

Prevalence of intestinal parasites in children enrolled in a daycare center in the city of Fortaleza, Ceará.

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Intestinal infections by helminthes and/or protozoa parasites remain as prevalent diseases in underdeveloped or developing countries, such as Brazil. These infections are closely related to failures at sanitation policies that could improve socio-hygienic conditions of the poorest people. The use of untreated water along with inadequate sanitary practices is traditionally and epidemiologically associated to the development and maintenance of such infections, especially considering their main route of transmission, faecal-oral. Classical signs and symptoms as diarrhea, abdominal pain, anemia, and intestinal obstructions in aggravated cases may occur in children and adults infected with helminthes and/or protozoa. This study aimed to estimate the prevalence of enteroparasite infections in children enrolled in a municipal daycare center located in the city of Fortaleza, state of Ceará, Brazil. Faecal samples from children up to six years old were collected in the period between august and December, 2016. A portion of each sample was homogenized with distilled water, filtered in a glass calix, and allowed to spontaneous sedimentation accordingly to Hoffmann's methodology. The sediments were microscopically analyzed for the presence of eggs and/or larvae of helminths and cysts/oocysts of protozoa. Twelve out of twenty-seven samples were positive for parasites, showing a prevalence of 44.4%. Of the positive samples, half showed monoparasitism, in which *Ascaris lumbricoides* and *Giardia duodenalis* were detected in one sample each one (8.3%), *Entamoeba coli* and Ancylostomidae in two samples (16.6%) each one. Biparasitism was detected in four samples (33.2%), showing *Giardia duodenalis* and *Entamoeba histolytica*. Polyparasitism was found in two positive samples (16.6%) showing *Entamoeba coli*, *Entamoeba histolytica* and *Giardia duodenalis*. These preliminary results indicate a high prevalence of enteroparasitoses in children up to six years of age enrolled in this daycare center, mostly infected by protozoa species. Studies on epidemiology, route of transmission and social repercussion of parasitic infections can shed light on needed actions to reduce their prevalence in the population, especially children, and they can contribute to governments be conscious about low life quality of many communities that suffer with these preventable diseases.

Keywords: Enteroparasites; Protozoa; Helminthes