

## Abstract

Low haemoglobin level is a common public health problem in many developing countries and is mainly attributed to parasitic intestinal helminth infections. The parasite species involved and host-parasite outcomes have not been adequately studied in different specific population segments in Kenya. A six month hospital based study to assess the association between hookworm infection, spatial variation in intensity of infection and maternal haemoglobin levels was undertaken at a district hospital. A total of 153 pregnant women who consented participate were enrolled in the study. Data was analyzed using SPSS windows version 16.0. Chi-square was used to determine the association of *Necator americanus* infection and maternal haemoglobin level. 21(13.8%) out of 153, had intestinal helminth infections. *Ascaris lumbricoides* was 10 (6.5%) *Necator americanus* 6 (3.9%). *Trichuris trichiura* 2 (1.3%). A significant negative association was observed between heavy infection of *Necator americanus* and maternal low haemoglobin level (P-value 0.13). We concluded that heavy intensities of *Necator americanus* are associated with low haemoglobin levels in pregnant women. It is recommended that all women of child bearing age living in hookworm endemic areas be subject to periodic antihelminthic treatment and incorporation of de-worming in antenatal care programs.