CHANGES IN THE PREVALENCE OF INTESTINAL PARASITES IN AN ENDEMIC AREA OF BAHIA OVER THE PAST 20 YEARS

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ABSTRACT

Introduction: Despite the availability of treatments for various parasitic diseases, endemic areas require continuous monitoring to assess the prevalence of these infections and to understand the dynamics of these parasitosis. **Methodology:** This is a time-series study using data from two cross-sectional surveys conducted between 2001 and 2019. **Results:** In 2001, the spontaneous sedimentation method (HPJ) was performed on 1025 samples revealing high prevalences of Hookworms (71.2%), followed by *A. lumbricoides* (65.3%), *T. trichiura* (63.5%), and *S. mansoni* (42.4%). Protozoa detected included *E. nana* (27.3%), E. coli (45.3%), and *Giardia lamblia* (4.8%). In 2003, using the same HPJ method, the main parasites found were Hookworms (27.5%), *A. lumbricoides* (47.5%) and *T. trichiura* (52.5%), followed by *S. mansoni* (20.0%). Protozoa such as *E. nana* (2.5%), *E. coli* (10%) and *Giardia lamblia* (2.5%) were less frequently detected. In 2014, *S. mansoni* had the highest prevalence (66.6%). However, a progressive reduction was observed in subsequent years, with prevalences of 55.6% in 2018 and 34.9% in 2019. The prevalence of *A. lumbricoides* showed a continuous decrease after 2014, reducing to 8.6% between 2018 and 2019. During the same period, *S. mansoni* and *T. trichiura* decreased to 25.1% and 19.9%, respectively, along with a reduction in parasite loads. Hookworm analysis revealed low positivity (2.5%), possibly due to the slide reading time. **Conclusion:** Despite the interventions implemented over the past 20 years, the reduction in prevalence was limited for certain species. S. mansoni showed a 20.6% reduction between 2001 and 2018, while T. trichiura decreased by 36.4%. A. lumbricoides experienced an approximate 50% decline in the same period. These findings highlight the need for the continued implementation of parasite control strategies in endemic regions to further reduce infections and improve public health conditions.

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