

Filarial Infections among Migrant Workers Employed in Steel Factories in Gampaha District, Sri Lanka

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In 2016, WHO declared Sri Lanka as a country that eliminated lymphatic filariasis (LF) as a public health problem. Influx of migrant workers from neighbouring countries which are still endemic for LF has been reported in Sri Lanka, recently. Majority of them are employed in the industrial sector in Gampaha district. This could be associated with increased risk spreading LF with the possibility of introducing new strains of *Wuchereria bancrofti* (Wb) and may increase the potential of re-emergence of brugian filariasis. This study reports the initial findings of an ongoing research, conducted jointly by the FOM, KDU and Anti Filariasis Campaign, Sri Lanka, to assess the impact of migrant workers in re-establishment of LF in the country. Migrant workers (N = 1112) who are employed in six steel factories in Gampaha district were enrolled for this descriptive cross-sectional study. Participants' demographic data and other information were collected using a questionnaire. Thick Night Blood Films (NBF) of the participants were prepared and later examined by two independent expert microscopists. A single multiplex PCR was performed using *WBR129* and *BMR188* reverse primers specific for *Wb* and *Brugia malayi* respectively on the participants who were positive for NBF. Screening of NBF identified 14 filariasis positive workers. All NBF positives were confirmed as *Wb* infections by PCR. All positive workers were Indians who resided in Sri Lanka from 3 months to 5 years. Thus, the results indicate that migrant workers could act as reservoirs for LF in the Gampaha district where the density of vector mosquito is high.

Keywords: lymphatic filariasis, migrant workers, *Wuchereria bancrofti*, Sri Lanka