



In Search of Better Health

PRESS RELEASE

TO: News Editors & Reporters

SUBJECT: Study Unveils New Drug to Reduce Malaria Rates for HIV Pregnant Women

DATE: Tuesday, 16th, January 2024

NAIROBI-KENYA: Researchers have published results that show that a new drug has potential to prevent malaria during pregnancy for women living with HIV.

Malaria during pregnancy can cause serious maternal and newborn health issues, especially in women living with HIV. The World Health Organization recommends daily doses of the antibiotic co-trimoxazole to prevent malaria in pregnant women living with HIV residing in areas with high malaria transmission. However, its efficacy in sub-Saharan Africa is threatened because malaria parasites are becoming increasingly resistant to the drug.

The study christened, IMPROVE-2 by researchers from Kenya Medical Research Institute (KEMRI) in partnership with colleagues from the Liverpool School of Tropical Medicine (LSTM), the Kamuzu University of Health Sciences, and the Malawi University of Science and Technology have just published in *The Lancet*, suggests that the addition of the antimalarial drug dihydroartemisinin-piperazine to daily co-trimoxazole substantially reduces the risk of malaria in pregnancy.

“We celebrate these findings that propose additional arsenal against a disease that risks about 70 percent of our population, malaria in pregnancy can cause a host of serious health complications, including miscarriage, stillbirth, pre-term delivery and growth restriction of newborn babies, and co-infection with HIV increases doubles these risks,” said Prof. Elijah Songok, KEMRI Ag. Director General & CEO.

Feiko ter Kuile, Professor of Tropical Epidemiology at LSTM, and the study lead, said: **“These are promising findings, and potentially welcome news in the future of prevention malaria among pregnant women living with HIV in areas where prevalence of the disease is high. Our trial showed that the addition of dihydroartemisinin-piperazine to the currently recommended preventative treatment strategy for pregnant women living with HIV reduced malaria by 68%.”**

Dr. Hellen Barsosio, a Clinical Research Scientist from the KEMRI’s Centre for Global Health Research (CGHR), and lead author on the new paper published in *The Lancet*, said: **“These findings are very encouraging. Not only did we find that adding dihydroartemisinin-**

piperazine to co-trimoxazole was safe and prevented two out of every three malaria infections during pregnancy, it was also very well tolerated by pregnant women, which is very important when a drug is given for prevention. The study could lead to a much-needed policy change that could make a real difference in improving maternal and newborn health in Africa”.

Dr. Simon Kariuki, Head of Malaria Program from the KEMRI-CGHR said: **“We hope that these findings, along with a similar trial being conducted in Gabon and Mozambique, will inform the malaria prevention guidelines from the World Health Organization and national health policies.”**

Notes to Editors

This study follows a series of trials coordinated by LSTM with collaborators like KEMRI to explore alternative options to prevent malaria in pregnant women without HIV, which found that out of several antimalarials, dihydroartemisinin–piperazine was the only one tolerated well enough to be considered for malaria prevention. Until now, no suitable alternative or additional preventative treatment has been identified for pregnant women living with HIV.

The currently recommended treatment for malaria prevention in pregnant women living with HIV, a daily dose of co-trimoxazole, is an antibiotic already prescribed to prevent opportunistic infections in HIV patients that also has antimalarial properties.

However, the high and growing resistance of the malaria parasite to drugs such as co-trimoxazole is threatening its effectiveness. In 2017, WHO stated that daily unsupervised co-trimoxazole provided only partial protection against malaria for women living with HIV in areas with high-grade resistance and highlighted the need for research of new strategies for malaria prevention in pregnancy.

Study Findings

Researchers assessed whether the addition of monthly dihydroartemisinin–piperazine to daily co-trimoxazole is more effective at preventing malaria infection than a monthly placebo plus daily co-trimoxazole in women living with HIV. 904 women were enrolled into the trial and assigned randomly to each group.

The trial found that pregnant women who received the combination of monthly dihydroartemisinin–piperazine to daily co-trimoxazole had 68% less malaria during pregnancy than women who received the standard of care with daily co-trimoxazole alone.

The study also involved investigators from the University of Copenhagen, Denmark, from the US Centers for Disease Control and Prevention (CDC), Atlanta, GA, USA.

The study was funded through the European & Developing Countries Clinical Trials Partnership (EDCTP2) programme, a public–public partnership between 15 European and 28 African countries, supported by the European Union, and by a joint initiative of the UK Foreign, Commonwealth and Development Office; Medical Research Council; National Institute for Health Research and the Wellcome Trust; and by the Swedish International Development Cooperation Agency.

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