

**A Prospective Study of Lymphatic Filariasis in an  
Endemic Village of Kapilbastu District, Nepal.**

**A dissertation  
submitted in partial fulfillment of the  
requirements for the master's degree in Zoology**

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## **RECOMMENDATION**

This is certified that Miss **JYOTSNA LAMICHHANE** has completed her dissertation work entitled “**A PROSPECTIVE STUDY OF LYMPHATIC FILARIASIS IN AN ENDEMIC VILLAGE OF KAPILBASTU DISTRICT, NEPAL**” as a partial fulfillment of the **Master’s Degree of Science in Zoology (Parasitology)** under my supervision. To our knowledge her work has not been submitted for any other degree.

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## ABSTRACT

Lymphatic filariasis is a major public health problem in Nepal. It has been known to be endemic in Nepal since a long time and its identification as pathogenic parasite continues to be found throughout the world. It impedes socioeconomic development in many endemic areas of Nepal. It is a disease of poverty, affecting the poorest of the poor. A total of 505 blood samples were collected during the study period between November 2005 to October 2006 from the Maharajganj VDC of Kapilbastu district. The methodology used for the survey was night blood sample collection. Out of 505 blood samples 50 samples (9.90%) were found to be positive for mf with age ranged between 3 to 85 years. In the present study the highest endemicity rate was found in the age group (61-70) years i.e. 26.67%, and the lowest endemicity rate 6.67% was found in the age group 10 years. According to age-wise prevalence of filariasis, it was found that the endemicity rate of filariasis gradually increased with the increase in age and hence there was significant difference of infection in different age-groups ( $\chi^2 = 10.97$ ,  $P > 0.05$ ,  $df = 15$ ). Regarding the sex-wise prevalence, it was found that the endemicity rate was higher in males (12.64%) than the females (10.59%). According to the sex-wise prevalence of filariasis, it was found that there was significant difference of infection in both sexes ( $\chi^2 = 0.51$ ,  $P > 0.05$ ,  $df = 3$ ). From the study, it was concluded that the prevalence of disease was due to illiteracy, dirty environmental status of the household, lack of knowledge about the disease and not taking precaution of filariasis. Thus, people need to be well-known with this disease. For this awareness programmes through mass media, radio and television must be expanded for protecting vector borne disease lymphatic filariasis. Different programmes should be launched to improve health and hygiene of the people. The risk of infection can be reduced by taking measures to prevent mosquito bites or reduce mosquito numbers.

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## **ABBREVIATIONS:**

ADL – Adenolymphangitis

Alb – Albendazole

CBoS – Central Bureau of statistics

CDR – Crude Disease Rate

CFA – Circulating Filarial Antigen

DDC – District Development Committee

DEC – Diethylcarbamazine

DoHS – Department of Health Services

ELISA – Enzyme Linked Immuno Sorbent Assay

HMG – His Majesty's Government

HP – Health Post

ICT – Immunochromatographic Card Test

IOM – Institute of Medicine

KAP – Knowledge, Attitude and Practices

MoH – Ministry of Health

OPD – Out Patient Department

PHC – Primary Health Center

SHP – Sub Health Post

SLC – School Leaving Certificate

T.U – Tribhuvan University

VDC – Village Development Committee

WHO – World Health Organization.

Crude Disease: Having Sign and Symptom of Lymphatic Filariasis

i.e. also known as Chronic stage of Lymphatic Filariasis.