INTESTINAL PARASITIC INFECTIONS IN MALAYSIAN SCHOOL CHILDREN

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ABSTRACT

Introduction: Intestinal parasitic infections are still a major public health problem in most developing countries. Previous studies have indicated a high prevalence in Malaysia.

Objective: The objective of this study is to determine the prevalence of intestinal parasitic infections among school children in Malaysia and to correlate the findings with the demographic data of the study population.

Methodology: This is an observational cross-sectional study design. Students between the ages of 6-12 years were selected using systemic sampling method. Questionnaires were used to collect the demographic profile of the school children and at the same time stool containers were distributed and collected two days later. Laboratory examinations were carried out using the direct smear, Brine floatation and formal-ether sedimentation techniques to detect both intestinal helminth and protozoa infections.

Results: This study concluded that 39.7% of the school children were positive for parasitic infections. The most common parasites detected were Trichuris trichiura (25.7%), followed by Ascaris lumbricoides (14.0%) and hookworm (9.6%). Protozoa infections were relatively less common when compared with nematode infections, the most common protozoa isolated were Entamoeba coli (3.7%), Entamoeba histolytica (1.8%), Blastocystis hominis (1.5%) and Giardia lamblia (1.5%) respectively. The results showed that 42.4% of females and 37.1% of male students were infected with one or more parasites. Infection was more common among Orang Asli (aborigines) (77.3%) followed by Indians (40%), Malays (18.9%) and Chinese (15.1%).

Keywords: Prevalence Intestinal Parasites

INTRODUCTION

Intestinal parasitic diseases have been the major public health problem of humans for centuries and still remain a major public health problem in most developing countries especially among many underprivileged communities in many parts of the developing world¹-³. Intestinal parasites are particularly common among young children (toddlers to teenagers) from disadvantaged communities in both rural and urban slums. Studies conducted over the year's show that the problem has not improved much³-¹¹. The factors that contribute to high incidence of intestinal parasites are low socioeconomic status, poor personal hygiene, poor environmental sanitation and negligence on the part of the people. Great efforts have been made to combat these parasitic diseases which resulted in marked achievement. Over the last decade there have been tremendous changes with improvement in the socioeconomic status, hygiene, urbanization and environmental changes and some countries have shown a decline in such infections. It is necessary to point out that the changes are minimal and restricted to few countries but the problem is still visible among the rural populations; hence the exposure to such infections, especially among children persists.

To provide treatment and to take control measures require a clear understanding on the epidemiological characteristics of the infections in terms of cost to the health providers and to the community. The important parameter for evaluating the impact of