

Name Inshirah Hussain
Assignment General Science
Submitted To Sir Majid

Q. What is Malaria? Describe its causes, symptoms, treatment and preventive measures.

1) **Definition:**

Malaria is a life-threatening disease spread to humans by some types of mosquitoes. It is mostly found in tropical countries. It is preventable and curable.

2) **How common is malaria?**

Malaria is common in tropical areas where it's hot and humid. In 2020, there were 241 million reported cases of malaria throughout the world, with 627,000 deaths due to malaria. The majority of these cases occur in Africa and South Asia.

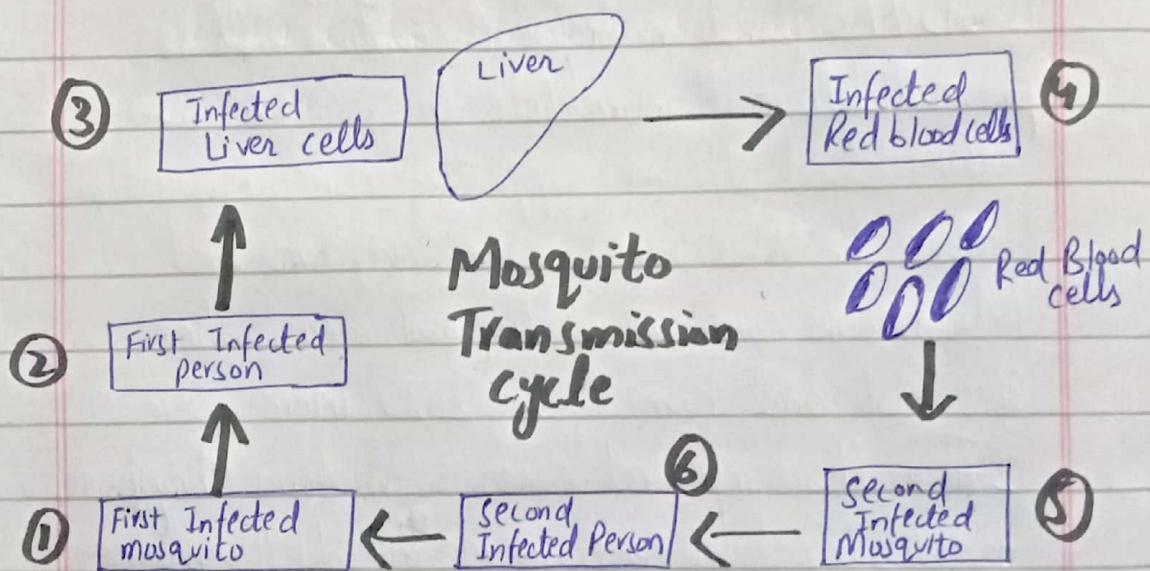
3) **Causes of Malaria:**

Malaria is caused by a single-celled parasite of the **genus plasmodium**. The parasite

is transmitted to humans most commonly through mosquito bites.

• Mosquito Transmission Cycle

Malaria spreads when a mosquito becomes infected with the disease after biting an infected person, and the infected mosquito then bites a noninfected person. The malaria parasites enter the person's bloodstream and travel to the liver. When the parasites mature, they leave the liver and infect red blood cells.



4) Symptoms of Malaria:

Symptoms of malaria are similar to flu symptoms. They include: fever, sweating, chills, headache, muscle aches, fatigue, chest pain, breathing problems, cough, diarrhea

, vomiting and nausea. As malaria get worse, it can cause anemia and jaundice.

• **Cerebral Malaria:**

The most severe form of malaria, which may progress to a coma. This type represents about **15% of deaths** in children and nearly **20% of adult deaths**.

5) **Treatment of Malaria:**

With early treatment, most people with malaria will make a full recovery. Treatment for individuals with the disease includes: medication to eliminate the parasite from the blood stream, supportive care, hospitalization for those with severe symptoms and intensive care, in some cases.

• **Anti Malarial Drugs**

The main antimalarial drugs are chloroquine, hydroxychloroquine, primaquine, atovaquone-proguanil etc.

The treatment period usually lasts 2 days.

6) **Preventive Measures of Malaria:**

You should also take precautions to avoid mosquito bites. To lower your chances of

getting malaria, you should: apply mosquito repellent with DEET (**diethyltoluamide**) to exposed skin, drape mosquito netting over beds and put screens on windows and doors. Wear long pants and long sleeves to cover your skin.

• **Vaccination:**

In 2021, the first vaccine against malaria, called **RTS,S (Mosquirix)** received approval from the WHO. The second vaccine against malaria called **R21** recommended by WHO. Both vaccines are shown to be safe and effective in preventing malaria.
