Spatial analysis of *Biomphalaria glabrata* foci and *Schistosoma mansoni* human cases in peri-urban areas of Barra dos Coqueiros city, Sergipe, Northeastern Brazil.

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Due to the existence of storm water drainage channels, the contact and misuse of that water, the Schistosomiasis has spread and has become a constant concern and a serious worldwide public health problem. The aim of this study was to monitor human cases of Schistosomiasis and the breeding areas of the snails of the genus *Biomphalaria* through spatial analysis in the community "Invasão do Canal do Guaxinim", located at Barra dos Coqueiros city, Sergipe state in the years 2013 and 2014. A cross-sectional epidemiological study by parasitological and malacological surveys. To verify the spatial analysis was performed spatial point pattern analysis by means of the Kernel intensity estimation, using TerraView software 4.2.2. It was observed a reduction in the prevalence of Schistosomiasis from 8.08% (2013) to 4.86% (2014); Mild infection prevailed in adolescents and/or young adults in the two years of the study. In malacological research,387 specimens of snails of the genus *Biomphalaria glabrata* were collected, and all negative for *Schistosomam mansoni* infection. Spatial analysis showed a strong spatial trend for increased risk of transmission of Schistosomiasis to the north and south in 2013 and in 2014, only the north of the "Invasão do Canal do Guaxinim". The spatial analysis techniques used configure as an important methodological tool for monitoring and control this parasitic disease**.** While surveys show a reduction in the occurrence of Schistosomiasis, this can bring social and economic repercussions since Barra dos Coqueiros municipality remains an attractive center for eco-tourism and real estate expansion in Sergipe, Brazil.

Keywords: Urban Schistosomiasis; Spatial Analysis; Monitoring.