

# Monitoring Malaria Parasitemia Prevalence among Pregnant Women at Reproductive and Child Health Clinics in the Lake Zone, Tanzania

## INTRODUCTION

- As malaria control interventions are intensively scaled-up, rational approaches are needed for monitoring their impact over time.
- Pregnant women reporting for antenatal care (ANC) at reproductive & child health (RCH) clinics can constitute a sentinel population for malaria surveillance.

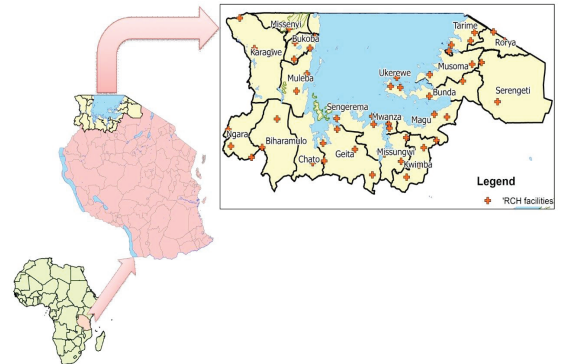
## OBJECTIVE

- To assess through a pilot study in Kagera, Mwanza and Mara regions in the Lake Zone of Tanzania whether malaria screening at RCH clinics could serve as a practical approach for longitudinal surveillance of malaria prevalence in the surrounding community.

## METHOD

- Data were collected from 54 RCH facilities (18 in Kagera, 14 in Mara and 22 in Mwanza) between December 2012 and June 2013. The study is ongoing through December 2013.
- Malaria rapid diagnostic tests (mRDTs) were used to screen pregnant women at time of first antenatal care (ANC) visit.
- Test positivity rates (number mRDT positive/number tested) were calculated. Monthly variation in positivity rate was also assessed.
- All participants who tested positive were treated as per national guidelines.

Figure 1: Map showing distribution of health facilities in Kagera, Mara, and Mwanza regions in the Lake Victoria Zone of Tanzania



## RESULTS

- Proportion of RCH clinics reported monthly for pregnant women is 86.8%. A total of 27,471 pregnant women attended RCH clinics
- 59.5% of pregnant women in RCH clinics received testing with mRDT
- Overall prevalence of malaria parasitaemia among pregnant women was 12.9% .

Table 1: Summary results of malaria testing in pregnant women at first ANC visit in Kagera, Mara, and Mwanza regions, Tanzania, December 2012–June 2013.

Characteristic	Pregnant Women			
	Kagera	Mara	Mwanza	Total
Number of health facility reports expected	126	98	154	378
Proportion of reports received	89.7%	96.9%	77.9%	86.8%
Total Attendance	9,425	5,024	13,022	27,471
Total tested	6,716	4,509	5,108	16,333
Proportion of participants tested	71.3%	89.7%	39.2%	59.5%
Malaria positivity (%)	14.0%	12.6%	11.7%	12.9%

Figure 2: Health facilities reporting rate among pregnant women at their first visit in Kagera, Mara and Mwanza, Tanzania, December 2012–June 2013.

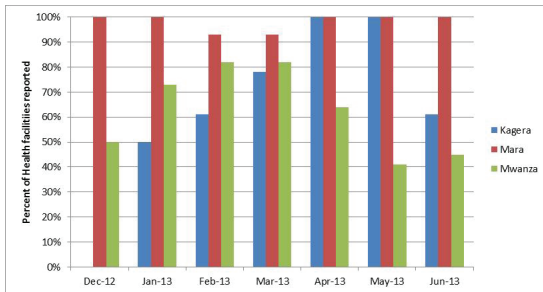
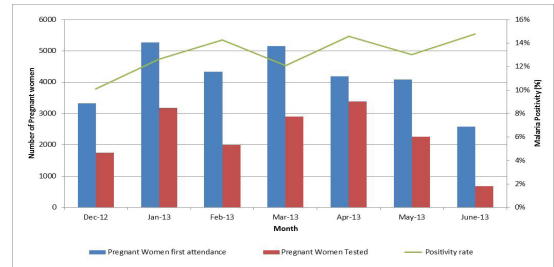


Figure 3: Monthly trends of malaria parasitemia for pregnant women at their first ANC visit in Kagera, Mara and Mwanza regions, Tanzania, 2012–June 2013.



## CONCLUSIONS

- Routine screening of these accessible populations may offer a practical strategy for routine continuous surveillance for tracking malaria control progress over time.
- Frequent mRDT stock-outs observed in most health facilities posed a challenge to maintain test rate of more than 90%.
- Despite the challenges of frequent mRDT stock-outs, the positivity rate of malaria for this asymptomatic sentinel population group remains low at approximately 12%.
- Given that only a little over half of pregnant women were tested at first ANC visit, further research and efforts are needed to examine and address barriers to testing among pregnant women.



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