

Impact of repeated annual Diethylcarbamazine-Albendazole mass treatment on transmission of *Wuchereria bancrofti* in the Gampaha district

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Entomological and parasitological surveys are critical for the baseline evaluation of impact of repeated annual Diethylcarbamazine-Albendazole mass treatment on the reduction of microfilaria density and level transmission of *Wuchereria bancrofti* in *Culex quinquefasciatus*. The objective of this study was to assess the current situation, following the mass drug administration programme in the Gampaha district, with regard to lymphatic filariasis, using entomological and parasitological data. A pilot survey was carried out using parasitological, clinical and entomological indicators in 21 sites in 7 Medical Officer of Health areas of Gampaha district to assess the current filariasis situation. The localities were selected from the Medical Officer of Health areas based on previous data obtained from the regional Anti Filariasis Campaign office. Results indicate that 76.19% (16/21) sites were infested with mosquitoes positive for *Wuchereria bancrofti* and the positivity of 1.44% (31/2157) was observed among the mosquitoes caught from households in the selected sites. The microfilariae density was determined to be 15.5 per positive I mosquito. The parasitological result was indicated 0.017 % prevalence of lymphatic filariasis in the selected population. Data recorded by the Anti Filariasis Campaign Gampaha in 1994, suggested that significant decrease of infective rate, positivity of mosquito and microfilaria density, which are respectively 90%, 3.05% and 23. Study confirms that active transmission of *Wuchereria bancrofti* is currently taking place in the Gampaha district, despite the mass drug administration Programme been implemented since 2002. This study highlights the urgent requirement of a proper screening programme combined with anti-filarial treatment and vector control programme to minimize filarial morbidity and interrupt filarial transmission within the country.