

Analysis of human Brucellosis cases: An epidemiological evaluation based on demographic and treatment data

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ABSTRACT

Human brucellosis is a bacterial zoonosis caused by *Brucella abortus*, it is a serious public health problem for workers who have direct contact with infected animals. The disease is often exacerbated by the inadequate handling of vaccines and the consumption of unpasteurized animal products, necessitating strict control and prevention measures. This study analyzes the distribution and characteristics of positive cases of Human Brucellosis in the 54 municipalities under the jurisdiction of the Regional Health Unit of Montes Claros (URS-Moc), Minas Gerais, through a descriptive analysis of data recorded in the Disease Notification Information System (SINAN) in the period from 2014 to 2023. The variables examined were: age, gender, race, area of residence of the patients and treatment outcome. Of the registered cases, four (30.8%) received confirmation of the disease. The analysis showed that Brucellosis affects individuals of all age groups, with a lower prevalence in children. No clear trend was observed in terms of the annual variation of cases, which suggests a stability in the number of occurrences of the disease over the years studied. Men seem to be more affected than women, possibly due to greater occupational exposure in the agricultural sector. The higher incidence in brown individuals may reflect demographic particularities or exposure to the pathogen. A predominance of cases was noted in rural areas, reinforcing the zoonotic nature of Brucellosis. In addition, the lack of complete information on treatment and diagnosis highlights deficiencies in data recording and in the response capacity of the health system. The study reiterates the importance of continuous surveillance and differentiated approaches for each demographic affected by Brucellosis and the gaps found in data collection emphasize the need for improvements in health systems for effective management of the disease.

Keywords: Brucellosis, Human, Epidemiology, Demographic data.

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