ANALYSIS OF REGIONS WITH PREVALENCE OF LEPROSY CASES IN THE CITY OF ANÁPOLIS-GOIÁS

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ABSTRACT

Leprosy is a chronic and infectious-contagious disease caused by the agent *Mycobacterium leprae*. Throughout the centuries, it has been highly stigmatized; however, advances in studies have contributed to a better understanding of this disease, which varies according to its clinical presentation and treatment. This study aims to identify the presence and year of notification of Leprosy in the regions of Anápolis-Goiás from 2019 to 2024, in addition to developing an educational booklet with the main information about the disease, combined with providing data to improve public health programs and policies. This is a quantitative, descriptive, observational, and cross-sectional study, where field research and data collection were carried out in the city of Anápolis, at its Municipal Health Department, in the Dr. Ilion Fleury Jr. health unit, a reference in areas such as viral hepatitis and leprosy. During data analysis, the presence of Leprosy was identified in several regions during the studied period. Those where the disease lasted the longest, with notifications in four of the six years analyzed, were named the regions of Interlandia, Jardim América, Jundiaí, Bairro de Lourdes, and Vila São Joaquim. It is concluded, therefore, that the disease, even after centuries, is still very present, requiring educational strategies for the population so that cure is achieved with adequate treatment, in an attempt to avoid both the dissemination and reactivation of the disease in the body, so that the studied indices decrease more and more over the years.

Keywords: Leprosy; Hansen's Disease; Mycobacteriosis; Mycobacterium leprae.

INTRODUCTION

Leprosy is the name given to the chronic and infectious-contagious disease characterized, since antiquity, by the social stigma linked to its manifestation, the isolation of those who presented the most severe clinical forms of the disease, and the lack of knowledge about its forms of transmission, being stipulated as the reflection of punishment from deities. It was only in the 19th century, when the Norwegian physician Gehard Hansen identified the etiological agent of Leprosy, *Mycobacterium leprae*, that studies related to Leprosy began to advance in all aspects (VELOSO et al., 2018; BRASIL, 2017).

Numerous pieces of information regarding the peculiarities of Leprosy help develop combat goals for this disease today, such as the incubation period and its diverse clinical manifestation. Its broad spectrum of manifestations includes hypochromic or reddish spots, decreased sensitivity, papules, nodules, and hair loss. Its transmission occurs through the respiratory tract, resulting from close and

prolonged contact of an individual with a higher probability of becoming infected with a patient not yet treated (VELOSO et al., 2018).

Data from the World Health Organization (WHO) showed that in 2016, 143 countries reported 214,783 new cases of Leprosy. In Brazil, in the same year, 25,218 new cases were recorded, with notification rates of 12.2 cases per 100,000 inhabitants. Thus, Brazil is classified as a high-burden country for the disease, having the highest rate recorded in the world population, per inhabitants. However, despite still having a high detection percentage, Brazil showed a significant reduction in the prevalence of the disease in recent years, from 4.52/10 thousand inhabitants in 2003 to 1.2 in 2018 (TAVARES et al., 2018; IKEHARA et al., 2010).

Regarding the state of Goiás, few studies are noted relating different variables prevalent in the region. It was observed that the city of Anápolis reported 3.53 cases of Leprosy per 10,000 inhabitants in 2007 and 3.19 cases per 10,000 inhabitants in 2010, demonstrating rates above the Brazilian average for the respective years. Due to the scarce literary basis addressing the city of Anápolis, Goiás, detailed research of the city is necessary to identify specific transmission localities and, consequently, carry out targeted actions for source cases (PEREIRA et al., 2015).

Thus, this study aims to identify the presence and year of notification of Leprosy in the regions of Anápolis-Goiás from 2019 to 2024, in addition to developing an informative booklet with the main information about the disease, together with providing data to assist in improving public health programs and policies in the municipality of Anápolis-Goiás.

