ORIGINAL ARTICLE

Evaluation of the level of knowledge of the community about leprosy in a municipality in the interior of Northeastern Brazil

Avaliação do nível de conhecimento da comunidade sobre hanseníase em um município do interior do nordeste brasileiro

Missilene Nascimento Passos[1], Aline do Carmo Silva[2], Isabela Resende Ávila[3], Juliana Maria Trindade Bezerra[2,3,4]

1. Discente do curso de Ciências Biológicas, Universidade Estadual do Maranhão (UEMA), Lagoa da Pedra, MA, Brasil. 2. Programa de Pós-Graduação em Ciência Animal, Centro de Ciências Agrárias, Universidade Estadual do Maranhão (UEMA), São Luís, MA, Brasil. 3. Programa de Pós-Graduação em Parasitologia, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, MG, Brasil. 4. Departamento de Química e Biologia, Campus Caxias, Universidade Estadual do Maranhão (UEMA), Caxiias, MA, Brasil.

Abstract

Objective. this study aimed to evaluate the level of knowledge about leprosy among the community in the municipality of Lago dos Rodrigues, located in the Central Mesoregion of Maranhão, in Northeastern Brazil. **Methods:** a questionnaire with eight multiple-choice questions was administered to 369 participants, and their sociodemographic data were also analyzed. **Results:** most interviewees lacked knowledge about the main characteristics of the disease. This was evident from the responses to questions addressing, for example, the agent responsible for causing leprosy (41.46% did not know the answer); the scientific name of the etiological agent (58.54% did not know the answer), and the signs and symptoms (58.80% did not know the answer). **Conclusions**: after conducting the study, it can be concluded that a lack of information about leprosy prevails among the residents of Lago dos Rodrigues, state of Maranhão. Therefore, it is necessary to implement educational initiatives in the community to increase awareness about this important infection, aiming to reduce the number of cases and complications related to leprosy in the population.

Keywords: leprosy; knowledge; transmission; signs and symptoms; disease prevention.

Resumo

Objetivo. avaliar o nível de conhecimento sobre hanseníase entre a comunidade do município de Lago dos Rodrigues, localizado na Mesorregião Central do Maranhão, no Nordeste do Brasil. **Métodos:** foi aplicado um questionário com oito questões de múltipla escolha a 369 participantes, cujos dados sociodemográficos também foram analisados. **Resultados**: a maioria dos entrevistados não detinha conhecimento acerca das principais características da doença. Isso ficou evidente nas respostas a questões que abordavam por exemplo, o agente causador da hanseníase (41,46% não souberam responder); o nome científico do agente etiológico (58,54% não souberam responder), e os sinais e sintomas (58,80% não souberam responder). **Conclusões:** prevalece a falta de informação sobre hanseníase entre os residentes de Lago dos Rodrigues, estado do Maranhão. Dessa forma, torna-se necessária a implementação de iniciativas educativas na comunidade, com vistas a ampliar o conhecimento acerca dessa relevante infecção, visando reduzir o número de casos e as complicações relacionadas à hanseníase na população.

Palavras-chave: hanseníase; conhecimento; transmissão; sinais e sintomas; prevenção de doenças.

INTRODUCTION

Leprosy is a slowly progressive disease caused by *Mycobacterium leprae*[1], or Hansen's bacillus, an obligatory intracellular parasite with an affinity for ocular and cutaneous cells, as well as peripheral nerves[2]. Despite reports of naturally infected wild animals (armadillos and monkeys), humans are the only natural reservoir of *M. leprae*, which affects both sexes across all age groups[3].

Although curable, leprosy has a debilitating potential, and its diagnosis has a significant psychosocial impact[4]. These disabilities and deformities can lead to a variety of problems for those affected by the disease, such as reduced work capacity, limited social life, and psychological issues, as well as contributing to stigma and prejudice[5]. Transmission occurs through intimate and prolonged contact between a susceptible individual and a bacillary patient, primarily via inhalation of bacilli, with early diagnosis and treatment provided by *Sistema Único de Saúde do Brasil*[6] (SUS). The disease primarily manifests through dermatological signs and symptoms, such as skin lesions and peripheral nerve damage[7].

