

## ANALYSIS OF THE LEPROSY CURE INDICATOR AND BASIC CARE COVERAGE IN SANTA CATARINA

Análise do indicador de cura da hanseníase e da cobertura de atenção básica em Santa Catarina

Análisis del indicador de cura leprosa y cobertura de cuidado básico en Santa Catarina

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### ABSTRACT

**Objective:** to evaluate the population coverage of Primary Care teams in the municipalities of Santa Catarina and its correlation with the Proportion of cure of new cases of leprosy diagnosed in the years of the cohorts. **Methods:** cross-sectional ecological study that used secondary data from the official databases of the State of Santa Catarina, in the years 2017 and 2018. **Results:** the indicator of the proportion of leprosy cure is inversely correlated to the population coverage indicators of primary care teams and population coverage of family health, maintaining the correlation for the years 2017-2018 and achieved good performance in the municipalities of Santa Catarina in the years studied. **Conclusion:** the State of Santa Catarina performed well in meeting the target agreed in 2017 with regard to the proportion of leprosy cure. However, it performed regularly in 2018.

**DESCRIPTORS:** Leprosy; Primary health care; Nursing.

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## RESUMO

**Objetivo:** avaliar a cobertura populacional das equipes de Atenção Básica nos municípios de Santa Catarina e sua correlação com a Proporção de cura dos casos novos de hanseníase diagnosticados nos anos das coortes.

**Métodos:** estudo ecológico transversal que utilizou dados secundários dos bancos de dados oficiais do Estado de Santa Catarina, nos anos de 2017 e 2018. **Resultados:** o indicador de proporção de cura de hanseníase é inversamente correlacionado aos indicadores de cobertura populacional de equipes de atenção básica e de cobertura populacional de saúde da família, mantendo a correlação para os anos de 2017-2018 e obteve bom desempenho nos municípios catarinense nos anos estudados. **Conclusão:** o Estado de Santa Catarina apresentou um bom desempenho no cumprimento da meta pactuada no ano de 2017 com relação à proporção de cura da hanseníase. Entretanto, apresentou um desempenho regular em 2018.

**DESCRIPTORES:** Hanseníase; Atenção primária à saúde; Enfermagem.

## RESUMEN

**Objetivo:** evaluar la cobertura poblacional de los equipos de atención primaria en los municipios de Santa Catarina y su correlación con la proporción de curación de nuevos casos de lepra diagnosticados en los años de las cohortes. **Métodos:** estudio ecológico transversal que utilizó datos secundarios de las bases de datos oficiales del Estado de Santa Catarina, en los años 2017 y 2018. **Resultados:** el indicador de la proporción de cura de lepra está inversamente correlacionado con los indicadores de cobertura de población de los equipos de atención primaria y cobertura poblacional de salud familiar, manteniendo la correlación para los años 2017-2018 y logrando un buen desempeño en los municipios de Santa Catarina en los años estudiados. **Conclusión:** el estado de Santa Catarina tuvo un buen desempeño al cumplir el objetivo acordado en 2017 con respecto a la proporción de cura de la lepra. Sin embargo, se realizó regularmente en 2018.

**DESCRIPTORES:** Lepra; Atención primaria de salud; Enfermería.

## INTRODUCTION

Leprosy is a slowly evolving, infectious disease that manifests itself through dermatoneurological signs and symptoms, causing lesions on the skin and peripheral nerves.<sup>1</sup> It is considered a public health problem due to its magnitude and high incapacitating power,<sup>2</sup> especially in individuals of working age. It is a curable disease; its diagnosis is clinical and epidemiological,<sup>3</sup> and treatment is carried out on an outpatient basis. The earlier it is diagnosed and treated, the faster the patient is cured.<sup>1</sup> Therefore, the treatment of the leprosy patient is essential to cure him/her, since it interrupts the chain of transmission of the disease, being strategic in the control of the endemic disease and to eliminate leprosy as a public health problem.<sup>1</sup>

