





# ANALYSIS OF THE EVOLUTION OF THE NUMBER OF HOSPITALIZATIONS FOR RHEUMATIC FEVER IN BRAZIL

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### **BACKGROUND**

Rheumatic fever (RF) is a late, non-suppurative inflammatory complication of upper airway infection by group A beta-hemolytic streptococcus, which occurs mainly in childhood. It is related to the lower socioeconomic status and precarious living conditions, which favor the spread of the bacterium. It is a public health problem, with high morbidity and mortality, especially if there is cardiac involvement. The present study aims to analyze the evolution of the number of hospitalizations for RF in Brazil and to compare hospitalization rates among the different regions of the country.

#### **MATERIALS AND METHODS**

Descriptive cross-sectional study, based on DATASUS information, considering the last available period, from 2002 to 2007.

## **RESULTS**

Between 2002 and 2007, there were a total of 16,465 hospitalizations for RF in Brazil. In 2002, there were 4,186 cases, 41.4% of which occurred in the northeast (NE), 28.15% in the Southeast (SE), 12.15% in the north (N), 9.8% in the South (S) and 8.5% in the Midwest (MW). In 2003, there were 3,269 admissions: 34.7% in NE, 29.4% in SE, 12.75% in N, 12.35% in S and 10.8% in MW. In 2004, of the 2,659 hospitalizations, 36.5% occurred in the NE, 31.45% in the SE, 12% in the N, 11.15% in the MW and 8.9% in the S. 2,390 cases were reported in 2005: 38.7% in the NE, 30.4% in the SE, 10.9% in the MW, 10.3% in the N and 9.7% in the S. In 2006, of the 2,107 hospitalizations, 37.1% happened in NE, 29.5% in SE, 16% in N, 10,5% in S and 6,9% in MW. Finally, in 2007, of the 1,854 cases, NE accounted for 35.4%, SE for 33%, N for 14.3%, S for 9.8% and MW for 7.5%. When compared to the year 2002, there was a 55% decrease in hospitalizations during 2007. The rate of decrease by region was: 62% in NE, 61% in MW, 56% in S and 48% no N and SE.

## **CONCLUSION**

The hospitalizations for RF decreased progressively from 2002 to 2007 throughout Brazil, with the Northeast region being the one that had more cases. However, together with the Midwest, it was the one that presented the greatest reductions in hospitalization rates in the analyzed period. These results probably show not only better living conditions but also better clinical approach of these patients, and it is expected that these rates continue to decline in the following years.