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RHEUMATIC HEART DISEASE IN BRAZIL: TEN YEARS OF EPIDEMIOLOGICAL ANALYSIS IN THE CHILD POPULATION

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INTRODUCTION

Rheumatic fever (RF) is characterized by a non-suppurative inflammatory process that occurs after an infection with Lancefield group A beta-hemolytic streptococcus. Its prevalence is greater in developing countries such as Brazil. RF is the most prevalent rheumatic disease in the pediatric age group, with a prevalence of RF of around 3% among Brazilian children and adolescents. Clinically, the evaluation takes place using the Jones criteria, which are divided into major and minor, and which make up the main findings of the pathology.

The major Jones criteria are predominantly the manifestations of arthritis, carditis, subcutaneous nodules, erythema marginatum and, later, Sydenham's chorea. From the development of rheumatic fever, an important sequel left is rheumatic heart disease. CKD is the most serious form, as it is responsible for high rates of debilitation and mortality due to cardiac impairment. The initial lesions in the myocardium regress, however, the valve lesions, mainly the mitral and aortic lesions, are progressive and irreversible. For valve correction, heart surgeries are necessary, which in developing countries, such as Brazil, generate a major public health problem, with high costs for Health Systems.

GOALS

To carry out an epidemiological analysis of the last ten years on rheumatic heart disease in the Brazilian child population, and correlate the variables mentioned below across the sample.

METHODS

Data research on the DATA-SUS platform, with descriptive, cross-sectional and retrospective epidemiological analysis in the period from 2009 to 2018. The following variables were used: age, sex, color/race, cost of hospital services, nature of care, average length of stay and mortality rate.

RESULTS

In the pediatric age group, 5,730 hospitalizations due to CKD were reported in2 Brazil. The Northeast region was responsible for 2,490 hospitalizations, the Southeast with 1,688, the Central-West with 733, the North with 465 and the South with 424. It is estimated that R$27,261,524.75 were spent on this disease in Brazil, being R$10,243. 078.46 destined only to the northeast region. The years with the most hospitalizations in Brazil were 2011 (718) and 2010 (627), respectively, and the years with the fewest hospitalizations were 2018 (395) and 2017 (448). Urgent care represented 63% of hospitalizations and elective 37%, with an average of 11.71 days of hospitalization. The mortality rate in Brazil was 3.22%, with the highest in the North at 4.95% and the lowest in the Northeast at 2.6%. The age group with the most hospitalizations was those between 15 and 19 years old with 2,137 cases. Regarding gender, 53.73% were male and 46.27% female. Regarding color and race, 34.78% were mixed race, 18.13% white, 2.77% black, 0.54% yellow, 0.29% indigenous and 43.47 without registration.

CONCLUSION

Based on the epidemiological analysis carried out in this study, we can see that the region with the highest number of hospitalizations for CKD in Brazil was the Northeast region followed by the Southeast region, affecting, in its majority, male individuals aged 15 to 19 years. Therefore, in addition to reaching a considerable number of people, it was also responsible for an important financial impact on health, reinforcing the importance of preventive measures and awareness about the disease.

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