Among the infectious diseases considered public health issues in Brazil, leprosy holds a prominent position, with 17,979 new cases reported in 2020, representing 93.6% of the 19,195 cases in the Americas. The high incidence places Brazil second among countries with the highest number of cases in the world, behind only India[8]. In 2021, preliminary data indicated 15,155 new cases, a reduction that may be associated with underreporting

Correspondence: Juliana Maria Trindade Bezerra. Departamento de Química e Biologia, Campus Caxias, Universidade Estadual do Maranhão, Praça Duque de Caxias, s/n, Morro do Alecrim, CEP: 65.604-380, Caxias, Maranhão, Brasil. E-mail: julianabezerrauema@gmail.com

Conflict of interest: There is no conflict of interest on the part of any of the authors.
Received: 14 Ago 2025; Revised: 23 Set 2025; Accepted: 29 Set 2025

due to the COVID-19 pandemic. According to an epidemiological survey by the *Ministério da Saúde* (MS), Maranhão consists of 217 municipalities, of which 98 are considered hyperendemic for leprosy[9]. From 2013 to 2022, the state had the highest number of new cases of the disease in the Northeast region, remaining the third state in the country with the highest number of cases, behind only Mato Grosso and Tocantins[10,11].

Leprosy is strongly linked to unfavorable economic, social, and environmental conditions, placing Maranhão in a prominent position due to the number of cases. The state is the poorest in the country, with the highest number of people whose household income is R$479.00 per month, with 57.90% of the population living under these conditions[12]. In addition to these factors, people in more vulnerable situations have limited access to health services and information about the signs and symptoms of the disease, which directly impacts the detection of leprosy in its early stages. Therefore, strategic actions are necessary to ensure comprehensive care and minimize the suffering of those affected[13]. Health education is essential to raise awareness among the population, engaging them in prevention and control efforts, aiming to reduce the number of cases.

Considering the dynamics of leprosy and its significant impact on the lives of those affected, studies focused on this issue are extremely relevant. Public awareness of the disease can, in turn, aid in early diagnosis and consequently lead to appropriate treatment and patient recovery. Based on this premise, the present study aimed to evaluate the level of knowledge about leprosy in the community of the municipality of Lado dos Rodrigues, located in the Central Mesoregion of the state of Maranhão, Northeastern Brazil, considering the region's particularities regarding this important endemic disease.

METHODOLOGY

Area of study

The study was conducted in the municipality of Lago dos Rodrigues, in the interior of the state of Maranhão, located in the Central Mesoregion of Maranhão and the Médio Mearim Microregion, in Northeastern Brazil. The town has a territorial area of 220.776 km² and is situated at 34 meters above sea level. According to the population census conducted in 2022 by the *Instituto Brasileiro de Geografia e Estatística* (IBGE), the municipality has 8,758 inhabitants and a population density of 39.67 inhabitants per km² [14]. It is bordered to the north by the municipalities of Lago do Junco and Igarapé Grande, to the south by the municipality of Poção de Pedras, to the east by the municipality of Igarapé Grande, and to the west by the municipality of Lago do Junco[15].

In education, the following school-level indicators stand out, according to the IBGE[14]: a school enrollment rate of 97.3% for children aged six to 14 in 2010; the *Índice de Desenvolvimento da Educação Básica* (IDEB) for early years of elementary education (public schools) was 5.2 in 2021, and the IDEB for final years of elementary education (public schools) was 4.2 in 2021. In health, there is no available data on the average infant mortality rate in the city. Hospitalizations due to diarrhea amounted to 13.4 per 1,000 inhabitants in 2017[14].

