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Clinical and epidemiological aspects of leprosy in the elderly

Aspectos clínicos e epidemiológicos da hanseníase em idosos

Aspectos clínicos y epidemiológicos de la lepra en el adulto mayor

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ABSTRACT

Introduction: In the last few decades the number of elderly people in Brazil has presented a significantly increase and comorbidities as leprosy directly impacted their health. **Aim:** To evaluate the clinical and epidemiological aspects of the leprosy in the elderly population in municipalities with high endemicity in the state of Piauí, from 2001 to 2014. **Outlining:** Transversal study with 206 new cases of leprosy as from 60 years old, living in Picos and Floriano in the 2001 to 2014 period, notified in the Information System for Notifiable Diseases. **Results:** the average age was 71 years old, 52.9% was male, 39.3% did not attend to school, 58.7% received up to two minimum wages, 49% of the participants were ranked as multibacillary, 29,1% presented the clinical form borderline and 49% with zero-degree functional disability. It was verified statistically significant association of the degree of physical disability with the living municipality and dyslipidemia and between leprosy reactions and gender, being male increased the chances of having a leprosy reaction by 5.54 times. **Implications:** The study highlighted that the leprosy represents serious health problem for the elderly and suggests the need for control and surveillance actions through public policies.

DESCRIPTORS

Leprosy; Aged; Epidemiology; Nursing.

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INTRODUCTION

The aging process is a reality in Brazil and in the world, which increases the need for public policies focused on the quality of life of the elderly. Longevous people usually have chronic comorbidities, as leprosy, which, associated to the biopsychosocial transformations usual of old, can affect their lives due to the burdens arising from the disease.¹

Brazil is an endemic country for leprosy. It is estimated that approximately 12 new cases per 100,000 inhabitants occur annually, being an expressive public health problem and that requires the attention of the health professionals.² It is an infectious disease caused by *Mycobacterium leprae*, of slow evolving, which hits cutaneous cells and peripheral nerves and usually causes physical disabilities and mental disorder, mainly related to its stigmatization.³

Leprosy's distributions occur unevenly all around the world, having high endemicity agglomerates in some countries like Brazil, India and Indonesia, which are responsible by 81% of the new cases of the disease in the world. In Brazil, in 2019, the detection rate of new cases was 11.24/100,000 inhab., which corresponds to a high standard of endemicity. Leprosy's detection rates in Brazil are diversified by regions and the Midwest, North and Northeast regions still present those high rates, demonstrating, respectively, 33.84/100,000 inhab., 24.95/100,000 inhab., and 17.08/100,000 inhab. rates.³

Leprosy is considered a social disease, linked to the socioeconomic conditions of the persons who, mostly, live in precarious and Society-far situations. Moreover, the deformities due the grievance as limbs' alterations, blindness, spots on the skin, among other, can worsen social life, which makes those people stay unsupported by the necessary care.⁴

The lack of adequate treatment enables the worsening of the clinical condition, which leads to

physical and psychological pain and social malaise. Interventions aiming those people's improvement of life conditions, mainly done by the nursing staff, are important. Through actions that guide and take off doubts, the team can prevent new cases and promote health.²

The epidemiological surveillance must be organized all over the complexity levels of the Healthcare System, with actions in the high endemicity areas focusing the detection of new cases to interrupt the transmission chain and to prevent physical incapacities.³ In this perspective, the health professionals of all levels of healthcare must be trained for handling leprosy and whole network must be structured and organized for the attention.⁵

It is necessary that the researches approach the epidemiological, social and clinical questions related to the leprosy in areas considered as with higher social vulnerability and, consequently, of high endemicity, to improve the resolute ability of the health services for opportune preventing, diagnosis and treatment, especially by considering the complexity of the leprosy as public health problem in the elderly population. The organization of the system for an efficient care for this population is one of the main challenges the health sector must face, particularly regarding the leprosy, once it can cause incapacity which will impact even more in the health quality of these people.

Before the problem in the exposed, the aim of this study was to evaluate the clinical and epidemiological aspects of leprosy in elderly in cities of high endemicity in the state of Piauí, during the period from 2001 to 2014.

