Testing the Feasibility of Community IPTp in Burkina Faso

MCSP Technical Brief

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MCSP Implementation Research Brief Series

Overall Study Aim

Learn whether utilization of community health workers (CHWs) for community delivery of IPTp (C-IPTp) in three districts in Burkina Faso can increase coverage of three or more IPTp-SP doses compared to IPTp-SP delivery only at antenatal clinics (ANC) without detracting from ANC attendance.

Malaria in pregnancy is responsible for 8-14% of low-birth-weight and 20% of stillbirths in sub-Saharan Africa. To prevent malaria during pregnancy, the World Health Organization (WHO) recommends intermittent preventive treatment of pregnant women (IPTp) with sulfadoxine-pyrimethamine (IPTp-SP). However, global IPTp coverage remains unacceptably low.

Study districts in Burkina Faso: Batié, Pô, Ouargaye

The Burkina Faso 2016-2020 National Malaria Strategic Plan aims to "reduce malaria case incidence by at least 40% by the end of 2020, compared to the 2015 rate." To reach this goal, the government is seeking new strategies to control malaria, including malaria in pregnancy. The government, with support from the U.S. President's Malaria Initiative, initiated the implementation of a study to determine the effectiveness and feasibility of IPTp distribution at the community level on IPTp and antenatal care (ANC) coverage in three districts. MCSP, as study implementers, worked closely with the National Malaria Control Program (NMCP) and local stakeholders to design, implement and monitor the study throughout the life of the program.

Study Details

Timeline:
April 2017–August 2018

Implementing Partners:
PMI, Burkina Faso NMCP, MCSP, District Health Management Teams

Districts: Batié, Ourgaye, Pô

Trainings: 24 facility-based ANC health care workers; 58 CHWs

Study Design:

- Household survey at baseline and endline
- Implementation of C-IPTp in intervention areas by existing CHWs trained and supervised by health staff.
- 12 facilities (6 control & 6 intervention)
- Routine monitoring of IPTp provision and ANC attendance

It was determined through this study that the following conditions were determined to be necessary elements to support the intervention and should be part of any successful community IPTp scale-up efforts:

- **Consistent SP supply:** CHWs can improve IPTp coverage only when health services ensure an adequate supply of SP for the estimated number of pregnant women in an area.
- **Community engagement:** Communities were responsible for the selection of CHWs. They appreciated the availability of essential services at their doorstep from trusted community members as well as played an active role in supporting CHWs.
- **Strong link between providers and CHWs:** Health workers formed a partnership with communities, and in addition to training the CHWs, they met regularly with the CHWs to review progress and resupply materials and SP.
- **Quality supervision at all levels:** The study relied on quality supervision from district supervisors, ANC providers and national stakeholders. Local district and health facility teams supervised daily activities to support implementation.

Results

Figure 1. C-IPTp leads to higher uptake of all IPTp doses in the intervention area*

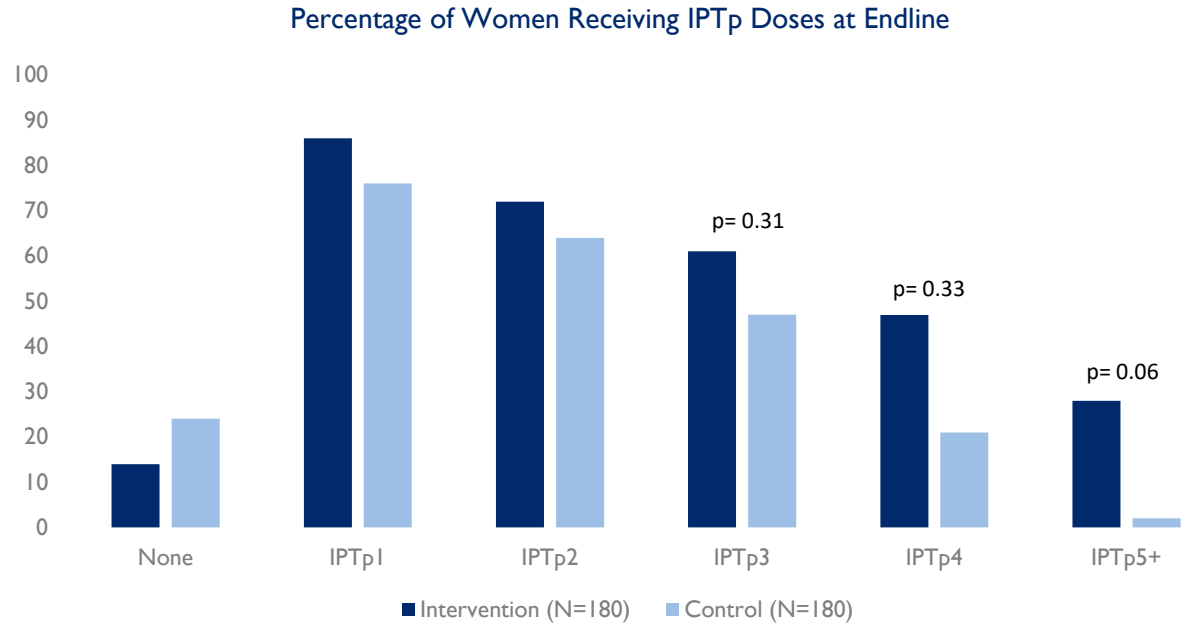
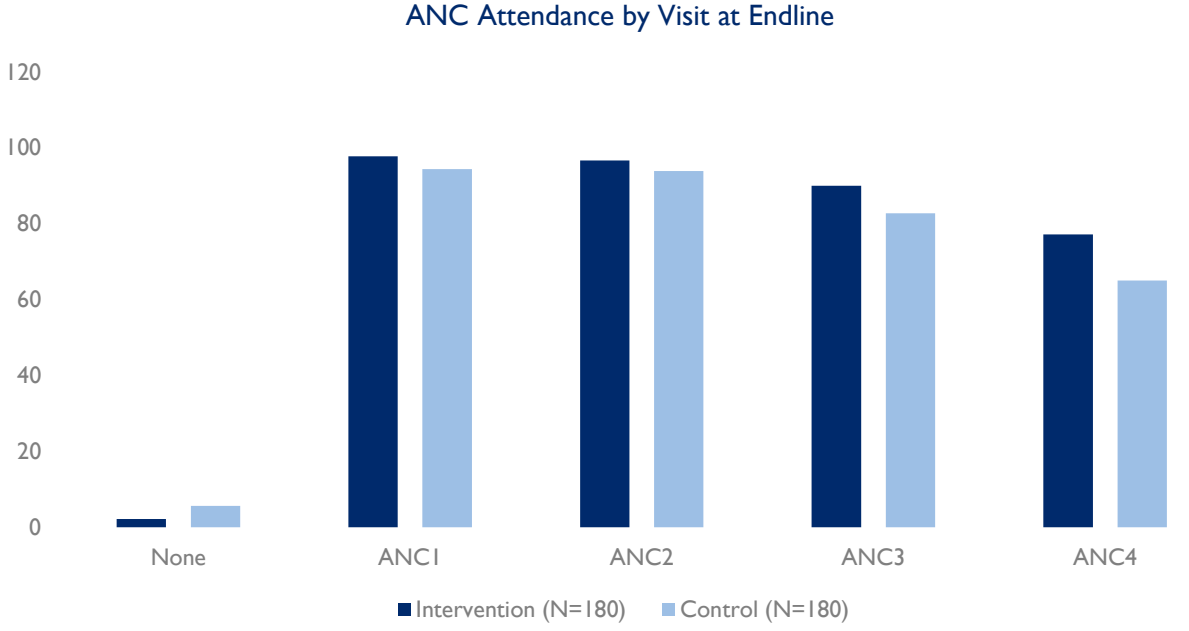


