

African women living with HIV have an effective option to prevent malaria during pregnancy, clinical trial finds

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In women living with HIV, preventive treatment with DHA-PPQ is a safe and effective strategy to prevent malaria during pregnancy,

according to the final results of MAMAH, a clinical trial coordinated by the Barcelona Institute for Global Health (ISGlobal). The study, published in the *Lancet Infectious Diseases*, could help protect the health of the estimated one million pregnant women who suffer from a double infection with malaria and HIV every year.

Pregnant women are particularly vulnerable to malaria infection. Hence the [recommendation to offer preventive treatment](#) (IPTp) based on sulphadoxine and pyrimethamine (SP) to [pregnant women](#) living in malaria-endemic areas. The problem is that these drugs are incompatible with co-trimoxazole (CTX), an antibiotic given to people with HIV to prevent bacterial infections.

"This means that the population most vulnerable to malaria infection and its consequences, namely pregnant women living with HIV, are also the least protected," explains ISGlobal researcher Raquel González, technical coordinator of the [MAMAH project](#), led by Clara Menéndez, director of ISGlobal's Maternal, Child and Reproductive Health Initiative.

The aim of the project was to evaluate the safety and efficacy of two other drugs: dihydroartemisinin and piperaquine (DHA-PPQ) to prevent malaria during pregnancy in women living with HIV. The research team conducted the trial in Gabon and Mozambique with more than 600 pregnant women taking CTX in addition to antiretroviral treatment for HIV. One group of pregnant women received DHA-PPQ and the other group received a placebo.

Lower risk of malaria infection and disease

Although there was no significant difference in [malaria infection](#) at the time of delivery, women in the DHA-PPQ group had a significantly lower risk of developing clinical malaria throughout pregnancy (almost

eight times lower than the placebo group) and also a lower risk (almost half) of becoming infected. DHA-PPQ was effective in women taking different antiretroviral treatments. No [serious side effects](#) were observed, and DHA-PPQ had no effect on mother-to-child transmission of HIV.

"We show that [preventive treatment](#) with DHA-PPQ is effective even in low malaria transmission settings," says Gonzalez. "Adding this strategy to malaria control tools could significantly improve the health of thousands of mothers and their babies, especially in sub-Saharan Africa, a region where an estimated one million women living with HIV are infected with malaria during pregnancy every year," she adds.

"We congratulate the MAMAH team on these important results in the field of malaria research, and, in particular, in providing better health to pregnant women living with HIV in [malaria](#)-endemic areas," says Montserrat Blázquez-Domingo, EDCTP Senior Project Officer.

"This study underlines the value of collaborative research that EDCTP supports and our focus on priority infectious disease affecting sub-Saharan Africa in populations often excluded from clinical trials—such as pregnant women."

More information: Miriam K Laufer et al, Malaria prevention: advancing clinical trials to policy, *The Lancet Infectious Diseases* (2024). DOI: 10.1016/S1473-3099(23)00808-3 , [www.thelancet.com/journals/lan ... \(23\)00808-3/fulltext](http://www.thelancet.com/journals/lan ... (23)00808-3/fulltext)

Raquel González et al, Safety and efficacy of dihydroartemisinin–piperaquine for intermittent preventive treatment of malaria in pregnant women with HIV from Gabon and Mozambique: a randomised, double-blind, placebo-controlled trial, *The Lancet Infectious Diseases* (2024). DOI: 10.1016/S1473-3099(23)00738-7 ,

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