



# ANAEMIA IN PREGNANCY

**SANA**  
(6<sup>th</sup> SEMESTER)



A photograph of four pregnant women standing together, smiling and touching their bellies. They are dressed in casual clothing: purple, pink, teal, and yellow. The background is plain white.

# **PREGNANCY – MOST DANGEROUS JOURNEY OF MANKIND**

- **ANEMIA BEGINS IN CHILDHOOD,  
WORSENS DURING ADOLESCENCE IN  
GIRLS & GETS AGGRAVATED DURING  
PREGNANCY.**

# OBJECTIVES

A group of four women are shown from the waist up, smiling and touching each other's abdomens. One woman on the right is pregnant and wearing a yellow shirt. The other three women are wearing pink, blue, and purple shirts. They appear to be in a supportive or educational setting.

➤ **Introduction**

➤ **Definition**

➤ **Incidence**

➤ **Classification**

# ANEMIA

- Introduction:

**Anemia is the commonest medical and nutritional disorder in pregnancy.**

**It may be a direct consequence of pregnancy or just an associated condition which is unmasked or worsened by pregnancy.**

**It is the major health problem through out the world especially in developing countries.**

# ANEMIA ?????

## Definition:

**Anemia-** It is decrease in Hb level  $<10$  gm/dl

- ✓ **WHO definition-** Hb level  $< 11$ gm/dl.
- ✓ **CDC definition** – Hb level  $<11$ gm/dl in 1<sup>st</sup> and 3<sup>rd</sup> trimesters and  $<10.5$ gm/dl in 2<sup>nd</sup> trimester.

	<b>ICMR</b>	<b>WHO</b>
<b>MILD</b>	10-11 g/dl	10-10.9g/dl
<b>MODERATE</b>	7-10g/dl	7.9-9g/dl
<b>SEVERE</b>	4-7g/dl	<7g/dl
<b>VERY SEVERE</b>	<4g/dl	-

## Magnitude of Problem

- ◆ Globally, is about 30 %
- ◆ In developing countries & India, incidence is around 40 – 90%.
- ◆ Responsible for 40% of maternal deaths in third world countries.
- ◆ Important cause of direct and indirect maternal deaths



