

Active Case Study at Arivial Nagar: A Malaria Endemic Locality in the District of Kilinochi

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Kilinochi district was rated as one of five malarious districts in Sri Lanka. However the incidence of malaria has occurred in the district over the past three years. An active case detection study was done in the Arivialnagar locality of Kilinochchi district where an outbreak of malaria occurred in 2003. This study was carried out in mid March 2005. A random sample of 325 residents in the locality (1/3 of total population) was screened for malaria parasites by examining both thick and thin blood films. A questionnaire based survey was also conducted among the occupants of two hundred houses (2/3 of total houses) in the locality to identify the previous history of malaria and the practices of personal protection methods against mosquito bites. None of the screened slides showed positive for either *Plasmodium vivax* or *P. falciparum*. The questionnaire survey indicated that 52% (male 60%, female 40%; with the age distribution of 0-10 yrs.40%, 31-40 yrs. 30%, 41-50 yrs. 20% 51-60% 10%) of the responds had previous experience of malaria. The study also revealed that the residents were aware of mosquito bites and all responds practice some way of protective way of measures (80% used mosquito nets, 10% mosquito coils, 8% smokes, 2% home made nets, etc.). This study further revealed that the study population had a complete health education programs conducted by the Department of Health. This study suggests that combination of effective personal protection measures used by this population combined (chemical and biological) vector control methods by the Anti Malarial Campaign, prompt and effective treatment by the District Hospital Kilinochchi might have contributed for the recent decline of malaria incidence. However, a more detailed study on entomological parameters (Longevity, vector density, biting pattern etc.) that determine the dynamics of malaria transmission in this population is proposed.

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