However, the stigma and lack of knowledge about the disease, both by the population and by health professionals, mean that, most of the time, the diagnosis is delayed, bringing serious consequences for patients and their families, due to the lesions that disable them physically.<sup>1</sup>

Since the introduction of multidrug therapy (MDT) more than two decades ago, the leprosy burden in the world has

decreased considerably. Thus, it was considered a disease that could be treated in the context of primary health care.<sup>4</sup> In Brazil, in recent decades, the Ministry of Health (MH) has been emphasizing the importance of the Family Health Strategy (FHS) teams in performing actions to control and eliminate leprosy.<sup>1</sup> This happened more concretely with the publication of the Norma Operacional da Assistência à Saúde (NOAS) 01/2001 of the Sistema Único de Saúde (SUS),<sup>5</sup> which triggered the process of decentralization of health care, mainly to the municipalities, and established leprosy as a priority area in Primary Health Care (PHC) services.<sup>6</sup>

Ordinance 2.436/2017,<sup>7</sup> determines that it is the municipalities' competence to organize, execute, and manage Primary Care services and actions, as well as to develop strategies to reach the health goals defined in the interfederative pacting. "One of these goals corresponds to the assistance to leprosy patients, within the scope of the Family Health Strategy."<sup>8:614</sup>

Moreover, leprosy is part of a group of diseases known as neglected tropical diseases "that are prevalent in tropical and subtropical conditions in 149 countries, affecting more than one billion people and costing developing economies billions of dollars every year",<sup>9</sup> with the populations living in poverty, in poor socioeconomic conditions, being the most affected.<sup>9</sup>

In September 2015, the United Nations (UN) with its 193 member countries (among them, Brazil) officially adopted the "2030 Agenda for Sustainable Development",<sup>10:3</sup> considered an "ambitious and bold agenda",<sup>10:9</sup> which includes the Sustainable Development Goals (SDGs). In its goal 3 (Ensure healthy lives and promote well-being for all at all ages) it aims "by 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases, and combat hepatitis, waterborne and other communicable diseases".<sup>11</sup> The implementation and success of the 2030 Agenda "will depend on the sustainable development policies, plans and programs"<sup>10:11</sup> undertaken by countries and their federated entities.

Thus, considering that leprosy control actions are the responsibility of primary care, this study has as a hypothesis: Municipalities with greater coverage of primary care have better results in the indicator of Proportion of healing of new cases of leprosy diagnosed in the years of the cohorts according to the parameter recommended by the MH. And its objective: To evaluate the coverage of primary care in the municipalities of Santa Catarina and the achievement of the indicator Proportion of cure of new cases of leprosy diagnosed in the years of the cohorts according to the parameter recommended by the MH.

## METHOD

The methodological approach used was cross-sectional ecological type, using spatial analysis technique, performed in the period 2017 and 2018, taking as units of analysis the 295 municipalities of the State of Santa Catarina. Using the method of probabilistic relationship records.

The data were extracted from the official databases of the State of Santa Catarina available and of public access of DIVE/SC on the page <http://200.19.223.105/cgi-bin/dh?mortalidade/mortalidade.def> and <http://200.19.223.105/cgi-bin/dh?popsc/def/popsc.def>, accessed on 23/09/2019.