Sampling

The minimum sample size was calculated considering a significance level of 5%, a hypothetical frequency of 50% (community knowledge about leprosy), and a confidence limit of 5%. According to the latest demographic census conducted by the IBGE in 2022, the total population of 8,758 inhabitants was taken into account[14]. Based on this calculation, the minimum sample size reached was 369 individuals interviewed for the study. The OpenEpi software, version 3.01 28 (Georgia, United States of America), was used to calculate the minimum sample size.

Type and Design of the Study

This is an observational and cross-sectional study aimed at gathering information on the level of community knowledge about leprosy in the municipality of Lago dos Rodrigues, in the interior of the state of Maranhão. The study was conducted in two phases: the first phase involved administering a pilot questionnaire to 10 randomly selected individuals from the municipality to test the data collection tool in October 2022. Subsequently, the evaluation of the community's level of knowledge about leprosy was conducted. The questionnaires, consisting of eight multiple-choice questions, were developed by the researchers and administered by them in the homes of 369 residents of Lago dos Rodrigues from October to November 2022, with sociodemographic data also being analyzed.

Inclusion and Exclusion Criteria

Participants included in this study were residents of the municipality of Lago dos Rodrigues, of both sexes, aged 18 years and older, who consented to participate in the study after a prior explanation of the project and signing the *Termo de Consentimento Livre e Esclarecido* (TCLE) in duplicate (one copy for the individual and another for the study team). Individuals from other municipalities, minors, or those who did not consent to participate in the study after the prior explanation were excluded.

Statistical Data Analysis

Microsoft Office Excel 2013 (Washington, United States of America) was used to create tables and graphs. This analysis included calculations of absolute and relative frequencies for the following categorical variables: sociodemographic (sex, age, education level, race, income, family arrangement) and key aspects of leprosy (etiological agent, transmission, signs and symptoms, and clinical forms).

Ethical Aspects

This study was submitted to and approved by the *Comitê de*

Ética em Pesquisa of the *Universidade Estadual do Maranhão* (UEMA) under the C*ertificado de Apresentação de Apreciação Ética* (CAAE) number 63026922.5.0000.5554. The study was conducted based on the responses of the interviewees, without identifying names or addresses of the individuals, in accordance with the *Resolução do Conselho Nacional de Saúde* (CNS) number 466/2012, dated December 12, 2012[16].

RESULTS

Among the 369 participants in this study, there was a prevalence of 65.00% (n=240) for females, 40.10% (n=148) for the age group of 30 to 49 years, 33.33% (n=123) for individuals with a completed high school education, and 73.30% (n=270) for individuals of brown race. Regarding household income and family arrangement, there was a predominance of 36.70% (n=135) for individuals earning 2 to 3 minimum salaries and 53.40% (n=197) for households composed of 1 to 3 people (Table 1).

Table 1. Sociodemographic characteristics of the interviewed population in Lago dos Rodrigues, state of Maranhão.

VARIABLES	n	%
Sex		
Male	129	35.00
Female	240	65.00
Age range (in years)		
18 to 29	85	23.03
30 to 49	148	40.10
50 to 69	82	22.22
70 to 89	54	14.65
Education level		
No education	19	5.15
Incomplete elementary education	38	10.30
Completed elementary education	6	1.70
Incomplete high school	49	13.27
Completed high school	123	33.33
Incomplete higher education	43	11.65
Completed higher education	55	14.90
Postgraduate	36	9.70
Race		
Black	25	6.70
White	62	16.70
Brown	270	73.30
Other	12	3.30
Household Income		
Less than 1 minimum salary	68	18.30
1 minimum salary	105	28.30
From 2 to 3 minimum salaries	135	36.70
More than 3 minimum salaries	61	16.70
Family arrangement		
Alone	26	7.00
1 to 3 people	197	53.40
4 to 6 people	140	37.90
More than 6 people	6	1.70
Total	369	100.00

n = number of interviewees; % = percentage of interviewees. Source: prepared by the authors.

