MALARIA :

Definition:

According to World Health Organization:

"Malaria is a life-threatening disease caused by Plasmodium parasites. The parasite pass to people through the bites of female Anopheles mosquitoes."

There are 5 parasite species that can cause malaria, and 2 of them are:

i- P. falciparum
ii- P. vivax

i) P. falciparum:

The most prevalant malaria parasite on the African content. It is responsible for most of the deaths globally.

ii) P. vivax:

The dominant malaria parasite in most countries out of the Sub-Saharan Africa.

WHO 2024 report:

* According to World Health Organization 2024 report, in 2023 there were about 263 million malaria cases reported globally and 597000 deaths.

* 94-95% those cases and deaths

reported in the African Region.

★ The 2025 campaign "Malaria Ends With Us: Reinvest, Reimagine, Reignite". It means progress needs new efforts globally.

Causes:

★ The parasite infects humans when an infected female Anopheles mosquito bites a person and injects parasites into the bloodstream.

★ The parasites travel to the liver, multiply, then re-enter the blood stream and infect red blood cells; this cycle causes illness.

Risk factors:

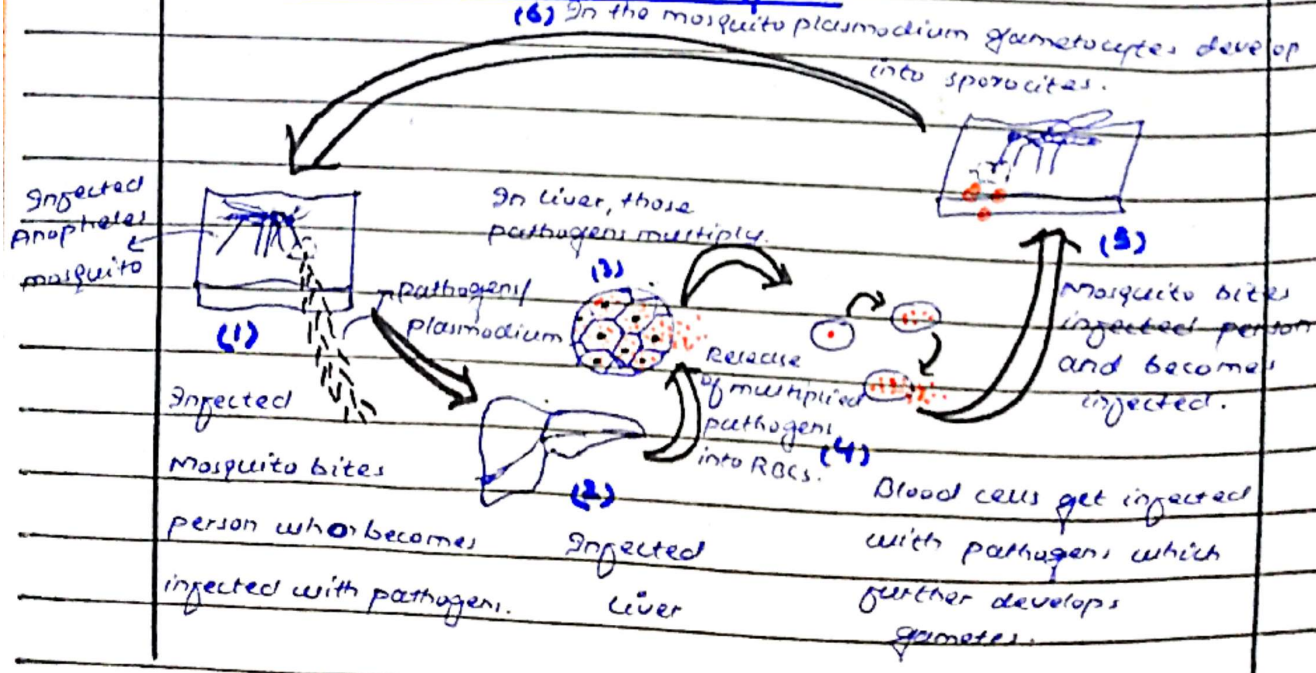
i- Being in tropical / sub-tropical region.

ii- Poor mosquito control

iii- Weak immune systems

iv- Poor access to prevention and treatment.

Malaria Transmission Cycle:



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Symptoms:

★ It is an acute feverish illness and its symptoms often appear in 10-15 days after bite of mosquito.

★Common symptoms:

i- Fever
ii- Sweating
iii- Vomiting
iv- Cough
v- Chills
vi- Headache
vii- Fatigue
viii- Abdominal pain

↳ If these are not treated in 24 hours, lead to severe illness.

★Severe symptoms:

i- Cerebral Malaria
ii- severe Anemia
iii- Organ Failure
iv- Coma and Death.

Preventions:

i) Vector Control:

1- Use insecticide-treated bed nets when sleeping in malaria-risk regions.
2- Indoor residual spraying of insecticides on walls and surfaces where mosquitoes rest.
3- Use repellents (DEET, lotions) on exposed skin, especially in evening.
4- Wear protective clothing.

ii) Protective chemotherapy/prophylaxis:

1. Taking anti-malarial medication to prevent infection.
2. For travellers to malaria-endemic areas, prophylactic antimalarials may be advised.
3. WHO recommends protective measurements for pregnant women in malaria-endemic areas.

iii) Vaccination:

- WHO now recommends vaccines for childrens in endemic areas.

iv) Enviromental and community measures:

i. Remove the standing water
ii. Community education
iii. strong health systems for rapid diagnosis.

Treatment:

(i) Early diagnosis and treatment reduces disease and prevents deaths. It also contribute to reducing malaria transmission.

(ii) For P. falciparum malaria, artemisinin-based combination therapy (ACT) is used as treatment.

(iii) Drugs and dosing may vary by species, by region, by age, and pregnancy status.

(iv) Ensure full course of treatment is completed.

(v) Anti-malarial medication is used both to treat and prevent malaria.

(vi) There are no licenied vaccines against malaria.