**Transmission Assessment Survey on Lymphatic Filariasis in 16 Districts of Nepal**

**Date: 2013**

**Background**

An estimated 120 milliion people in 73 countries are currently infected, and an estimated 1.393 billion live in areas where filariasis is endemic and mass drug administration (MDA) is required. LF is a public health problem in Nepal. The disease is a major cause of morbidity, primarily lymphoedema of legs and hydrocele and impedes socio-economic development in many endemic areas of the country. The disease is prevalent in the rural and slum areas of the country, predominantly affecting the poorest sector of the community. The government had initiated the implementation of Mass Drug Administration (MDA) in Parsa district in 2003. Since then the program has expanded gradually in other endemic districts as well. The purpose of this study was to determine the prevalence of LF in 16 districts of Nepal where six rounds of MDA was completed. This survey was also conducted to determine the effectiveness of MDA and to provide information about prevalence of LF for use in decision making by EDCD.

**Methods**

This was a school based cross sectional study conducted among school going children of grade 1 and 2. The study was conducted in 7 EUs comprising of 16 districts of Nepal namely Dhading, Nuwakot, Kavrepalanchowk, Sindhuplachowk, Ramechhap, Dhanusha, Rautahat, Sindhuli, Mahottari, Gorkha, Tanahun, Syangja, Palpa, Bara, Sarlahi and Kapilvastu. The internationally used software, Survey Sample Builder (SSB version 2) was used for sampling the schools within the EUs. The survey was conducted as per the manual developed by WHO; National LF elimination Program 2011. Immuno chromatography test (ICT) was performed.

**Results**

The prevalence of LF was less than one percent in 5 EUs i.e. EU A (0.4 percent), EU B (0.6 percent), EU C (0.5 percent), EU D (0.8 percent), EU E (0.3 percent). However, the prevalence of LF was more than one percent in EU F (1.2 percent) and EU G (4.5 percent). 5.5% of the positive cases were females while 3.6% were males in EU G where most of the positive cases were reported. Though the prevalence of LF in EU D was less than one percent, 1% of the males were found positive. Age wise distribution of the positive cases shows that 6.4% of the positive cases from EU G were from 10-14 years age group while 4.4% were from 6- 9 years and 2.6% from 3-5 age groups. Although, the prevalence of LF in EU B was less than one percent, 3.6% of the positive cases were reported in 10-14 years age group.

**Conclusions**

The number of positive cases in five EUs (A, B, C, D, E) was below critical cutoff value (20 cases) except for EU E. The critical cut off value for EU E is 18 cases. In EU G, the number of positive cases was above critical cut off value (20 cases), which was 77 cases. While in EU F the positive cases were equivalent to critical cut off value i.e. 20 cases.

**Keywords:** lymphatic filariasis; multi drug administration; positive cases; prevalence; school going children.