





# Profile of health conditions of elderly quilombolas in the municipality of Bequimão, Maranhão: data from IQUIBEQ

Claudia Silva Pinto<sup>1</sup>, Getúlio Rosa dos Santos Junior<sup>1</sup>, Rosiany Pereira da Silva<sup>1</sup>, Bruno Luciano Carneiro Alves de Oliveira<sup>1</sup>, Francisca Bruna Arruda Aragão<sup>2</sup>, Andressa Rayane Viana Barros<sup>1</sup>, Andréa Suzana Vieira Costa<sup>1</sup>.

## ABSTRACT

**Objective:** to analyze the health conditions of elderly quilombola women living in a city in the interior of the state of Maranhão, Brazil. **Method:** This is a cross-sectional, household-based study conducted in 11 remaining quilombola communities in the Municipality of Bequimão, Maranhão. A census of the quilombola elderly population was carried out, which was represented by 132 elderly women  $\geq 60$  years of age. The data were analyzed in the Stata<sup>®</sup> version 14 program, with descriptive statistics techniques. **Results:** the median of the elderly women was 70 to 79 years old, (61.4%) declared themselves as black in color/race; (32.6%) were widows, 53.8% of the women cannot read and write. Regarding their health status, 60.6% reported having two or more chronic conditions, 38.8% had had a cervical cancer preventive exam at least 3 years ago. Most elderly women had never had a mammogram (67.2%) and had never been submitted to a clinical examination of the breasts (56.9%). **Conclusion:** Most elderly quilombola women live in precarious socioeconomic, sanitary, and health situations; among them, the prevalence of multi-morbidity was high.

**Keywords:** Elderly, Women's health, Health of the black population, Group with ancestors of the African Continent, Health surveys.

## INTRODUCTION

Aging is a natural process, in which the person tends to become gradually more vulnerable and dependent to perform their daily life activities. Therefore, old age is lived in a variable way, according to the material conditions of production and social reproduction, that is, the social status of old age depends on the class insertion<sup>1,2,3</sup>. The differences experienced by social classes throughout the life cycle draw different old ages<sup>1</sup>. It is not a homogeneous process, rich and poor do not experience it in the same way<sup>3</sup>.

The growth of the elderly population has been characterized as a phenomenon that is gaining more and more expression on the world stage. The elderly represent 12% of the world population, and this number is expected to double by 2050<sup>4</sup>. On the national scenario, the elderly contingent grew from 3 million in 1960, to 7 million in 1975, and 14 million in 2002, surpassing the 30.2 million mark in 2017<sup>4,5</sup>. In the year 2000, the Brazilian elderly population grew eight times

more than the young population<sup>5</sup>. Of this universe, females represented 55.7% compared to males. There are still a higher number of women among the elderly, especially over 80 years old<sup>6</sup>.

However, throughout the life cycle, disadvantages between blacks and whites appear in several dimensions, such as schooling and formal employment, aspects that are closely related<sup>7,8</sup>. The unemployment rate among blacks is 41% higher than among whites. The income of the black population is 40% lower than that of the white population<sup>8</sup>.

The participation of the elderly in family income is increasingly significant. At the beginning of the 1980s, the contribution of the elderly was 37%; in the 1990s, it rose to 47.2% and, in 2007, in 53% of the households with elderly people in the country, more than half of the income was provided by people aged 60 or over. In rural areas, the contribution of the elderly in the family budget reached 67.3% of the households in 2007<sup>9</sup>.

Regarding health services in Brazil, more than 80% of the elderly depend exclusively on

<sup>1</sup> Federal University of Maranhão, Pinheiro Campus, Pinheiro, (MA), Brazil

<sup>2</sup> University of São Paulo, Ribeirão Preto, (SP), Brazil



UHS for their health care<sup>1,7,10</sup>. This proportion is even higher among blacks and the poor, since racism and discrimination are considered determinants associated with illness and early death among black and low-income women and men<sup>1,7</sup>.

The health of black elderly women is not an area of knowledge or a relevant field in the Health Sciences. A brief review of the journals available in the SciELO virtual library allows us to verify this scarcity: a simple search with the descriptors "black women's health" offers 33 national articles published from 2004. And with the descriptors "health of elderly black women" and "health of elderly black quilombola women" no articles were found.

Finally, it is within the fragile structure of the quilombola communities that the elderly quilombola woman plays several important roles for the survival of her people, her culture and the very subsistence of her descendants<sup>15</sup>. The greatest concern with the issue of population aging and, especially, with the female population, stems from the fact that this contingent is seen as dependent and vulnerable. And that in their last stage of life, which is associated with the withdrawal from economic activity, with increasing morbidity rates, mainly due to chronic diseases, with changes in physical appearance, besides the appearance of new social roles, such as being grandparents or family heads, as a result of widowhood.