Regarding the local knowledge of the population of Lago dos Rodrigues about leprosy, concerning the causative agent of the disease, 41.46% (n=156) of the participants were unable to answer the question, and only 26.56% (n=98) answered correctly that the disease is caused by a bacterium. Concerning the scientific name of the pathogen responsible for leprosy, 58.54% (n=216) of the interviewees did not know the answer, while only 25.75% (n=95) answered correctly that the etiological agent of the disease is *M. leprae* (Table 2).

Table 2. Responses regarding the causative agent of leprosy and its transmission in Lago da Pedra, state of Maranhão..

QUESTIONS	n	%
Do you know which agent is responsible for causing leprosy?		
Virus	94	25.47
Bacterium	98	26.56
Fungus	7	1.80
Arthropod parasite	5	1.36
Protozoan parasite	6	1.70
Helminth parasite	6	1.70
I don't know	153	41.46
Which of the names below is the scientific name of the causative agent of leprosy?		
Candida albicans	6	1.70
Mycobacterium leprae	95	25.75
Malassezia furfu	6	1.70
Mycobacterium tuberculosis	6	1.70
Dermatobia hominis	40	10.84
Sarcoptes scabiei	0	0.00
Pediculus capitis	0	0.00
I don't know	216	58.54
Do you know how leprosy is transmitted?		
By contact with stagnant water	6	1.70
By the bite of the female *Aedes aegypti* mosquito	12	3.30

QUESTIONS	n	%
By the bite of the female mosquito known as muriçoca	0	0.00
By the bite of the female sandfly, also known as phlebotomine	6	1.70
By contact with saliva droplets from a sick person who is undergoing treatment	74	20.00
By close and prolonged contact between a healthy person and an untreated patient	80	21.70
I don't know	191	51.70
Can leprosy be acquired through respiratory routes?		
Yes	145	41.70
No	92	25.00
I don't know or I'm not sure	123	33.30
Can leprosy be acquired through the use of objects that were previously used by an infected person and then by a healthy individual?		
Yes	228	61.70
No	49	13.30
I don't know or I'm not sure	92	25.00
Total	369	100.00

n = number of interviewees; % = percentage of interviewees. Source: prepared by the authors.

Regarding the mode of transmission of the disease, 51.70% (n=191) of the participants did not know how to respond to the question. When asked whether leprosy can be acquired through respiratory routes, 41.70% (n=145) of the interviewees answered correctly that it can. Concerning the possibility of leprosy being transmitted through the use of objects previously used by an infected person and subsequently by a healthy individual, 61.70% (n=228) of the participants incorrectly answered that this mode of transmission is possible (Table 2).

Regarding the main signs and symptoms of leprosy, the majority of interviewees were unable to answer (58.80%; n=217), and only 24.12% (n=89) correctly stated that all the descriptive options in the initial phase of the disease were correct. Concerning the clinical forms of leprosy, 58.30% (n=215) of the participants correctly answered that leprosy has several clinical forms. Regarding the names of the four clinical forms of the disease, 55.83% (n=206) of the interviewees were unable to answer, while 24.39% (n=90) correctly stated that all the alternatives in the question were correct (Table 3).

Table 3. Responses regarding the signs, symptoms, and clinical forms of leprosy in Lago da Pedra, state of Maranhão

QUESTIONS	n	%
Which of the following initial signs and symptoms may manifest in an individual with leprosy?		
Areas of skin or whitish (hypochromic), brownish or reddish spots, with changes in sensitivity to heat and/or pain, and/or touch	22	5.96
Tingling, shocks, and cramps in the arms and legs, progressing to numbness – the person burns or injures themselves without realizing it	15	4.07
Papules, tubercles, and nodules (lumps), usually without symptoms	9	2.44
Decrease or loss of hair, localized or diffuse, especially in the eyebrows	5	1.36
Infiltrated skin (reddish), with decreased or absent sweating in the area	12	3.25
None of the above	0	0.00
All of the above	89	24.12
I don't know	217	58.80
In your opinion, does leprosy present several clinical forms?		
Yes	215	58.30
No	13	3.40
I don't know or I'm not sure	141	38.30
Of the clinical forms below, which one(s) would you consider to refer to leprosy?		
Indeterminate leprosy (PB)	27	7.32
Tuberculoid leprosy (PB)	29	7.86
Dimorphic leprosy (MB)	7	1.80
Virchowian leprosy (MB)	0	0.00
None of the above	10	2.71
All of the above	90	24.39
I don't know	206	55.83
TOTAL	369	100.00

n = number of interviewees; % = percentage of interviewees; PB = Paucibacillary; MB = Multibacillary. Source: prepared by the authors.

