ABSTRACT

It is estimated that about 10 million pregnant women could be infected with schistosomiasis in Africa. In Kisumu, schistosomiasis, soil transmitted helminths and malaria are endemic and studies done on school children and occupationally exposed adults had reported high prevalence levels of these infections. However, little was known about the prevalence of *S. mansoni*, geohelminths and malaria co-infections among pregnant women in Kisumu, Kenya. In order to determine the importance of *S. mansoni*, geohelminths and malaria co-infections among pregnant women in Kisumu, Kenya, a cross-sectional study was done to determine the prevalence of *S. mansoni*, geohelminths and malaria and to determine the association between worm and worm/ malaria co-infections and anemia among pregnant women. A total of 245 pregnant women attending antenatal care clinics in Usoma and Rota health centres in Kisumu were recruited. The Kato Katz technique was used to screen faecal samples for *S. mansoni* and other geohelminths. Giemsa stained thick and thin blood smears were analysed for the presence of malaria parasites and haemoglobin levels measured using the hemoglobinometer. Of the 245 women included in the study, 34.3% of the women were infected with *S. mansoni*, 5.3% with Ascaris, 6.9% with hookworm, 4.9% with *Trichuris trichuria* and 11% had malaria infections. Overall, 66.1% of the women had anemia. Increased risk of anemia was associated with malaria (OR = 2.91, 95% CI: 1.01-8.34) but not *S. mansoni*, other helminthes or co-infections with malaria. This study suggests that *S. mansoni* is prevalent among pregnant women in this study area. Malaria infection was associated with increased risk of being anemic, hence an integrated program for the control and treatment of these infections is recommended in order to reduce the degree of anemia during pregnancy.