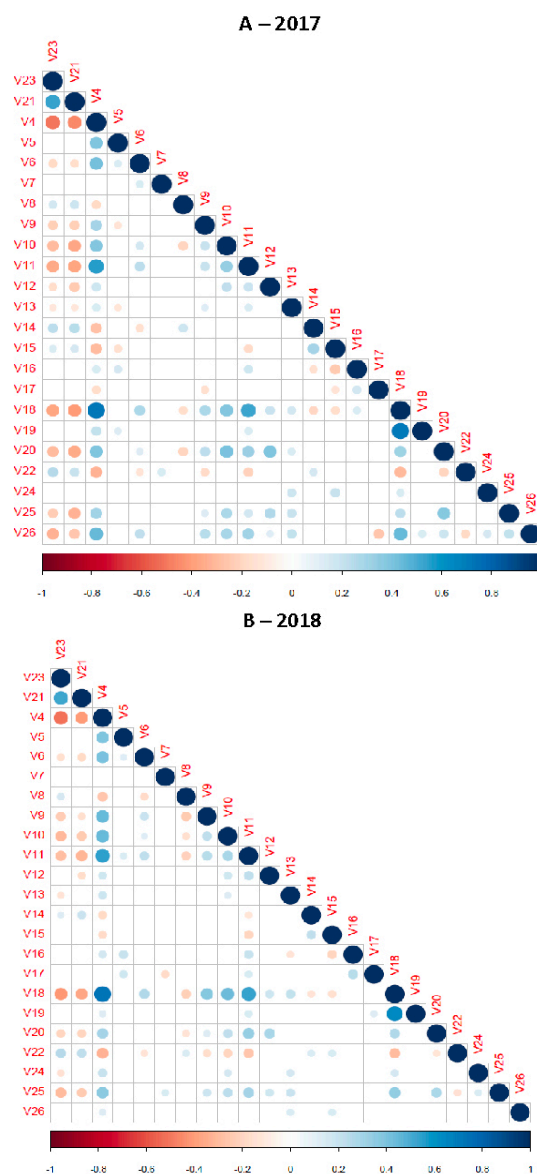
The data analysis process of the present research began with a descriptive exploration including mean, standard deviation, median, 25th and 75th percentile, minimum and maximum for all study indicators. To test the hypothesis, a correlation matrix was proposed from the calculation of Spearman's rank correlation coefficient. Also, choropleth maps with selected indicators were plotted to evaluate the distribution of indicators in the study area for the year 2017 and 2018. All tests took into account a two-way  $\alpha$  of 0.05 and a 95% confidence interval (CI) and were performed with computational support from R software (<https://www.r-project.org/>), IBM SPSS 25 (Statistical Package for the Social Sciences) and Excel 2016<sup>®</sup> (Microsoft Office). Maps were developed in QGIS3.10.2 software (<https://www.qgis.org/en/site/about/index.html>).

The ethical aspects of research with human beings occurred in the course of the investigation, according to resolution 466/12 and complementary. Resolution n<sup>o</sup> 510, of 04/07/2016, of the Conselho Nacional de Saúde (CNS), in its sole paragraph, items II, III and IV, determines that "research that uses information in the public domain does not need to be registered and evaluated by the Research Ethics Committee", thus, considering that the investigation occurred from secondary data sources, submission to the CEPISH was not necessary, since this type of investigation does not imply any risk for the research subjects and followed the ethical principles of respect for the person, charity and justice, guidelines and regulatory standards.

## RESULTS

In Figure 1 we can observe the correlation coefficient; the more intense the color, the better correlated are the indicators. Thus, it can be verified, for example, that the greater the population coverage of family health (V21) the greater the population coverage of primary care teams (V23). The indicator of leprosy cure rate (V10) is inversely correlated to the indicators of population coverage of primary care teams (V23) and population coverage of family health care (V21), maintaining the correlation for the years 2017 and 2018. This means that the higher the presence of one, the lower the presence of the other.

**Figure 1** - Correlation matrix of the indicators proportion of cure of new leprosy cases in the cohort years (V10), population coverage of primary care (V23) and population coverage of family health. Santa Catarina, Brazil, 2017 and 2018



Source: Researcher, 2020

In table 1 we can observe that in the year 2018 the indicators Cure proportion of new leprosy cases diagnosed in the years of the cohorts, population coverage of family health and population coverage of primary care teams, presented lower averages than in the year 2017.

