

Evaluation of parasitic contamination in public squares in the municipality of Jataí-Goiás, Brazil

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Parasites are an important public health problem worldwide, especially in developing countries, where there is a deficit of investment in basic sanitation, health and education, causing high rates of morbidity and mortality. These parasites need favorable climatic and environmental conditions to develop, so playgrounds and sand courts are an important means of transmitting enteroparasites, and in addition, the high prevalence of stray animals corroborates with the increase of parasites in these environments. This study aimed to analyze the prevalence of enteroparasites in samples of sand from playgrounds in public squares in the municipality of Jataí-GO. The research was carried out in thirteen squares, including playgrounds and/or sand courts. Fifteen sand samples were collected from each square, at five different points, with the aim of obtaining a larger sampling field, five samples of surface sand and ten samples of deep sand (5 and 15 cm deep), collected at different points. From the park, then they were stored in collecting bottles, previously identified and sent to the Parasitology Laboratory of the Federal University of Jataí. Lutz, Rugai and Ritchie methods were performed. The results were analyzed by simple proportion. Of the total of 195 samples collected, 1,755 slides were analyzed, where it was found that 12.93% (227/1,755) were contaminated with at least one parasitic form (eggs, larvae, adults and protozoan cysts). Regarding the risk factors for contamination, the presence of animal waste was observed in most squares, human footprints, animal paws and most squares were fenced, but only four squares had closed gates. Of the applied techniques, the spontaneous sedimentation (Lutz Method) demonstrated greater positivity when compared to the others, regarding the presence of larvae, it was verified that the majority was detected in the sand samples collected at depths of 5 and 15 cm, also being observed the presence of hookworm eggs, rhabditoid and filarioid larvae of *Strongyloides* sp. and *Ancylostoma* sp., egg of *Toxocara* sp., cyst of *Giardia* sp. and as yet unidentified adult nematodes. There was a variation in positivity in relation to temperature, on colder days there was a greater number of negative samples, but despite this, no square was completely negative. In view of the high positivity of contamination by parasitic structures in all squares, it is concluded that there is a need to adopt measures for prevention and awareness of the population, in relation to the care of children and animals in these places.