# PREVALENCE AND ASSOCIATED DETERMINANTS OF MALARIA INFECTION AMONG PREGNANT WOMEN IN MALARIA EPIDEMIC AREAS OF WESTERN HIGHLAND OF KENYA

## Abstract

*Purpose:* To determine prevalence and associated determinants of malaria infection among pregnant women in Western highland of Kenya, and specifically, Mt. Elgon Sub-County.

*Methodology:* Cross-sectional analytical design was adopted and mixed methods used for data collection. A total of 392 participants were randomly selected using systematic sampling in a population of 4,970 women aged between 15-49 years while qualitative approach adopted interview guides that targeted key informants working in the health facilities. Data entry and analysis was conducted using SPSS version 21.0 and presented in tables. The study used descriptive and inferential statistical analysis. To determine the association between variables bivariate logistic regression was adopted. Odds ratios were calculated and P-value of <0.05 was considered statistically significant.

**Findings:** Prevalence of malaria in pregnancy (MiP) was 16.2%. Prevalence was higher among women aged less than 25 (67.3%, n=262) compared to those aged > 25 years (33.7%, n=137). Place of residence (OR: 5.7; 95% CI: 2.6 – 12.4; p < 0.0001); those who tested positive in the last 2 years (OR: 1.7; 95% CI: 1.0 – 2.9; p = 0.05); preferred shape of ITNs (OR: 3.8; 95% CI: 1.5 – 9.7; p = 0.008); methods used to deliver health education (OR: 4.4; 95% CI: 1.6 -12.3; p = 0.007) were statistically significantly associated with malaria prevalence in pregnancy. Key informants associated MiP to current policy regarding prevention on malaria among pregnant women in high epidemic malaria prone zone in Western Kenya.

*Unique contribution to theory, Practice and Policy:* The study results showed that patient related factors and institutional factors were significant factors that were associated with MiP. Policy regarding non-use of intermittent prophylaxis treatment as a preventive measure was reported by key informant as a determinant of MiP.  To reduce MiP, the study recommends Bungoma County Government to promote use of insecticide treated nets (ITN's) and preferably rectangular ITNs by ensuring they are translated to appropriate use; support regular indoor residual spraying with insecticides and create awareness by use of print media to compliment the current malaria control

measures. WHO and Kenyan Government to review IPTp-SP policy in the Western Highland of Kenya.