مسم الله الرحمن الرحيم الحمد لله رب العالمين والصلاة والسلام على نبينا محمد خاتم الأنبياء وسيد المرسلين وعلى آله وصحبه أجمعين وبعد

#### **B-Infant and Child Care:**

1- Prenatal Care of the infant: (Prematurely,
Congenital abnormalities, Birth injuries, and neonatal infections. Good Nurseries).
A-W.B.C.

- 1- Physical Examination (Scheduled Visits) •
   2-Growth and Development
- 3-Vaccination
- 4- Nutrition •
- 5- Health Education. •

## B- Day Care of Children out-side the home Good • child care services are a primary need.

- C- Health of the school age child (School health) •
- D- Care of adolescents: Youth Clinics (Psychological problems, Contraception, Smoking, Drug addiction etc.)

E- Handicapped Children (Physically and • Mentally).

#### **Needs of the Newborn**

Improving newborn survival will • dramatically reduce infant mortality worldwide.

Of the 7.1 million infants who die • each year, approximately twothirds die in the first 28 days after birth – the neonatal period.

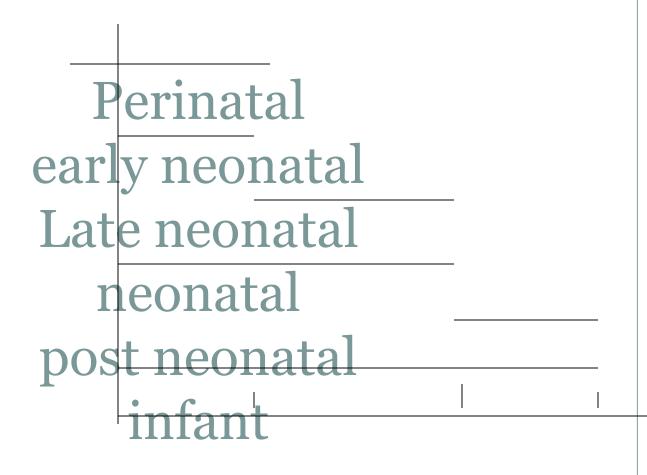
Of these deaths, two-thirds take place • in the first week after birth. Ninety-eight percent of all neonatal • deaths occur in developing countries. There are basic needs of a newborn that • can help ensure a healthy start in life.

Basic needs of a newborn that can help ensure a healthy start in life.

During labour and delivery, mothers and • newborns need:

- **Skilled attendance** provide safe management of normal delivery and timely referral for complications.
- **Support and care** promote family support and a baby and woman-friendly environment for birth and maternal and newborn care

Infection control – ensure clean delivery, • including clean surface, hands, blade, and cord tie.
Management of complications – identify and • manage complications, including bleeding, high blood pressure, prolonged labour, and foetal distress



#### Birth 1 wk 1 mon. 1 y

#### **Infant mortality**

Critical indicator of population health • reflecting the overall state of maternal health as well as quality and accessibility of PHC available to pregnant women and infants.

Infant Mortality Rate (IMR): number of • infant deaths per 1,000 live births in a population.

#### **Other indicators.**

Neonatal Death: Death of an infant less • than 28 days after birth (<28 days).

Postneonatal Death: Death of an infant • between 28 days and one year after birth (28-364 days).

Low Birthweight (LBW): Birth weight less • than 2,500 grams and VLBW 1500.

## Perinatal and fetal mortality.

Health of infants depends in large part on • their health in utero. A fetus with severe defects or growth problems may not be delivered alive.

Because only live births are counted in infant • mortality rates, perinatal and fetal mortality rates provide a more complete picture of perinatal health than does the infant mortality rate alone.

## Perinatal mortality.

The perinatal mortality rate includes both • deaths of live-born infants through the first 7 days of life and fetal deaths after 28 weeks of gestation.

This rate is a useful overall measure of • perinatal health and the quality of health care provided to pregnant women and newborns.

#### **Perinatal Mortality (PM)**

#### General Consideration

- Of the 13 million deaths each year in children under 5 years old in the developing world, 3 million occur in the first week after delivery.
- In addition, there are some 4 million stillbirths or late fetal deaths each year.
- Perinatal mortality is the number of late foetal deaths (also called still births) and early neonatal deaths (before day 7 (168 hours) per 1000 births.

• Among the estimated 25 million low-birth-weight babies born each year worldwide, 24 million are in developing countries where 80% of global births occur, The perinantal mortality rate ranges from 40 to 60 per 1,000 live births in most developing countries, but it is between 6 and 10 in industrial countries.

