RBM Partnership Malaria in Pregnancy Working Group:

Consensus Statement on community-based delivery of intermittent preventive treatment of malaria in pregnancy

January 2024

RBM Partnership To End Malaria | Malaria in Pregnancy Working Group

Increasing access to and coverage of life-saving medicines through a community-based delivery approach helps prevent malaria in pregnancy and protect mothers and their babies

The RBM Partnership Malaria in Pregnancy (MiP) Working Group (WG) strongly encourages malaria-endemic countries to consider the implementation of community-based delivery of intermittent preventive treatment of malaria during pregnancy (c-IPTp) in eligible areas. This RBM MiP WG consensus statement is based on the June 2022 update of World Health Organization (WHO) recommendations on IPTp *(see below box)* and the recently released WHO field guide on community deployment of intermittent preventive treatment of MiP with sulfadoxine-pyrimethamine: https://www.who.int/publications/i/item/9789240086272

2022 WHO recommendations for Intermittent preventive treatment of malaria in pregnancy (IPTp)[1]

In malaria-endemic areas, pregnant women of all gravidities should be given antimalarial medicine at predetermined intervals to reduce malaria disease burden in pregnancy and adverse pregnancy and birth outcomes.

- Sulfadoxine-pyrimethamine (SP) has been widely used for malaria chemoprevention during pregnancy and remains effective in improving key pregnancy outcomes.
- IPTp-SP should start as early as possible in the second trimester and not before week 13 of pregnancy.
- Doses should be given at least one month apart, with the objective of ensuring that at least three doses are received.
- Antenatal care (ANC) contacts remain an important platform for delivering IPTp. **Where inequities in ANC service and reach exist, other delivery methods (such as the use of community health workers) may be explored, while ensuring that ANC attendance is maintained and underlying inequities in ANC delivery are addressed.**
- IPTp is generally highly cost-effective, widely accepted, feasible for delivery, and justified by a large body of evidence generated over several decades.

Background

Although IPTp has been recommended by WHO for nearly two decades, with a target of 80% coverage, in 2022, among eligible pregnant women, 64% received IPTp1, 54% received IPTp2, and **only 42% received IPTp3,** despite the fact that 78% of pregnant women used ANC services at least once during their pregnancy.[2] The ongoing gap between high ANC attendance in sub-Saharan Africa and the low proportion of eligible pregnant women receiving the recommended at least three doses of IPTp is a critical missed opportunity to provide protection to mothers and their fetuses. It largely reflects a failure

[1] World Health Organization (WHO). WHO guidelines for malaria - 16 October 2023. https://app.magicapp.org/#/guideline/7661

[2] WHO. 2023. World malaria report. https://www.who.int/publications/i/item/9789240086173

of the health system to provide IPTp at ANC facilities and highlights the need for alternative delivery strategies to increase IPTp coverage.

Context

Community-based delivery of IPTp, or c-IPTp, is an innovative, "no missed opportunities" approach to increase IPTp coverage, improving access to IPTp with SP for all eligible women by making it available both in their communities and at ANC.

Evidence

A number of African countries have piloted implementation of c-IPTp, and some countries have adopted c-IPTp at scale. From pilot studies, c-IPTp has been shown to be an effective strategy for significantly increasing IPTp coverage without negatively affecting ANC attendance. In addition, in some areas, c-IPTp had a positive effect on ANC4 through an approach that focused on building trusting relationships with community health workers (CHWs) and, in particular, between communities and health facilities. The impact of c-IPTp on IPTp3 coverage has been shown to be greater in settings where initial IPTp coverage is low.[3,4,5,6]

C-IPTp is widely accepted by pregnant women, CHWs, and health care providers.[7] It is feasible for trained CHWs to deliver c-IPTp, and it has been demonstrated to be highly cost-effective, especially in areas with low IPTp uptake.[8,9]

The evidence underscores the opportunity and benefit c-IPTp can bring to countries' efforts to increase access to malaria prevention with the aim to reduce the burden of MiP.

Conclusion

C-IPTp is a complementary approach that can help bridge the gap between IPTp-SP coverage and ANC attendance in eligible areas. It does not stand alone; rather, when done correctly it can improve ANC attendance and comprehensive care for pregnant women. As existing c-IPTp programs scale up and new ones are launched, there are important lessons to be learned from countries implementing c-IPTp. A

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[3] González R, Manun'Ebo MF, Meremikwu M, et al. The impact of community delivery of intermittent preventive treatment of malaria in pregnancy on its coverage in four sub-Saharan African countries (Democratic Republic of the Congo, Madagascar, Mozambique, and Nigeria): a quasi-experimental multicentre evaluation. Lancet Global Health. 2023;11(4):e566-e574. https://doi.org/10.1016/s2214-109x(23)00051-7.

[4] Gutman JR, Stephens DK, Tiendrebeogo J, et al. A cluster randomized trial of delivery of intermittent preventive treatment of malaria in pregnancy at the community level in Burkina Faso. Malar J. 2020;19(1):282. https://doi.org/10.1186/s12936-020-03356-9.

[5] Salam RA, Das JK, Lassi ZS, Bhutta ZA. Impact of community-based interventions for the prevention and control of malaria on intervention coverage and health outcomes for the prevention and control of malaria. Infect Dis Poverty. 2014;3:25. https://doi.org/10.1186/2049-9957-3-25.

[6] Enguita-Fernàndez C, Alonso Y, Lusengi W, et al. Trust, community health workers and delivery of intermittent preventive treatment of malaria in pregnancy: a comparative qualitative analysis of four sub-Saharan countries. Glob Public Health. 2021;16(12):1889-1903. https://doi.org/10.1080/17441692.2020.1851742.

