MATERIAL MORTALITY

مرحلة الخامسة - رعاية صحية
م.د. ميادة كامل محمد
مدرسة فرع طب الأسرة والمجتمع
MATERNAL MORTALITY

- Introduction
- Definition
- Determinants
- Prevention
85% women will deliver normally

% women will develop complications 10-15

need surgical interventions 3-5% women will (blood/Cesarean etc.)

women having a normal delivery

More chances of

However delivery complications can occur suddenly, without any warning signals
SOME FACTS

20-25% deaths occur during pregnancy.

labour and 40-50% deaths occur during delivery

25-40% deaths occur after childbirth

(More during the first seven days)

It is important to focus attention during pregnancy and also after childbirth
Death of a woman who is pregnant or within 42 days of termination of pregnancy, irrespective of the site or duration of pregnancy, from any cause related to or aggravated by the pregnancy or its management.
DIRECT OBSTETRIC DEATHS

- The deaths resulting from obstetric complications of the pregnant state (pregnancy, labour and the puerperium), from interventions, omissions, or incorrect treatment, or from a chain of events resulting from any of the above are called direct obstetric deaths.

Indirect obstetric deaths

Those resulting from previous existing disease or disease that developed during pregnancy and that was not due to direct obstetric causes but was aggravated by the physiological effects of pregnancy.
**Late maternal death**
Late maternal is death of a woman from direct or indirect obstetric causes, more than 42 days but less than one year, after termination of pregnancy.

**Pregnancy related death**
defined as: the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the cause of death.

To facilitate the identification of maternal death in circumstances in which cause of death attribution is inadequate, ICD-10 “pregnancy-related death” introduced a new category, that of
MEASUREMENT OF MATERNAL MORTALITY

There are three main measures of maternal mortality:

- maternal mortality ratio,
- maternal mortality rate,
- lifetime risk of maternal death.
MATERNAL MORTALITY RATIO

- This represents the risk associated with each pregnancy, i.e. the obstetric risk.

- It is calculated as the number of maternal deaths during a given year per 100,000 live births during the same period. This is usually referred to as rate though it is a ratio.
The appropriate **denominator** for the maternal mortality ratio would be the **total number of pregnancies** (live births, fetal deaths or stillbirths, induced and spontaneous abortions, ectopic and molar pregnancies).

However, this figure is seldom available and thus number of live births is used as the denominator.

In countries where maternal mortality is high is per 1000 live births but as this denominator used indicator is reduced with better services, the denominator used is per 1,00,000 live births to avoid figure in decimals.
Onset, time and death

- APH-12 hours
- PPH – 02 hours
- Rupture uterus- 24 hours
- Eclampsia – 48 hours
- Infection – 06 days
CAUSES OF MATERNAL MORTALITY

20 % - indirect
80 % - direct

Four Major causes

- Haemorrhage
- Infection (sepsis)
- Eclampsia
- Obstructed Labour

*Total is more than 100% due to rounding.*
Source- Registrar General India. Causes of Maternal Mortality in Rural India
UNDER LYING FACTORS

- Socio-economic
- Nutritional
IMPACT OF MATERNAL DEATHS

- Children who lost their mothers are more likely to die within two years of maternal death.
- 10 times the chance of death for the neonate.
- 7 times the chance of death for infants older than one month.
- 3 times the chance of death for children 1 to 5 years.
- Enrolment in school for younger children is delayed and older children often leave school to support their family.
WHAT IS COMMON TO ALL THESE CAUSES?

They all are preventable to a great extent.
IF THEY ARE ALL PREVENTABLE THEN WHY NOT?

The reasons are

Social
Economical
Medical
SOCIAL ISSUES

- Early marriage
- Gender discrimination
- Illiteracy
- Female feticide
- Desire for selective sex of child
- Domestic violence
ECONOMIC ISSUES

- Lack of money
- Lack of timely transport and communication
- Delay in taking decision to shift
- Improper dietary habits
MEDICAL ISSUES

Lack of ANC

Lack of emergency obstetric care

Lack of blood and blood products

Lack of essential drugs

Junior staff dealing with high risk cases without supervision

Delay in diagnosis / wrong diagnosis
PREVENTION OF MATERNAL MORTALITY

- **Health Education**
  - Age at marriage
  - Utilization of services
  - Awareness of antenatal care
  - Nutritional education
  - Importance of Immunization
  - Spacing / Limitation of births
PREVENTION OF MATERNAL MORTALITY

- Safe Abortion services
PREVENTION OF MATERNAL MORTALITY

- **Health delivery infrastructure**
  - Improved staffing
  - Facilities for Essential / Emergency obstetric care
    (TBAs)
  - Training of traditional birth attendants
PREVENTION OF MATERNAL MORTALITY

- **Health care delivery**
  - Emergency management of Eclampsia / Third stage complications at PHC level
  - Flying squad services
PREVENTION OF MATERNAL MORTALITY

- Adoption of small family norm
Prevention of anaemia

- Concept of 100 tablets
  - at puberty
  - at the time of marriage
  - during pregnancy
  - during lactation
Final Message

Child birth – a miracle of life should not become a nightmare of death.