METHOD

This is a transversal analytic study, carried out as from the Information System for Notifiable Diseases (SINAN), and inserted in a macro project of Operational Research in Health of the Graduate

Program in Nursing of the Federal University of Piauí, entitled “IntegraHans Piauí: Integrated approach of clinical, epidemiological (spatiotemporal), operational and psychosocial of the leprosy in Piauí’s cities with high endemicity”, previously submitted for authorization both in the state and municipal health offices of Floriano and Picos and approved by the Research Ethics Committee/UFPI (CAAE: 46169715.2.00005214) according to the pronouncement nº 1.115.818.

The research was conducted in accordance with ethical standards, pursuant the Resolution nº 466/12 of the National Health Council.⁶ It is highlighted that both the inquiry as the physical exam only were performed after the signing of the Informed Consent Form by the partakers.

It sought to approach the whole population with leprosy’s diagnosis living in the municipalities of Floriano (n=1,076) and Picos (689) during the 2001 to 2014 period (N=1,765 persons) and included in the SINAN. The addresses of 995 cases were identified, 602 in Floriano and 393 in Picos, among which 120 missed the scheduling and 256 were not approached due not being scheduled, once there were some incomplete or inexistent addresses and some either moved out or died. Thus, the population resulted in 619 cases (Floriano: n=334; Picos: n= 285).

The sample consisted of by those who match the following inclusion criteria: being 60 or over, both sexes, to have permanent residence in either Floriano or Picos municipalities. Cases of duplicity or incomplete data in SINAN records were excluded, resulting in 206 cases.

Data collection in the SINAN was carried out by the researchers between July and December 2016 and consisted of two stages: the location of the addresses on the platform and home visiting to all partakers. On the home visiting, the participants were invited to present themselves in locals and dates established in the healthcare unit (UBS) closest to their homes.

Two instruments were employed: sociodemographic and economic data survey of the elderlies with leprosy and survey of clinical data (comorbidities, operational classification, clinical form in the diagnosis, leprosy reactions, degree of disability during diagnosis and simplified neurological evaluation). All the instruments were validated within the actions of the Project North/Northeast IntegraHans, in 2014, coordinated by the Federal University of Ceará.

All information was consolidated into a database. The variables studied were: sociodemographic data (age, gender, race/color, educational attainment, occupation, marital status, individual income) and clinic-epidemiological data (comorbidities, operational classification, clinical form in the diagnosis, leprosy reactions and degree of disability during diagnosis).

The version 20.0 of the Statistical Package for the Social Science (SPSS) was utilized for the analysis. The association of the qualitative variables was made through Person’s qui-square test and/or Fisher’s exact test. A dispersion graph was generated with the linear correlation coefficient (r^2) between the number of wounds in the diagnosis and the age for calculating the relationship strength between the two variables. Values of r ranging from 0.1 to 0.3 were considered as weak, the ones ranging from 0.4 to 0.6 as moderated, and the ones ranging from 0.7 to 1 were considered as strong.⁷The logistic regression, by means of the Odds Ratio (OR), has been used to explain the joint effect of the variables on the outcomes. The inclusion criterium ann significance of the variables in the model was the association in $p \leq 0,05$ level, the same adopted in the multivariate model.

RESULTS

206 new cases of leprosy in elderlies partook the study, notified in the SINAN in the 2001 to 2014

period, resident in the municipalities of Floriano (107) and Picos (99), in the state of Piauí.

Table 1 brings the sociodemographic data. The average age was 71 years (DP±8), 182 with age ranging from 69 to 79 years, 109 (52.9%) male, 86

(41.7%) pardo, 81 (39.3%) did not attend to school, 87 (42.2%) married, 83 (39.3%) employed in the formal labor market and 121 (58.7%) with an up to two minimum wage income.

Table 1 - Sociodemographic characterization of the elderlies with leprosy living in the municipalities of Floriano and Picos notified in the 2001 to 2014 period. Teresina, Piauí, 2019 (n=206).