[7] Alonso Y, Lusengi W, Manun'Ebo MF, et al. The social dimensions of community delivery of intermittent preventive treatment of malaria in pregnancy in Madagascar, Mozambique, Nigeria and the Democratic Republic of the Congo. BMJ Glob Health. 2022;7(11):e010079. https://doi.org/10.1136/bmjgh-2022-010079.

[8] Burke D, Tiendrebeogo J, Emerson C, et al. Community-based delivery of intermittent preventive treatment of malaria in pregnancy in Burkina Faso: a qualitative study. Malar J. 2021;20(1):277. https://doi.org/10.1186/s12936-021-03814-y.

[9] Cirera L, Sacoor C, Meremikwu M *et al.* The economic costs of malaria in pregnancy: evidence from four sub-Saharan countries [version 2; peer review: 2 approved]. Gates Open Res. 2023, 7:47. https://doi.org/10.12688/gatesopenres.14375.2.

wide variety of resources from pilot countries is available to support countries interested in c-IPTp adoption and scale-up and a WHO field guide on c-IPTp implementation is under development. [10,11]

Frequently asked questions about community distribution of IPTp

What settings are optimal for c-IPTp impact?

C-IPTp has been shown to have the most impact on increasing IPTp uptake in areas with an initial low IPTp coverage and where c-IPTp is supported by favorable policy and programmatic factors. These include existing national policy that includes MiP prevention, functional CHW networks, supply chain management to support availability of SP, and strong collaboration across stakeholders, including those working in malaria and in reproductive health.

Is there a best platform for c-IPTp?

Adoption of c-IPTp is optimal where community-based programming exists. The c-IPTp approach can be adapted and integrated into existing community-based interventions. It is recommended that communities engage in decision-making around the intervention and in the selection of community agents to get community buy-in to ensure optimal support for c-IPTp and promotion of comprehensive care at ANC.

Which national programs should be involved in the design, implementation, and oversight of c-IPTp implementation?

Collaboration and coordination are key for successful c-IPTp implementation and scale-up, as multiple stakeholders at various levels in the country are involved**.** c-IPTp can be an integral component of a country's MiP program. Like all MiP programs, partnership between the national malaria program and the national reproductive health program is an underpinning of success. These two programs work together— with the national malaria program providing technical oversight and the national reproductive health program managing and leading program implementation. With c-IPTp, extending this partnership to national community programs, including ensuring community engagement and ownership, will help ensure effective implementation and support at the community level. Continued engagement of other national programs, including but not limited to HIV/AIDS, monitoring and evaluation, and supply chain management, should be considered and harnessed before, during, and throughout implementation. Collaboration between the different stakeholders and integration into existing country systems is key to successful and sustainable implementation of c-IPTp.

Should CHWs provide the first dose of IPTp?

While not compared directly, there did not appear to be substantial differences in IPTp uptake in countries where IPTp1 could be delivered by CHW versus countries where it was required to be delivered by an ANC provider. Additionally, there was no evidence to suggest that after appropriate training CHWs provided IPTp to women who were not eligible. It is recommended that the rollout of c-IPTp be accompanied by training of CHWs on determining eligibility of pregnant women for IPTp and by capacity strengthening for health care providers at the facility level on estimating gestational age.

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[10] RBM. Partnership to End Malaria. Resources. https://endmalaria.org/node/989/related-material

[11] WHO. 2024. Community deployment of intermittent preventive treatment of malaria in pregnancy with sulfadoxine-pyrimethamine a field guide. https://www.who.int/publications/i/item/9789240086272

What level of support is needed between health care providers and CHWs?

C-IPTp pilots that demonstrated significant increases in IPTp uptake included a strong referral system between the community and health facilities. Having a designated facility-based provider to supervise the work and reporting of the CHWs contributes to the consistency and quality of their services at the community level and to CHW motivation. Monthly meetings between the health facility and CHWs help to strengthen capacity and provide a regular opportunity for data collection and SP resupply.

Does c-IPTp detract from ANC utilization?

C-IPTp is intended to compliment not replace the provision of SP to pregnant women at ANC, and study findings support the effectiveness of c-IPTp improving IPTp coverage without reducing ANC attendance.[12] It is important that pregnant women continue to attend regular ANC visits to receive comprehensive care. WHO recommends c-IPTp should be explored in areas w**here inequities in ANC service and reach exist, ensuring that ANC attendance is maintained and underlying inequities in ANC delivery are addressed.** Facility-based ANC contacts remain an important platform for delivering IPTp. A c-IPTp intervention that minimizes negative impact on ANC attendance, and in many cases contributes to increased ANC attendance, should include consistent CHW messaging to pregnant women about the importance of ANC and a strong referral system in which CHWs follow up with pregnant women to confirm ANC visits and, in some cases, accompany pregnant women to the health facility.

How is community-level data captured and reported?

C-IPTp data should be well integrated into the country´s existing system and collected through existing data collection systems. Community-based distribution can be captured through CHW registers and summary forms, which can feed into health facility monthly summary forms. ANC cards can be adapted to track distribution through both ANC and from CHWs to ensure coordination of care. Accurate reporting of community-level data with monthly meetings between the CHWs and health facility helps to identify pregnant women who have missed ANC visits.

[12] González R, Manun'Ebo MF, Meremikwu M, et al. The impact of community delivery of intermittent preventive treatment of malaria in pregnancy on its coverage in four sub-Saharan African countries (Democratic Republic of the Congo, Madagascar, Mozambique, and Nigeria): a quasi-experimental multicentre evaluation. Lancet Global Health. 2023;11(4):e566-e574. https://doi.org/10.1016/s2214-109x(23)00051-7.