

## HIGH PREVALENCE OF *Giardia lamblia* IN CHILDREN FROM A TOURIST CITY IN BRAZIL

MONIQUE PINTO GONÇALVES<sup>1</sup>, JANINE DE ARAUJO FERRO<sup>1</sup>, ISABELLA STEPHANOVICH FRANCELINO<sup>1</sup>, BRENO TEIXEIRA SOARES<sup>1</sup>, ÉRIKA VERÍSSIMO VILELLA<sup>2</sup>, ALDA MARIA DA CRUZ<sup>1,2</sup>, MARIA FANTINATTI FERNANDES DA SILVA<sup>2</sup>.

<sup>1</sup>INSTITUTO OSWALDO CRUZ-IOC, RJ, BRASIL, <sup>2</sup>UNIVERSIDADE DO ESTADO DO RIO DE JANEIRO, UERJ, RJ, BRASIL.

*Giardia lamblia* is an enteroparasite with global distribution, zoonotic in nature, transmitted through water or direct intra- and interspecific contact. Children are the primary group affected by this infection. It is estimated that the prevalence of *G. lamblia* infection ranges from 2% to 7% in developed countries and can exceed 50% in developing countries such as Brazil. Although the Lagos Region of Rio de Janeiro is known for its tourism significance, there are also pockets of poverty and inadequate water and sewage treatment, with the frequency of enteroparasites being unknown. In this context, the aim of this study was to assess the prevalence of *G. lamblia* infection among children attending daycare centers in the municipality of Armação dos Búzios. To this end, fecal samples were collected from children under 5 years old attending the 12 municipal daycare centers in the city of Armação dos Búzios/RJ. The samples were subjected to a parasitological stool examination using the Ritchie and Kato-Katz methods. Out of 1,227 preschool children enrolled in the municipality of Armação dos Búzios, 417 unique stool samples were collected on a voluntary basis. The parasitological examination revealed the presence of the following protozoan forms: *Giardia lamblia* (123/417, 29.5%), *Entamoeba histolytica complex* (3/417, 0.71%), *Endolimax nana* (107/417, 25.6%), *Entamoeba coli* (21/417, 5.0%), and the helminth *Ascaris lumbricoides* (6/417, 1.4%). The prevalence of *G. lamblia* is dynamic and can vary both spatially and temporally. Although no previous surveys are available, the frequency of this infection was considered high when compared to other regions of the state. Considering that Armação dos Búzios is the third most important tourist destination in Brazil and the possible transmission routes of *G. lamblia*, the identification of high infection rates points to the potential spread of the parasite to different municipalities along the tourist route.

Supported by: FAPERJ, CNPq, PAEF/IOC, FIOCRUZ, CAPES.  
Partnership with the Municipal City Hall of Armação dos Búzios/RJ

Keywords: *Giardia lamblia*, frequency, Armação dos Búzios.