Variables	n	%
Age		
60 - 79	182	88.3
80 and above	24	11.7
Gender		
Male	109	52.9
Female	97	47.1
Race		
Caucasian	37	18.0
Pardo	86	41.7
Black	51	24.8
Other (Asian, indigenous)	32	15.5
Years in school		
None	81	39.3
1 - 4	63	30.6
5 - 8	36	17.5
9 - 11	10	4.9
≥ 12	16	7.8
Marital status		
Single / Never married before	42	20.4
Married / Living together	87	42.2
Divorced/widower	77	37.4
Labor situation		
Do not work	18	8.7
Formal labor market	83	40.3
Housewife	18	8.7
Retired	59	28.6
Individual income		
Without income	22	10.7
< 1 MW	29	14.1
1 to 2 MW	121	58.7
+ 2 MW	26	12.6
Did not answer	8	3.9

Legend: MW = Minimum Wage R\$ 788.00 (for the year 2015).

Source: Direct search.

Table 2 has the data referring to the clinical characterization of the partakers. It is found that the prevalent operational classification was the multibacillary one, occurring in 101 (49%) cases. The clinical form borderline occurred in 60 (29.0%) cases. As to the Degree of Physical Incapacity (DPI), 101 (49%) presented zero, 115 (55.8) presented from 1 to

5 wounds, with average of 4 wounds per elderly (DP±6) and 25 (12.1%) had some sort of leprosy reaction. Hypertension (35%), dyslipidemia (22.8%) and diabetes (17%) are among the most highlighted comorbidities.

Table 2 - Clinical characterization of the elderly with leprosy living in the municipalities of Floriano and Picos notified in the 2001 to 2014 period. Teresina, Piauí, 2019 (n=206).

Variable	n	%
Operational classification		
Paucibacillary	86	41.7
Multibacillary	101	49.0
No information	19	9.3
Clinical Form		
Undetermined	59	28.6
Tuberculoid	37	18.0
Borderline	60	29.1
Virchowian	30	14.6
Ignored	20	9.7
DPI		
Zero	101	49.0
1	30	14.6
2	4	1.9
Ignored	71	34.5
Number of wounds		
None	34	16.5
1 to 5	115	55.8
6 or more	38	18.4
Without information	19	9.3
Leprosy reactions		
Never had	181	87.9
Some reactions at some moment	25	12.1
Visual impairment		
Yes	72	35.0
No	134	65.0
Comorbidities (*)		
Hipertension	72	35.0
Dyslipidemia	47	22.8
Diabetes	35	17.0
Depression	22	10.7
Dermatosis	16	7.8
Nephropaty	16	7.8
Liver disease	11	5.3
Tuberculosis	2	1.0

Legend: DPD = Degree of Physical Incapacity; (*)Multiple-choice answer.

Source: Direct search.

Table 3 shows the association of the operational and clinical classification, DPD and leprosy reactions with the sociodemographic and clinical characteristics of the elderly partakers of the study. It was observed that DPD was statistically

associated with the municipality of residence ($p < 0.001$) and with the dyslipidemia ($p = 0.050$), while the leprosy reactions were associated with the gender ($p = 0.001$).

Table 3 - Association of operational and clinical classification, degree of physical incapacity and leprosy reactions with sociodemographic and clinical characteristics of the elderly with leprosy resident in the municipalities of Floriano and Picos during the 2001 to 2014 period. Teresina, Piauí, 2019 (n=206).

Variable	Operational classification	Clinical classification	DPI	Leprosy reactions
	p-Value(*)	p-Value(*)	p-Value(*)	p-Value(*)
Municipality of residence	0.431	0.106	0.000	0.320
Gender	0.097	0.720	0.966	0.001
Race	0.995	0.739	0.686	0.757
Age	0.702	0.575	0.454	0.504
Years in school	0.762	0.495	0.987	0.656
Marital status	0.735	0.164	0.846	0.584
Current labor situation	0.980	0.938	0.654	0.127
Individual income (**)	0.875	0.989	0.259	0.896
Diabetes	0.734	0.237	0.565	0.152
Depression	0.264	0.393	0.839	0.736
Visual impairment	0.835	0.730	0.147	0.094

Dyslipidemia	0.231	0.234	0.050	0.880
Nephropaty	1.000	0.288	0.912	1.000
Liver disease	0.323	0.600	0.932	0.367
Tuberculosis	0.176	1.000	0.590	0.229
Dermatosis	0.520	0.124	0.801	0.420

Legendd: DPD = Degree of Physical Incapacity; (*)p-value determined by Person's qui-square test or Fisher's exact test; (**) Minimum wage at the time: R\$ 788.00.