DISCUSSION

With the implementation of this study, which is unprecedented

in the municipality, the level of knowledge of the community in Lago dos Rodrigues, a city in the Central Mesoregion of Maranhão, regarding leprosy was assessed. Leprosy is an important public health problem in Brazil and around the world, especially due to its debilitating effects. It was observed that misinformation about the disease is a challenge that affects different sexes, age groups, education levels, and races, and that, despite being an ancient disease, it is still associated with prejudice and discrimination against those who contract the infection.

Among the 369 interviewees, there was a prevalence of 65.00% for females, 40.10% for the age group of 30 to 49 years, 33.33% for individuals with a complete high school education, and 73.30% for individuals of brown race. It is important to highlight that the education level of a population is extremely relevant when it comes to health education. A study conducted in Fortaleza, in the Northeastern state of Brazil, between 2011 and 2015, identified that individuals with a higher level of education know more about diseases, as well as how to prevent and treat them17. Furthermore, in the mentioned study, a large portion of the interviewees had only studied up to the sixth grade of elementary school, which influenced their understanding of information about the disease and its management[17].

Regarding the local knowledge of the interviewees from Lago dos Rodrigues about leprosy, the low rate of correct answers to some questions highlighted that a significant portion of the population in the municipality has little knowledge about the aspects and characteristics of the disease. When asked about the causative agent of leprosy, 41.46% of participants were unable to answer the question, and only 26.56% correctly stated that the disease is caused by a bacterium. In a study conducted in Pouso Alegre and Poços de Caldas, Minas Gerais, in the Southeast region of Brazil, in 2009, with community health agents from both municipalities, it was revealed that 47.7% of them believed that the causative agent of the disease was not bacterial[18].

Regarding the scientific name of the pathogen responsible for leprosy, 58.54% of the interviewees were unable to answer the question, and only 25.75% correctly identified that the causative agent of the disease is *M. leprae.* However, it is important to understand that the etiological agent of leprosy is a bacterium and to know its name in order to understand how to prevent it, especially since it is a highly stigmatized disease, and other diseases with different etiological agents may occur in the same locality[19].

Concerning the mode of transmission of leprosy, 51.70% of the interviewees were unable to answer the question, and only 21.70% stated that transmission occurs through close and prolonged contact between a healthy person and an untreated patient. Similarly, a study conducted with residents of a neighborhood in Montes Claros, in the state of Minas Gerais, found that approximately 50.3% of the interviewees also did not understand the mechanism of transmission of the disease[20]. The study further revealed that some individuals believe transmission occurs through contact with contaminated water (9.2%); mosquito bites (9.2%); bites from dogs, cats, and bats (3.2%); or contact with animal feces (3.2%)[20].

When asked whether leprosy can be acquired through respiratory routes, 41.70% of the interviewees correctly answered yes. In a study conducted in Uberaba, Minas Gerais, a questionnaire regarding leprosy was administered to individuals using the city's basic health units before and after an educational intervention. Prior to the intervention, only 7.3% of the respondents knew that the disease could be acquired through the respiratory system. In contrast, after the intervention, 86.5% of the participants gained knowledge about the topic[21]. Therefore, the importance of conducting health education campaigns focused on leprosy are emphasized.

