

Transmission aspects of filariasis in relation to socio-economic indices

Studies on socio-economic aspects of filariasis was neglected until recently and research conducted on this aspect in Sri Lanka is lacking. The objective of this study was to obtain information on socio-economic aspects of filariasis in three municipal wards of Colombo Municipal Council (CMC) namely Mahawatta, Grandpass-South and Kollupitiya.

The survey was conducted using questionnaires which were filled by questioning inhabitants of houses where entomological and parasitological surveys were conducted. It was designed to obtain personal details of householder, nature of house, sanitary conditions and protection methods against mosquitoes.

From the chief householders surveyed 50.6%, 29.6% and 17.4% belonged to Sinhalese, Muslims and Tamils respectively. Microfilaria rates of Sinhalese, Muslims and Tamils were 2.26%, 0.53% and 0.22% and 0.22% respectively. Microfilaria rates of occupants from endemic areas and non-endemic areas were 1.41% and 0.85% respectively.

Of 443 households surveyed, at least one type of protection method was used by 80.8% of the households surveyed i.e mosquito coils-290, Fan-148, bed nets-36 and smoking & other methods-16. The use had no significant impact on infection rate and infective rate of vector mosquito and microfilaria rate of human population.

The relative density, infection rate and microfilaria rate were significantly related to the income level of surveyed population ($p=0.01$, $p=0.01$ and $p=0.02$ respectively) Significant relationships were also obtained between occupational status of community and relative density , infection rate and infective rate of mosquitoes ($p=0.04$, $p=0.04$ and $p=0.04$ respectively)

The study emphasized the need to upgrade the living conditions of urban poor if successful control of filariasis is to be achieved.