

Nutritional status in children with malaria

Malaria is considered to be an aetiological agent of Protein Energy Malnutrition (PEM) in endemic countries. At the community level PEM is assessed using anthropometric indices, namely, weight for age, (WAZ), weight for height (WHZ), and height for age

(HAZ). In this study, the impact of an acute uncomplicated attack of malaria on the nutritional status of children living in Kataragama, a malaria endemic area of Sri Lanka, was investigated. Two cohorts of children (one with malaria and a control group) under 12 years of age were observed over a period of thirteen months. Each child was followed up for children with malaria the day of presentation to malarial diagnosis to treatment clinics in the area and for age and sex matched controls the day of recruitment) and subsequently on days 7, 14, 30, 60 and 90. At the time of presentation, weight for age (WAZ) of children with malaria was significantly lower than control children (-1.9 ± 0.7 vs -1.6 ± 0.7). Weight for height (WHZ) was also significantly lower than control children with malaria on day 0 as compared to control children (-1.6 ± 0.8 vs -1.4 ± 0.8). There was no difference in height for age (HAZ) between the two groups. The significant differences in WAZ and WHZ between children of the two groups persisted up to 14 days. Among the children with malaria, there was gradual improvement in WAZ and WHZ during the follow up period. Among the control children, there were no significant differences in any of the antropometric indices (WAZ, WHZ and HAZ) during the follow up period. An acute attack of malaria results in an acute loss of weight that is reflected in WAZ and WHZ.