ABSTRACT
PREVALENCE, AND FACTORS INFLUENCING SOIL TRANSMITTED HELMINTHS (STH) AMONG SCHOOL AGE CHILDREN (5–14 YEARS AGE) IN A RURAL AREA OF COIMBATORE DISTRICT

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Introduction: Soil Transmitted Helminthiasis (STH) is a used to refer group of parasitic diseases caused by nematode worms that are transmitted to humans by soil contaminated with fecal matter. The soil-transmitted helminthes are Ascaris lumbricoides, Trichuris trichiura, Necator americanus and Ancylostoma duodenale.

Objectives: To find the prevalence and factors associated with Soil Transmitted Helminthic infection, among school age children (5-14 years) in the field practice area of PSGRHTC Vedapatti Coimbatore.

Methodology: The study was conducted in the field practice area of the Rural Health Training Centre (RHTC) Vedapatti under Department of Community Medicine, PSG Institute of Medical Sciences& Research, Coimbatore. Five of the fourteen villages in the field practice area were selected by cluster sampling method. Survey was conducted during November 2015-July 2016. There were 819 children available for the study. Consent from parents and assent from child were obtained. Even though parents of 819 children participated in the survey, only 610 children gave one adequate stool sample. Early morning stool samples were collected and transported to the laboratory immediately. Formal ether concentration method was performed. Direct microscopic examination of faces in saline or iodine suspension was done. Data entry was made in the Microsoft Excel software and analysis was done with SPSS-19 computer package. Prevalence is expressed in percentage with 95% Confidence interval (CI). Uni variate analysis and Multivariate analysis were performed. Strength of association was expressed in terms of odds ratio and adjusted odds ratio with 95% confidence interval. P value <0.05 was considered as statistically significant.

Results and analysis: Non response rate was 24.42%. The prevalence of STH was 7.70% (95% CI: 5.58- 9.82). Among all STH, Ascaris lumbricoides was highly prevalent 6.9% (4.89% to 8.91%) followed by hook worm 0.2 (0.15% to 0.55 %) and Trichuris trichiura 0.7% (0.04% to 1.36%). There was no significant association between STH and factors influencing STH in our study.

Conclusion: Soil transmitted helminthiasis is still a public health problem in Coimbatore.

Key words: Soil Transmitted helminthiasis, Prevalence, School age children. Coimbatore.