

Operational Research on community-based strategies to improve IPTp-SP uptake in Mali

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Study 1:

Increasing Intermittent Preventive Treatment uptake through enhanced antenatal clinic service delivery to improve maternal and child health

Objectives

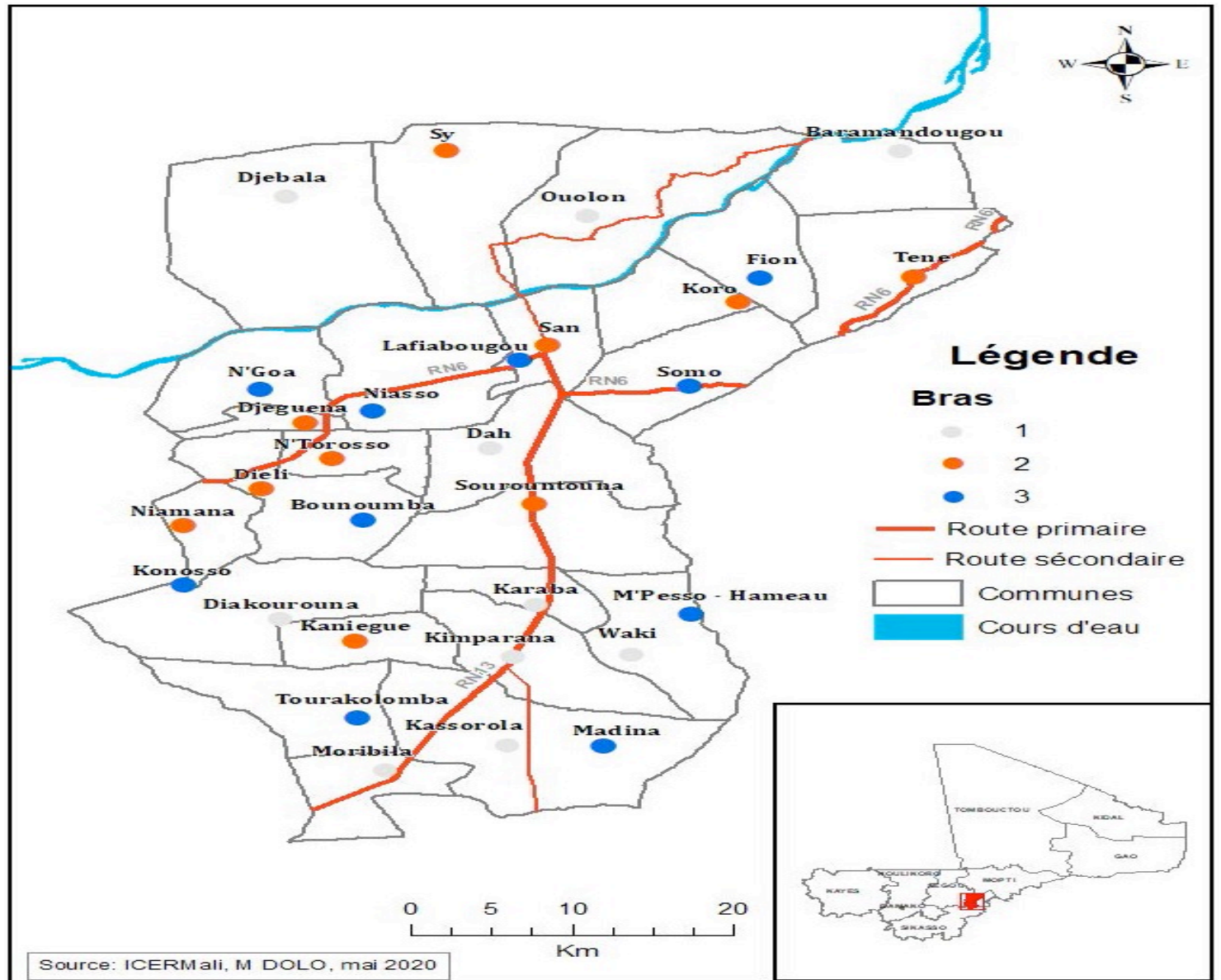
- Evaluate an 'MIP Improvement Package' (intervention groups)
 - Enhanced MIP-focused training and supervision for health workers in antenatal clinics
 - Community-based promotion campaign (intervention groups) to improve women's awareness of and demand for at least three doses of IPTp-SP
- Current standard
 - Coverage of at least 3 doses of IPTp-SP
 - Barriers to implementation of the standard versus enhanced intervention packages and the potential feasibility of implementation
 - Acceptability of the enhanced versus standard packages to stakeholders
 - Impact of enhanced training and community mobilization interventions on healthcare workers' practices and health-seeking behavior by pregnant women.

