

## **A cross-sectional study on the determinants of personal hygiene practices related to soil-transmitted helminthiases among school children in Bandar Baru Bangi, Malaysia**

### **ABSTRACT**

**Background:** Soil-transmitted helminthiases (STHs) are important causes of morbidity among school age children in the tropics and the promotion of good personal hygiene practice that protects against infection remains a vital component of the control and elimination strategies. This study aimed to identify the determinants of personal hygiene practice among urban school children to assist in health education and hygiene promotion.

**Materials and Methods:** Using a cross-sectional study design and a proportionate stratified random sampling, 380 standard five Malay students were drawn from five Malay-medium national primary schools in the town of Bandar Baru Bangi, Malaysia. Self-administered questionnaires were used to collect information regarding their socio-demographic characteristics, knowledge, attitude and personal hygiene practices related to soil-transmitted helminthiases. Using SPSS version 22.0, multiple logistic regression analysis was used to obtain the adjusted determinants of good personal hygiene practice. In making statistical decisions, p-values < 0.05 were considered significant.

**Result:** A total of 352 students returned eligible questionnaires within a period of one week, giving the study an overall response rate of 92.6%. Out of these, 267 (75.9%) heard of STHs, 329 (93.5%) considered them harmful to health, and majority of the students reported good hygiene practices including always washing fruits before eating (92.0%), always washing hands before eating (88.6%) and always wearing shoes when going outside (88.1%). Determinants of good personal hygiene practice included disease awareness (AOR=2.13; 95%CI=1.04 to 4.36) and knowing poor academic performance as a possible complication of STHs (AOR=2.27; 95%CI=1.30 to 4.00).

**Conclusion:** Knowledge, attitude and personal hygiene practices related to soil-transmitted helminthiases were generally good among standard five Malay students in the area. The observed associations between some knowledge items and self-reported personal hygiene practice present an important opportunity for improving the students' hygiene practices through health education.

**Keyword:** Soil-transmitted helminthiasis; Knowledge; Attitude; Personal hygiene practices; School-age children