Prevalence of Enterobius vermicularis infections among preschool children in kindergartens of Taipei City, Taiwan in 2008 范家堃

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摘要

Abstract

The prevalence of Enterobius vermicularis infection among preschool children was reported to be low based on a 5-year screening program in Taipei City, Taiwan. The Taipei City government intended to terminate the E. vermicularis screening program among preschool children. Thus, we were entrusted with confirming whether pinworm infections among preschool children in Taipei City had truly declined. From each of 12 administrative districts 2-3 kindergartens were randomly selected for investigation. In total, 4,349 children were examined, of which 2,537 were boys and 1,812 were girls. The cellophane tape adhered to a glass slide was used, and all examinations were done by certified medical technologists. Results indicated that the overall prevalence rate of pinworm infections was 0.62% (27/4,349). Although the infection rate was higher among boys (0.67%, 17/2,537) than in girls (0.55%, 10/1,812), no significant difference was found ($\chi 2 = 0.399$, P = 0.62). According to the administrative district, the infection rate ranged from no positive cases of E. vermicularis infection in the Xinyi, Zhongzhen, and Wanhua Districts (0%; 0/299, 0/165, and 0/358, respectively), to 0.26% (1/131) in Songshan District, with the highest rate of 1.88% (7/373) in Wenshan District. Because the overall infection rate (0.62%, 27/4,349) in the present study was unchanged compared to that (0.40%, 197/49,541) previously reported in 2005, we propose that regular pinworm screening and treatment programs should be continued in some parts of Taipei City.