EPIDEMIOLOGICAL PROFILE OF CHILDREN AGED 3 MONTHS TO 6 YEARS IN A SCHISTOSOMIASIS-ENDEMIC RURAL AREA OF BAHIA, BRAZIL

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ABSTRACT

Introduction: Helminthiases, including infections by *Ascaris lumbricoides* (Al), *Trichuris trichiura* (Tt), and *Schistosoma mansoni* (Sm), represent a public health challenge, especially in rural areas with poor socioeconomic and sanitation conditions. This study aimed to describe the epidemiological profile of children aged 3 months to 6 years from a schistosomiasis endemic rural area in Conde, Bahia, Brazil. **Methodology:** A cross-sectional study, part of an ongoing clinical trial, was conducted between December 2024 and February 2025, involving 161 children, of whom 125 provided stool samples for parasitological analysis. The Kato-Katz result for Al and Tt was evaluated qualitatively, while for Sm, it was evaluated quantitatively and qualitatively. **Results:** The median age of children was 3 years old, with 82 girls (50.9%) and 79 boys (49.1%). Among the 125 tests, 4% were positive for Sm, 38.4% for Al and 31.2% for Tt, with frequent co-infections. The overall parasite load had a median of 12 (IQR 12-48) EPG. All children who tested positive for Sm belonged to families with an income below one minimum wage and consumed treated water, but without additional treatment. Most reported contact with river water and the disposal of waste in inappropriate places. In the biochemical analysis of the five children positive for Sm, only one (20%) had AST, PCR, and CK-MB levels above the reference value. **Conclusion:** The data revealed a high rate of infections by *Ascaris lumbricoides* and *Trichuris trichiura* among children, whereas schistosomiasis presented a lower rate. However, there is a strong indication of an association between socioeconomic conditions and the incidence of infections. The relationship between inadequate sanitation and contact with contaminated water sources highlights the urgent need for public health interventions and improvements in the living conditions of the local population.

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