

# Relationship between the prevalence of parasitemia in pregnant women and children : Bioko Island Malaria Indicator Survey 2008-2015

## Background

Pregnant women have been one of the main targets in the efforts to control malaria and in some settings they are routinely screened and treated or provided anti malaria prophylaxes and also provided ITNs. Studies have indicated that they are more likely to have detectable malaria due to higher parasite densities.

Prevalence in children (2-14 years) is one of the main standard measures used to monitor the outcomes and impacts of malaria control programs in moderate to high transmission areas.

Pregnant women attend ANC and blood samples are routinely taken and could be used to screen for parasitemia, allowing for an insight into the monthly variation of the incidence of malaria without need for extra sampling.

Knowing the relationship of the prevalence of malaria in children and pregnant women could have far reaching implication the various control interventions in terms of timeliness of data and the implementation of the routine MIS.

## Methods

Using 8 years data of the annual MIS Bioko islands of Equatorial Guinea from 2008-2015, the yearly prevalence of parasitemia in children and pregnant women was calculated and Pearson's product-moment correlation was run to assess the relationship...

## Results:

Prevalence among children is relatively higher, there exist similar trends in the two groups; There was a very strong positive correlation between prevalence of the two groups  $r(6) = 0.909, p < .002$ .

## Conclusion

ANC attendees can be used as a sentinel group to monitor malaria prevalence because they are readily available and show similar trends with the children whose malaria prevalence is a standard measure to estimate malaria endemicity. More importantly, there will be timely and seasonal data for decision making.