Design: Treatment arms

Study component	Control Arm 1: Standard of care in Mali	Intervention Arm 2: Enhanced training and supervision	Intervention Arm 3: Enhanced training/supervision + community promotion campaign
Initial training workshop	One day FANC training (including IPTp)	One day FANC training (control standard) + Three days enhanced training (with clinical component)	One day FANC training (control standard) + Three days enhanced training (with clinical component)
Refresher training after 1 year	Yes	Yes	Yes
Supervision by NMCP and RH	As normally scheduled (biannually, with financial support from the project)	One month after initial training and regular quarterly +use of supervisory checklist	One month after initial training and regular quarterly +use of supervisory checklist
SP and ITNs	Ensured by project	Ensured by project	Ensured by project
Jugs and goblets for drinking water	Ensured by project	Ensured by project	Ensured by project
Community sensitization	No	No	Yes. Training of relays/ASC using job aides for ANC and IPTp promotion (health messages, image boxes, groups)

- Health District of San:

- 30 clusters covered : 10 per treatment arm
- Baseline household survey: Dec 19-Jan 20
- Health audit: Dec-Jan 2020
- Qualitative: Feb 20
- Cost-effectiveness survey: Aug 2021
- Endline survey: Aug-Sep 2022 (now)



Next steps

- Endline household survey ongoing (Aug-Sep 2022)
- Clinical data entry ongoing
- Sustain the community mobilization
- Report for Dec-2022

Study 2:

Increasing Intermittent Preventive Treatment uptake through enhanced antenatal clinic service delivery to improve maternal and child health & assessing ANC data for routine monitoring in Mali

Study components

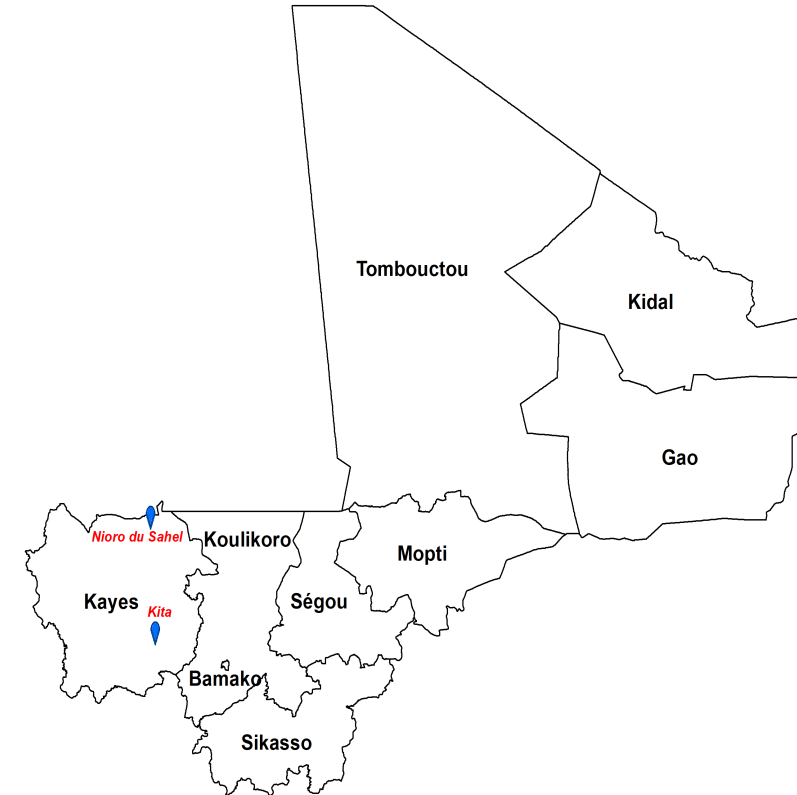
- Assessing the effectiveness of ANC outreach
 - Determine whether access to antenatal services to pregnant women is increased by improving the capacity of community health centers (CSComs) to provide basic ANC services and by delivering ANC services through outreach to women living further than 5 kilometers from a health facility
- Assessing the utility of ANC surveillance
 - Assess if pregnant women can serve as a sentinel population for monitoring malaria indicators including malaria prevalence.

Objectives

- Assessing the effectiveness of ANC outreach
 - Primary: Assess the extent to which outreach improves uptake of ANC services and IPTp coverage
- Assessing the utility of ANC surveillance
 - Primary: Assess whether malaria prevalence (by RDT) and malaria program coverage data (on ITN ownership and use, case management) collected from pregnant women during their first ANC visit is representative of malaria prevalence and program coverage levels in the community.
 - Assess malaria prevalence (RDT) and malaria program coverage data (on ITN ownership and use, case management) collected from children less than 5 years old through household survey in order to compare with data collected at ANC services.

