

Post-MDA surveillance for transmission of lymphatic filariasis in the Colombo and Gampaha districts of Sri Lanka

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In the year 2002 the national Anti-filariasis Campaign launched the program for elimination of lymphatic filariasis (LF) by annual mass drug administration (MDA) of diethylcarbamazine citrate and albendazole to the eligible at risk population in the three endemic provinces of Sri Lanka. The program was concluded in 2006 after completing five rounds of treatment with coverage exceeding the goal of 80%. Recently, Sri Lanka received certification of elimination of LF.

Screening for LF was done in two consecutive time periods (2009-2010 and 2013-2015) in the districts of Gampaha and Colombo using the thick night blood smears (NBS), and in 2015 children were screened for antibodies to *Brugia malayi* with a rapid dipstick test (Brugia Rapid, Reszon Diagnostics International, Malaysia).

A total of 2,461 individuals (mean age 32.05, range 4-80 years, male: female ratio 1:1.01) from the districts of Colombo (17.4%), and Gampaha (82.8%) were screened by NBS and 250 children (7-12 years) were screened for antibodies to *Brugia malayi* with a rapid dipstick test.

During 2009-2010, examination of 1,257 NBS from Angoda (2009), Mathumagala (2010), Welisara (2010) and Galwala (2010) revealed four *Wuchereriabancrofti* microfilaria (mf) positives (mf rate 0.32%). During 2013-2015, examination of 1,204 NBS from individuals living in Kandaliyaddapaluwa (2013), Galwala (2015) and Wattala (2015) of Gampaha district revealed one *B. malayi* mf positive (mf rate of 0.08%). Of 250 children surveyed for antibodies to *B. malayi* in the Gampaha district, 1.6% (n=4) demonstrated evidence of exposure to *B. malayi* infection, which was hitherto regarded as an infection of the past.

This survey provides supportive evidence on the success of the annual MDA program in achieving elimination of bancroftianfilariasis in the western province and suggests the need for further studies on brugianfilariasis in the country.

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