

**PREVALENCE OF *Enterobius Vermicularis* AMONG THE CHILDREN
BETWEEN THE AGE OF 2-9 YEARS AT BHUTANESE REFUGEE CAMP
IN RELATION TO SOCIO-ECONOMIC FACTORS IN BELDANGI,
DAMAK, JHAPA**

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BY

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RECOMMENDATION

This is to recommend that the dissertation entitled "**Prevalence of *Enterobius vermicularis* among the Children Between the Age of 2-9 Years at Bhutanese Refugee Camp in relation to socio-economic factors in Beldangi, Damak, Jhapa**" has been carried out by Miss Naina Sharma for the partial fulfillment of M.Sc. degree in Zoology (Parasitology). This original work was conducted under my supervision. To the best of my knowledge this dissertation work has not been submitted for any other degree.

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

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Abstract

The present study entitled "Prevalence of *Enterobius vermicularis* Among the Children Between the Age Group of 2-9 Years at Bhutanese Refugee Camp in Relation to Socio-Economic Factors in Beldangi, Damak, Jhapa" has unfolded some facts about the status of parasite and control in the community for the first time who for the several years are living below poverty line in Nepal. Baseline household survey was carried out with prepared questionnaire to determine knowledge, attitudes and practices regarding intestinal parasite in children's age group 2-9 years, from January 2009 to June 2009 AD. Altogether 210 swab samples were collected during six months of the study period in the same year. Out of 210 samples, 96 were of males and 114 were of females in which 14 males and 20 females were identified positive for Enterobiasis. In males, out of 96 samples, 5 were highest positive number falling between 8-9 years, which is 45.4% and in females, between age group 2-3 years, 6 is the highest positive samples indicating 27.2% of total 22 samples. 11 males of locality-1 had shown the highest sampled area, that is 24.4% and 14 females, that is 30.4% of the same locality between 2-4 years was also the highest sampled area whereas 10 males of locality-1 and 16 females of locality-2 indicate most sampled female population among 5-7 years age group. Among the positive male samples locality-3 had 5 infections i.e. 23.07% of total population of that locality. Locality-4 had most 9 positive samples, i.e. 19.5% and locality-5 had the least positive infections that is 12.5%. ($t^2_{cal}=7.28$, $t^2_{cal} > t^2_{tab}$, d.f. = 5). In the survey of methods for cleaning hand before and after going toilet and having food, those who use water only had the highest infection rate, i.e., 17 positive samples, which is 16.6% and 3 were those who use water and soap, i.e., 10.7% were the least infected samples with Enterobiasis ($t^2_{cal} = 10.1$, $t^2_{cal} > t^2_{tab}$, d.f. = 3, level of significance = 0.05). According to the nail cutting habits, those who cut randomly showed the maximum infected percent, i.e., 6, which is 26.08% and 10 out of 70, that is 14.2% showed the least infected percent who cut once a week. ($t^2_{cal} = 8.13$, $t^2_{cal} > t^2_{tab}$, d.f. = 2, level of significance = 0.05). According to comparison between treatment practice and prevalence of *Enterobius vermicularis* of samples, 40% used to have medicines directly without being prescribed by Physician, i.e., 8 out of 20 where as 19 positive infection which is 13.01% used to treat diseases with traditional methods and 7 out of 44 samples, were infected with Enterobiasis used to consult doctors, i.e., 15.9% of 44 samples. It is therefore requisite to implement large scale treatment with anti-helminthic drugs, health education and sanitary improvement for the intestinal parasitic control in the surveyed area.

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