Ascariasis and Protein Energy Malnutrition Among Schoolchildren of Monteclaro Elementary School, Miag-ao, Iloilo

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ABSTRACT

Ascaris infections lead to malnutrition and poor cognitive development especially to children aged 5-15 years of age. In the Philippines, protein-energy malnutrition is one of the ten leading causes of child mortality. From January to February 2008, a cross-sectional descriptive study was carried out in Monteclaro Elementary School to describe the prevalence of ascariasis and the prevalence of protein energy malnutrition and relate it to the demographic factors such as age group, educational attainment of the mother, annual family income, availability of toilet, and proper hand washing practice. Sixty eight pupils of the said school were included in the study with ages ranging from 6-13 years. Fecal sample of the participants were collected, processed using the Kato-Katz smear technique, and microscopically examined to determine the prevalence of infections. The weight was measured for weight for age index. A self administered questionnaire was given to know about socio-economic factors. Handwashing activities were utilized as a basis for personal hygiene. The result of the study shows that 12% of the study population has a mild *A. lumbricoides* infection. Weight for age measurement shows that 21% of the pupils are underweight. Pupils of the age group 12-14 were of the highest frequency of ascaris infection and pupils of the age group of 6-8 were of the lowest frequency. Twelve percent of pupils who have toilets in their household are positive for ascaris infection. All pupils failed in the handwashing activity. Twenty seven percent of the pupils whose mothers have no formal education were underweight. This is due to the level of education that the mother has achieved. Mothers who have undergone tertiary education know more about the proper ways to nourish their children thereby minimizing children who are underweight. Twenty-three percent of the pupils included in the study were below normal in the weight for age index. Trend shows that those families with lower income have a higher frequency of respondents that are underweight. For pupils with below normal weight for age 50% are without toilet while 19% with toilet. There is low prevalence of ascariasis in Monteclaro Elementary School. The results of this study do not truly show the relationship of ascariasis with protein energy malnutrition. Inconsistencies of the results with the findings of other studies are possibly due to low number of positive ascaris-infected participants and the low number of overall participants. Increase in the sample size and ascariasis positive participants within the sample are recommended to get more accurate results.