Figure 2. C-IPTp does not detract from ANC attendance and contributed to higher ANC4 attendance in the intervention area*



*None of the differences were statistically significant

At the end of the intervention period, data from the baseline and endline surveys as well as routine health data demonstrated that CHWs were able to work with facility-based health workers to deliver IPTp services at community level, thus improving ANC and IPTp coverage among pregnant women in the intervention group. Figures 1 and 2 show overall results for IPTp and ANC at the end of the study, and demonstrate a significant difference in uptake between intervention and control. Key results include:

- Administration of the **fourth dose of IPTp (IPTp4)** more than doubled between the baseline (22%) and endline (47%) in the intervention group. At endline, the coverage for the intervention group was double that for the control group.
- Delivery of the **fourth and additional ANC visits (ANC4 or more)** increased by 15 percentage points for the intervention area between the baseline (62%) and endline (77%) surveys, while there was only a three percentage point increase in the control group.

The study results show positive evidence of impact and feasibility of C-IPTp in the Burkina Faso context. Despite the substantial increases in IPTp coverage, we were unable to find a statistically significant difference overall for any of the measures. This was likely due to the small sample size and insufficient power, as we had powered the study on prior estimates of IPTp coverage that were much lower than what existed at the time the study began. However, the fact that there was an improvement in retention in ANC should alleviate many of the concerns around community delivery of IPTp. While further, larger studies are warranted to confirm that this method of delivery results in significant improvements, this study suggests that there is no disadvantage to community IPTp delivery.

Recommendations

- Share lessons learned and disseminate results widely to other countries that need innovation to improve ANC and IPTp uptake.
- Consider scale-up of approach in other high-malaria-burden areas of Burkina Faso, and documentation of the scale-up approach.
- Consider replicating the approach in other malarious countries with existing CHW systems that are able to support IPTp at the community level.
- Engage with WHO to review the evidence on community delivered interventions including C-IPTp for the prevention of malaria in pregnant women.

The increase in IPTp coverage without detracting from ANC attendance means that community-based delivery of IPTp is an effective strategy for ensuring more pregnant women are receiving the SP doses needed to protect them from malaria. The study results form the basis of a growing body of evidence regarding the impact of community distribution in increasing IPTp uptake and coverage rates, generating key data to inform change in policy recommendations across sub-Saharan Africa for the World Health Organization. Meanwhile, the Burkina Faso NMCP allows for continuation of community IPTp activities and eventual scale-up in the National Malaria Strategic Plan. Since the results dissemination workshop held in Burkina Faso, the NMCP has continued discussions with partners on how to sustain current gains in IPTp coverage in intervention areas and possibly expand C-IPTp efforts throughout the three districts while awaiting official policy change from the WHO.

A key take-away lesson is that CHWs can improve IPTp coverage only when health services ensure an adequate supply of SP for the estimated number of pregnant women in an area. The Ministry of Health ensured that there were no SP stockouts during the study period. The supply of SP cannot be based on past ANC participation. C-IPTp involves reaching out to the community to serve all pregnant women. Therefore, a combination of SP provision data from communities and health facilities must be used to provide a complete estimate of the number of pregnant women in the community. That said, any future intervention must take into account the procurement and supply chain management of basic commodities and other malaria control products

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