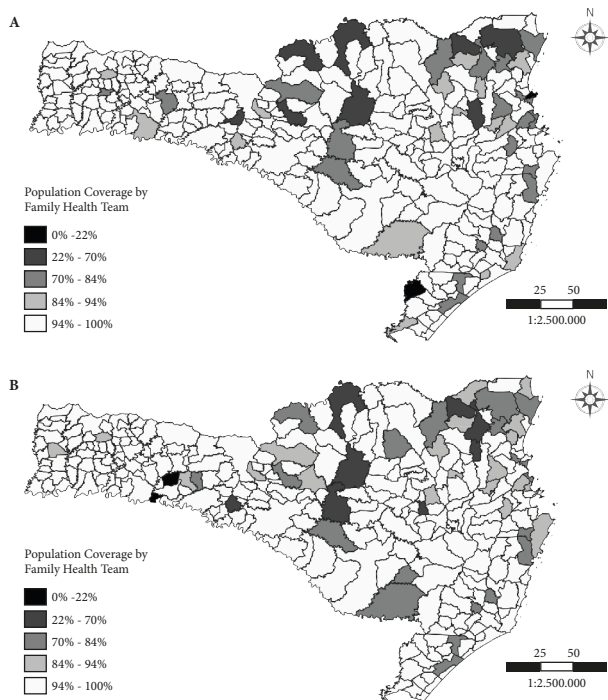
**Table 1** - Description of the different indicators. Santa Catarina, Brazil, 2017 and 2018

|   | 2017  |       |         |       |       |        |        | 2018  |       |         |       |       |        |        |
|---|-------|-------|---------|-------|-------|--------|--------|-------|-------|---------|-------|-------|--------|--------|
|   | Média | DP    | Mediana | P25   | P75   | Mínimo | Máximo | Média | DP    | Mediana | P25   | P75   | Mínimo | Máximo |
| Leprosy cure rate                           | 19.4% | 39.1% | 0.0%    | 0.0%  | 0.0%  | 0.0%   | 100.0% | 18.3% | 37.9% | 0.0%    | 0.0%  | 0.0%  | 0.0%   | 100.0% |
| Population coverage of Family Health Care   | 95.8  | 12.4  | 100.0   | 100.0 | 100.0 | 0.0    | 100.0  | 95.7  | 12.8  | 100.0   | 100.0 | 100.0 | 0.0    | 100.0  |
| Population coverage of Primary Health Teams | 82.8  | 25.3  | 100.0   | 65.4  | 100.0 | 0.0    | 100.0  | 82.4  | 25.5  | 100.0   | 66.7  | 100.0 | 0.0    | 100.0  |

Source: Researcher, 2020

In Figure 2 we can observe that the lower the intensity of the colors the greater the population coverage of family health and the population coverage of primary care. The vast majority of the municipalities in Santa Catarina in the 2017-2018 period had family health population coverage between 84 and 100%.

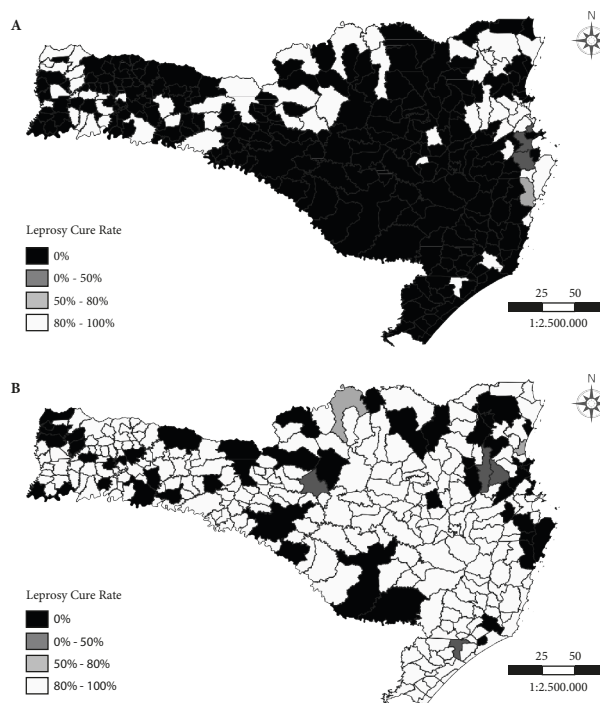
**Figure 2** - Map of family health population coverage. Santa Catarina, Brazil, 2017 (A) and 2018 (B)



Source: Researcher, 2020

In Figure 3 we can observe that the lower the intensity of the colors the higher is the Proportion of cure of new leprosy cases diagnosed in the years of the cohorts. However, the vast majority of municipalities in Santa Catarina in the period 2017-2018 were identified with the most intense color (darker), but this does not mean that the proportion of healing of leprosy was equal to zero, but rather, that there was no record of new cases according to the cohort years.

