

Maternal and perinatal mortality

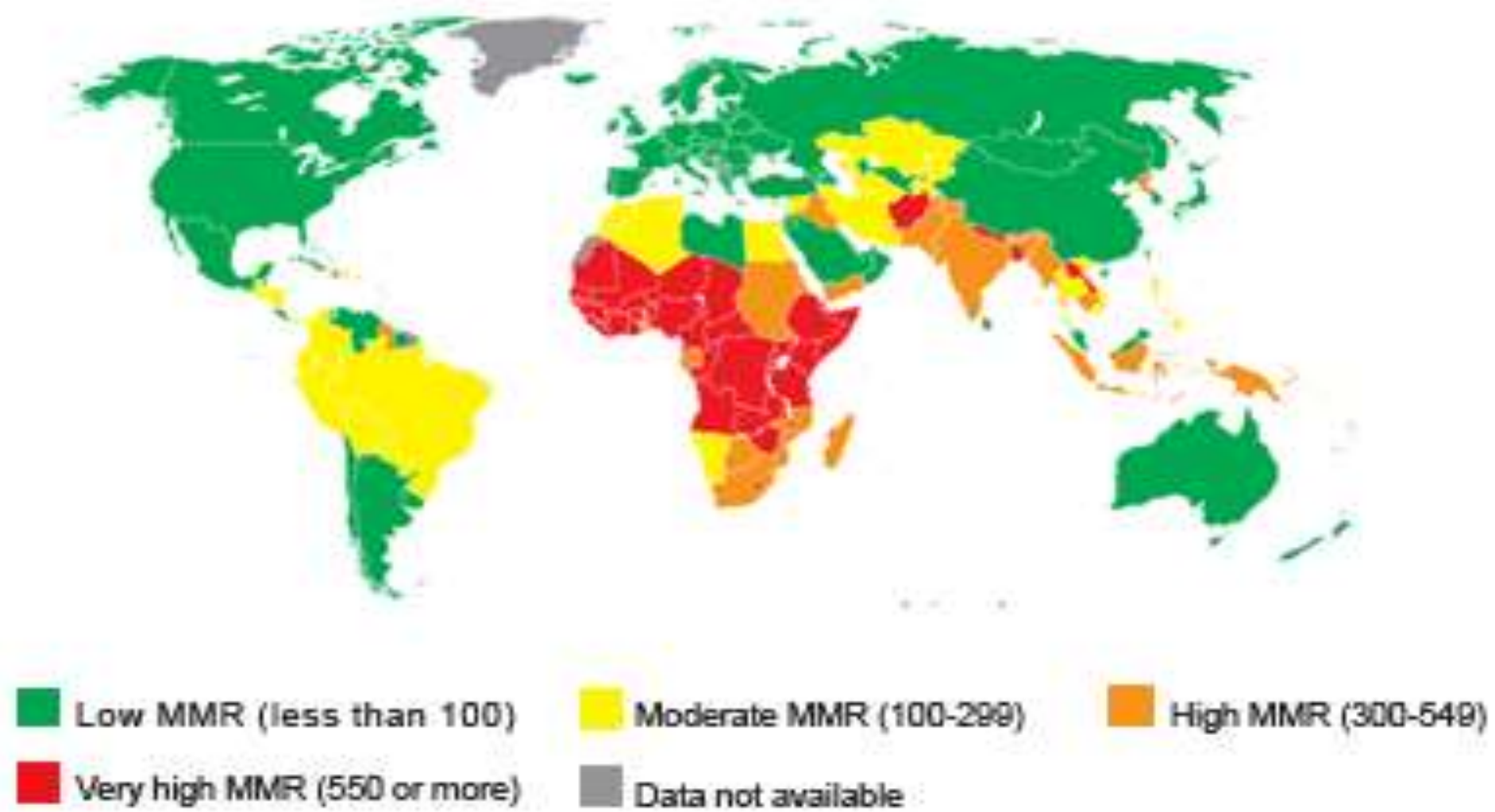
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Maternal mortality is highest in countries of sub-Saharan Africa and South Asia

Maternal mortality ratios (MMR) per 100,000 live births (2005)



INTRODUCTION

- Mortality rates in the perinatal period are used to evaluate the outcome of pregnancy and monitor the quality of perinatal (prenatal and neonatal) care. The perinatal mortality rate encompasses late fetal and early neonatal mortality.