Methods

- 2 districts: Kita and Nioro du Sahel
 - Eight CSComs and their catchment areas selected per district;
 - Four CSComs per district per treatment arms
 - Total of 16 facilities and their catchment areas, 8 control and 8 intervention



Design

- Two-arm, cluster-randomized intervention study in health facilities and their catchment communities (clusters), to assess the impact of the delivery of ANC through outreach on the uptake of ANC services and IPTp among women living more than 5 km from a health facility.
 - **Control arm:** receives ANC services at CSComs (health facilities) ONLY:
 - **Intervention arm:** receive ALL the same services as the control arm, IN ADDITION, ANC services to be provided to communities > 5 km from a facility through monthly outreach by CSComs staff
 - **Randomization:** 1:1 ratio (4 intervention versus 4 control arms) per district

Outcomes

- **Assessing the effectiveness of ANC outreach** (Baseline and end line household surveys)
 - The primary outcome of interest is ANC and IPTp3 coverage in communities receiving ANC services through outreach compared with coverage in the same community before the availability of services through outreach.
- **Assessing the utility of ANC surveillance** (household surveys & 1st ANC visit)
 - Correlation between the data on coverage of interventions reported by pregnant women during their 1st ANC visit and that obtained in the household surveys conducted at the community level
 - Correlation between malaria prevalence as assessed by RDT among pregnant women during their first ANC visit and among children less than five years of age found during the household survey .

Progress and perspectives

- Baseline survey:
 - Household survey : Aug-Sep 2021
 - Health audit: Sep-Dec 2021
- Intervention launch: 17th of February 2022
- Project termination: December 2023

Study 3:

**Increasing the uptake of Intermittent Preventive Treatment in pregnancy (IPTp) with Sulfadoxine-pyrimethamine (SP) through seasonal malaria chemoprevention (SMC) channel delivery:
the INTEGRATION project**

Consortium of 5 institutions (2 in Africa and 3 in Europe)

Objective & endpoint

- To evaluate whether the addition of IPTp-SP to SMC will increase the coverage of IPTp3+ and ANC among pregnant women in Mali and Burkina Faso
- Primary endpoint: % women who delivered within the last 12 months with IPTp3+ at endline

Method

- Design: Multicentre cluster-randomized, implementation trial
- Study arms:
 - Intervention: IPTp administration through SMC channel delivery and ANC
 - Control: IPTp administration through ANC only
- Study population: Women with a child less than or equal to 12 months of age, ANC attendees, health workers, district management team staff
- Sample size: Burkina-Faso (966), Mali (1,008) women.
- Assessment:
 - IPTp coverage: Household surveys at Baseline and Endline
 - Confirmed malaria cases in children and pregnant women: Facility-based ANC cards and registers review
 - Feasibility and Acceptability through In-depth interviews (health providers, managers, CHWs, pregnant women).

Progress

- Baseline household survey in May-June 2022
- Implementation in July 2022 for two seasons
- Post intervention household survey planned Nov-Dec 2023

Study 4:

Intermittent Preventive Treatment (IPT) using Sulfadoxine-pyrimethamine in the context of WHO antenatal care “eight contacts” in the district of Kita in Mali

Objectif

- To assess the feasibility of WHO ANC recommendations of eight contacts through training of health workers and community promotion campaign

Design

- Design: Cluster-randomized trial in 20 clusters (10 intervention and 10 control)
- Study arms:
 - Intervention: Community mobilization
 - Control: Standard
- Sample size: 1175 women with a child less than 12 years old
- Assessment:
 - IPTp coverage: Household surveys at Baseline and Endline
 - Confirmed malaria cases in children and pregnant women: Facility-based ANC cards and registers review
 - Feasibility and Acceptability through In-depth interviews (health providers, managers, CHWs, pregnant women).

Community intervention targets

- Pregnant women
- Women of childbearing age
- Village leaders (religious, traditional, counselors, Mayors)
- Mothers-in-law
- Heads of households/husbands,
- Leaders of women's associations/women's groups,
- Presidents of ASACO- CHWs- Community Relays
- Traditional healers
- Traditional birth attendants

Progress

- Interventions to be tailored to results from the baseline qualitative survey (pregnant women-WOCBA, village leaders, mother in law, heads of household, community health workers, community relays..)
- Baseline survey: Mar-Apr 2022
- Intervention launched: Sep 2022 for 18 months

Conclusion of studies

- Providing an integrated and sustainable strategy to improve IPTp coverage will be a major advance for malaria prevention in pregnant women
- At the same time, our strategies have the potential to boost ANC attendance and uptake of the latest WHO ANC recommendations of eight ANC contacts

Acknowledgements

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Anice
Thanks