Source: Direct search

In table 4, it can be observed that, in the sample corresponding to Floriano, having dyslipidemia increased by 4.27 the odds of presenting DPD 2 when compared to those from Picos. However, that association was not statistically significant

($p=0.998$; $IC95\%=0,000 - 4,270$). The sample from Picos had a DPD ignored by 61% when compared to Floriano ($p= 0,005$; $IC95\%=0,203 - 0,751$).

Table 4 - Analysis of the multinomial logistic regression of factors associated with DPI. Teresina, Piauí, 2019 (n=206).

DPI		p-Value	OR	IC 95%
1	With dyslipidemia	0.588	1.337	0.467 - 3.825
	Without dyslipidemia	-	1	-
	Picos	0.353	1.497	0.639 - 3.505
2	Floriano	-	1	-
	With dyslipidemia	0.998	4.270	0.000 - 4.270
	Without dyslipidemia	-	-	-
Ignored	Picos	-	-	-
	Floriano	-	-	-
	With dyslipidemia	0.044	2.129	1.019 - 4.448
Ignored	Without dyslipidemia	-	1	-
	Picos	0.005	0.390	0.203 - 0.751
	Floriano	-	1	-

Legenda: DPI = Degree of Physical Incapacity.

Source: Direct search.

In the Table 5 it can be verified that being male augmented by 5.54 the odds of presenting leprosy reaction.

Table 5 - Multinomial regression of the leprosy reaction with gender. Teresina-PI, 2019 (n=206).

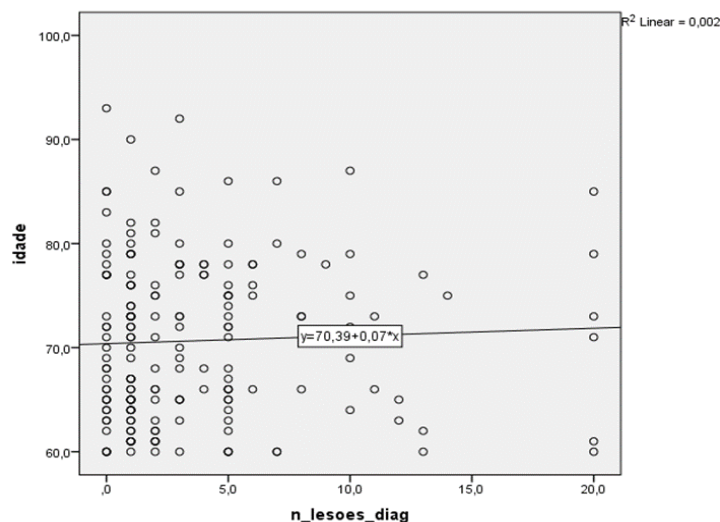
Gender	Leprosy Reaction		
	p-value	OR	IC 95%
Male	0.002	5.548	1.832 - 16.806
Female	-	1	-

Fonte: Pesquisa direta.

Graph 1 shows the linear correlation between number of wounds during the diagnosis and age, indicating that there is a weak correlation ($R^2=0,002$),

that is, the increase of the age does not interfere in the number of wounds presented by the elderlies.

Graph 1 - Linear correlation between number of wounds during the diagnosis and age. Teresina, Piauí, 2019 (n=206).



Fonte: Pesquisa direta.