About 61.70% of the interviewees from Lago dos Rodrigues believe that leprosy can be acquired through the use of objects that were previously used by an infected individual and later by a healthy person. In a study conducted in Belém, Pará, in Northern Brazil, the majority of interviewees (47.90%) did not know how leprosy is transmitted, followed by 31.10% who stated that the disease is transmitted through respiratory routes when living with an untreated patient. The predominance of participants who are unaware of the transmission method of leprosy is strongly linked to the historical stigma and prejudice associated with the disease[22].

In the present study, a high degree of misinformation regarding the main signs and symptoms of the disease was also observed. Information presented in the study confirms that 58.80% of respondents are unaware of the dermatological and neurological manifestations that the infection causes in an infected individual. In a study conducted with elementary school students in Betim, Minas Gerais, conflicting data was obtained, as 57.7% of them correctly reported the signs and symptoms or even the sequelae caused by the disease[23].

Regarding the clinical forms, Paucibacillary (Indeterminate leprosy and Tuberculoid leprosy) and Multibacillary (Dimorphic leprosy and Virchowian leprosy), 58.30% of participants correctly responded that the disease presents different forms. However, the percentage of correct answers regarding these classifications was low, as only 24.39% of respondents indicated that all the alternatives are considered clinical presentations of the disease. The majority were unable to answer (55.83%). Thus, there is a deficiency in the operational classification of the disease and a possible misunderstanding of the clinical forms. A study conducted in Belém, Pará, in the Northern region, with final-year medical students from public universities, indicated that only 30.30% were aware of the clinical forms of the disease. For healthcare professionals, this issue becomes even more alarming, given that knowledge is essential for the proper management of patients and for the clinical outcome of the disease[24].

Despite a considerable number of correct answers to the previously mentioned questions, when compared to the large number of individuals who were unable to respond, the same situation is observed regarding the other questions addressed in this study. The results of the present research align with those of a study that evaluated the level of knowledge among public school students in Betim, Minas Gerais, which found that the average index of correct knowledge/information about the disease was below 50% in the studied group[23].

Therefore, the results obtained in this study, through the administration of a questionnaire to a sample of the population in the municipality of Lago dos Rodrigues, may be directly related to the education level of the participants, as a significant portion of the correct responses were attributed to those with a higher level of education, particularly individuals with higher education qualifications.

Thus, identifying the level of knowledge about leprosy, considering the specificities of communities and populations, allows for the development of strategies to confront the disease, which can help dismantle taboos and stigmas surrounding it. Therefore, it is emphasized that promoting educational actions in various settings for the population of Lago dos Rodrigues is crucial for them to gain a better understanding of leprosy and to contribute to the early diagnosis among those affected, thereby preventing the disabilities and deformities it causes.

CONCLUSIONS

Through this study, it was evident that the majority of residents of Lago dos Rodrigues possess little or no knowledge about leprosy, which represents a serious public health problem in Brazil, especially in the state of Maranhão. Based on interviews conducted with a representative sample of the population, it was possible to ascertain that a large part is unaware of the main characteristics of the disease, such as the etiological agent, main signs and symptoms, clinical forms, and transmission.

It is also emphasized that the great importance of producing studies focused on this topic, in order to contribute to the formulation of public policies that can lead to awareness campaigns for the general population, with specific segments targeting groups considered at higher risk of illness. Thus, it is possible to promote correct prophylaxis, reducing the incidence of new cases and assisting in the identification of patients in the early stages. Early diagnosis is an indispensable tool for decreasing the occurrence of deformities and physical disabilities and, consequently, demystifying the stigmas surrounding the disease.

ACKNOWLEDGEMENTS

ACS thanks the *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* (CAPES) for granting the master's scholarship.

REFERENCES

1. Hansen GHA. Undersřgelser angaaende Spedlaskedens Aarsager (Investigations concerning the etiology of leprosy). Norsk Mag F Laegev. 1874;3(9):1-88. doi: https://doi.org/10.1016/j.clindermatol.2012.10.001.

