

## ORT\_21 - Epidemiological survey in isolated riverside communities in the Municipality of Guajará in Amazonas

Elaine Motta Costa<sup>1</sup>; Monica Barcellos Arruda<sup>1</sup>; Marisa de Oliveira Ribeiro<sup>1</sup>; Elisabete Ferreira de Andrade<sup>1</sup>; Daniele Ramos Rocha<sup>1</sup>; Pedro Henrique Cardoso<sup>1</sup>; Antonio Gomes Pinto Ferreira<sup>1</sup>; Shana Priscila Coutinho Barroso<sup>3</sup>; Rodrigo Medeiros de Souza<sup>2</sup>; Patrícia Alvarez Baptista<sup>1</sup>. <sup>1</sup>Fiocruz/Bio-Manguinhos <sup>2</sup>Universidade Federal do Acre - UFAC <sup>3</sup>Marinha do Brasil

**Introduction:** In recent years, concern with epidemiological and health surveillance has increased considerably, to respond in cases of emergencies. The frequent outbreaks of arboviruses (Dengue, Zika, Chikungunya, Yellow Fever, Mayaro and West Nile Virus), outbreaks and the current pandemic of respiratory viruses (influenza A/B and coronavirus) and the epidemiological situation of other diseases of clinical importance (viral hepatitis and gastrointestinal viruses, syphilis, HIV, Malaria and Chagas disease), reinforce such concerns. A partnership signed between Bio-Manguinhos/FIOCRUZ, the Brazilian Navy and UFAC, was carried out with the intention of mapping the main viruses in the North region of Brazil, contributing to the diagnosis of the local population and expanding the biological monitoring capacity. This work is important in the development of new PCR-based and real-time diagnostic kits for neglected diseases. Knowing the viruses in that territory is essential for improving epidemiological surveillance and, with that, a prompt response to possible causative agents of yet another pandemic.

**Objectives:** The aim of this project was an epidemiological and serological survey using rapid tests to detect HIV1/2, Syphilis, Chagas disease, Malaria, HBsAg, HCV and SARS-Cov-2 in the Guajará city, state of Amazonas, Brazil.

**Methodology:** We carried out an interview and application of the TCLE in the riverside population of the communities of Gama, Igarapé Grande and Floresta, who made themselves available to participate in the study with blood and nasal swabs sampling. These samples were tested for the following rapid tests for antibody detection: anti-HIV1/2, Syphilis and Chagas disease, and detection of malaria antigens, HBsAg, HCV and SARS- Cov2.

**Results:** 210 patients from three different communities: Gama (67%), Floresta (17%) and Igarapé Grande (16%) were included in the study. Among these, 41% were male and 59% were female. At the time of the interview, 46% were asymptomatic and 54% declared some type of symptom. Most participants were between 31 and 50 years old (47.6%). Of the respondents, only 36% took the last campaign Flu vaccine and 87% took at least 1 dose of the vaccine for COVID-19. Regarding the circulation of Malaria, 90% of the patients reported a previously infection. We obtained 100% non-reactive samples for HIV, HCV and SARS-Cov-2. For syphilis detection, 5% of patients were positive, 6% for Chagas disease, 2% for malaria and 4% for HBsAg.

**Conclusion:** This study demonstrates the importance of diagnosis based on point of Care Testing in isolated areas, for early diagnosis and control of possible outbreaks.

Keywords: Epidemiological, diagnostic