TIPTOP PROJECT- Fact sheet

Background

Malaria infection during pregnancy (MiP) entails substantial risks for the mother, her fetus and the newborn. In 2021, an estimated 13.3 million (32%) of 40 million pregnancies were exposed to malaria infection in 38 moderate to high transmission countries in the WHO African Region. The WHO recommends a package of interventions to prevent MiP, which includes use of insecticide-treated nets, administration of intermittent preventive treatment with sulphadoxine-pyrimethamine (IPTp-SP) during pregnancy, and appropriate case management through prompt diagnosis and effective treatment of malaria. In all areas with moderate-to-high malaria transmission in Africa, IPTp-SP should be administered as early as possible at each scheduled antenatal care (ANC) visit from the second trimester of pregnancy onwards.

While there have been notable gains in addressing malaria in pregnancy (MiP) since the early 2000s, the overall coverage of IPTp uptake in malaria endemic countries has remained unacceptably low. Disruptions during the COVID-19 pandemic, decreased the coverage of ANC and IPTp1 from 85% and 65% in 2019 to 72% and 55% in 2021. Coverage of IPTp3 in 2021, at 35%, remained largely unchanged from that of 2019 and 2020, and well below the target of at least 80%. This underscores the substantial number of missed opportunities for IPTp.

The value that community health workers (CHWs) add to the promotion and delivery of health services, including malaria control, is well documented, although there has been less focus on community delivery of IPTp-SP.

What is TIPTOP?

The ***Transforming Intermittent Preventive Treatment for Optimal Pregnancy (TIPTOP)*** was a 5-year implementation research project aimed at evaluating an alternative, though complementary, approach to the ANC clinic for the delivery of IPTp. Starting in 2017, the project was funded by UNITAID and implemented by Jhpiego (coordinator) and ISGlobal (research partner) in collaboration with the World Health Organization (WHO) and the Medicines for Malaria Venture (MMV).

Pregnant woman taking SP in the presence of a CWH in Mozambique – TIPTOP project district.

The focus of the TIPTOP project was to expand the coverage and access to SP for IPTp through the ***introduction of community distribution***—without decreasing coverage of ANC in four countries, namely the Democratic Republic of the Congo (DRC), Madagascar, Mozambique, and Nigeria.

The project´s "no missed opportunities" approach selected and trained CHWs to identify and map pregnant women in the community, screen them for IPTp eligibility, provide the requisite SP doses to the eligible ones, and thereafter refer them to the health facility (HF) for comprehensive ANC services. A wide variety of data were generated through several research studies and complemented by routine data monitoring.

Evidence generation

KEY RESEARCH STUDIES	KEY FINDINGS
Household Surveys	• Sharp increase of IPTP3+ coverage after first C-IPTp implementation in the DRC, Madagascar and Nigeria compared to Mozambique. Limited effect of C-IPTp in Mozambique may be explained by several factors, including a higher baseline IPTp3+ coverage than other countries • Overall C-IPTp contributed to higher IPTp uptake in project districts and ANC coverage remained consistent or increased
Anthropological study	• C-IPTp is widely accepted by its beneficiaries in project areas • Barriers: pregnant women´s limited autonomy, negative perceptions of SP (due to rumors/experienced side effects) and CHWs´ working conditions • Opportunities for delivery: awareness of severity of MiP, trust in efficacy of SP and active involvement of relevant influential actors in family unit and community
Cost-effectiveness study	• C-IPTp increased IPTp3+ at a low additional cost to the health system • C-IPTp may result in significant cost savings for the health system and households
SP Drug resistance monitoring study	• The proportions of Pfdhfr/Pfdhps haplotypes significantly differ between each country. • SP resistance was found to be high in Nigeria and Mozambique compared to DRC and Madagascar.

Lessons learned

The success of TIPTOP starts with its design combining robust research and routine monitoring, thorough implementation strategies, and strong partnerships. However, a foundation for a successful C-IPTp implementation requires certain elements such as:

- ✓ A functional ANC clinic platform with adequate facilities and equipment
- ✓ A policy environment that promotes an integrated approach to essential healthcare services
- ✓ Availability of SP for IPTp through strong supply chain management
- ✓ An adequate number of motivated, knowledgeable facility-based healthcare workers and CHWs
- ✓ Strong government-led partnerships working through a functional MiP technical working group
- ✓ Adopting context-specific approaches to active community involvement in C-IPTp implementation
- ✓ Continuous and effective socio-behavioral change communication
- ✓ Strong monitoring and evaluation systems