A-22 The impact and cost implication of two interventions to reduce malaria, based on risk factor analyses

D M Gunawardena[1,4], A R Wickremasinghe[3], J Rajakaruna[1]
S Weerasingha[1], L Perera[1], R Carter[2], K N Mendis[1]
([1]*Malaria Research Unit, Dept. of Parasitology, Faculty of Medicine, Univ. of Colombo, Colombo 8,* [2]*Division of Biological Science, ICAPB, Univ. of Edinburgh, Scotland,* [3]*Dept. of Community Medicine and Family Medicine, Faculty of Medical Sciences, Univ. of Sri Jajewardenepura, Nugegoda,* [4]*Anti Malaria Campaign, Badulla*)

It was previously reported from a malaria endemic population in southern Sri Lanka that the risk of acquiring malaria is (i) significantly (2.5 times) greater in residents of poorly constructed houses compared to well built ones, and (ii) even greater in poor houses when they are located close to a source of water, a potential breeding place of the vector mosquito. Based on these findings, the impact of malaria on this population, of 2 potential interventions was estimated. One was the imposition of a buffer zone of 200 m around water bodies from which houses of poor construction type were excluded, which is estimated to lead to a reduction in the malaria incidence by 21% in the overall population and by 43% in the relocated community. The other was the conversion of houses of poor construction type located in the buffer zone, to those of a good construction type, which was estimated to lead to a 36% reduction in the incidence in the whole population and 76% in the residents of houses whose construction type was improved. Taking into consideration the cost to the Government of malaria prevention, the worth of a Government's investment on improving house construction type was estimated. Given the assumptions used here, the investment in housing is estimated to be offset in 7.2 years by savings to the Government on malaria costs alone and beyond this period, bring a return on the investment by way of savings to the malaria control programme.

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