

SOROEPIDEMIOLOGICAL SURVEY ON THE PREVALENCE OF CHRONIC CHAGAS DISEASE IN VILA DOS REMÉDIOS, NOVO HORIZONTE, BAHIA

LARISSA DE CARVALHO MEDRADO VASCONCELOS^{1,2}, TYCHA BIANCA SABAINI PAVAN^{1,2},
NIVISON RUY ROCHA NERY JUNIOR², CRISLAINE GOMES DA SILVA², FELIPE SILVA SANTOS
DE JESUS^{1,2}, JOÃO VICTOR FRANÇA MOREIRA^{1,2}, ROSANGELA ANDRADE DE ALMEIDA^{1,2},
NOILSON LÁZARO SOUSA GONÇALVES^{1,2}, ANDERSON LUIZ PIMENTEL FERREIRA^{1,2},
DANIEL DIAS SAMPAIO², ISADORA CRISTINA DE SIQUEIRA^{2,3}, FRED LUCIANO NEVES
SANTOS¹

¹ADVANCED HEALTH PUBLIC LABORATORY, GONÇALO MONIZ INSTITUTE, OSWALDO
CRUZ FOUNDATION, BA, BRAZIL, ²INTERDISCIPLINARY RESEARCH GROUP IN
BIOTECHNOLOGY AND EPIDEMIOLOGY OF INFECTIOUS DISEASES (GRUPIBE), GONÇALO
MONIZ INSTITUTE, OSWALDO CRUZ FOUNDATION, BA, BRAZIL, ³LABORATORY OF
INVESTIGATION IN GLOBAL HEALTH AND NEGLECTED DISEASES, GONÇALO MONIZ
INSTITUTE, OSWALDO CRUZ FOUNDATION, BA, BRAZIL

Chagas disease (CD), caused by the protozoan *Trypanosoma cruzi*, remains a neglected tropical disease with significant public health implications. Despite Bahia being an endemic region for CD, its true prevalence remains uncertain due to underreporting and limited surveillance efforts. This study aimed to estimate the prevalence of chronic CD through a seroepidemiological survey conducted in the village of Vila dos Remédios, Novo Horizonte, Bahia.

A structured questionnaire was administered to collect sociodemographic data, followed by screening with the TR Chagas Bio-Manguinhos rapid test. Individuals who tested positive, along with a subset of negative cases, underwent venipuncture for laboratory confirmation at LACEN-BA. A total of 912 individuals participated, with 454 (49.7%) residing in the Mercês rural region, 449 (49.2%) in the village of Vila dos Remédios, and 10 (1.1%) from other areas.

Among these, 247 individuals were referred for confirmatory testing, including 52 rapid test-positive cases and 195 randomly selected negatives. Laboratory testing identified seven confirmed cases of chronic CD, yielding a prevalence of 2.8% (7/247). Only two of these individuals (40%) were previously aware of their diagnosis. Additionally, two cases produced inconclusive results, necessitating further investigation. The median age among confirmed cases was 53 years (IQR: 47-60), with an equal female-to-male ratio (1:1).

Although Novo Horizonte is classified as an endemic area for chronic CD, the observed prevalence in Vila dos Remédios was relatively low compared to other endemic regions in Bahia. These findings emphasize the need for expanded epidemiological investigations and systematic screening across the city of Novo Horizonte to establish a more comprehensive understanding of disease prevalence and inform targeted public health interventions.

Funding: INOVA-FIOCRUZ, CAPES, CNPq, FAPESB.

Keywords: Chagas disease; screening; seroepidemiological survey