PREVALENCE OF INTESTINAL PARASITES AMONG CHILDREN [AGED 5-15 YEARS] OF GURUKUL MADHYAMIC VIDHYALAYA OF JATUWA, BIRATNAGAR-18

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

Submitted By
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To
Central Department of Zoology
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RECOMMENDATION

This is to certify that **Mrs. Hemlata Kumari Gupta** has successfully completed her thesis work entitled **"PREVALENCE OF INTESTINAL PARASITES AMONG CHILDREN (AGED 5-15 YEARS) OF GURUKUL MADHYAMIC VIDHYALAYA OF JATUWA, BIRATNAGAR-18**" for the partial fulfillment of the requirements for the **Master's Degree of Science** in Zoology with special paper **Parasitology**. To my knowledge, this is an original research study and has not been submitted for any other degree.

PROF. DR. RANJANA GUPTA
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APPROVAL

On the recommendation of Supervisor **PROF. DR. RANJANA GUPTA**, this thesis submitted by **Mrs. Hemlata Kumari Gupta**, entitled **"PREVALENCE OF INTESTINAL PARASITES AMONG CHILDREN (AGED 5-15 YEARS) OF GURUKUL MADHYAMIC VIDHYALAYA OF JATUWA, BIRATNAGAR-18**" is approved for examination, and is submitted to the Tribhuvan University for the partial fulfillment of the requirements for the **Master's Degree of Science in Zoology** with special paper **Parasitology.**

PROF. DR. VASANTA KUMAR THAPA
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LETTER OF ACCEPTANCE

We, the members of evaluation committee, evaluated the dissertation work entitled, **"PREVALENCE OF INTESTINAL PARASITES AMONG CHILDREN (AGED 5-15 YEARS) OF GURUKUL MADHYAMIC VIDHYALAYA OF JATUWA, BIRATNAGAR-18**" and approved that **Mrs. Hemlata Kumari Gupta is** qualified for awarding **Master's Degree of Science in Zoology** with special paper **Parasitology.**

EVALUATION COMMITTEE

PROF. DR. VASANTA KUMAR THAPA
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ACKNOWLEDGEMENT

I feel immense pleasure to submit my assiduous work entitled "**Prevalence of intestinal parasites among children (aged 5-15 years) of Gurukul Madhyamic Vidhyalaya of Jatuwa, Biratnagar-18"**

Firstly, I want to wish and extol to my supervisor **Prof. Dr. Ranjana Gupta,** Central Department of Zoology T.U., for her supervision and guidance.

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ABSTRACT

Chaotic condition of Jatuwa village of Biratnagar is as a consequence of illiteracy, ignorance and poverty of local people. A school based study was carried out to determine the prevalence rate of intestinal parasites and to determine knowledge, attitudes and practices regarding intestinal parasites by means of structured questionnaire in children of age group 5-15 years of Gurukul Madhyamic Vidhyalaya of Jatuwa village of Biratnagar-18 in 2008. A total of 220 stool samples were collected and examined by direct smear technique. Out of 220 students, 45(20.5%) were found to be infected with one or more types of intestinal parasites. Among positive samples, prevalence rate in Yadav children was 19.86% and Non-Yadav children was 21.62%. The prevalence rate in male children was 21.77% and female children were 18.75%. The prevalence rate was approximately equal in age group 11-15 yrs (27.77%) and 5yrs (28.57%) followed by age group 6-10 yrs (13.79%). All above mentioned were found statistically insignificant. The percentage prevalence in total 220 stool samples, of helminthes, *Ascaris lumbricoides*(8.64%), *Trichuris trichiura* (0.90%), *Hymenolepis nana* (2.27%) and hookworm (0.45%) while of protozoan parasites, *G. lamblia* (7.73%), *E. histolytica* (4.10%) and *Cyclospora* (0.45%). Out of 45 positive cases, 38(84.44%) were found with prevalence of single species infection, 5(11.11%) double species infection and 2(4.44%) with prevalence of triple species infection.

As matter of survey analysis, it revealed that 23.88% were infected with intestinal parasites among non-vegetarian and 5% were infected with intestinal parasites among vegetarian which is statistically insignificant. The survey had also made clear that the intestinal parasitic infection was found to be maximum (25.28%) whose parents are farmer and minimum (7.14%) whose parents are service holder. Similarly, maximum (45%) infection was found in those children who used to defecate near water resource. It was found that the awareness towards intestinal parasites was very poor. Prevalence of parasitic infection was found only 12% among parasite aware children whereas 21.53 among un-aware children.

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LIST OF ABBREVIATIONS AND ACRONYMS

WHO	:	World Health Organization
ADD	:	Acute Diarrhoel Diseases
EDCD	:	Epidemiology and Disease Control Division
i.e.	:	That is
B.S.	:	Bikram Sambat
Yrs	:	Years
No.	:	Number
CBS	:	Central Bureau of Statistic
IFPPCP	:	Integrated Family Planning and Parasite Control Project
T.U.	:	Tribhuvan University
VDC	:	Village Development Committee