



# THE EFFECT OF MALARIA ON PREGNANT WOMEN

Presented by: Aisha Mohammed 3002

2<sup>nd</sup> year , Med student

#### OBJECTIVE:

**Define of malaria** 

Describe the risk prevalence malaria infection during pregnancy

List maternal and fetal effect of malaria in pregnancy

Outline of Impact of malaria in pregnancy in different epidemiological statues

Describe Prevention and control of malaria in pregnant women



#### INTRODUCTION



#### Definition of malaria

Malaria is a mosquito-borne disease that affects humans and other animals It is caused by a parasitic protozoan (a group of single celled microorganisms) belonging to the genus Plasmodium.





## The risk of prevalence malaria infection during pregnancy

Malaria infection in pregnancy compromises the mother's health and can lead to her death. In 2018, an estimated 11 million pregnant women living in 38 countries with moderate-to-high transmission in sub-Saharan Africa were infected with malaria (29% of all pregnancies).

#### CENTRAL AFRICA



#### WEST AFRICA



EAST AND SOUTHERN AFRICA (+SUDAN AND SOMALIA



80 %

#### SUB SAHRAN AFRICA (MODERATE AND HIGH TRANMISSION)



PREGNANCY WITH MALARIA INGECTION



# The maternal and fetal effect of malaria in pregnancy

Hypoglycemia

Acute Rena Failure

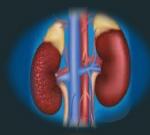


#### MATERNAL EFFECT





Hypoglycemia



Acute Renal Failure



Hepatitis



Jaundice



Hemolytic Anemia



Folate Deficiency

#### FETAL EFFECT

Low Birth Weight

Intrauterine growth Retardation



High Risk Abortion



Congenital Malaria

Intrauterine Fetal Demise



Failure to thrive

# Epidemology Different epidemiological states

#### 1-Areas of low or epidemic (unstable) transmission:

Pregnant women living in areas of low or unstable malaria transmission have little or no immunity to malaria.

At a 2 to 3-fold higher risk of developing severe disease a result of malaria infection more than in non-pregnant women living in the same area.

Can cause maternal death (directly and indirectly).

#### 2-Areas of high or moderate (stable) transmission:

Most pregnant women in malaria-endemic regions of Africa live in areas of relatively stable transmission.

At Although parasite prevalence and density are higher among pregnant women compared to non-pregnant women infection with P. falciparum is usually asymptomatic Partial clinical immunity acquired.

## Prevention and control of malaria in pregnant women



#### Conclusion

Malaria in pregnancy is an important public health problem. It not only affects mother but also hampers the growth of developing fetus.

In areas with high transmission rate of malaria populations are • • relatively immune and patients do not present with symptomatic malaria.

#### References:

Nkfusai, Claude Ngwayu et al. "Barriers towards the Prevention and Treatment of Malaria among Pregnant Women at the Nkwen Health Center Bamenda, Cameroon." International journal of MCH and AIDS vol. 11,1 (2022): e312. doi:10.21106/ijma.312.

Kumah, Emmanuel et al. "Intermittent Preventive Treatment of Malaria in Pregnancy with Sulphadoxine-Pyrimethamine and its Associated Factors in the Atwima Kwanwoma District, Ghana." Annals of global health vol. 88,1 27. 27 Apr. 2022, doi:10.5334/aogh.3560

Tadesse Boltena, Minyahil et al. "Malaria and Helminthic Co-Infection during Pregnancy in Sub-Saharan Africa: A Systematic Review and Meta-Analysis." International journal of environmental research and public health vol. 19,9 5444. 29 Apr. 2022, doi:10.3390/ijerph19095444,