Therefore, this study aimed to analyze the health conditions of elderly quilombola wo-

men living in a countryside town in the state of Maranhão, Brazil.

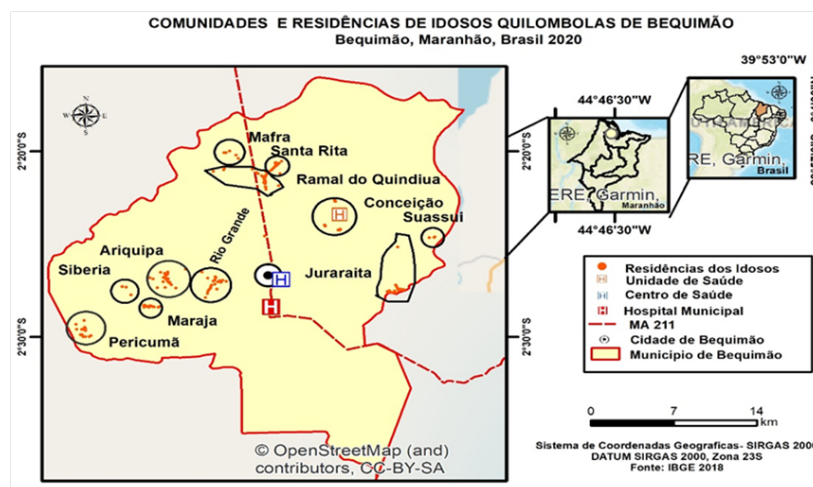
## METHOD

### Type of study

This is a cross-sectional, household-based study, with a quantitative approach, which is part of the Project "Population Survey on the Living Conditions and Health of Elderly Quilombolas from a Town in the Baixada Maranhense" (IQUIBEQ Project), which studied various health and cultural indicators of the elderly quilombola population from a town in the Baixada Maranhense.

### Study location

The study was conducted in quilombola communities in the city of Bequimão located on the western coast of Maranhão. It is estimated that in Bequimão there are 1,286 families living in 11 quilombola communities: Ariquipá, Conceição, Rio Grande, Pericumã, Santa Rita, Ramal do Quindiuá, Sibéria, Juraraitá, Mafra, Suassui and Marajá. These communities are officially recognized by the Palmares Cultural Foundation and the Ministry of Culture, according to the Presidential Decree of November 20, 2009 (Figure 1).



**Figure 1:** Geographic location of the quilombola communities in Bequimão, Maranhão, Brazil, 2020

Source: IBGE 2018

The municipality of Bequimão is inserted in the meso-region of the North and micro-region of the Western Coast of Maranhão. Geographically it is located on the margin of the MA-211 road, equidistant from the Capital São Luís and the Federal University of Maranhão Campus located in the city of Pinheiro - MA. In 2010, the total area of the municipality of Bequimão was 761.49 km<sup>2</sup> and the census population was 20,344 inhabitants (67.5% in rural areas and 12.3% elderly). The Human Development Index (HDI) was 0.601 and the Gross Domestic Product per capita was R\$2,754.37<sup>7</sup>. In 2018, the estimated population was 21,260 inhabitants.

### Research Universe and Period

The study population was composed of elderly people aged 60 or older residing in the communities. These were selected based on the coordination with the municipality's Secretariat of Social Assistance and the Community Health Agents (CHAs) of the respective communities. The CHAs conducted a previous survey and built a nominal list with information about sex and date of birth, counting 220 elderly of both sexes, therefore the number of elderly women was 132.

The collection was conducted during weekdays in business hours between the months of June to December 2018. A pilot study was conducted to adjust the instruments and train the interviewers. During collection, the interviewers could consult the manual to clarify any doubts, and were accompanied by the researchers responsible for the research.

### Available Infrastructure and Technical Support

The physical infrastructure of libraries, auditoriums, and classrooms used in this research was provided by the Medicine Course of the Center for Human, Natural, Health, and Technology Sciences (CCHNST) of UFMA in Pinheiro. The technical and logistical support came from the Municipal Secretariat of Social Assistance of Bequimão and the Family Health Teams deployed in the commu-

nities of interest of the research, which were motivated to contribute to the research.

