



**A-22: A knowledge, attitudes, beliefs and practices survey of malaria in the Huruluwewa watershed, Anuradhapura District**

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The available literature on direct or indirect costs of malaria in the Sri Lanka context is very limited. To be able to estimate the cost benefit ratio of different control interventions, it is necessary to gain more

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knowledge regarding the economic burden of diseases at household level. It was therefore decided, as part of a pre-intervention malaria baseline survey in the Anuradhapura District of Sri Lanka, to estimate the direct cost of malaria among people living in 5 different villages of the study area.

In addition to estimating the direct cost of malaria at household level, it was the objective of the survey to describe peoples' treatment seeking behaviour, the use of preventive measures as well as their perceived importance of malaria as a health problem and their knowledge regarding the transmission of the disease.

To supplement the entomological, parasitological work undertaken as part of a pre-intervention malaria baseline survey, a questionnaire-based knowledge, attitudes, beliefs and practices (KABP) survey was done among 220 households in February 1995 focusing on the parameters necessary to estimate the direct cost of malaria. In addition to the quantitative information generated as part of the KABP survey, qualitative aspects were accumulated during the year of field work in the area on the basis of observations and informal household interviews.

The parameters used to estimate the direct cost of malaria included the cost of diagnosis and treatment, expenses incurred on transport and while awaiting consultation/treatment, costs linked to specific sickness behaviour, cost of labour substitution and the cost of preventive measures against malaria. The annual income of the households was estimated to provide a basis for comparison. Of the 171 malaria cases recorded the geometric mean values for the direct expenditure per episode of malaria totalled Rs.47.00. Of this, 57% was spent on special diet for the sick. An average 23% of the total expenditure was spent on transport to the health facility and only 4% on diagnosis and treatment. The remaining 16% was spent on "other" expenditure including food while waiting at the health facility. It was uncommon to pay for hired labour during the period of illness although labour substitution took place to a great degree. The average annual household income in the study area was Rs.6000.00.

Paracetamol was the most common form of treatment at the household level and 81% of the surveyed population used this form of treatment on the first

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day of fever. 86% selected a government health facility as their first choice of treatment centre. Among the study population 22% made use of private health facilities during the course of their illness.

Seventy per cent of the households burnt leaves (neem/mee), neem seeds or cashewnut shell during the evenings and nights to keep away mosquitoes. 20% of the population used bed-nets to protect one or more of the family members from mosquito bites. No environmental management measures were taken to reduce vector breeding sites.

Thirteen per cent of the population surveyed mentioned malaria as the biggest problem in their village and 94% found that malaria was the biggest health problem.

The majority of the population had a good knowledge of disease symptoms, treatment practices and the role of mosquitoes as vectors.

The direct cost of malaria constitute a considerable amount of the cash expended in a household. However, the most negative impact of malaria is experienced when the disease hits one of the agriculturally active family members in the early and latter part of the Maha season during land preparation, transplanting and harvesting.

The community surveyed see malaria as a major health problem: not only owing to its economic burden on them but also because it is seen as a disease that drains the energy and initiative of individuals and, in this way, hamper the development of the villages.