

The Status of asymptomatic malarial infections in two endemic regions of Sri Lanka

The presence of an asymptomatic carriage of malarial infections has been attributed as a major factor for the maintenance of malarial disease at sub clinical status. The present study was designed to assess the level of asymptomatic carriages of *P.vivax* and *P. falciparum* infections of two different localities of malarial endemic areas of Sri Lanka.

Two cohorts of people comprising 69 and 60 individuals from two endemic regions; Kurunegala and Kataragama respectively were tested for the presence of *P vivax* or *P falciparum* infections in relation to their clinical score over a period of 15 months. The infections were detected by thin and thick blood examination by microcopy. The results indicated the presence of different degrees of asymptomatic carriage in these two localities as having 4.34% at Karunegela and 16.66% at Kataragama. Moreover, the incidence for malarial infections (both *P. vivax* and *P falsiparm*) as found in Kataragama was significantly higher than that of Kurunegala ($p=0.048$). This may suggest that exposure to relatively high exposure of malarial infections would lead to the establishment of a asymptomatic carriage more efficiently. However, the contributions of *P. vivax* and *P. falciparum* infections in generating these asymptomatic carriages in Kataragama were 1.43% and 2.89% respectively whereas in Kataragama, the asymptomatic carriage was purely based on the presence of only *P. vivax* infections at 16.66% This higher contribution of *P. vivax* infections towards the asymptomatic carriage found at Kataragama may be in parallel to a previous finding which described the lowering of clinical symptoms of *P. vivax* patients in this region due to anti-disease immunity mounted against fever generating factors.