

Abstract:

OBJECTIVE: To establish Plasmodium falciparum malarionometric indices in a field study site in Apac district, northern Uganda. **DESIGN:** A community-based cross sectional survey. **SETTINGS:** Atopi Parish, Apac district, Uganda, 1995. **SUBJECTS:** One thousand two hundred and thirty four volunteers aged below one and ninety years. **MAIN OUTCOME MEASURES:** P. falciparum parasitaemia rates and parasite density, splenomegaly, bednet use and chloroquine consumption. **INTERVENTIONS:** All subjects with P. falciparum positive smears were treated with chloroquine. **RESULTS:** The population prevalence of parasitaemia was 62.1% with the predominant species being P. falciparum (100%) and P. malariae in the minority (3.5%); P. ovale was not seen. The prevalence of parasitaemia in subjects older than 20 years and in those under ten years was 36% and 85%, respectively. The geometric mean parasite density started to decline by the age of six years. The splenomegaly rate in subjects over the age of 12 years and in those under nine years was 19.8% and 63.1%, respectively. Bednet use and chloroquine consumption was low. Interestingly, the reported use of chloroquine in the week immediately preceding the study was more frequent in children under two years old than in the rest of the population. **CONCLUSION:** Malaria transmission in Atopi Parish in northern Uganda is hyperendemic and age-related acquired anti-parasite immunity seems to appear by seven years of age.