#### **Causes of Perinatal Mortality**

- • Low birth weight
  - Cord prolapse
  - Asphyxia
  - Birth injury
  - Congenital anomalies
  - Sepsis
  - Neonatal tetanus
  - Complicated labours (prolonged, obstructed, breech, transverse)
  - Mismanagement of labour

#### Low Birth Weight

- Low birth weight is an extremely important factor predisposing for PNM.
- Because the perinatal mortality rate for low-birth weight babies is five to thirty times higher than for fetuses or infants of normal weight. Low-birthweight infants who survive may have serious neurological problems and hearing and visual defects and may be subject to slow development
  - throughout life.

#### **Causes of low birth weight include:**

- • Short stature
- Low pre-pregnancy weight
- Inadequate weight gain during pregnancy
- • Anemia
- • Reproductive tract infections,

- Other infections during pregnancy. For example, women suffering from malaria in sub-Saharan Africa give birth to an estimated 3 million severely underweight babies. A woman with HIV has a 25 to 40 percent chance of passing the infection on to her fetus in the womb or at birth. According to WHO, 25 percent of the children born with HIV will be diagnosed with AIDS in the first year and 80 percent by the fourth year.
- Antepartum haemorrhage
- Eclampsia,

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### Fetal death.

Fetal death often is associated with • maternal complications of pregnancy, such as problems with amniotic fluid levels and blood disorders.

Also when birth defects, such as • anencephalus, renal agenesis, and hydrocephalus, are present.

#### Fetal death.

Rates of fetal mortality are 35 percent • greater than average in women who use tobacco during pregnancy and 77 percent higher in women who use alcohol.

Targeting prenatal risk screening and • intervention to high-risk groups is critical to reducing this gap.

#### Stillbirth (around in the dark)

Information about 4 million neonatal deaths • worldwide is limited, even less information is available for stillbirths (babies born dead in the last 12 weeks of pregnancy) and there are no systematic global estimates.

The numbers of stillbirths are high and • regions in which most stillbirths occur, with under-reporting being a major challenge.

#### Infant and neonatal mortality.

Infant mortality rate is made up of two • components: neonatal mortality (death in the first 28 days of life) & postneonatal mortality (death from the infants' 29th day but within the first year).

The leading causes of neonatal death • include birth defects, disorders related to short gestation and LBW, and pregnancy complications.

#### Neonatal mortality.

The most to be preventable are those related • to preterm birth and LBW, which represent approximately 20 percent of neonatal deaths.

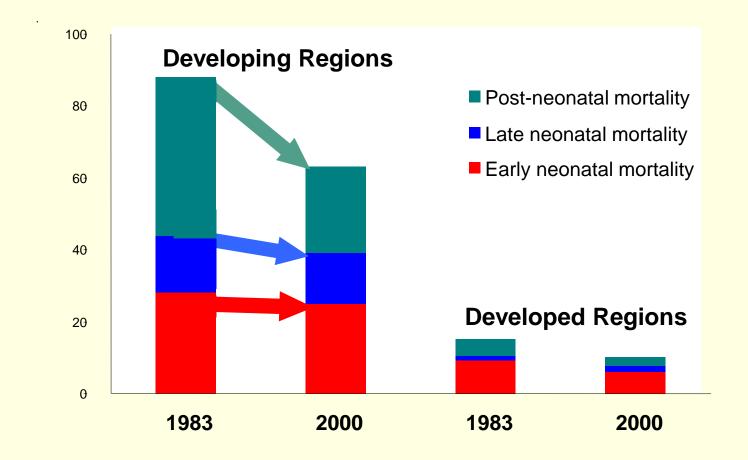
Postneonatal death reflects events • experienced in infancy, including SIDS, birth defects, injuries, and homicide. SIDS is the leading cause of postneonatal death.

#### Neonatal mortality.

Most neonatal deaths usually occur in the first • 24 hours of life, and three-quarters of neonatal deaths occur in the first week after birth.

Most newborn deaths are preventable through • affordable interventions. To address the high burden of newborn deaths care must be available during pregnancy, labour and postpartum