**Figure 3** - Map of the Proportion of healing of new leprosy cases diagnosed in the years of the cohorts. Santa Catarina, Brazil, 2017 (A) and 2018 (B)



Source: Researcher, 2020

In 2017, of the 295 municipalities, 59 had a leprosy cure ratio different from zero. Of these, 28, had 100% cure of leprosy with 100% family health coverage, of which 26 were municipalities identified with a population less than 40,000 inhabitants (Flor do Sertão was the municipality with the smallest population, 1,594 inhabitants) and São Miguel do Oeste, with the largest number of inhabitants (39,793); and only two, had a population greater than 200,000 inhabitants (Itajaí with 212,615 inhabitants and Florianópolis with 485,838 inhabitants).

Another 25 municipalities achieved 100% cure of leprosy with a family health population coverage that ranged from 49.17 to 97.45%. Of these, eight had a population larger than 100,000 inhabitants (ranging from 104,457 - Tubarão

to 577,077 - Joinville) and 17 had a population smaller than 100,000 (ranging from 4,192 - Modelo, to 82,842 - São Bento do Sul). Another two reached 50% cure with 100% coverage and, a population of 36,931 (Tijucas) and 66,558 (Biguaçu). One municipality achieved 81.82% cure of leprosy with a family health population coverage of 100%.

The others, a total of three municipalities, achieved a leprosy cure percentage between 50 and 83.33% with a family health population coverage between 76.20 and 81.66%. Of these, two municipalities had a population greater than 100,000 inhabitants (Palhoça with 164,925 inhabitants and São José with 239,718 inhabitants), and one municipality, with a population less than 100,000 inhabitants (Itapema - 61,187 inhabitants).

In 2018, of the 295 municipalities, 56 had the leprosy cure proportion different from zero. Of these, 30 had 100% leprosy cure with 100% family health population coverage, of which 28 were municipalities identified with a population less than 70,000 inhabitants (União do Oeste was the municipality with the smallest population, 2,517 inhabitants, and Biguaçu, with the largest number of inhabitants, 67,458); and only two, had a population greater than 100,000 inhabitants (Lages with 157,743 inhabitants and Itajaí with 215,895 inhabitants).

Another 17 municipalities achieved 100% cure of leprosy with a family health population coverage that ranged from 62.36 to 98.58%; and only one achieved 50% cure of leprosy with a family health population coverage of 100%. The others, a total of eight municipalities, achieved the leprosy cure rate between 50 and 92.31% with a family health population coverage between 66.72 and 96.15%. Of these, five had a population of more than 200,000 inhabitants (ranging from 213,023 to 583,144 inhabitants - Criciúma, Chapecó, Blumenau, Florianópolis, and Joinville), and three had a population of less than 70,000 inhabitants (ranging from 36,299 to 68,465 - Fraiburgo, Canoinhas, and Gaspar).

In this sense, when considering the years 2017 and 2018, 115 municipalities, of which 36 were present in both years, presented a proportion of cure different from zero. Of this total, 105 municipalities, which corresponds to 91.3%, had a healing proportion between 80 and 100%. Of these, 101 municipalities, that is, 87.8%, had a proportion of cure greater than 90%, which according to the parameters of the MH are classified as having a good performance.

The 36 municipalities that were present in both years, presented the following situation from one year to the other:

- 1) Five (Canoinhas, Chapecó, Criciúma, Gaspar, and Joinville) had an increase in family health population coverage, but there was a decrease in the leprosy cure rate, which means that the increase in coverage did not contribute for a better result in the indicator leprosy cure rate.
- 2) Two (Maravilha and São José), had a decrease in the population coverage of family health care and an increase in the leprosy cure proportion; even though there was a decrease in coverage, the municipalities managed to increase the cure indicator.
- 3) Three (Blumenau, Florianópolis and Fraiburgo) had a decrease both in family health population coverage and in the leprosy cure rate; this means that the decrease in

coverage contributed to a negative result in the leprosy cure rate indicator.

