



Journal of Microbiome (DOI:10.28933/JM)



Analysis of Cryptosporidium spp and Other Enteroparasites Associated With Schools in the Municipality of Recife

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ABSTRACT

Introduction: Cryptosporidiosis mainly affects immunocompromised individuals, and co-infection with other associated parasites is frequent. Infection can cause severe diarrhea in children. Transmission occurs through interpersonal contact, zoonotic transmission, ingestion of contaminated water and food. **Objectives:** Analyzing the occurrence of enteroparasites in children of a school in the city of Recife in the State of Pernambuco, nutritional status by children and feces consistency. **Methodology:** Data and fecal samples were collected between May 2015 and January 2016. Nutritional analysis was performed according to SISVAN guidelines. Coproparasitological analysis employed the modified Lutz and Kinyoun methods. **Results and Discussion:** Our data showed that from 152 analyzed children, 32/152 (21%) had positivity for *Cryptosporidium* spp. By them, 10/32 (31.3%) presented polyparasitism, being 40% 4/10 positive for *Endolimax nana*, 20% (2/10) for *Entamoeba histolytica* / *Entamoeba dispar*, 20% (2/10) for *Giardia lamblia*, 20% (2/10) for *Entamoeba coli* and 20% 10 for *Ascaris lumbricoides* (with up to three associated parasites). Nascimento et. al., 2009 verified a positivity of 32.4% for *Cryptosporidium* spp, confirming that there was no reduction of the cases in the northeastern region of Brazil. *Cryptosporidium* spp contamination was observed in 22/32 (68.8%) diarrheal stools and 10/32 (31.2%) in the solid consistency stools assuming that there is intense elimination of oocysts in the diarrheal stools. Among children positive for cryptosporidiosis, 12/32 (37.5%) had some kind of nutritional disorders, being 6.3% underweight and 31.2% overweight, implying a possible association between this infection and cases of malnutrition child. **Conclusion:** Our study showed that school-aged children are highly susceptible to enteroparasites, requiring greater attention in relation to their nutrition to avoid nutritional disorders, as well as observing fecal consistency. Measures of basic sanitation and sanitary education would be efficient tools suggestive in the fight against the parasitoses.

Keywords:

Children; Cryptosporidiosis; Diarrhea; Nutritional; School

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How to cite this article:

Silva I.F., Carvalho P.L.B.; Costa L.P.; Santana R.M.; Nunes P.H.V.5; Rocha F.J.S. Analysis of *Cryptosporidium* spp and Other Enteroparasites Associated With Schools in the Municipality of Recife. *Journal of Microbiome*, 2018, 1:3



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