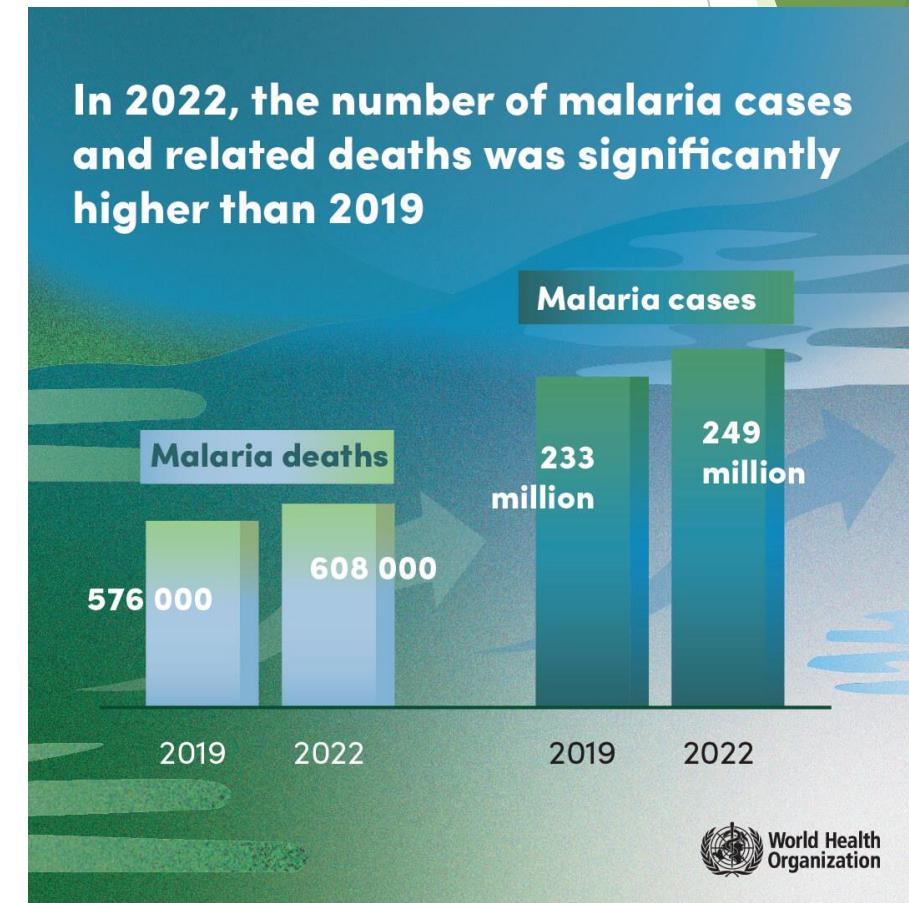


Malaria: Exploring Its History and the Fight to Get Rid of It Today.

BY:

RELEVANCE OF TOPIC

- ▶ Malaria remains a significant global health concern, affecting millions annually.
- ▶ Globally, malaria claimed the lives of 435,000 individuals in 2017 and afflicted an estimated 219 million people (Talapko et al., 2019).
- ▶ While in 2022, the cases were at 249 million (Gibson, 2023)



EPIDEMIOLOGY: MODE OF TRANSMISSION

- ▶ Malaria is transmitted through the bite of infected Anopheles mosquitoes.
- ▶ Blood transfusions and dirty needles or syringes can also spread malaria.
- ▶ The mosquito that bites untreated malaria patients can spread the disease.



(CDC, 2022)

EPIDEMIOLOGY:POPULATIONS AFFECTED

- ▶ Malaria disproportionately affects vulnerable populations, including children under 5 and pregnant women.
- ▶ Individuals who are immunocompromised, including those with HIV who lack protective immunity
- ▶ Lack of access to healthcare and preventive measures exacerbates the burden.



EPIDEMIOLOGY: RISK FACTORS



- ▶ Malaria infection is most significantly increased by residing in or traveling to regions where the illness is prevalent.
- ▶ Efforts to control malaria include vector control measures such as insecticide-treated bed nets and indoor residual spraying.
- ▶ However, challenges such as insecticide resistance persist.

(Spitzen et al., 2017)



SYMPTOMS AND CLINICAL PRESENTATION

- ▶ Symptoms of malaria include fever, chills, sweats, headaches, and body aches.
- ▶ Clinical presentation varies based on the Plasmodium species causing the infection.
- ▶ However, the symptoms are frequently nonspecific and can also be present in other illnesses such as influenza



Symptoms of Malaria

The early symptoms of malaria include a cold, headache, and a high temperature with chills. In addition, the following are the malaria fever symptoms:

- Feeling very tired
- Difficulty in breathing
- Nausea and vomiting
- Increased bowel movements
- Cough
- Abdominal pain
- Joint pain
- Bloody urine (dark-coloured)
- Seizures
- Yellow discolouration of eyes and skin (Jaundice)

Malaria symptoms during pregnancy

- Increase in body temperature
- Headache
- Nausea
- Vomiting
- Muscle pain

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SYMPTOMS AND CLINICAL PRESENTATION

- ▶ Severe malaria can lead to complications such as cerebral malaria, severe anemia, and organ failure.
- ▶ Prompt diagnosis and treatment are crucial to prevent mortality.
- ▶ In regions where malaria is no longer prevalent, such as U.S states, healthcare providers may lack familiarity with the disease (CDC, 2019).



