# KNOWLEDGE AND PRACTICES ON CULTURAL INFLUENCES ON INTESTINAL PARASITISM AMONG SECONDARY LEVEL STUDENTS

(A Case Study from Ratnanagar Municipality, Chitwan)

#### Submitted to:

Central Department of Sociology/Anthropology

Faculty of Humanities and Social Sciences, Tribhuvan University

Kirtipur, Kathmandu, Nepal

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE MASTER'S DEGREE
OF ARTS IN ANTHROPOLOGY

Submitted by:

Ramesh Devkota

Central Department of Sociology/Anthropology
Tribhuvan University, Kirtipur, Kathmandu, Nepal

July, 2011

#### TRIBHUVAN UNIVERSITY

#### **Faculty of Humanities and Social Sciences**

#### Central Department of Sociology/Anthropology

#### RECOMMENDATION LETTER

This is to certify that Mr. Ramesh Devkota has completed his thesis work entitled "Knowledge and Practices on Cultural Influences on Intestinal Parasitism among Secondary Level Students (A Case Study from Ratnanagar Municipality, Chitwan)" for the partial fulfillment of the Master's Degree of Arts in Anthropology under my supervision. Best of my knowledge, this is an original work and has not been submitted for any other degree. I therefore recommend it for the evaluation to external examination.

\_\_\_\_\_

Mr. Kapil Dahal

Supervisor

Lecturer

Central Department of sociology/Anthropology

Tribhuvan University, Kirtipur, Kathmandu, Nepal

Date:

#### TRIBHUVAN UNIVERSITY

## **Faculty of Humanities and Social Sciences**

#### **Central Department of Sociology/Anthropology**

#### Kirtipur, Kathamndu, Nepal

#### LETTER OF ACCEPTANCE

We have conducted the viva-voce examination of the thesis submitted by Mr. Ramesh Devkota entitled "Knowledge and Practices on Cultural Influences on Intestinal Parasitism among Secondary Level Students (A Case Study from Ratnanagar Municipality, Chitwan)" and found that the thesis to be an independent work of the student written according to the prescribed format. We approved that the thesis to be accepted as the partial fulfillment to qualified for awarding Master's Degree of Arts in Anthropology.

#### **Expert Committee**

Prof. Dr. Om Gurung	
Head of the Department	
External Examiner	
Lecturer Mr. Kapil Dahal	
Supervisor	
Date	

**ACKNOWLEDGEMENTS** 

With affection and appreciation, I acknowledge my supervisor Mr. Kapil Dahal, Lecturer,

Central Department of Sociology/Anthropology, T.U., Kirtipur for supervising my research

work.

I am also very grateful to Professor Dr. Om Gurung, Head, Central Department of

Sociology/Anthropology, T.U., kirtipur for his all administrative help to prepare this thesis. My

sincere thanks go to all my teachers of the Department for their constant advices.

I would like to express my deep gratitude to the principals and the students of Ekata Shishu

Niketan Secondary School and Buddha Jyoti Secondary School for their strong support to collect

the primary data.

Last but not least, I am very indebted to my parents for their constant inspiration and support to

have this degree in my life.

Ramesh Devkota

T.U. Regd. 34161-94

Symbol No. 280209

Admission Batch: 2063/64

Central Department of Sociology/Anthropology

Tribhuvan University, Kirtipur, Kathmandu, Nepal

July, 2011

#### **ABSTRACT**

This study was designed to determine the knowledge of secondary level students' on daily human practices and their influences in human parasitic infections. One hundred ten male and female secondary level students from two secondary schools of Ratnanagar municipality were asked to fill a questionnaire to determine their knowledge on cultural influences in human parasitic infections. Out of total 110 respondents, 30 percent were below 15 years and 70 percent were between 15 and 19 years of age. Around 51 percent of them were from Brahmin community followed by Chhetri (15%), Newar (11%), Tharu (10%), other groups (8%), Tamang (4%) and Gurung (2%). Among the total respondents 86 percent were Hindu followed by Buddhist (6%), Christian (3%), Muslim (2%) and others (3%). 92 percent respondents' fathers and around 87 percent mothers were literate. Based on occupational status, around 36 percent of the respondents were from agriculture background followed by business, private employee and others occupation. Majority of the respondents' (43%) mothers were engaged in agriculture and least proportion (1%) mothers were engaged in government employment. Among male respondents all have electricity followed by TV, radio, phone, computer and e-mail/internet. Similarly, among females all have electricity followed by TV, phone, radio, computer and e-mail/internet. Of the total 110 stool samples tested, 43 (39.1%) were found positive for parasites with highest prevalence in females. The most prevalent parasite was Giardia lamblia followed by Trichuris trichura, Ascaris lumbricoides, Entamoeba histolytica, hook worm and E. coli with co-infection of round worm and E. histolytica.

Out of 110 respondents, most (98.2 %) had heard about the parasites. About 76 percent of them had heard about Malaria parasites followed by Hookworms, Tape worms, Liver flukes, Round worm, Whip worm and Others. Majority of them had obtained knowledge on parasites from text books. Around 45 percent of the respondents said that parasites were very harmful followed by harmful (43.5%), neither harmful nor useful (6.5%) and don't know (4.6%). 25 percent respondents said that drinking contaminated water was the most potential source of parasite transmission followed by walking bare foot, eating contaminated food, close companion with domestic animals, swimming /washing or fishing in polluted water and don't know. Around 22 percent of the respondents said that wash hand before eating and after toilet is the most important preventive method of parasitic transmission followed by proper use of latrine, avoid walking bare food, protect food from house flies or other insects, do not eat contaminated food, do not drink contaminated water, washing fruits and vegetables before eating and don't know. Children were the most vulnerable age group and farmers were the most risk occupational group of parasitic infection. All of the respondents have latrines at their home and all of them use it properly. 79 percent of the respondents claimed that their family members have no parasitic infection in the past six months.

