PREVALENCE OF INTESTINAL PARASITES IN PEOPLE CONSUMING AND NON-CONSUMING ALCOHOL OF MUSHAR COMMUNITY, CHANDRALALPUR-6, SIRAHA

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN ZOOLOGY WITH SPECIAL PAPER PARASITOLOGY

SUBMITTED TO

CENTRAL DEPARTMENT OF ZOOLOGY

INSTITUTE OF SCIENCE AND TECHNOLOGY

TRIBHUVAN UNIVERSITY

KIRTIPUR, KATHMANDU

NEPAL

SUBMITTED BY

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(2010)

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RECOMMENDATION

It is my pleasure to mention here that Mr. Binod Kumar Yadav has completed his dissertation work entitled "Prevalence of Intestinal Parasites in People Consuming and Non-Consuming Alcohol of Mushar Community, Chandralalpur-6, Siraha" as a partial fulfillment of the M.Sc. Degree in Zoology with special paper parasitology under my supervision and guidance. To my knowledge his work has not been submitted for any other degree. His work is an original one and deserve for recommendation and is approved for the examination.

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LETTER OF APPROVAL

On the recommendation of supervisor Prof. Dr. Ranjana Gupta, this dissertation work of Mr. Binod Kumar Yadav has been approved by the undersigned members of the Expert Committee and is submitted to the Tribhuvan University in partial fulfillment of the requirement for the degree of Master of Science in Zoology with Parasitology as a special paper.

Expert Committee

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Internal Examiner

Prof. Dr. Ranjana Gupta
Head of Department
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External Examiner

Date: ……..

ACKNOWLEDGEMENT

First and foremost, I would like to express my enormous gratitude to my honorable supervisor Prof. Dr. Ranjana Gupta, Central Department of Zoology (T.U.) for having pleasure of working under her noble guidance and well supervision.

I express my gratitudes to Prof. Dr. Ranjana Gupta, the head of the Central Department of Zoology for providing laboratory facilities and other valuable suggestions to complete my dissertation.

I owe a great depth of gratitude to assistant lecturer Janak Raj Subedi, Pitambar Dhakal and Ashok Bahadur Bam. I am also very greatful to Prof. Dr. P.N. Misra for his valuable help.

I also want to thank all the teaching and non-teaching staffs of Central Department of Zoology for giving valuable suggestions. I am thankful to my whole family and friends for their kind help. I also want to thank people of Mushar community for their great contribution from their sides.

I would like to express my sincere gratitude to my parents for their inspiration and support which I received through the academic career.

Last but not least, I would like to appreciate the kindness to all my classmates and one of my best friend Mannu Bhandari for her great sharing of knowledge during research work.

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Batch: 2063/2064

ABSTRACT

In the present study the base line household survey was carried out in the Mushar Community of Chandralalpur-6, Siraha with prepared questionnaire to determine knowledge, attitudes and practices regarding the prevalence of intestinal parasites in people consuming and non-consuming alcohol in different age groups above 10 years. The study duration was during the months of April to September, 2009. Altogether 300 stool samples of different age groups and sexes were collected and examined by fecal smear preparation method. The stool samples were collected on the basis of amount of alcohol consumed or not. They were categorized into heavy drunker, moderate drunker, rare drunker and non-drunker of alcohol.

Out of 300 stool samples, 113 (37.66%) samples were recorded as positive. The prevalence rate of intestinal parasites was found to be most in non-alcoholic and gradually decreased from rare drunker to heavy drunker. The prevalence percentage of intestinal parasites was 0% in heavy drunker, 38 (31.66%) in moderate drunker, 35 (70%) in rare drunker and 40 (88.88%) in non-drunker of alcohol. Regarding the sex-wise, the total prevalence percentage of intestinal parasites in males was 31 (27.43%) and in females 82 (72.56%). Males were less infected by intestinal parasites in comparison to females. The prevalence percentage of intestinal parasites was 12.5% in males and 19.16% in females of moderate drunker, 16% in males and 54% in females of rare drunker and 17.77% in males and 71.11% in females of non-drunker of alcohol respectively.

Among the protozoan infections, *Entamoeba histolytica* and *Giardia lamblia* were found in the people of Mushar community. The prevalence percentage of *Entamoeba histolytica* was 0% in heavy drunker, 12 (31.57%) in moderate drunker, 7 (20%) in rare drunker and 6 (15%) in non-drunker of alcohol whereas the prevalence percentage of *Giardia lamblia* was 0% in heavy drunker 23 (31.75%) in moderate drunker, 22 (62.85%) in rare drunker and 31 (77.5%) in non-drunker of alcohol respectively. The prevalence percentage of helminth infections was 9 (7.96%) *Ancylostoma duodenale* 12 (10.61%) *Ascaris lumbricoides*, 8 (7.07%) *S. stercoralis*, 14 (12.38%) T. *solium*, 14 (12.38%) *H. nana* and 2 (1.76%), *T. trichiura* respectively.

Regarding sex wise, prevalence of intestinal parasites in males was 31 (16.23%) and in females was 82 (75.22%). The present study shows that females were more infected by the intestinal parasites in comparison to males. The prevalence of intestinal parasites was found to be high because of their non-vegetarian, non-alcoholic feeding habit as well as their open air defecation practice and lack of awareness. The prevalence percentage of *Taenia solium* was found to be high because of heavy eating of uncooked pork. Out of 300 respondents, only 4 (1.33%) males respondents were literate (able to read and write) and remaining all males and females respondents were illiterate (not able to read and write). Most of the people i.e. 268 (89.33%) respondents were non-vegetarian and 32 (10.66%) respondents were vegetarian. The rate of infections of intestinal parasites were found more in non-vegetarian than the vegetarian. Out of 113 (37.66%) positive samples 35.39% showed single infection, 52.21% showed double infection and 12.38% showed triple infection. The alcohol consuming behaviour in Mushar community was found to be very high. Economic status of Mushar community seems to be extremely poor.

Thus, in Mushar community people, public health awareness educational programme should be launched along with poverty alleviation programme providing land with technical training as soon as possible to accommodate them in mainstream of country development.

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