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TITLE

PREVALENCE OF SCHISTOSOMIASIS MANSONI AND RISK FACTORS IN ENDEMIC COMMUNITIES IN NORTHEASTERN BRAZIL

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ABSTRACT

Introduction: Schistosomiasis mansoni is a parasitic disease commonly found in impoverished and rural populations. In endemic regions, multiple factors can influence the occurrence and severity of the disease. **Objective:** This study aimed to assess the prevalence and identify risk factors contributing to the transmission of schistosomiasis mansoni in endemic regions of Sergipe State, located in Northeast Brazil. **Methodology:** A cross-sectional study was conducted between August 2022 and April 2023 in the villages of Patioba and Colônia Miranda, within the municipalities of Japarutuba and São Cristóvão, respectively. All participants completed a sociodemographic questionnaire. Disease prevalence was determined by detecting *S. mansoni* eggs using the Kato-Katz method. **Results:** A total of 721 residents took part in the study (n=351 from Patioba, n=370 from Colônia Miranda). Schistosomiasis prevalence was higher in Patioba (33.61%) compared to Colônia Miranda (25.67%). In Patioba, infection was more prevalent among males (52.54%). There was a significant correlation between infection rates and low education levels (55.08%, p = 0.034). Negative test results were linked to the use of indoor bathrooms (p = 0.005, OR = 5.5365, 95% CI = 1.4393-21.2969) and being female (p = 0.008). In Colônia Miranda, infection rates were higher among females (52.63%). In households with fewer than five residents, negative *S. mansoni* results were more common (68.72%, p = 0.041, OR = 0.4537, 95% CI = 0.1924-1.0698). In Patioba, 74.57% of those who tested positive for *S. mansoni* had contact with natural water sources, mainly for bathing and personal hygiene (58.47%), washing clothes (44.91%), and fetching water (27.96%). Fishing was the only activity significantly associated with infection (22.03%, p = 0.002, OR = 2.461, 95% CI = 1.34-4.51). In Colônia Miranda, 77.89% of those infected accessed natural water sources, with bathing and personal hygiene (38.94%) being the most common activities linked to schistosomiasis (p = 0.027, OR = 1.733, 95% CI = 1.06-2.83). Individuals who used natural water sources were 2.756 times more likely to be infected (OR = 2.7567, 95% CI = 1.5737-4.8290). **Conclusion:** The study highlights that the two villages are high-prevalence areas for schistosomiasis, with infection risk varying between them. The results offer valuable insights into the status of schistosomiasis in the study areas, supporting efforts to control the disease in Sergipe. The implementation of integrated disease control measures and prevention strategies is vital to reduce prevalence. Additionally, collaborative health education programs are essential for increasing public awareness.

KEYWORDS

Prevalence; Risk factors; Schistosoma mansoni

FINANCIAL SUPPORT

Study financially supported by CNPq (404966/2021-7); Scholarship from FUNCAP (BMD-0008-01273.01.01/22)