INTRODUCTION

- About 287 000 women died in 2010 of complications during pregnancy or childbirth.
- Most of these deaths can be avoided as the necessary medical interventions exist and are well known.
- The key obstacle is pregnant women's lack of access to quality skilled care before, during and after childbirth

INTRODUCTION

- Causes of maternal mortality
- **The major direct causes of maternal morbidity and mortality include:**
- **The most common cause is VTE,,, others causes:**
 - 1. Hemorrhage,
 - 2. Infection,
 - 3. High blood pressure,
 - 4. Unsafe abortion,
 - 5. Obstructed labour.
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INTRODUCTION

- These complications may arise **unexpectedly**.
- Investing in health systems - especially in training midwives and in making emergency obstetric care available round-the-clock - is **key** to reducing maternal mortality.
- support women in seeking the needed care is 2nd **key**

Definitions

- The use of standard terminology facilitates comparisons of mortality rates among states and countries
- A 2016 clinical report from the American Academy of Pediatrics (AAP) Committee on Fetus and Newborn established standard terminology for fetal, infant, and perinatal deaths, based on standards set by the World Health Organization (WHO) and the National Center for Health Statistics (NCHS) of the Centers for Disease Control and Prevention (CDC)

Definitions

- **The World Health Organization :**
- **Live birth:** Live birth is defined as complete expulsion or extraction from the mother of a product of human conception, irrespective of the duration of pregnancy, shows any evidence of life (heartbeats, umbilical cord pulsations, breathing, or voluntary muscle movement), regardless of whether the umbilical cord has been cut or the placenta is attached. Heartbeats should be distinguished from transient cardiac contractions and breathing distinguished from fleeting respiratory efforts or gasps.

Definitions

The World Health Organization

defines **perinatal mortality** as the number of stillbirths and deaths in the **first** week of life per 1,000 total births, the perinatal period commences at **22** completed weeks of gestation, and ends seven completed days after birth.

..... other

Definitions

Definitions

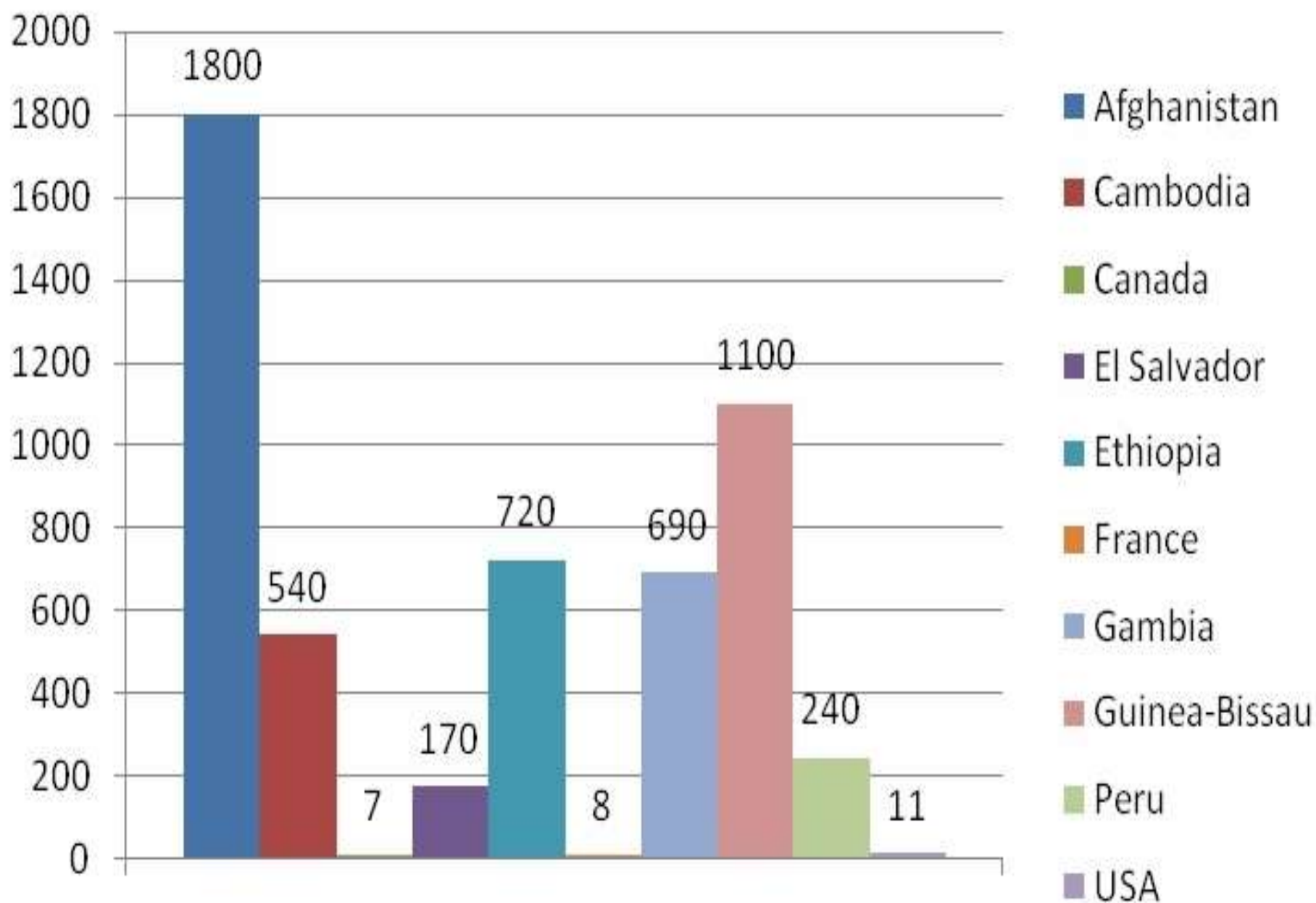
- **Maternal death:** death of a woman while pregnant or within 42 days from its end from causes related to or aggravated by pregnancy
- **Direct maternal death:** death from obstetric complications
- **Indirect maternal death:** death resulting from previous disease or disease developed in pregnancy but not caused direct obstetric causes
- **Late maternal death:** death resulting from direct or indirect causes from 42 days to 1 year after delivery (end of pregnancy)