2. Froes LAR Junior, Sotto MN, Trindade MAB. Leprosy: clinical and immunopathological characteristics. An Bras Dermatol. 2022 May-Jun; 97(3): 338-47. doi: https://doi.org/10.1016/j.abd.2021.08.006.

3. Ministério da Saúde (BR). Secretaria de Vigilância. Hanseniase 2022. Bol. Epidemiol. 2022 Jan [cited 2023 Jan 19]; (Esp): 1-54. Available from: https://www.gov.br/saude/pt-br/centrais-de-conteudo/publicacoes/boletins/epidemiologicos/especiais/2022/boletim-epidemiologico-de-hanseniase-_-25-01-2022.pdf .

4. Assis DO, Tavares CM, Alcântara RA, Ramirez LJ, Brum EH, Barbota KG, et al. Impacto no cotidiano das pessoas com as manifestações de hanseníase na região de cabeça e pescoço. Res Soc Dev. 2021 Jul; 10(8): e54210817715. doi: http://dx.doi.org/10.33448/rsd-v10i8.17715.

5. Jesus ILR, Montagner MI, Montagner MA, Alves SM, Delduque MC. Hnaseníase e vulnerabilidade: uma revisão de escopo. Ciênc Saúde Colet. Jan 2023; 28(1): 143-54. doi: https://doi.org/10.1590/1413-81232023281.09722022.

6. Silva KC, Sampaio LF Neto, Rodrigues CI. Educação em hanseníase para médicos residentes. Tem Saúde. 2021; 21(1): 63-83. doi: https://doi.org/10.29327/213319.21.1-4.

7. Vieira SM, Lima LF, Castro PA, Bezerra JM. Aspectos sobre a patogênese, a clínica, o diagnóstico e o tratamento da hanseníase: uma revisão narrativa. JESH. 2022 May; 2(2): 1-11. doi: https://doi.org/10.52832/jesh.v2i2.98.

8. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Hanseníase 2021. Bol. Epidemiol. 2021; (Esp): 1-56. Available from: https://www.gov.br/saude/pt-br/centrais-de-conteudo/publicacoes/boletins/epidemiologicos/especiais/2021/boletim-hanseniase-_-25-01.pdf.

9. Goiabeira YN, Rolim IL, Aquino DM, Soeiro VM, Inácio AS, Queiroz RC. Perfil epidemiológico e clínico da hanseníase em capital hiperendêmica. Rev Enferm UFPE Online. 2018 Jun; 12(6): 1507-13. doi: 10.5205/1981-8963-v12i6a234693p1507-1513-2018.

10. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Doenças de Condições Crônicas e Infecções Sexualmente Transmissíveis. Estratégia Nacional para Enfrentamento da Hanseníase 2019-2022. Brasília: Ministério da Saúde; 2021. [cited 2023 Jan 18]. Available from: https://bvsms.saude.gov.br/bvs/publicacoes/estrategia_nacional_enfrentamento_hanseniase_2019.pdf.

11. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Hanseníase. Bol. Epidemiol. 2024 [cited 2024 January 10]. (Esp): 1-71. Available from: https://www.gov.br/saude/pt-br/centrais-de-conteudo/publicacoes/boletins/epidemiologicos/especiais/2024/be_hansen-2024_19jan_final.pdf.

12. Corsini I. Entre 2019 3 2021, 9,6 milhões de pessoas entraram na linha de pobreza no Brasil, diz FGV [Internet]. São Paulo: CNN; 2022 [updated 2022; cited 2023 Jan 19]. Available from: https://www.cnnbrasil.com.br/economia/macroeconomia/entre-2019-e-2021-96-milhoes-de-pessoas-entraram-na-linha-de-pobreza-no-brasil-indica-fgv-social/.

13. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Doenças de Condições Crônicas e Infecções Sexualmente Transmissíveis. Estratégia Nacional para Enfrentamento da Hanseníase 2019-2022. Brasília: Ministério da Saúde; 2021.