DISCUSSION

Brazilian population will present an increase in the total number of elderlies of more than 4% per year until 2022, mainly in the 60 to 70 years-old age range.⁸ The development of daily activities by these longevous is quite common, considering they're more active and made them with no aid. In the present study, most of the cases was in the 60 to 79 years-old age range, group that fastest grows in the country, requiring greater attention by the public healthcare, considering that leprosy can spoil the quality of life of this population, by incapacitating and debilitating the individual.¹

The elderlies are more vulnerable to leprosy due the social context and socioeconomic conditions they are within. Among the main sociodemographic characteristics pointed out by the literature are race/color, gender, educational attainment and socioeconomic conditions, which are aspects that directly impacts leprosy's development.⁹⁻¹⁰

The results made explicit that the pardo color, followed by black color, low educational attainment, and low family income had higher prevalence among the analyzed data. As to the race/color, although Brazilian population is mostly composed of pardo, the results demonstrated that black was the more

affected by leprosy, as they are in a situation of greater vulnerability in comparison to the other social groups. Besides that, it suffers more stigma and prejudice that hamper the access to a quality of life.^{11,9}

Low educational attainment hampers the adhesion to the protective measures, treatment and control of this disease. In addition, the elderlies present a routine with paradigms about their experiences and learnings obtained during all over the life, which makes the promotion of education on health difficult.¹²

Good socioeconomic conditions can enable population's quality of life. Family income allows elementary needs to be suppressed, such as food, home, water, electricity, health among other, although there exist countless governmental programs and free treatment in the healthcare system.¹² In this sense, low income of the elderlies participants of the study harms the access to healthcare, once it is necessary a good economic structure to use the services and devices. Without his last one, many end up depending on government programs, which usually are slow and with care deficits. So, it was verified that leprosy is related to the social context and is associated with

socioeconomic conditions. This fact significantly contributes to increase the risk of getting sick, besides of contributing for the stigma and neglect of the disease, complicating its solving as public health problem.¹

The gender male predominated the study, despite of having no significant association with the operational and clinical classification and the degree of physical incapacity. However, being male augmented the odds for presenting leprosy reaction when compared to the female gender. Men present higher risk to the disease, considering they go less to the physician and the seek for health centers does not happen efficiently, mainly because men have a conservator behavior regarding their bodies. The seek for healthcare happens, mostly, when there is a physical limitation due the disease which is hindering them of performing commonplace activities.¹³ It is known that the seek for continuous treatment either avoids the emergence of leprosy reactions or guarantees that the handling occurs quickly, avoiding the patient to have complications.¹¹

Elderlies who either kept marital relationships or had some sort of job were the most affected. The elderlies generally value the union and feel more secure in the familiar environment, hence, need actions to avoid the transmission. Leprosy's transmission is related to the social interaction and prolonged contact. Crowded places enable higher transmission, hence more sick persons. Due this, it is important that this group of people with the disease receive the treatment and specific orientations in order to avoid the transmission of the bacilli.¹⁴

In relation to the clinical conditions of the studied population, it was verified the presence of comorbidities usual in the elderlies, which are associated with the use of continuous medicaments and with the reduction of the comfort, due bringing emotional, social and physical disturbances. The arterial hypertension and diabetes, among the three most prevalent comorbidities in the studied

population, are considered chronic problems that affect the elderly causing problems which directly spoil their quality of life. They are considered crippling diseases due reducing the ability of the elderly for performing their daily/instrumental activities without aid. And being associated with leprosy, they can further contribute to a decline in senile health.¹⁵

Having dyslipidemia demonstrated significant association with the DPI. Due being a clinical condition prevalent among elderlies, because of the decreased metabolism by diseases usual in the age which cause secondary dyslipidemia, in the present study, it can be considered as a confounding variable, once it can be associated to conditions that may led impaired mobility.²

Studies corroborate on the aggravation of the clinical condition of the leprosy elderly by the presented comorbidities, what requires continuous monitoring by the health professionals. Besides that, the problematic of the polypharmacy and of the Polychemotherapy, which, either put together or alone, influence in the welfare and in the quality of life of the elderlies.¹⁶⁻¹⁷

Also referred by the elderlies, the depression, that may be a problem in consequence of the stigma of the disease. The process of rejection by the Family members and close persons, also as patient's lack of knowledge, favoring the reclusion which facilitates psychic suffering. Another reason would be the physical deformities and skin wounds, which cause certain social impact. This problem exists since the first cases of the disease and lasts until the present day, although there are public policies that intervene in this.¹³

