



## **INCIDENCE OF HOSPITALIZATIONS FOR ACUTE RHEUMATIC FEVER IN CEARÁ IN THE LAST DECADE (2009 - 2018)**

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### **BACKGROUND**

Rheumatic fever (RF) is a immunologically mediated inflammatory disease which has a high prevalence, especially in developing countries. Prevalence varies among populations depending on socioeconomic status of the country. The highest ratios are related to the precarious conditions of housing and a bad health system, which favors the spread of beta-hemolytic streptococci (group A) among patients. The objective of this study is to analyze the number of hospitalizations for acute RF in Ceará in the last decade (2009 - 2018) and to clarify its most probable causes.

### **MATERIALS AND METHODS**

A cross-sectional quantitative study with a sample of 3,337 individuals hospitalized for acute RF in the last decade (2009 - 2018) in Ceará, the data was retrieved from the Hospital Morbidity Data System found in the DATASUS website. Data were analyzed by region of hospitalization and year of hospitalization.

### **RESULTS**

The number of hospitalizations due to acute RF in Ceará in the last decade was 3,337 (Incidence = 37,73 per 100.000 person). Regarding the year of the higher and lower incidence, 606 hospitalizations were found in 2010, and 2017 was the year with the lowest number (50 cases). The Macro-region of Cariri was distinguished by the highest number of hospitalizations, consisting 2,240 occurrences (67.1% of all cases), out of which 2,094 only in the municipalities of Barbalha (1,401 cases) and Crato (693 cases). Fortaleza was the second in occurrences (755 cases). Based on this, some risk factors for RF should be highlighted, such as genetic predisposition, the local socioeconomic development index, the environment and poor accessibility to health services. Possibly, the increase in access to primary care, comparing the years 2010 and 2017, contributed to the establishment of diagnostic suspicions and early conducts. Besides, the higher number of hospitalizations in the municipalities of Barbalha, Crato, and Fortaleza is due to the disposition of high population density centers in these cities and the precarious housing conditions of a good part of the population.

### **CONCLUSION**

Despite the decline in the incidence of RF, the disease is a challenge for the Brazilian health. The higher number of cases concentrated in Cariri reflects the low quality of health services in the interior regions, displacing people to high complexity poles. In this context, there is a need for improvement in the prevention and early diagnosis of RF to avoid major complications, including rheumatic cardiopathies.