Maternal mortality

- The overall rate indirect deaths higher than direct causes
- The most common cause of direct cause is
- **VTE**
- Following by:
- **Amniotic fluid embolism**
- **non** significant increases in mortality rate from VTE , PET , eclampsia and sepsis comparing with hemorrhage and direct uterine trauma
- The most common cause of indirect deaths is
- **Cardiac disease**

Risk factors

- Social disadvantage
- Poor communities
- Late booking > 22 weeks
- Poor attendance
- Minority ethnic groups
- Obesity
- Domestic violence
- Substance abuse
- Substandard care



Maternal Mortality: Adjusted* (2005)

Lifetime risk of maternal death

1 in:

Region/Group

36	Sub-Saharan Africa
200	South Asia
280	Middle East and North Africa
670	Latin America and Caribbean
880	East Asia and the Pacific
2000	CEE/CIS
52	Least developed countries

By income group*

41	Low income
220	Middle income
130	Lower middle income
970	Upper middle income
3300	High income
180	World

Recommendations

- 1. **Preconception counseling:** for all women had serious medical or mental health conditions with clear plan for antenatal care ,time of visits , mode of delivery
- 2.the **booking** visit and hand held record should be completed by 12 weeks and with patient
- 3.women **under risk** should be seen every 2 weeks
- 4.full medical examination In first visit
- 5.women with systolic BP >160 require treatment
- **6.Caesarean** : women should inform that CS not a risk free surgery

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NO. PENDAFTARAN

K09/1(a)/96



REKOD KESIHATAN IBU

Cop dan No. Tel. Klinik

KLINIK IBU DAN ANAK BANDAR SG PETANI
8000 JALAN BADLISHAH
SG PETANI KEDAH
TEL: 04-4213355

Pelekat warna

Faktor Risiko

1. _____
2. _____
3. _____

NO. KAD PENGENALAN

Nama Ibu: _____

Kumpulan Etnik: _____

Warganegara: _____

Tahap Pendidikan: _____

Pekerjaan: _____

Alamat Rumah: _____

Nama Suami: _____

Pekerjaan Suami: _____

Alamat Tempat Kerja Suami: _____

THA (LMP)

TAL (EDD)

Gr. P. +

Tarikh Lahir/Umur

No. Tel. (P)

(R)

NO. KAD PENGENALAN SUAMI

No. Tel. (P)

Simpan buku ini di tempat yang selamat. Bawa buku ini setiap kali anda pergi ke klinik/hospital untuk mendapatkan pemeriksaan.

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2. _____
3. _____

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Alamat Rumah: _____

Nama Suami: _____

Pekerjaan Suami: _____

Alamat tempat kerja suami: _____

THA (LMP)

TAL (EDD)

Tarikh lahir/umur

Pekerjaan Ibu: _____

Tahap Pendidikan: _____

No. Tel. (R)

(P)

No. Kad Pengenalan Suami

No. Tel.

Gr. Para Bil. L/Hidup Bil. L/Mati Bil. Gugur

Kandungan/Kelahiran Bermasalah

Tarikh Kelahiran Terakhir

Bil. anak hidup

Bil. anak mati

Amalan Perancangan Keluarga: Ya/Tidak

Cara

Masalah Perubatan Ibu: _____

Masalah Perubatan Keluarga: _____

ALAMAT 2

No. TEL 2

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Maternal mortality

- **Rate:**
 - Number of maternal deaths in given period per 100 000 women of reproductive age during the same time period
- **Ratio:**
 - number of maternal deaths during a given time period per
 - 100 000 live births during the same time period

Prenatal mortality

- Rate =
- fetal and early neonatal deaths / total births (live + deaths) * 1000
- Raito
- Fetal and early neonatal deaths / live births * 1000

Perinatal mortality

- **Causes:**
- **A. Antenatal causes:**
- Maternal diseases HTN, CVD, DM, anemia , anatomical defect
- **B. Intranatal causes:**
- Birth injury, asphyxia, obstetric complications
- **C. Postnatal causes:**
- 1. Preterm delivery and low birth weight less than 2500 gr
- 2. neonatal infections
- 3. RDS
- 4. congenital anomalies

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Prevention

- **Antenatal prevention:**
- Risk group women
- Prevent PTL
- Regular Antenatal care
- Screening and treat infections
- GBS screening ?? Recommendations
- Treat maternal disease before pregnancy or control the diseases with pregnancy

Prevention

- **Intrapartum prevention:**
 1. Instrumental delivery by indications only
 2. Risk group women
 3. Delivery under well trained team
 4. Treat Patients with infections
 5. Antibiotics for GBS
 6. Corticosteroids for PTL
 7. Controlled ARM for polyhydramnios



POLY MENDES