

Malaria is the world leading cause of deaths among the tropical infectious diseases particularly in children and pregnant women. A safe and effective vaccine would have been the easiest way to control this disease, but the development of vaccine has not been successful despite decades of research. The periodic mutation and production of variants has not only posed a challenge to the vaccine production but also drug resistance. Also important is host-related factors that contribute to disease susceptibility and resistance. The prevalence and severity of parasitic infections higher in males than females among human and non-human primates, sex differences in exposure as well as susceptibility to parasites probably contribute to sex-based differences in the severity and prevalence of *P. falciparum*. Although sex and age have been correlated with severity of malaria infection no such study has been done in Kenya. This study correlated sex and age and malaria infection in terms of parasitaemia level. The study involved 78 malaria symptomatic children both males and females who presented at Nyanza Provincial General Hospital and living within Kisumu town, Kenya. Children age between 1-10 years whose parents or guardians consented to the study were enrolled. Parasitaemia levels were significantly higher in males (60.4% positive for malaria parasite) than in females (44.0% positive for malaria parasite). Sex was positively correlated with malaria parasite infection ( $r = 0.199$ ,  $P = 0.040$ ). 39.6% male had severe malaria, which was higher than that of the female (23.3%). Age was inversely correlated with parasitaemia levels ( $r = -0.0278$ ,  $P = 0.007$ ), High parasitaemia was observed in young children than their counterparts who were relatively old. Higher parasitaemia levels in males than in females living in the same malaria holoendemic areas are an indicator that males are more vulnerable to malaria infection than females.