## World

population: 5-6 billion  
2 billion anemic

## Developing Countries:

9 out of 11 pt are anemic.  
Every second preg. Woman  
4 out of 10 pre school

## MAGNITUDE OF THE PROBLEM

## India:

Highest prevalence

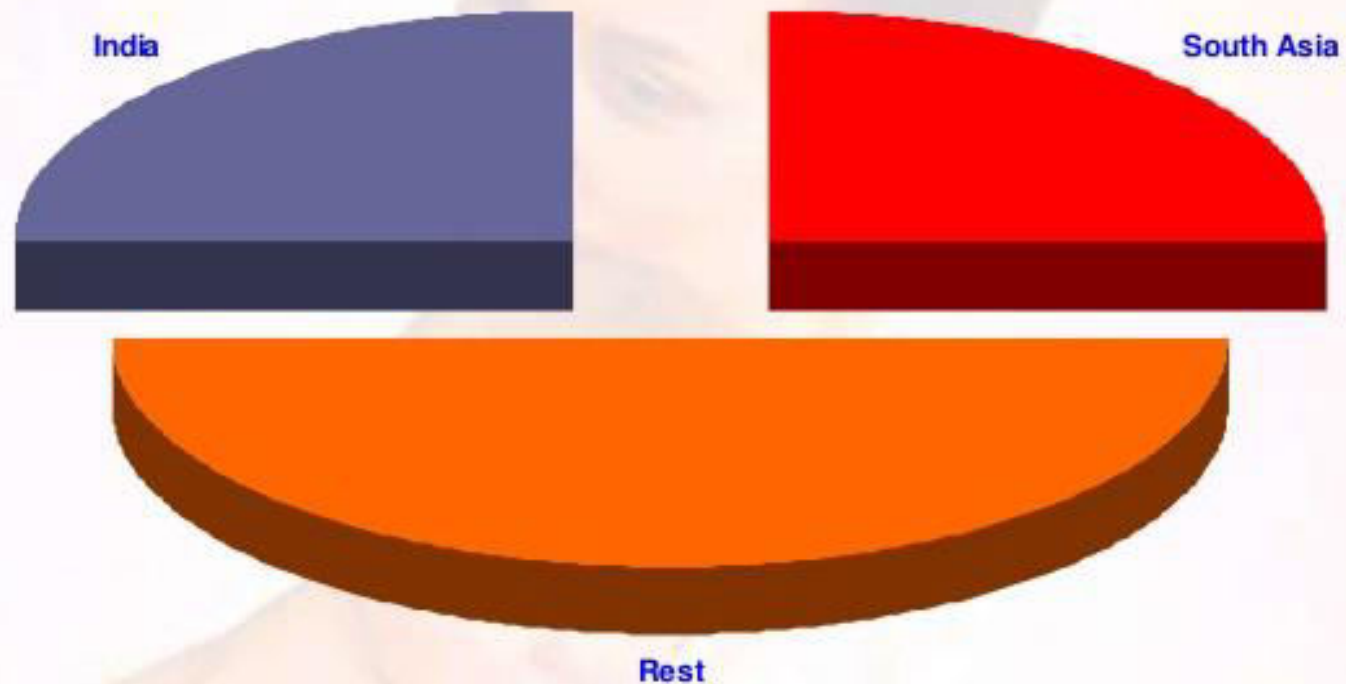
87% preg women

10% severe anemia

1 in 5 maternal deaths



# ANNUAL MATERNAL DEATHS - GLOBALLY TOTAL 500,000



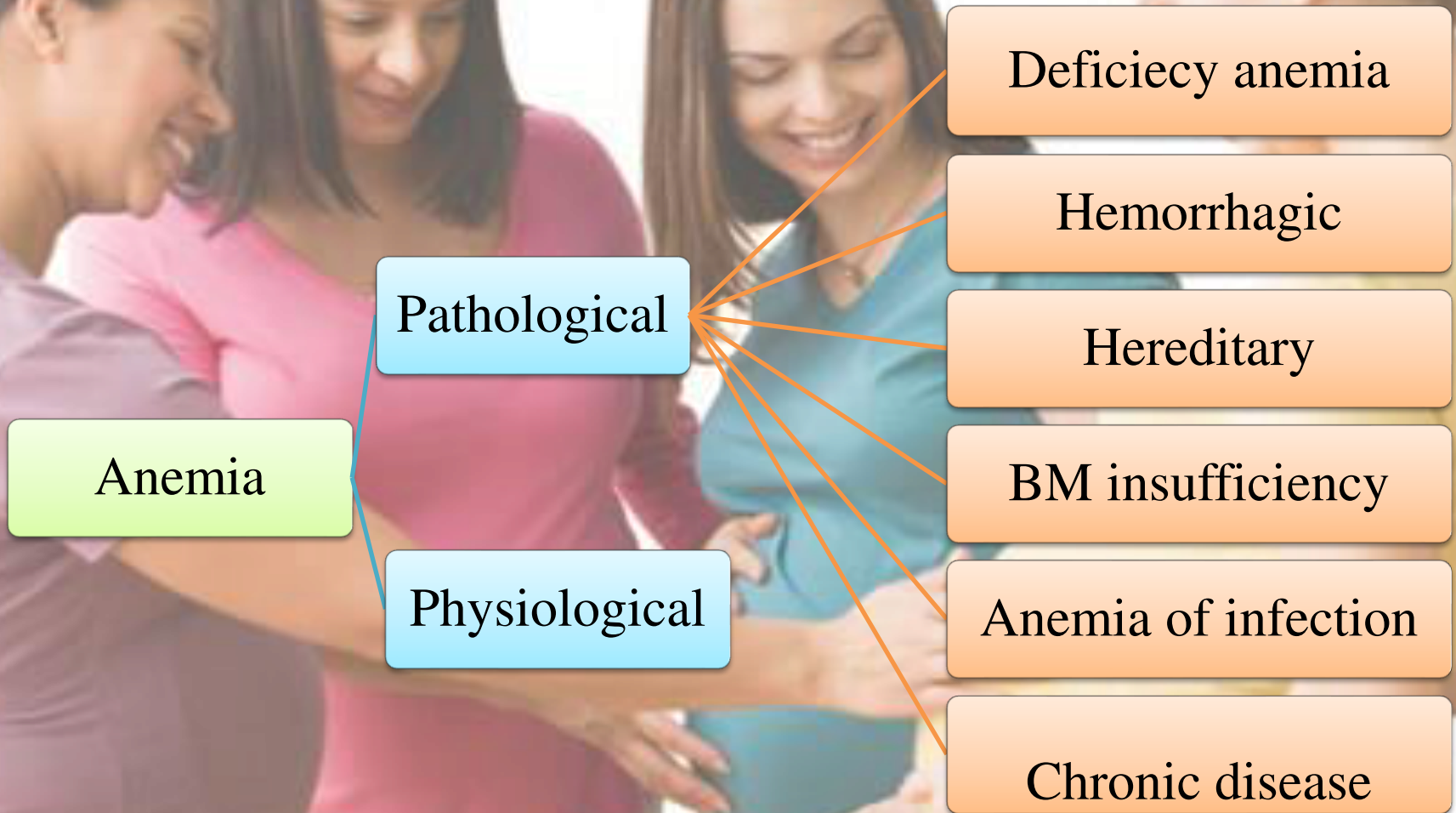
■ South Asia ■ Rest ■ India

**75%** : Hemorrhage ; Abortion ; Eclampsia ; Sepsis ; Obs. Labour.

**ANAEMIA** : Direct cause contributes 20%

Indirect cause further 20%

# CLASSIFICATION





**PHYSIOLOGICAL:**

**PATHOLOGICAL:**

Deficiency anemia

Fe deficiency

Folic acid  
deficiency

B12  
deficiency

Protein  
deficiency

Hemorrhagic

Acute

Chronic

Bleeding in early months  
/APH

Hook worm  
infection, bleeding piles  
etc



Hereditary

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graph TD; A[Hereditary] --- B[Thalassemia]; A --- C[Sickle cell haemoglobinopathies]; A --- D[Hereditary hemolytic anemia]; A --- E[Others];
```

Thalassemia

Sickle cell  
haemoglobinopathies

Hereditary  
hemolytic anemia

Others

**BONE MARROW INSUFFICIENCY:**  
Hypoplasia/Aplasia.

**ANEMIA OF INFECTION:**

**CHRONIC DISEASE/NEOPLASM:**

