

Malaria

Prelims: Current events of national and international importance | Health

Why in news?

Researchers have recently identified two promising new approaches to counteract malaria's growing resistance to medication — one involving a new class of drugs.

- Malaria is a life-threatening, **mosquito-borne disease** caused by parasites.
- **Caused by** - The **Plasmodium parasite** (mainly *P. falciparum*, *P. vivax*, *P. ovale*, *P. malariae*, and *P. knowlesi*).
- **Transmission** - It is transmitted to people through the bites of infected **female Anopheles mosquitoes**, through blood transfusions or contaminated needles, etc. (*No direct human-to-human transmission*).
- **Symptoms** - Typically include fever, fatigue, and headaches, but severe cases can lead to jaundice, seizures, coma, or death.
- **Higher risk** - Infants, children under 5 years, pregnant women and girls, travellers and people with HIV or AIDS.
- **Disease burden** - Malaria cases increased globally to an estimated 263 million cases in 2023, up from 252 million in 2022, with approximately 597,000 deaths (***WHO's World Malaria Report 2024***).
- It is mainly found in **tropical and subtropical climates** and largest death toll in recent years has been seen in children in sub-Saharan Africa.
- **Prevention** - Malaria can be prevented with insect repellent, protective clothing, and preventive medication, and is treatable with antimalarial drugs, especially when caught early.
- **Antimalarial drugs available in India** - Chloroquine, Artemisinin-based combination like Artesunate + Sulfadoxine-Pyrimethamine (SP) and Artemether-Lumefantrine, and Quinine, etc.

Quick Fact

Two new malaria treatments

GanLum

- An antimalarial Drug, developed by Switzerland-based Pharma company, Novartis.
- It is a packet of tiny powder-like granules, once daily for three days.
- **Composition** - Combines ganaplacide (new molecule) with lumefantrine (existing long-acting drug).
- It is ***not yet licensed***, expected rollout in 18 months.
- **Result** - Over 97% cure rate, highly effective against mutant malaria parasites & slightly better than standard artemisinin-based therapies.

Single-Dose Four-Drug Combo

- In an effort to offer a one-time treatment, a study in Gabon, West Africa found a single dose of four widely available malaria drugs.
- **4 drugs** - Artemisinin, pyronaridine, sulfadoxine, and pyrimethamine.
- **Results** - 93% parasite clearance after 28 days (vs. 90% for standard 3-day course) and has a potential for single capsule formulation to ease administration.

References

1. [The Hindu | 2 new malaria treatments](#)
2. [WHO | Malaria](#)