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# Turning the Tide on Malaria: Nigeria's Bold Move with the New Vaccine

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Malaria, a deadly yet preventable disease, has been a significant public health challenge, particularly in sub-Saharan Africa. Nigeria, which carries the highest global burden of malaria, is making historic strides in combatting the disease with the rollout of a new vaccine aimed at vulnerable populations, especially children under five.

## Malaria in Nigeria - A grim reality

Malaria is caused by *Plasmodium* parasites, transmitted through the bites of infected female Anopheles mosquitoes. Common symptoms include fever, chills, headache, and muscle pain, which, if left untreated, can lead to severe complications such as anaemia, organ failure, and even death. Nigeria accounts for over 27% of the global malaria cases and approximately 23% of malaria deaths worldwide, making it the most affected country. Children under five are the most vulnerable, with malaria being a leading cause of childhood mortality in the country. Alongside children, pregnant women are highly susceptible, and malaria during pregnancy can lead to complications such as low birth weight, stillbirths, and maternal deaths.

## Current prevention strategies

Insecticide-treated bed nets (ITNs) have been widely distributed to protect people from mosquito bites at night, while Indoor Residual Spraying (IRS) involves spraying homes with insecticides to kill mosquitoes. In pregnancy, Intermittent Preventive Treatment (IPTp) provides pregnant women with preventive medication to protect against malaria. Despite these efforts, malaria remains rampant in many regions, emphasizing the urgent need for new tools like vaccines to complement existing preventive strategies.

## The new malaria vaccine: A game changer

**R21/matrix-M vaccine:** Developed by Oxford University and manufactured by the Serum Institute of India, this vaccine is designed to prevent malaria in children, the group most affected by the disease. Early trials showed the vaccine to be around 75% effective in preventing malaria, a significant improvement over previous malaria vaccines like RTS,S.

Nigeria recently procured 846,200 doses, with plans to distribute 800,000 doses in high-prevalence states like Kebbi and Bayelsa. The vaccine will be offered free of charge, targeting children under five. This rollout marks a historic moment for global public health, as it is the first time the vaccine is being distributed on such a large scale in a country with such a high malaria burden.

## What makes this vaccine different?

The R21/Matrix-M vaccine has demonstrated greater efficacy in reducing malaria cases compared to previous vaccines. It is cost-effective, being manufactured at scale by the Serum Institute of India, making it affordable and accessible to millions. While the vaccine

is not a standalone solution, it complements existing preventive measures discussed above including insecticide-treated bed nets (ITNs) and Indoor Residual Spraying (IRS), forming part of a comprehensive, integrated malaria control strategy.

## Challenges ahead

Ensuring that the vaccine reaches remote and rural areas will be crucial to its success, as effective logistics and distribution are essential. Sustainability will also play a key role, requiring ongoing international support and government commitment to maintain vaccine supplies and funding for the long term. Equally important is raising public awareness-educating communities about the importance of vaccination and addressing any myths or misinformation will be critical to achieving high coverage rates and the overall success of the rollout.

Nigeria's rollout of the R21 malaria vaccine represents a groundbreaking step in the global fight against malaria. With high hopes pinned on this new intervention, it holds the potential to significantly reduce malaria mortality and morbidity, particularly among the most vulnerable populations. However, a comprehensive approach that combines vaccination with other preventive measures will be essential to fully turn the tide against this deadly disease.

The success of this vaccination campaign will rely on widespread community engagement and continued global and local support. Governments, NGOs, and health institutions must work together to ensure every child in Nigeria and across malaria-endemic regions has access to life-saving vaccines.