

# EPIDEMIOLOGY AND DIAGNOSIS OF INTESTINAL PARASITIC INFECTIONS ACROSS DIFFERENT AGE GROUPS: A STUDY IN TERESINA, BRAZIL

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Intestinal parasitic infections are highly prevalent, with approximately 3 million people worldwide infected by some type of parasite. In developing countries with socioeconomic and environmental deficiencies, prevalence is notably high; however, parasitic infections are often underreported. In Brazil, the Northeast stands out as one of the regions with the highest rates of enteroparasitoses. This study aimed to provide health access to socially vulnerable areas through fecal sample analysis and the characterization of the epidemiological and socioeconomic profile of children, adolescents, and adults. Fecal examinations and socioeconomic-epidemiological questionnaires were conducted with participants from two regions in Teresina: CETI José Pereira da Silva school in the urban area and Soin Municipal School in the rural area. Fecal sample analysis was performed at the Zoology and Parasitology Laboratory of the State University of PiauÍ using the modified Ritchie and modified Willis-Mollay techniques. In the urban area, among 45 participants, *Entamoeba coli* was identified in 11% of samples. In the rural area, 35% of the 37 participants were infected, with 12 cases of *E. coli* and one case of co-infection with *E. coli* and hookworm. Additionally, it was noted that a significant portion of participants, 85%, used untreated running water for food hygiene, while others used a bleach solution. At the end of the study, a “Day D” event was held at both schools, featuring lectures on parasitosis prevention, medical and nutritional consultations, and the distribution of personal hygiene kits and clay water filters. This study highlights the importance of access to essential services such as sanitation and clean water, as these are critical factors in reducing the prevalence and transmission of intestinal parasitic infections.

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