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DESCRIPTION OF THE CLINICAL PROFILE OF INDIVIDUALS WITH SCHISTOSOMIASIS IN AN URBAN TRANSMISSION AREA IN THE METROPOLITAN REGION OF RECIFE - PE	

#### **AUTHORS**

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### **AFFILIATIONS**

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#### **ABSTRACT**

Introduction: Schistosomiasis mansoni is a parasitic disease caused by the parasite Schistosoma mansoni, whose pathogenesis results in the development of liver fibrosis, which can be classified according to the severity level and is responsible for the morbidity and mortality associated with the disease. In Brazil, Pernambuco has the highest number of deaths associated with the disease. The aim of this study was to describe the disease clinical profile in an endemic area for Schistosomiasis. Methodology: A cross-sectional study was carried out with a coproscopic survey in micro-areas 3 and 7 covered by USF Barra de Jangada I in Novo Horizonte in the municipality of Jaboatão dos Guararapes (PE). Residents were invited to take part in the survey by providing a stool sample which was analyzed using the Kato-Katz (KK) and Hoffman techniques. Positive individuals were summoned for an upper abdominal ultrasound to characterize the disease according to the Niamey protocol. The project was approved by the Research Ethics Committee under protocol number 5.905.584. Results: 413 residents were registered, and stool samples were obtained from 263 individuals, 52.5% male and 47.5% female with an average age of 34.8 years (1-86 years). By analyzing two KK slides, 57 individuals were identified as positive for S. mansoni with an average parasite load of 282 EPG (12-3,168 EPG) and 3 individuals by Hoffman. There was no statistically significant difference between the distribution of parasite loads and age groups. Of the 60 infected individuals, 65% were male and 35% female (p = 0.027) with a mean age of 36.9 years (6-81 years). There was a statistically significant difference between the mean age in the classification of moderate and high parasite load (p = 0.009). Among the positives, 14 individuals had pattern A or B, 50% male and 50% female with an average parasite load of 161.53 OPG (24-552 OPG) and 27 individuals had periportal fibrosis with pattern C, D, E or F, 74.07% male and 25.92% female, with an average parasite load of 339.38 OPG (12-3,168 OPG). The group without fibrosis had a mean age of 21 years (5-54 years) and the group with fibrosis had a mean age of 38.76 years (7-77 years) (p = 0.003), however, there was no statistically significant difference when comparing the parasite loads between the two groups. The other 11 individuals had hepatic steatosis or chronic liver disease with an average age of 45.45 years and an average parasite load of 440 OPG (12-1,800 OPG) and 8 did not attend. Conclusion: The locality has moderate prevalence and parasite load, even in a previously classified low endemic municipality, and has individuals with moderate to severe clinical involvement, highlighting the need for control program actions.

## **KEYWORDS**

Schistosomiasis mansoni; Liver Fibrosis; Parasite Load; Urban Transmission; Endemicity.

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