- 4) Two (Itapema and Palhoça), had an increase both in family health population coverage and in the leprosy cure proportion; this means that the municipalities managed to increase the leprosy cure proportion by expanding their coverage.
- 5) Thirteen (Água Doce, Anchieta, Dionísio Cerqueira, Irani, Itajaí, Lebon Régis, Princesa, Romelândia, São Carlos, São José do Cedro, Schroeder, Três Barras and União do Oeste), maintained the family health population coverage and the leprosy cure ratio equal to 100%;
- 6) Seven (Balneário Camboriú, Brusque, Caçador, Indaial, Porto União, Rio do Sul and São João Batista), had an increase in the family health population coverage and maintained the leprosy cure rate equal to 100%;
- 7) Three (Jaraguá do Sul, Navegantes and Tubarão), had a decrease in the family health population coverage while keeping the leprosy cure rate equal to 100%; despite the decrease in coverage, they managed to keep the leprosy cure rate at 100%.
- 8) One (Biguaçu), maintained 100% family health population coverage with an increase in the leprosy cure rate.

It is also important to highlight that in the year 2017 the State of Santa Catarina presented a leprosy cure proportion equal to 91.84%, which classifies the State with a good performance according to the MS parameter, having a state population coverage of family health equal to 87.93%. However, in the year 2018, although there was an increase in the population coverage of family health in the state to 89.88%, this did not reflect in the growth of the leprosy cure proportion, but rather, in a decrease, reaching the result of 87.30%, classifying the state with a regular performance in that year.

## DISCUSSION

The results of the study point out that the State of Santa Catarina presented a good performance<sup>3</sup> in meeting the goal pactuated in the year 2017 with respect to the proportion of cure of leprosy. However, it presented a regular performance in 2018. This shows that the increase in population coverage of family health/basic care observed in 2018 when compared to 2017, did not contribute to the better result of the indicator of leprosy cure proportion. This also shows the fragility of the health system in the development of actions to control and eliminate the disease.<sup>1</sup>

The great majority of the municipalities, in the two years evaluated, reached the goal recommended by the MH, being classified as having a good performance.<sup>3</sup>

A study conducted in Oman in the Middle East (2017) showed that the achievement of 100% cure of leprosy was due to good adherence to treatment by patients, reaching the end of treatment, and good access to health services, in addition to a strong political commitment, good coverage of MDT and a counseling service for patients.<sup>12</sup>

On the other hand, treatment failure is mainly associated with lack of patient and family commitment, lack of medication

in the basic health unit, lack of patient guidance, level of education, and side effects of medications.<sup>13</sup> In this sense, the fundamental role of health surveillance and the strengthening of primary care<sup>6</sup> as the gateway to health services in direct contact with patients and their families can be highlighted for treatment success.

Although the expansion of the FHS and consolidation of primary care have occurred in recent years, it is still necessary that SUS managers give due priority to leprosy, considering that it remains one of the leading causes of physical disability among infectious-contagious diseases,<sup>2</sup> significantly compromising family and social dynamics<sup>14</sup>.

The strengthening of leprosy control and elimination actions in primary care “increases the performance of early case detection, through health surveillance carried out in the units, contributes to the reduction of physical disabilities caused by the disease and reduction of stigma”.<sup>9,6,83</sup> The most effective cure for leprosy is closely linked to early detection of the disease.<sup>15</sup>

The indicator leprosy cure rate evaluates the quality of care provided to the person affected by the disease, expressing the effectiveness of the assistance provided to ensure adherence to treatment until discharge. It is a highly relevant indicator, since the cure will reflect in the reduction of the disease outbreaks and contribute to the prevention of physical disabilities.<sup>3,16</sup>

The knowledge of the leprosy cure rate indicator should guide the decision making of managers, technicians and health professionals regarding the management, planning, monitoring and evaluation of leprosy control actions<sup>3</sup> and elimination of leprosy as a public health problem, in addition to subsidizing the formulation of social policies and promoting the understanding of the influence of population coverage of primary care teams on the leprosy cure rate indicator.