#### Deaths among infants under 7 days are decreasing more slowly than among older infants



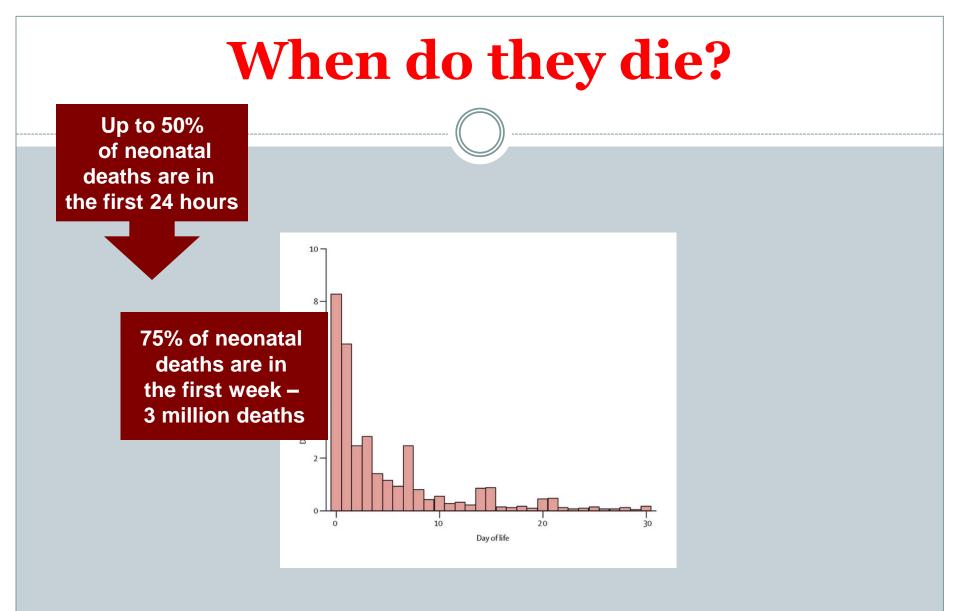
Source: RHR/WHO, 2003

#### Where do 4 million newborns die?

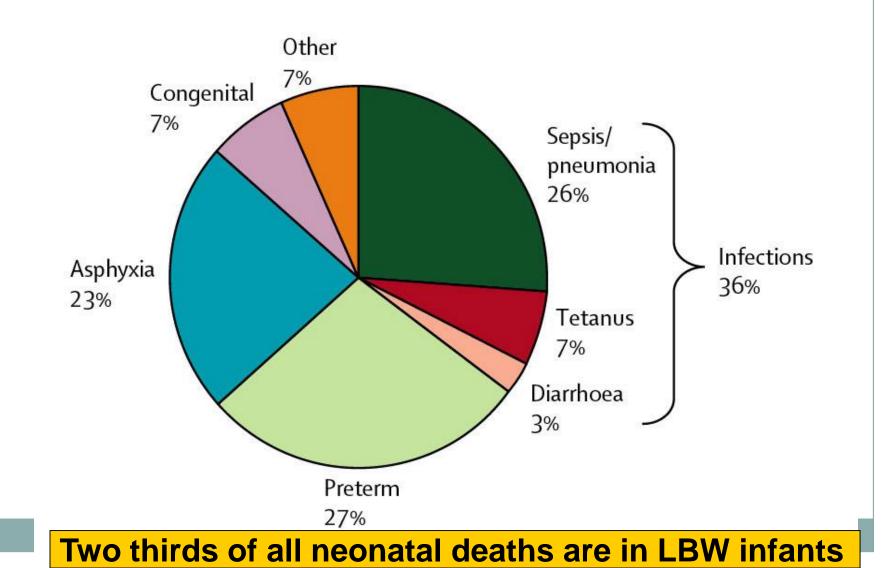
NMR (per 1000 livebirths)

<15</p>
15-29
30-45
>45

1.5 million (38%of all newborndeaths) occur in4 countries ofSouth Asia



#### 4 million newborn deaths – Why? almost all are due to preventable conditions



#### Children health.

Child's health includes physical, mental and • social well-being too.

Each year more than 10 million children • under the age of five die.

At least 6.6 million child deaths can be • prevented each year if affordable health interventions are made available to the mothers and children who need them.

# Underlying causes of Child illness and death.

Poverty: More than 200 million children • under five live in absolute poverty, on less than \$1 per day.

Under-nutrition and malnutrition: At least • 200 million children under five are malnourished.

High fertility and short birth intervals •

#### Under-five mortality rate (U5MR).

Indicates the probability of dying between • birth and exactly five years of age, expressed per 1,000 live births, if subject to current mortality rates.

It has several advantages as a barometer of • child well-being in general and child health in particular. It measures an 'outcome' of the development process.

#### **Under-five mortality rate (U5MR)**

Is known to be the result of a wide variety of • inputs:

nutritional status and the health knowledge • of mothers;

level of immunization and oral rehydration • therapy;

availability of maternal and child health • services (including prenatal care);

### **Under-five mortality rate (U5MR)**

Income and food availability in the family; • Availability of safe drinking water and basic • sanitation; Safety of the child's environment, among other factors

U5MR is less susceptible to the fallacy due that • is a picture of the health status of the majority of children (and of society as a whole).

#### Children < 5 years mortality (2008).

**Globally, 80 percent of all child deaths to** children under five are due to only a handful of causes: pneumonia (19%), diarrhea (18 %), malaria (8 %), neonatal pneumonia or sepsis (10 %), pre-term delivery (10 %), asphyxia at birth (8%), measles (4 %), HIV/AIDS (3%).