Adding up the fact that the mental disorders related to the humor affect the elderlies a lot, once the aging process debilitates the performing of routine activities. This associated with leprosy making worse the clinical condition, because this last one is characterized by compromising body's motor

functions. The body becomes more fragile and, as mentioned above, can compromise the selfcare and the development of daily functions, that is, can bring more dependency, which generates a feeling of impotence and uselessness.¹⁸

Leprosy is operationally ranked in accordance with the number of wounds into Paucibacillary (PB), corresponding to the cases with up to five wounds and that include the indetermined clinical form and the tuberculoid one, and into Multibacillary (MB), corresponding to the cases with up to five wounds and that show up in the borderline clinical form and in the Virchowian one. This rank is important, once, in accordance with it, both the treatment the patient will be underwent and the duration of the treatment will be determined.¹⁹

Analyzing the clinical data of the disease in the partakers of the study, it was verified that most was ranked as multibacillary and presented the borderline clinical form. When it comes to the elderlies, probably the diagnosis was late, since the multibacillary form is more related to the late or inopportune diagnosis.¹⁹ Besides that, these clinical conditions favor a possible neural commitment in patients who already have a risk for functional deficit due the aging itself.¹

The minority of the participants presented leprosy reactions, even for the elderlies. The leprosy reactions are closely related to patient's immune system and regardless the receipt of the PQT, because relates to an antigen/antibody reaction, immunity and bacillary load of the stricken one. The reactions require full attention, once they are the main cause of problems in body's innervations, of physical incapacities and of death. The senior presents a reduced mobility usual at the age and, care must be taken to avoid them to get their daily activities more harmed and, hence, affecting their emotional.²⁰

The physical incapacities are usual consequences of the leprosy, mainly when it comes to

the elderly, as they usually present themselves more aggressively as the individual is more fragile. It observed that the Degree of Physical Incapacity presented correlation with the municipality of residence. It is known that the studied municipalities are located inner the state and, thus, different from capitals, have less resources and, several times, present a neglected healthcare system.¹⁵

Besides that, in these smaller cities ranked as hyperendemic, it is usual the prevalence of a higher DPI due the lack of knowledge on leprosy compared to large capitals. Studies indicate that inner cities, even with high number of notified persons, are neglected as to the control of epidemics, contributing for the chain of transmission and, consequently, complications of the disease.^{20,14} What can also contribute for this, in addition to the deficiency of public policies, is the lack of incentive for continue the treatment and the late and inopportune diagnosis, leading to DPI. This situation is quite usual, because the country has an extensive territory, what harms the carrying out of an integrated care.

A study carried out in the city of Floriano pointed out that rates remained high between 2001 and 2014, being ranked as hyperendemic with continued transmission of the disease. The analysis of the indicator proportion of cases healed in the year with some degree of incapacity evaluated points of failure in the service offered by the municipality in the initial years of the series (2002-2008), especially in 2007, when the percentage was only 22.2%, inferring that the quality of care provided by health services in this period was not being effective.^{8,19} It is highlighted that providing forwarding of the patients of such municipalities for services that offer rehabilitation assisted by physiotherapists is a duty for the competent authorities, since this professional is not always included in the programs of the basic healthcare units.

It was also observed weak correlation between the variables increase of age of the seniors and the

number of wounds. The number of wounds will depend on disease's evolution time, person's immune system, diagnosis and start of the treatment. Although immune system of the persons stricken by leprosy is a preponderant factor and elderly have a more fragile immune system, the curve kept stable.¹¹

Thus, it is found that physical, social, psychic, cultural and demographical aspects are conditioning factors to the presence of the bacillus causing leprosy. It is important to evaluate these conditions, because simple actions for promoting and of surveillance in health can avoid the transmission of the disease. Measures as active search for senior in hangouts, the carrying out of educational campaigns for caretakers and family members, to instruct professionals and managers on the leprosy problem in the elderly population and the carrying out of exams of home and social contact can be adopted.

It is highlighted that the awareness formation on neglected diseases, as leprosy, is still fragile, considering that many people still don't have access to healthcare services and usually have less knowledge about those diseases and less practices of health promotion, exposing themselves more easily to risk situations. This exposure makes the infections to keep being transmitted, once the persons don't know them and there is no concern with the treatment and healing.²²

The healthcare professionals must be watchful to the questions that may leave to the

non-treatment, which may aggravate the existent wounds and lead, consequently, to the arrival of incapacitant damages which cause more suffering to the sick, especially when dealing with elderly patients. In addition, to observe the economic and social factors that can lead to social isolation,²³ as they contribute to the stigma and neglect of the disease.