14. Instituto Brasileiro de Geografia e Estatística. Lago dos Rodrigues [Internet]. Rio de Janeiro: IBGE; 2023. [updated 2022; cited 2023 Aug 28]. Available from: https://cidades.ibge.gov.br/brasil/ma/lago-dos-rodrigues/panorama.

15. Google Maps [Internet]. Lago dos Rodrigues; 2023. [updated 2023; cited 2022 Nov 04]. Available from: https://www.google.com.br/maps/@-4.6137135,-44.9783254,16.62z?hl=pt-BR.

16. Conselho Nacional da Saúde [Internet]. Resolução nº 466, de 12 de Dezembro de 2012. Aprova diretrizes e normas regulamentadoras de pesquisa envolvendo seres humanos. Diário Oficial da União. 2013 Jun 13 [cited 2022 Nov 04]; 12(seção 1): 59. Available from: https://www.gov.br/conselho-nacional-de-saude/pt-br/acesso-a-informacao/legislacao/resolucoes/2012/resolucao-no-466.pdf.

17. Ribeiro KG, Andrade LO, Aguiar JB, Moreira AE, Frota AC. Educação e saúde em uma região em situação de vulnerabilidade social: avanços e desafios paras as políticas públicas. Interface. 2018; 22(suppl 1): 1387-98. doi: https://doi.org/10.1590/1807-57622017.0419.

18. Mesquita M Filho, Gomes CF. Preconceito e conhecimento sobre hanseníase: a situação do agente comunitário de saúde. BioEthikos. 2014; 8(2): 153-160. doi: https://doi.org/10.15343/1981-8254.20140802153160.

19. Noordende AT, Korfage IJ, Lisam S, Arif MA, Kumar A, Van Brakel WH. The role of perceptions and knowledge of leprosy in the elimination of leprosy: a baseline study in Fatehpur district, northern India. PLoS Negl Trop Dis. 2019 Apr; 13(4): e0007302. doi: https://doi.org/10.1371/journal.pntd.0007302.

20. Silva PLN. Perfil de conhecimentos sobre hanseníase entre moradores de uma Estratégia Saúde da Família. Hansen Int. 2012;37(2):31-39. https://doi.org/10.47878/hi.2012.v37.36193.

21. Moreira AJ, Naves JM, Fernandes LF, Castro SS, Walsh IA. Ação educativa sobre hanseníase na população usuária das unidades básicas de saúde de Uberaba. Saúde debate. 2014 Apr-Jun; 38(101): 234-43. doi: https://doi.org/10.5935/0103-1104.20140021.

22. Queiroz LR, Ferreira AM, Palmeira IP, Matos EC, Valois RC, Corrêa GM, et al. Conhecimento sobre hanseníase entre os usuários de uma estratégia saúde da família no norte brasileiro. Rev. Centro Peq Avan Quali Vida. 2021; 13(3): 1-12. doi: https://doi.org/10.36692/862.

23. Alves DG. O conhecimento de Hanseníase entre estudantes de escolas públicas [dissertation]. Belo Horizonte (MG): Universidade Federal de Minas Gerais, Faculdade de Medicina; 2020 [cited 2022 November 19]. Available from: https://repositorio.ufmg.br/bitstream/1843/36566/1/O%20CONHECIMENTO%20DE%20HANSEN%c3%8dASE%20ENTRE%20ESTUDANTES%20DE%20ESCOLAS%20P%c3%9aBLI CAS%20CONCEITOS%20E%20PRECONCEITOS.pdf.

24. Viana AC, Araújo FC, Pires CA. Conhecimentos de estudantes de medicina sobre hanseníase em uma região endêmica do Brasil. Rev Baiana Saúde Pub. 2016; 40(1): 24-37. doi: https://doi.org/10.22278/23182660.2016.v40.n1.a738.

How to cite this article/ Como citar este artigo:
Passos MN, Silva AC, Ávila IR, Bezerra JMT, Evaluation of the level of knowledge of the community about leprosy in a municipality in the interior of northeastern Brazil. J Health Biol Sci. 2025; 13(1): e5993.