

**KNOWLEDGE AND PRACTICE OF USING LONG  
LASTING INSECTICIDAL NETs (LLINs) SUPPLIED BY MALARIA  
CONTROL PROGRAMME, NEPAL GOVERNMENT IN  
TWO VDCs OF DHANUSHA DISTRICT**

**A Thesis Submitted For the Partial Fulfillment of  
The Requirements for the Master's Degree of  
Science in Zoology with Special Paper  
Parasitology**

**To  
Central Department of Zoology  
Institute of Science and Technology  
Tribhuvan University, Kirtipur  
Kathmandu, Nepal**

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## DECLARATION

I hereby declare that the work presented in this has been done by myself and has not been submitted elsewhere for the award of my degree. All sources of information have been specifically acknowledged by references to all the authors or institutions.

Date: 2068/03/31

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RECOMMENDATION

This is to recommend that the thesis entitled “**KNOWLEDGE AND PRACTICE OF USING LONG LASTING INSECTICIDAL NETs (LLINs) SUPPLIED BY MALARIA CONTROL PROGRAMME, NEPAL GOVERNMENT IN TWO VDCS OF DHANUSHA DISTRICT**” has been carried out by Mrs. **Rachana Mathema** for the partial fulfillment of M.Sc. degree in Zoology with special paper **Parasitology** under my supervision. To the best of my knowledge this work has not been submitted for any other degree. Her work is an original and deserve for recommendation for the examination.

  
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**CERTIFICATE OF APPROVAL**

This thesis work submitted by Mrs. **Rachana Mathema** entitled "**KNOWLEDGE AND PRACTICE OF USING LONG LASTING INSECTICIDAL NETs (LLINs) SUPPLIED BY MALARIA CONTROL PROGRAMME, NEPAL GOVERNMENT IN TWO VDCs OF DHANUSHA DISTRICT**" has been approved as a Partial fulfillment of the requirements for M.Sc. degree in Zoology with special paper **Parasitology**

**EVALUATION COMMITTEE**

Head of the Department

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## ABSTRACT

The study was carried out in two VDCs of Dhanusa district from March to September 2010 with the main objective to explore the knowledge of the people about medicated (insecticidal) nets provided free by the Malaria Control Programme, Epidemiology and Disease Control Division (EDCD), Nepal Government to these two VDCs which falls in the malarious belt of Dhanusa district.

Malaria has become one of the world's most important public health concerns. It is the disease caused by protozoan parasite belonging to the genus *Plasmodium*. Two hundred families in Naktajhij village and one hundred eighty families in Dhalekbar village of the district were taken as the respondents in the study. In Naktajhij (199/200) i.e. 99.5% families and in Dhalkebar (138/180) i.e. 76.7% families received LLIN in the year 2009. People of both villages are interested to use the net as preventive measure to avert from mosquito borne disease. People seemed to be more interested to get net than use and maintain the net properly probably being free distribution. Regarding use and maintenance of LLINs 58.3% (116/199) families in Naktajhij and 58.7% (81/138) families in Dhalekbar have known to use and maintain the net and 41.7% (83/199) families in Naktajhij and 41.3% (57/138) families in Dhalekbar have not known to use and maintain the net properly. With regarding effectiveness of LLIN after washing, 78% (141/181), 15.5% (28/181), 4.9% (9/181) and 1.6% (3/181) respondents in Naktajhij and 60.3% (73/121), 29% (35/121) and 10.7% (13/121) respondents in Dhalkebar replied that the effectiveness of net was lost after washing once, twice, thrice and four times respectively. In Naktajhij, 55% (109/199) families and in Dhalkebar 72% (99/138) families informed that people found dead mosquitos and other insects after the use of net. Regarding satisfaction of LLIN Distribution 42.2% (84/199) families in Naktajhij village and 31.9% (44/138) families in Dhalekbar village were satisfied and 57.8% (115/199) families in Naktajhij village and 68.1% (94/138) families in Dhalekbar village were unsatisfied. In Naktajhij, 76.9% (153/199) families and in Dhalkebar, 56.5% (78/138) families also complained about the side effects they faced after the use of the net. Medicated net perceived as simple, economical and less costly and durable means to protect people from mosquito bites and its effects.

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## Maps

Map of Nepal

Map of Dhanusa District Showing the VDCs under present study

## **LIST OF ABBREVIATION**

CI	Confidence Interval
CL	Confidence Limit
EHP	Environmental Health Project
EVM	Environmental Management
GMP	Global Malaria Programme
HR	Hazard Ratio
IRS	Indoor Residual Spraying
ITN	Insecticidal Treated Net
IVM	Integrated Vector Management
KSH	Kenyan Shillings
LLIN	Long Lasting Insecticidal Net
PE	Protective Efficacy
RR	Relative Risk
RNSVC	Research on Newer Strategy for Vector Control
ROSEA	Resonal Office of South East Asia
SEA	South Asian Reason
USD	United State Dollar
UNDP	United State Development Programme
VDC	Village Development Committee
WHO	World Health Organization