

The relationship between *P. falciparum* parasitemia from MIS data among pregnant women and children and assessing the use of ANC data for estimating malaria prevalence.

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Malaria control programs often target vulnerable populations such as children and pregnant women. The Bioko Island Malaria Control Project (BIMCP) has implemented population specific control programs with aim of reducing the burden of malaria among such groups on Bioko Island, Equatorial Guinea. Through the annual Malaria Indicator Survey (MIS), the BIMCP is able to monitor malaria prevalence, but as most surveys this is an intensive and time-consuming process. Although the BIMCP has observed significant reductions in *P. falciparum* prevalence among children ages 2-14 years (From 45% in 2004 [95% CI, 40%-50%] to 12.1% in 2016 [95% CI, 11.2%-13.3%]), more efficient and timely methods of monitoring malaria prevalence will be needed to continue its progress. During antenatal care (ANC) visits, pregnant women are routinely screened for parasitemia, thus providing monthly variation of malaria incidence among this sub-population. If a relationship exists between malaria prevalence among pregnant women and children, monthly monitoring of ANC data could prove effective and efficient in estimating malaria trends in other subpopulations, such as children. The Pearson's product-moment correlation (PPMCC) will be used to assess the linear correlation between parasitemia prevalence among pregnant women and children using MIS data from 2008-2016 at a sentinel site level and island wide data from 2015-2016. Previous results indicate a strong relationship between the two groups. This study will continue to monitor the strength of the association of parasitemia between the two sub-populations, and therefore, the ability to use prenatal care attendees as an indicator for malaria prevalence estimation on Bioko Island.