However, there are still many challenges to be overcome for Brazil to become a leprosy-free country, according to what was proposed by the Global Strategy for Leprosy 2016-2020: early detection of leprosy and immediate treatment to prevent disability and reduce the transmission of infection in the community. This will contribute to the achievement of Sustainable Development Goal 3 - health and well-being for all by 2030.<sup>4</sup>

A limitation of the study is the use of secondary data extracted from the official databases of the State of Santa Catarina.

## CONCLUDING REMARKS

The results of the study point out that the State of Santa Catarina performed well in meeting the goal pactuated in the year 2017 with respect to the proportion of cure of leprosy. However, it presented a regular performance in 2018. This shows that the increase in population coverage of family health/basic care observed in 2018 when compared to 2017 and analyzed in isolation, did not contribute to the better result of the indicator of leprosy cure proportion.

Although the expansion of the FHS and the consolidation of primary care have occurred over the past few years, it is still necessary that SUS managers give due priority to leprosy,

because besides being a neglected disease, it is embedded in socioeconomic conditions, as well as disabilities that further aggravate the health and physical, emotional and socioeconomic well-being of people affected.

## REFERENCES

1. Ministério da Saúde (BR). Secretaria de Políticas de Saúde. Departamento de Atenção Básica. Guia para o Controle da hanseníase [Internet]. Brasília: Ministério da Saúde; 2002 [acesso em 18 de maio 2020]. Disponível em: [http://bvsmms.saude.gov.br/bvs/publicacoes/guia\\_de\\_hanseníase.pdf](http://bvsmms.saude.gov.br/bvs/publicacoes/guia_de_hanseníase.pdf).
2. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Boletim epidemiológico Hanseníase: 2018 [Internet]. Brasília: Ministério da Saúde [acesso em 12 de maio 2020]. Disponível em: <http://portalarquivos2.saude.gov.br/images/pdf/2018/janeiro/31/2018-004-Hanseníase-publicacao.pdf>.
3. Ministério da Saúde (BR). Secretaria de Vigilância em Saúde. Departamento de Vigilância das Doenças Transmissíveis. Diretrizes para vigilância, atenção e eliminação da Hanseníase como problema de saúde pública: manual técnico-operacional [Internet]. Brasília: Ministério da Saúde; 2016 [acesso em 18 de maio 2020]. Disponível em: <http://www.saude.pr.gov.br/arquivos/File/DiretrizesdoManualTcnicoOperacionaldeHansenase.pdf>.
4. Organização Mundial da Saúde (OMS). Estratégia Global para Hanseníase 2016-2020: Aceleração rumo a um mundo sem hanseníase. [Internet]. 2016 [acesso em 02 de junho 2020]. Disponível em: <https://apps.who.int/iris/bitstream/handle/10665/208824/9789290225201-pt.pdf?sequence=17>.
5. Brasil. Ministério da Saúde. Gabinete do Ministro. Portaria nº. 95, de 26 de janeiro de 2001. Aprova, na forma do Anexo desta Portaria, a Norma Operacional da Assistência à Saúde – NOAS-SUS 01/2001 que amplia as responsabilidades dos municípios na Atenção Básica; define o processo de regionalização da assistência; cria mecanismos para o fortalecimento da capacidade de gestão do Sistema Único de Saúde e procede à atualização dos critérios de habilitação de estados e municípios [portaria na internet]. Diário Oficial da União 29 jan 2001 [acesso em 12 maio 2020]. Disponível em: [https://bvsmms.saude.gov.br/bvs/saudelegis/gm/2001/prt0095\\_26\\_01\\_2001.html](https://bvsmms.saude.gov.br/bvs/saudelegis/gm/2001/prt0095_26_01_2001.html).
