

**PREVALENCE OF INTESTINAL PARASITES AMONG CHEPANG
PEOPLE IN SHAKTIKHOR AREA, CHITWAN, NEPAL**



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**A thesis submitted in partial fulfillment of the requirements for the
award of the degree of Master of Science in Zoology with special paper
parasitology**

Submitted to:

**Central Department of Zoology
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RECOMMENDATION

This is to recommend that the thesis entitled “**Prevalence of Intestinal Parasites Among Chepang People of Shaktikhor Area, Chitwan, Nepal**” has been carried out by Srijana Adhikari for the partial fulfillment of Master’s Degree of Science in Zoology with special paper Parasitology. This is her original work and has been carried out under my supervision. To the best of my knowledge , this work has not been submitted for any other degree in any institutions.

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DECLARATION

I hereby declare that the work done in this thesis have been done by myself and has not been submitted elsewhere for the award of any degree. All the sources of information have been specially acknowledged by references to all author(s) or institution(s).

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ABSTRACT

Parasitic infection is one of the most important public health problem that have been suffered by most of the tropical and subtropical countries due to the humid climate, unsanitary practices, poor socio-economic status, unhealthy and unhygienic habit of living. The main motive of this study was to stumble on the prevalence of intestinal parasites among Chepang community living in Shaktikhor Area of Chitwan district. Questionnaire was prepared to determine the knowledge, attitude and practices regarding intestinal parasites among Chepang people. Total 125 samples were selected randomly collected. Then these stool samples were examined by direct smear method and concentration methods. Out of 125 sample, 52% were found to be positive with one or more parasites. The prevalence rate of parasitic infection in male was 53.96% and in female was 50%. It showed that the rate of prevalence was higher among male than in female ($p= 0.791$). The highest existence of prevalence was among the age above 21 years and lowest was the age 2-10 years ($p= 0.045$). Altogether, seven different parasites were found with *Ascaris lumbricoides* as the dominant helminthic parasites (72.30%) and *Entamoeba coli* as the protozoan parasites (13.85%). This study showed that single infection was 83.07%, double infection was 15.38% and that of multiple infections was 1.53%. Hence, this study revealed the higher prevalence of parasitic infection which may be the result of contaminated food and water and poor personal prophylaxis. This study showed people drinking direct river water (61.17%) are found infected more than those using tap water (32.5%) ($p= 0.005$). Significant difference was obtained in terms of handwashing wise ($p = 0.03$), level of knowledge ($p =0.03$) and sources of drinking water ($p=0.005$). While there was no significant difference found in case of food-habit wise ($p=0.933$), occupation wise ($p= 0.123$), livestock and domestic animals presence wise ($p=0.63$), defecation ($p= 0.12$) and treatment-wise ($p=0.16$). The level of awareness is less regarding this prospectus so for minimizing the parasitic infection, awareness programmes, sanitary improvements, administration of drugs etc. are crucial.

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LIST OF ABBREVIATIONS

Abbreviated form	Details of abbreviations
CDZ	Central Department of Zoology
WHO	World Health Organization
T.U.	Tribhuvan University
VDC	Village Development Committee
χ^2	Chi-square
d.f.	Degree of Freedom
No.	Number
et al.	and his associates
Sqkm	Square kilometer
Km	Kilometer
ml	Milliliter
mm	Milimeter
A.D	Amino Domino
μm	Micrometer
gm	Gram
E	East
N	North
IPI	Intestinal Parasitic Infection
<i>A.lumbricoides</i>	<i>Ascaris lumbricoides</i>
<i>H.nana</i>	<i>Hymenolepis nana</i>
<i>S.stercoralis</i>	<i>Strongyloides stercoralis</i>
<i>E.coli</i>	<i>Entamoeba coli</i>
<i>T,trichuiria</i>	<i>Trichuris trichuira</i>