

DATE 24-12-2023

## Assignment:-

IALHA SARFRAZ KHAN  
32656 - 059

### Question:-

→ Define Malaria, It's Symptoms, Causes, Preventions and Treatments-

## MALARIA:-

### Definition:-

According to WHO;

"Malaria is an acute mosquito-borne infectious disease caused by parasitic microorganisms called plasmodium. These Plasmodium parasites are spread through the bites of infected female mosquito - (Anopheles)"

### Causes:-

- => Transmitted through the bite of an infected Anopheles mosquito -
- => Infected mosquitos carry their plasmodium parasites,
- => When mosquito bites, the parasite is released into bloodstream affecting RBCs -

### Symptoms:-

- 1-) Severe headache -
- 2-) Moderate to severe shaking & chills -
- 3-) High fever caused by rupture of RBCs -
- 4-) Vomitting -
- 5-) Diarrhea -
- 6-) Deficiency in Urine -
- 7-) Sweating -

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### Prevention:-

- > Sleep under insecticide bednets-
- > Full body clothing-
- > Mosquito repellents-
- > Use of insecticide sprays
- > Early detection & treatment using antibiotics-

### Treatments:-

Following are the known treatments for malaria-

#### Microscopy:-

- => It is a gold standard method in diagnosing malaria-
- => In microscopy, three samples of thick & thin blood are looked under the microscope -
  - "Thick Sample → For identifying the parasites
  - Thin Sample → For identifying the species"

#### Antimalarial Drugs:-

- i-) Artemisinin (Best suitable for Plasmodium Falciparum)
- ii-) Chloroquine
- iii-) Quinine etc.

## Question:-

Define ~~malaria~~, Typhoid, Its symptoms, causes, preventions and treatments?

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## TYPHOID:-

### Definition:-

"Typhoid fever also known as Enteric fever is a life threatening infection caused by the bacterium *Salmonella Typhi*."

### Symptoms:-

- => *Salmonella Typhi* lives only in humans-
- => Person affected by this disease carry bacteria in their bloodstream and intestinal tract-
- => Prolonged high fever.
- => Muscle aches & Fatigue.
- => Extreme headach and Abdominal pain.
- => Constipation and diarrhea.

### Causes:-

- > ~~The~~ Contaminated food and water is the leading cause of malaria.
- > Another cause is the close contact with a person who is carrying salmonella bacteria.
- > Urbanization and climate change have the potential to increase typhoid-
- > Increasing resistance to antibiotic treatment is making it easier for typhoid to spread.

### Prevention:-

- => Good personal hygiene mainly is the prevention of typhoid-
- => Access to safe water.
- => Adequate Sanitation.
- => Typhoid vaccination.

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## Treatments:-

### Antibiotics:-

- i-) Fluoroquinolones -
- ii-) Azithromycin
- iii-) Ceftriaxone
- iv-) Carbapenems -

Two additional vaccines have been used to prevent typhoid -

### Inactivated

- => An injectable vaccine. (IV injection)
- => Given to people 2 years & above
- => For travellers, it is recommended to give single dose 2 weeks before travel.
- => Repeated dose for people who remain at risk.

### Live attenuated

- => Given orally (capsule)
- => Given to 6 years and older.