

# *PLASMODIUM FALCIPARUM* INFECTION AT PARTURITION IN THE SANAGA MARITIME DIVISION: RISK FACTORS, DELIVERY OUTCOME AND EFFECT OF PREVENTIVE MEASURES



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## Background

Socio-economic, obstetrical characteristics and preventive measures have been associated with malaria in pregnancy.

## Methods

Data from 201 mother-newborn pairs were registered. Blood was used to prepare thick and thin blood films for malaria diagnosis and haemoglobin concentration.

## Results and discussion

The overall *P. falciparum* prevalence was about 23% and 6% in mothers and newborns respectively. Prevalence was higher ( $p=0.0057$ ) in peripheral (20.4%) than in placental blood of mothers (10.5%). Maternal infection significantly increased the risk of infection in newborns (OR=48.4;  $p<0.0001$ ). Monthly income lower than 28000 FCFA and young age were associated with higher prevalence of placental parasite infection ( $p=0.0048$  and  $p=0.019$  respectively). HIV infected mothers were 6% and had a 5-folds increased risk of *Plasmodium* infection (OR=5.38,  $p=0.0068$ ). Attendance at antenatal clinic and level of education showed significant influence on IPTp-SP utilisation ( $p<0.0001$  and  $p=0.018$  respectively). However, SP or mosquito net use did not have significant effect on malaria prevalence and density as well as pregnancy outcome in our study population.

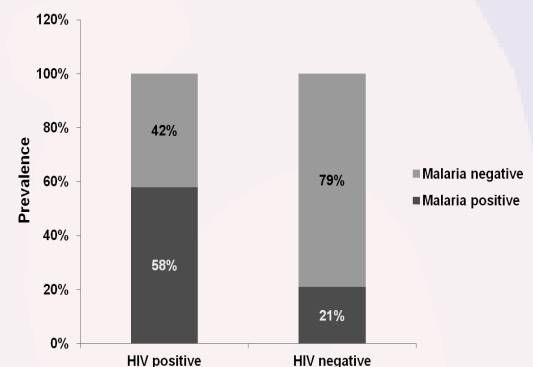
## Conclusion

Malaria infection in pregnancy is common in the Sanaga-Maritime Division and increases the risk of neonatal parasite infection. The risk of infection is higher in younger, poorer or HIV infected women. Preventive strategies are poorly implemented. Moreover, their utilization has overall negligible effect on *P. falciparum* infection and pregnancy outcome.

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Map of the study area presenting sample collection



Increase malaria infection in HIV positive women