As a limitation of this study, there is the use of secondary data that led to the loss of some initial information, which were mostly bypassed during the interviews.

CONCLUSION

Based on the results of this study, it was found that gender, education, income and clinical conditions are risk factors for the development of leprosy in the elderly population in the municipalities analyzed, which indicates the need for health control and surveillance actions through public policies. It is recommended to carry out more researches like this and increases in the articulation of public social and health policies for the elderly population, aiming at access, timely diagnosis, prevention of physical disabilities, rehabilitation and quality of care in health services at all levels of care and, primarily, in primary health care.

RESUMO

Introdução: Nas últimas décadas, o número de idosos apresentou um aumento significativo no Brasil e comorbidades como a hanseníase impactaram diretamente na saúde dos senis. **Objetivo:** Avaliar os aspectos clínicos e epidemiológicos da hanseníase na população idosa em municípios de alta endemicidade no Piauí, de 2001 a 2014. **Delineamento:** Estudo transversal com 206 casos novos de hanseníase a partir de 60 anos, residentes em Picos e Floriano no período de 2001 a 2014, notificados no Sistema de Informação de Agravos de Notificação. **Resultados:** A média de idade foi de 71 anos, 52,9% do sexo masculino, 39,3% sem escolaridade, 58,7% recebiam até dois salários-mínimos, 49% dos participantes foram classificados como multibacilares, 29,1% apresentavam forma clínica dimorfa e 49% com grau zero de incapacidade funcional. Verificou-se associação estatisticamente significativa do grau de incapacidade física com município de residência e dislipidemia e de reações hansênicas com sexo, sendo que ser do sexo masculino aumentou em 5,54 vezes as chances de apresentar reação hansênica. **Implicações:** O estudo evidenciou que a hanseníase representa sério problema de saúde para os idosos e sugere a necessidade de ações de controle e vigilância por meio de políticas públicas.

DESCRITORES

Hanseníase; Idoso; Epidemiologia; Enfermagem.

RESUMEN

Introducción: En las últimas décadas, el número de ancianos ha aumentado significativamente en Brasil y comorbilidades como la lepra han tenido un impacto directo en la salud de los seniles. **Objetivo:** Evaluar los aspectos clínicos y epidemiológicos de la lepra en la población anciana de municipios de alta endemia en Piauí, de 2001 a 2014. **Delineación:** Estudio transversal con 206 casos nuevos de lepra mayores de 60 años, residentes en Picos y Floriano de 2001 a 2014, notificados en el Sistema de Enfermedades de Declaración Obligatoria. **Resultados:** La edad promedio fue de 71 años, el 52,9% eran del sexo masculino, el 39,3% no tenían escolaridad, el 58,7% recibían hasta dos salarios mínimos, el 49% de los participantes se clasificaron como multibacilares, el 29,1% tenían condición clínica límite y el 49% con cero grado de discapacidad funcional. Hubo asociación estadísticamente significativa entre el grado de discapacidad física y el municipio de residencia y la dislipidemia y las reacciones leprosas con el género, siendo el sexo masculino un aumento de 5,54 veces la probabilidad de tener una reacción leprosa. **Implicaciones:** El estudio mostró que la lepra representa un grave problema de salud para los ancianos y sugiere la necesidad de acciones de control y vigilancia a través de políticas públicas.

DESCRIPTORES

Lepra; Anciano; Epidemiología; Enfermería.

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COLLABORATIONS

PIGM e CPBV: substantial contributions in the conception or design of the work; in the analysis and interpretation of data; and article's writing or in its critical review. TMEA, ODA e JAC: substantial contributions in analysis and interpretation of the data; and article's writing or in its critical review. **All authors agree and are responsible for the content of this version of the manuscript to be published.**

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Not applicable.

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CONFLICTS OF INTEREST

There are no conflicts of interest to declare.