- conceptional services ( during pregnancy ):**

- always when we say conceptional services we have to think how to let the lady follow ANC to detect complications of pregnancy at early stages and not to allow these complications to reach ketoacidosis for example if the mother is diabetic, or not let her reach preeclampsia (must diagnose symptoms early).
- These complications affect both mother and neonate but the neonate is more sensitive and more affected (higher infant mortality than maternal).
- **So who are the more exposed to complicated pregnancy?**
  - 1- Women with Past medical history (if the mother have certain disease like heart disease, renal problem, bronchial asthma, epilepsy, psychiatric problems like depression and psychosis affect pregnancy because of the drugs used to treat such diseases, so you have to choose drugs that do not affect pregnancy)
  - 2- Age
  - 3- Weight

- 4- Height (less than 155 cm affect the size of the pelvis).
- 5- Social class : poverty for example is a risk factor not just for pregnancy but it affects pregnancy more because it's a sensitive period (nutritional needs, special health care, special environmental factors, less exposure to pollution) so the level of living and services affect pregnancy.
- 6- Smoking and alcohol.
- 7- Number of children:
  - Multipregnancy (pregnant for the 6<sup>th</sup> or the 7<sup>th</sup> time) may suffer from complications (for example: abortion, diabetes, and hypertension –but not preeclampsia cause usually it is a disease for primary pregnancy, premature labor if less than a year between children)
  - Primary pregnancy (first pregnancy) also may have certain complications, because you don't know how the body will react to pregnancy.

- Most causes of maternal morbidities are :
  - 1- preeclampsia
  - 2- Diseases of first pregnancy and multipregnancy.
- Visits to antenatal care:
  - During the first 7 months there is one visit each month
  - During month 8 there is one visit every two weeks
  - During month 9 there is one visit every one week
  - So we have as average about 12 visits if the woman starts visiting ANC from the first missed period
  - ANC services include the examination of the fetus by ultrasound
  - Also testing women for: (weight, pressure, blood test, urine test ... etc.)And all of this aim to control diseases.



#### 4- Delivery care:

- During delivery 3 things are of a major importance:
  - 1- Where labor happened
  - 2- Who attended the labor ( medical staff, traditional birth attendance, midwives )
  - 3- When labor happened
    - Mature (term) child is born within 36-42 weeks of pregnancy
    - Premature: child is born within less than 36 weeks of pregnancy
    - Postmature: child is born within more than 42 weeks of pregnancy( in

this case we induce labor) to prevent complications.

Note: traditional birth attendant is not a nurse but she just acquired Experience in labor and they still attend labor in certain developing Countries

#### 5- Postnatal care:

- Most important category of such services is family planning services.

Done by: Razan Salameh

**GOOD LUCK**

