Soil Transmitted Helminth Infection among Children Admitted to Hospital Tengku Ampuan Afzan, Kuantan, Pahang

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Abstract

Introduction: Soil-transmitted helminth (STH) infections by Ascaris lumbricoides, Trichuris trichiura and hookworms still persist in rural and urban areas of developing communities. Recent studies in Malaysia focused on Orang Asli communities and none in the hospital settings. This study aimed to investigate the prevalence and associated risk factors for STH among children admitted to Paediatric ward of the Hospital Tengku Ampuan Afzan (HTAA). Materials and Methods: This study was conducted among 135 (78 males, 57 females) patients in HTAA from December 2017 to May 2018. Faecal samples were examined using wet smear, Kato-Katz, Harada-Mori and sedimentation techniques. Demographic data and hygiene practice information were collected using a pre-tested questionnaire. Results: The overall prevalence of STH was 5.9% (A. lumbricoides 5.2%, T. trichiura 0.7%, and hookworms 0.7%). Prevalence among males was 3.8% and females 8.8%. Majority (95.6%) were Malays. Chi square analysis showed that factors significantly associated with STH infections are household monthly income ($p<0.05$), education level of mother ($p<0.05$) and father ($p<0.05$), the source of drinking water ($p<0.05$), the method of garbage disposal ($p<0.05$). Logistic regression analysis confirmed garbage disposal via burning as a risk factor of STH infections ($p=0.021$, OR=23.8, 95% CI=1.6-350.06). Conclusion: This study shows that the prevalence of STH infections is low in children probably due to the effective implementation of control programs and good hygiene practice. Differences in individual lifestyles and the humid weather condition are probable reasons for sporadic infection to still exist.

Keywords

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KeyWords Plus: RISK-FACTORS

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