

ELIMINATION OF LYMPHATIC FILARIASIS IN SRI LANKA: ADVANCES IN DIAGNOSIS AND MANAGEMENT OF SURVEILLANCE

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The World Health Association in July 2016 validated Sri Lanka as having eliminated Lymphatic Filariasis (LF) as a public health problem. LF is a disabling mosquito borne disease caused by nematode parasitic worms *Wuchereria bancrofti* and *Brugia malayi* in Sri Lanka. However, latter was eradicated in nineteen sixties. In 1997 the World Health Assembly passed a resolution calling for the elimination of the disease. The World Health Organization established the Global Programme for the Elimination of Lymphatic Filariasis (GPELF) in 2000 aiming to achieve total elimination by 2020. The programme had two principal goals to interrupt the transmission of infection in the entire 'atrisk' population by treating every individual annually with a single dose of two drug regimen to alleviate the suffering and decrease the disability of those already with the clinical disease by reducing the secondary bacterial and fungal infections of the limbs and genitals and conduct of hydrocelectomies for hydrocoeles. In Sri Lanka the disease was considered to be endemic in three provinces, southern, western and north western and covering eight districts. The Ministry of Health, initiated the national programme for the elimination of lymphatic filariasis (PELF) in 2002 covering the three endemic provinces. Five rounds of mass drug administration were completed by 2006. The morbidity control programme too was continued through the years. Having completed ten years of surveillance after the last MDA, Sri Lanka has now reached the elimination goal. The country needs to maintain the success and to prevent resurgence of the disease. The role of the scientists at the present will be the continuation of surveillance and evaluation utilizing the recommended tools like night blood for microfilariae, tests to detect circulating antigen to *Wuchereria bancrofti* and other techniques to detect parasite DNA in humans and mosquitoes. The application of ICT card and other tests used by PELF; new Alere Filariasis Strip Test (FTS) against Card test; application of urine ELISA; application of independent questionnaire on community leaders and validating data obtained by clinicians and with urine ELISA; LAMP test and PCR used by PELF will be discussed. In addition, screening, testing of sentinel sites, hot spots, borderline districts, migrants and value of independent surveys too will be discussed. The remaining hot spots of high endemicity like in Galle, finding of *Brugia malayi* resurgence in the country and less attention paid for a disease after elimination are the challenges at present. Another important aspect of surveillance is to monitor Community Home Based Care approach to alleviate the suffering caused by LF. The newer techniques used for this and continuation of disability alleviation services on a larger scale will be discussed.