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Night blood survey of a selected high-risk population for lymphatic filariasis

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Human infection with *Wuchereria bancrofti* causes a disabling parasitic disease known as lymphatic filariasis, which is a major public health and socio-economic problem in many parts of the world. Little is known about the prevalence of filariasis among high-risk populations for filariasis. Objective of this study was to determine such prevalence of lymphatic filariasis among Mahara prison inmates whom the Anti Filaria Campaign (AFC) has identified as a high-risk group. All inmates of Mahara Prison were screened for Microfilariae (Mf) except those in special cells, by night blood film microscopy to determine the prevalence of infection from February to May 2007. All inmates were males of greater than 15 years. Of the 423 inmates screened, 15 were positive for Mf, giving a Mf positive rate of 3.55% in the study population and a mean Mf density of 5 Mf/60 µl blood, ranging between 4 to 9.2 Mf /60 µl of blood with a standard deviation of 2.49. The highest number of infected inmates was residents of Colombo and Gampaha districts where transmission is currently taking place. This is one of the few studies undertaken to date to determine the prevalence of bancroftian filariasis among inmates of a prison, a neglected population in Sri Lanka. This study indicates that the Mf rate of bancroftian filariasis in this study population is far greater than the 0.18% currently reported in the country. Therefore, an intensive programme is recommended to contain the spread of infection within this study population. For this, a proper screening programme combined with antifilarial treatment and vector control programme is urgently required.

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