

## “MOVING TOWARDS A FILARIASIS FREE SRI LANKA”

Summary of the symposium organized by the SLMA Expert Committee on Communicable Diseases on the 19<sup>th</sup> of March 2015 from 11.30am – 1.15pm at the Board Room, Faculty of Medicine, University of Colombo

### Lymphatic filariasis: Aetiological and clinical perspective

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Lymphatic filariasis has infected 120 million people living in 73 countries with 1.39 billion vulnerable persons worldwide. In Sri Lanka, 9.8 million people living in 8 districts in 3 provinces (North West - Puttalam, Kurunegala; Western - Gampaha, Colombo, Kalutara; and Southern - Galle, Matara, Hambantota) are at risk. The disease has resulted in serious incapacitation among 40 million sufferers. Genital symptoms in men and elephantiasis has accounted for 25 and 15 million cases respectively. It is responsible for the loss of 5.5 Million Disability Adjusted Life Years. It has been estimated that lymphatic filariasis patients spend 10-60% less time at work. Chronic nature of the disease and disabilities lead to socio-economic problems such as loss of employment opportunities, stigmatization and marital problems. These factors have made lymphatic filariasis a disease needing urgent attention.



Lymphatic filariasis (LF) is caused by tissue nematodes *Wuchereria bancrofti*, *Brugia malayi* and *Brugia timori*. *W. bancrofti* is responsible for over 90% of the lymphatic filariasis cases in the world while most of the remainder is caused by *B. malayi*. LF is a vector borne disease transmitted by mosquitoes of the genus *Culex*, *Anopheles* and *Mansonia* in different geographical localities. In Sri Lanka, the main aetiological parasite *W. bancrofti* is transmitted by *Culex quinquefasciatus* mosquito. *B. malayi* which was once thought to have been eliminated from Sri Lanka is re-emerging and the vectors *Mansonia uniformis* and *Mansonia annulifera* carry the pathogen. *B. timori* which is confined to Indonesia is spread by *Anopheles barbirostris*.

There are certain factors that facilitate the elimination of filariasis such as absence of animal reservoirs, absence of multiplication within the vector and the need of prolonged exposure for establishment of the disease. However *B. malayi* has been found in macaques, leaf monkeys and civet cats.

The disease has a wide array of clinical manifestations. However, the great majority are asymptomatic. During acute infection, patients can present with filarial fever, lymphangitis, lymphadenitis, adenolymphangitis (ADL), orchitis and epididymitis. Lymphoedema of limbs, breasts, genitals, hydrocoele and elephantiasis are the chronic manifestations of the disease. Other less common manifestations include tropical pulmonary eosinophilia (TPE), chyluria, chylascites, arthritis and skin lumps.

Interrupting transmission and preventing morbidities and management of disabilities among patients already affected by LF are the two main areas



focused by the Global Programme for Elimination of LF. Clinical manifestations are useful from the planning stage up to monitoring and evaluation of the elimination programme. A reduction in the frequency and intensity of episodes of adenolymphangitis for people with lymphoedema and a reduction in the number of new cases of lymphoedema and hydrocoele to a level where there are no new cases due to lymphatic filariasis demonstrate the success of the elimination programme.



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