6. Vieira NF. Fatores relacionados ao desempenho da atenção primária à saúde nas ações de controle da hanseníase. [Doutorado em Enfermagem]. Belo Horizonte (Brasil): Universidade Federal de Minas Gerais; 2019. [acesso em 12 de maio 2020]. Disponível em: [https://repositorio.ufmg.br/bitstream/1843/ANDO-9VMJKS/1/nayara\\_figueiredo\\_vieira.pdf](https://repositorio.ufmg.br/bitstream/1843/ANDO-9VMJKS/1/nayara_figueiredo_vieira.pdf).
7. Brasil. Ministério da Saúde. Gabinete do Ministro. Portaria nº. 2.436, de 21 de setembro de 2017. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes para a organização da Atenção Básica, no âmbito do Sistema Único de Saúde (SUS) [portaria na Internet]. Diário Oficial da União 22 set 2017 [acesso em 12 maio 2020]; Seção 1, (68). Disponível em: [https://bvsmms.saude.gov.br/bvs/saudelegis/gm/2017/prt2436\\_22\\_09\\_2017.html](https://bvsmms.saude.gov.br/bvs/saudelegis/gm/2017/prt2436_22_09_2017.html).
8. Saltarelli RMF, Seixas DHT. Limites e possibilidades na atenção ao portador de hanseníase no âmbito da estratégia saúde da família. Rev. APS. [Internet]. 2016 [acesso em 12 de maio 2020]; 19(4). Disponível em: <https://periodicos.ufjf.br/index.php/aps/article/view/15557>.
9. World Health Organization (WHO). Neglected tropical diseases. [Internet]. 2020 [cited 2020 may 12]. Available from: [http://www.who.int/neglected\\_diseases/diseases/en/](http://www.who.int/neglected_diseases/diseases/en/).
10. Organização das Nações Unidas (ONU). Cartilha sobre os Objetivos de Desenvolvimento Sustentável. [Internet]. 2020 [acesso em 02 de junho 2020]. Disponível em: [www.br.undp.org/content/dam/brazil/docs/ODS/undp-br-ods-FAQ.pdf](http://www.br.undp.org/content/dam/brazil/docs/ODS/undp-br-ods-FAQ.pdf).
11. Organização das Nações Unidas (ONU). Agenda 2030. [Internet]. 2020 [acesso em 02 de junho 2020]. Disponível em: <https://naacoesunidas.org/pos2015/agenda2030/>.
12. Al Awaidy ST. Progress towards a leprosy-free country: The experience of Oman. *PLoS Negl Trop Dis*. [Internet]. 2017 [cited 2020 Jun 01]; 11(11). Available from: <https://doi.org/10.1371/journal.pntd.0006028>.
13. Ribeiro MDA, Castilho IS, Silva JCA, Oliveira SB. A visão do profissional enfermeiro sobre o tratamento da hanseníase na atenção básica. Rev Bras Promoç Saúde. [Internet]. 2017 [acesso em 18 de maio 2020]; 30(2). Disponível em: <https://periodicos.unifor.br/RBPS/article/view/6349>.

14. Oliveira RG de. Sentidos das Doenças Negligenciadas na agenda da Saúde Global: o lugar de populações e territórios. *Ciênc. saúde coletiva*. [Internet]. 2018 [acesso em 12 de maio 2020]; 23(7). Disponível em: <https://www.scielo.br/pdf/csc/v23n7/1413-8123-csc-23-07-2291.pdf>.
15. Cruz A. Uma cura controversa: a promessa biomédica para a hanseníase em Portugal e no Brasil. *Physis*. [Internet]. 2016 [acesso em 03 de junho 2020]; 26(1). Disponível em: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0103-73312016000100025&lng=pt](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-73312016000100025&lng=pt).
16. Ministério da Saúde (BR). Secretaria de Gestão Estratégica e Participativa. Departamento de Articulação Interfederativa. *Caderno de Diretrizes, Objetivos, Metas e Indicadores: 2013 – 2015*. Brasília: Ministério da Saúde; 2013. 156 p.

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