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An epidemiological study of malaria in childhood

The objective of this investigation was to describe the epidemiology of childhood malaria in a typical malaria endemic area of Sri Lanka. The study population comprised 834 children below 12 years of age who presented at malaria diagnosis and treatment centres in the Kataragama and Buttala areas situated in the Moneragala district (662 children with malaria and 172 febrile children with no malaria parasites in the peripheral blood). 662 children who had 1138 episodes of malaria were followed up over a 2 year period. Malaria infections were monitored by passive case detection and parasite densities were estimated. The clinical severity of disease was determined in children aged five years or above using a previously validated questionnaire. Of the 1138 malaria infections, 776 were due to *Plasodium. vivax*, 359 due to *P. falciparum* and three were mixed infections. The mean parasitaemia for *P. vivax* infections was significantly higher than the mean parasitaemia for P. falciparum infections ($p<0.001$). Circulating gametocytes were found in the blood in 79.8% of P. vivax infection and 6.5%

of *P. falciparum* infections. The disease severity was greater in malaria infections as compared to non-malarial infections. The majority of children with malaria presented within the first three days of the onset of symptoms. The mean clinical scores for *P. vivax* and *P. falciparum* infections were similar. RI early and late, and RII chloroquine resistant *P. falciparum* infections were found in the population .Provision of effective treatment early will prevent transmission of *P. falciparum* infections in approximately 94% of patients. The findings of the study on the epidemiology of malaria in childhood will be useful for planning and targeting of preventive measures in this age group.