In conclusion the female respondents in spite of having higher knowledge on parasitic infection have higher parasitic load. The age of the respondents' have some role to determine the respondents' knowledge on parasites but religion, caste and parents' educational and occupational status have no role in determining the knowledge of respondents' on parasites.

# **CONTENTS**

Recommendation Letter	1
Letter of Acceptance	ii
Acknowledgement	iii
Abstract	iv
Contents	V
List of Tables	viii
List of Figures	ix
Abbreviations	X
<b>CHAPTER ONE: INTRODUCTION</b>	1
1.1 Background of the study	1
1.2 Statement of the problem	4
1.3 Objectives of the Study	6
1.4 Significance of the study	7
1.5 Limitation of the study	7
1.6 Organization of the Study	8
1.7 Conceptual Framework	8
CHAPTER TWO: LITERATURE REVIEW	10
2.1 Literature review in the World context	10
2.2 Literature Review in Context of Nepal	12

CHAPTER THREE: METHODOLOGY	15
3.1 Study Area	15
3.2 Nature and Source of Data	16
3.3 Sample Size	16
3.4 Method of Data Collection	17
3.4.1 Fecal sample collection, preservation and detection of parasites	17
3.4.2 Questionnaire design	17
3.5 Analysis Method	18
CHAPTER FOUR: BACKGROUND CHARACTERISTICS OF THE RESPON	<u>NDENTS</u>
	19
4.1 Age-Sex	19
4.2 Caste/Ethnicity	20
4.3 Religion	21
4.4 Parent's Educational Status	22
4.5 Mother's Education	23
4.6 Father's Occupation	24
4.7 Mother's Occupation	25
4.8 Facility at Home	26
	20

CHAPTER FIVE: KNOWLEDGE, ATTITUDE AND BEHAVIOR OF RESPONDENTS		
TOWARDS PARASITIC INFECTIONS 29		
5.1 Knowledge on Health, Culture and Intestinal Parasitism	29	
5.1.1 Heard of Parasites	29	
5.1.2 Knowledge on the potential source of parasitic transmission	31	
5.1.3 Opinion of Respondents' on Parasites	32	
5.1.4 Knowledge on Potential Sources of Parasitic Transmission	36	
5.1.5 Knowledge on Preventive Methods of Parasitic Transmission	36	
5.1.6 Knowledge of Respondents on most Vulnerable age group of Parasitic Infectio	<u>n</u> 37	
5.1.7 Knowledge on most Vulnerable Occupational Group of Parasitic infection	40	
5.2 Availability of latrine in respondent's house and its use	43	
5.3 Presence of Parasitic Infection within past six Month		
CHAPTER SIX: SUMMARY AND CONCLUSIONS	45	
6.1 Summary	45	
6.2 Conclusions	47	
REFERENCES 49	<u>)</u>	
QUESTIONNAIRE		

**PHOTO PLATES** 

# LIST OF TABLES

Table no. 3.1:	Distribution of sample size by schools	16
Table no. 4.1:	Distribution of respondents by age-sex	19
Table no. 4.2:	Distribution of respondents by caste/ethnicity	20
Table no. 4.3:	Distribution of respondents by religion	21
Table no. 4.4:	Distribution of respondents by father's educational status	22
Table no. 4.5:	Distribution of respondents by mother's educational status	24
Table no. 4.6:	Distribution of respondents' by father's occupation	25
Table no. 4.7:	Distribution of respondents by mother's occupational status	26
Table no. 4.8:	Distribution of respondents by facility at home	27
Table no. 4.9	Distribution of parasitic infection based on gender of the respondents	28
Table no. 5.1:	Distribution of respondents based on their knowledge on the source of	
	parasite transmission	31
Table no. 5.2:	Percentage distribution of respondents' views towards parasites by	
	background characteristics	33
Table no. 5.3.	Distribution of respondents by their knowledge on the preventive	
	methods of parasitic transmission	37
Table no. 5.4:	Percent Distribution of Respondents by their View towards most	
	Vulnerable age group of Parasitic Infection by their Background	
	Characteristics	38
Table no. 5.5:	Percentage distribution of respondents by knowledge on most vulnerab	le
	occupational group of parasitic infection by their background	
	characteristics	41

## LIST OF FIGURES

Figure no. 1.1	Overview of relationships between social and economic var health	riations and 9
Figure no. 4.1:	Prevalence of parasitic infection among respondents	28
Figure no. 5.1:	Distribution of respondents by the source of knowledge	30
Figure no. 5.2:	Overall distribution of respondents based on their opinion to	parasites 35
Figure no. 5.3:	Distribution of respondents based on their knowledge or potential source of patristic transmission	n the most
Figure no. 5.4:	Distribution of respondents' latrine based on its location	43
Figure no. 5.5:	Distribution of respondents based on their knowledge on the of parasitic infections in their family members within post six	•

### **ABBREVIATIONS**

ADL : Adenolymphangitis

DALYs : Disability Adjusted Life Years

DDT : Dichlorodiphenyltrichloroethane

UNFPA: United Nation Fund for Population Activities

VDC : Village Development Committee

WHO : World Health Organization