

## PARASITOLOGICAL EFFECTS OF WATER QUALITY ON THE PREVALENCE OF INTESTINAL PARASITES IN CHILDREN 1-10 YEARS LIVING IN FLOODED AREA MACAPÁ, AP.

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The intestinal parasitic diseases are a huge public health care problem and this occurs due to an inappropriate sanitary conditions and a lack of knowledge about the prophylaxis. There are present at any age although children are more susceptible to illness. The objective was to diagnose the prevalence of intestinal parasites in children 1-10 years Tacacá Surf residents and surrounding areas, city of Macapa - Amapá. Relating the results to social and environmental aspects, raised through questionnaires applied to all participants. We conducted 308 Tests for parasites through direct methods to cool, and the Hoffman Pons and Janer's technique. The overall positivity was 55.5%, of which are 93 cases of children living in the land area and 86 living in the flooded area. The most prevalent protozoan *E. nana* was in both collection sites while *A. lumbricoides* (4.4%) was the most prevalent in the land and *S. stercorales* (8.6%) in the surf. Relating sex / age, highly significant heterogeneity was observed in all categories. *Tricuris trichiura* and *Ascaris lumbricoides* were more prevalent in the age group 7-10. The *G. intestinalis* species (25.7%), *A. lumbricoides* (16%) and *T. trichiura* (19.3%) had a higher prevalence among women and in older age groups. The association protozoan/protozoan was the most abundant in fecal samples, the most remarkable occurrence was *E. histolytica* / *E. nana* (11.7%). There was indication of the symptom in most spots, followed by cramps and abdominal pain. Was conducted 188 water analysis of which are 81 and 93 surf the mainland by the membrane filter technique. 54.3% (N = 44) of surf samples and 48.5% (N = 50) of land were contaminated by some sort of intestinal parasite or commensal, with a significant difference between species. *S. stercorales* (27.4%) was the most frequent helminth followed by *A. lumbricoides* (9.6%). Among the protozoan parasite *E. histolytica* (22%) followed by the commensal *E. nana* (14.4%). The lowest prevalence was hookworm (2.5%). The statistical multiple regression test showed that there is a strong positive relationship between the results of fecal and water analysis. The significant occurrence of these pathogens in these children indicates that there is need to apply preventive health measures, as well as educational activities to minimize their spread and contamination because the control of these parasites involves improvements of socioeconomic conditions, sanitation and health education population.

**Key words:** Watter quality, intestinal parasite, children, prevalence.