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Malaria & Neglected Tropical Diseases

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"Biological threats in recent years have endangered malaria control and elimination efforts, putting progress at risk."
Dr Corrine Karem, NIMR Partnership to End Malaria
[Page 02](#)

"Several veterinary drugs might be an attractive starting point for treating infections in humans."
Jennifer Keiser, Swiss Tropical and Public Health Institute (Swiss TPH)
[Page 06](#)



Dr Samuel Harrison attends to malaria patients in the children's ward at the Kintampo Health Research Centre, Ghana.

Read more from Malaria No More on page 06

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Celebrating 20 years of public-private partnership in Equatorial Guinea

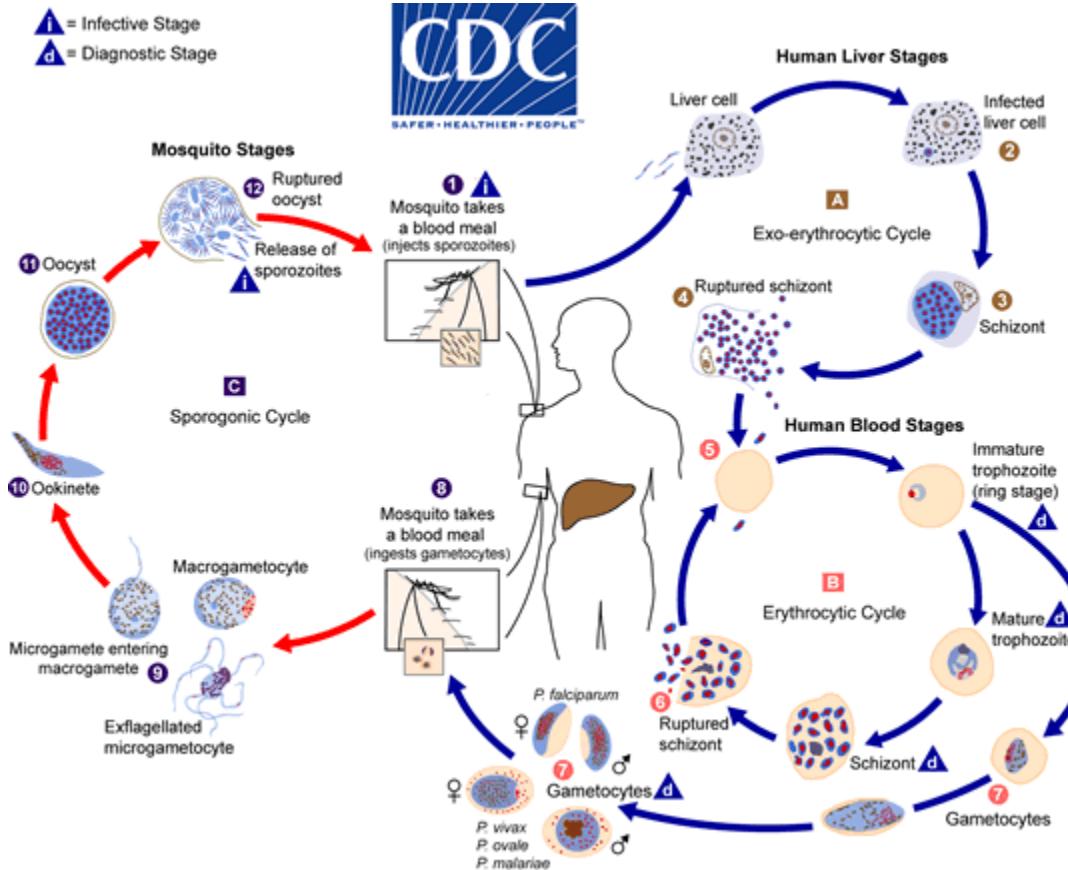
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Course of Disease



- ▶ The course of malaria involves an incubation period
- ▶ Followed by symptomatic illness characterized by recurrent fever episodes.
- ▶ Without treatment, malaria can progress to severe disease rapidly(CDC, 2019).

Course of Disease

- ▶ In severe cases, malaria can lead to multi-organ dysfunction and death.
- ▶ Early recognition of symptoms and appropriate management are essential to prevent complications.
- ▶ The diagnosis relies on the patient's symptoms and the physical findings seen during the examination.



TESTS USED TO IDENTIFY THIS ILLNESS



- ▶ Rapid diagnostic tests



TESTS USED TO IDENTIFY THIS ILLNESS

- ▶ The significance of a rapid diagnostic test (RDT) kit in decentralized settings is shown by the graphic representation of the kit
- ▶ Quick diagnostic tests (RDTs) are an invaluable instrument for the quick detection of malaria, especially in situations where laboratory infrastructure is inadequate.
- ▶ Through the use of enzyme-linked immunosorbent assay (ELISA) or indirect immunofluorescence (IFA), serology is able to identify antibodies against malaria parasites.



TREATMENT

- ▶ Treatment for malaria typically involves antimalarial medications such as artemisinin-based combination therapies (ACTs).
- ▶ Multiple testing kits are accessible for the identification of antigens originating from malaria parasites.
- ▶ Adherence to treatment regimens and follow-up care are crucial for successful outcomes.



CLINICAL PATIENT OUTCOME

- ▶ With timely diagnosis and appropriate treatment, most patients with uncomplicated malaria recover fully.
- ▶ However, severe cases require intensive care and may have long-term sequela
- ▶ Malaria has to be considered a possible medical emergency and be treated accordingly.



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