METHODOLOGY

This is a quantitative, descriptive, observational, and cross-sectional study, in which data collection was carried out in the city of Anápolis, at its Municipal Health Department, specifically in the Dr. Ilion Fleury JR. health unit, a reference unit in areas such as viral hepatitis and leprosy. The research analyzed records registered in the Sexually Transmitted Infections program of the unit. The sample consists of all records registered during the period from 2019 to 2024/1.

All records of patients with leprosy who are registered at the Dr. Ilion Fleuri Jr. health unit in the mentioned period were included, with records with incomplete information or outside the analyzed interval being excluded from the study. Furthermore, regarding ethical aspects, this project was approved by the Ethics and Research Committee of UniEVANGÉLICA on July 14, 2024, with CAAE 79490824.0.0000.5076 and opinion number 6,947,882, and discusses the principles of bioethics: autonomy, beneficence, justice, and non-maleficence, with data confidentiality guaranteed.

Regarding the limitations that this study obtained, they were mainly linked to the data provided by the Health Surveillance together with the Municipal Health Department, due to losses and non-updates of the analyzed records. Thus, it was not possible to measure the incidence element of Leprosy in the city of Anápolis due to the failure in data provision by the aforementioned entities.

RESULTS

After data collection through a survey of records between the years 2019 and 2024, the notified cases were classified according to the year of occurrence, sex, age group, and neighborhood of residence of the patients.

Regarding the regions where the presence of the disease was detected, they were classified according to the year of notification, with a certain prevalence observed in certain regions over time, and a certain punctuality in others. In the analysis of the years 2019-2024, no region notified cases in all years, but some in 4 of the 6 years analyzed, these being the ones with the longest duration of the disease.

Thus, the regions with the highest detection of Leprosy over the years in the municipality of Anápolis were: Interlândia (notification in the years 2019, 2020, 2021, and 2023); Jardim América (2019, 2020, 2022, and 2023); Jundiaí (2019, 2020, 2021, and 2023); Conjunto Filostro (2019, 2020, 2021, 2022); Bairro de Lourdes (2019, 2020, 2022, 2023) and the Vila São Joaquim region (years 2019, 2020, 2021, and 2022). That said, these locations with notifications in 4 years are where the highest incidence occurred, ahead of 12 other regions that showed

existence of the disease in 3 years of the studied period. Another 22 regions showed only 2 years of notification in the period 2019-2024.

Another study carried out in a Reference Health Unit in Anápolis characterized the locality, between the years 1980 and 2003, as hyperendemic, presenting detection rates greater than 4.0 per 10,000 inhabitants and with a higher incidence of the more complicated and slower-to-treat forms. The authors attribute this scenario to the absence of initiatives such as educational actions aimed at the massive propagation of the signs and symptoms of the disease, in addition to the need for complementary means such as seminars, courses, training, and messages in mass media (RESENDE; SOUZA; SANTANA, 2009).

CONCLUSION

Therefore, in the period from 2019 to 2024, there was the presence of Leprosy in several regions, in some continuously, which leads us to think about the maintenance of the disease in patients, and in others discontinuously, which could be due to new infections, reinfections, or the latency of the disease not properly treated. It is worth highlighting that Leprosy can be cured, with early diagnosis and adequate treatment being essential to avoid complications.

Thus, with the booklet designed by the author (Annex figure1), greater dissemination of information is expected. Regarding the improvement of public policies, a strengthening of Primary Health Care is necessary, in the sense of training professionals and expanding access to diagnosis, in addition to massive campaigns and community education, especially in endemic areas.

Furthermore, on a broad spectrum, there should be policies of inclusion and psychosocial support in an attempt to reduce the stigma and discrimination related to such a disease. Added to this, monitoring and surveillance with an efficient notification system and post-treatment follow-up for long-term care are essential, and for well-done treatment, access to medication must be guaranteed by public means, done in a humane manner and following due protocols.

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ANEXOS

Figura 1. QR Code de acesso à Cartilha Informativa sobre Hanseníase.

Fonte: autor