### Data Collection Technique and Research Instrument

A questionnaire with open and closed questions on the theme studied was applied, based on the General Questionnaire of the larger research entitled "Population Survey on the Living Conditions and Health of Elderly Quilombolas of a City in the Baixada Maranhense", which has the following modules: Module A (general characteristics), Module B (household information), Module C (education characteristics), Module D (work and income), Module E (disabilities), Module F (use of health services), Module G (difficulties in performing usual activities), Module H (aspect of life with family, friends and group activities), Module I (Health care), Module J (perception of health status), Module K (lifestyle), Module L (chronic diseases), Module M (women's health), Module N (health care); in addition to the MMSE and the Nutrition Questionnaire.

It is worth mentioning that, for the purposes of this research, only some modules of the General Questionnaire were used, namely: Module A (general characteristics), Module B (household information), Module C (education characteristics), Module D (work and income), Module F (use of health services) and Module N (health care).

Quantitative data collection was carried out among the elderly women who were residing in the quilombola communities at the time of data collection. The data in the questionnaires were collected by interviewers trained by the authors of this study, to the research subjects in homes, the Health Center and other social spaces (schools, churches etc.). The elderly answered the instrument from the questions asked by the interviewers of this research until they completed their answers.

### Data analysis

After collecting quantitative data, they were typed into the statistical program Epiinfo version 7

using the double data entry technique, in order to verify and correct possible typing errors. Then, these data were analyzed in the Stata® version 14 program, with descriptive statistics techniques. Discussion followed according to the literature.

## Ethical Aspects

The entire research process followed the ethical principles set out in Resolution No. 466/2012 of the National Health Council of the Ministry of Health, guaranteeing the participants, among other rights, their free and informed consent, confidentiality of information, and privacy. The research project was approved by the Research Ethics Committee of the University Hospital of the Federal University of Maranhão with opinion number 2,476,488 on January 28, 2018.

## RESULTS

A total of 132 quilombola elderly women were evaluated, and (46.2%) of these women were 60 to 69 years old, (32.6%) 70 to 79 years old, and (21.2%) were longevous ( $\geq 80$  years old). It was observed that (61.4%) declared themselves as black and (29.6%) brown; in marital status (32.6%) were widowed and (25.8%) single. It was estimated a higher percentage (53.8%) of women who could not read and write. Most of these women reside in households with three or more people (61.4%), in this study a total of (72.0%) live on an income of 1 to 2 minimum wages, were classified in stratum E of the socioeconomic class (84.8%).

As for the conditions of the houses, they are considered inappropriate (66.7%) and most of them live in houses with four to seven rooms (67.4%).

Regarding the water supply in the households, it comes from a well or spring on the property (59.1%), and (69.7%) have appropriate water treatment.

**Table 1**

Socioeconomic, demographic and health characteristics of quilombola elderly women  $\geq 60$  years old, Bequimão (IQUIBEQ Project), Maranhão, Brazil, 2018.

Variables	(N=132)	%
Age range (in years)		
60 to 69	61	46.2
70 to 79	43	32.6
$\geq 80$	28	21.2
Race/skin color		
Black	81	61.4
Brown	39	29.6
Others	12	9.0
Marital Status		
Married/Stable	38	28.8
Separated/divorced	17	12.9
Widowed	43	32.6
Single	34	25.8
Can read and write		
Yes	61	46.2
No	71	53.8
Number of residents per household		
Alone	12	9.0
Two	39	29.6
Three or more	81	61.4
Family income in minimum wage of 954.00 (in Reais)		
< 1 Minimum wage	37	28.0
$\geq 1$ Minimum wage	95	72.0

(continua...)

**Table 1***(continuation)*

Variables	(N=132)	%
Socioeconomic stratum*		
D	20	15.2
E	112	84.8
Number of rooms per household		
≤ 3	1	0.8
4 to 7	89	67.4
≥ 8	42	31.8
House in proper condition		
Not Appropriate	88	66.7
Appropriate	44	33.3
Water Supply		
General network	23	17.4
Well or spring on property	78	59.1
Well or spring on the property	30	22.7
Other ways	1	0.8
Water treatment at home		
Treated	92	69.7
Not treated	40	30.3

**Notes:** \* There were no elderly women in the A, B and C social strata.

Regarding health conditions, there was a predominance of negative self-assessment of the general health condition (57.6%), but no change without

functional disability (84.1%). Regarding chronic conditions, 60.6% reported the involvement of two or more conditions among those listed (Table 2).

**Table 2**

Health conditions of quilombola elderly women ≥60 years old, Bequimão (IQUIBEQ Project), Maranhão, Brazil, 2018.

Variables	(N=132)	%
Self-assessment of general health status		
Positive	56	42.4
Negative	76	57.6
Functional incapacity		
No	111	84.1
Yes	21	15.9
Number of chronic conditions		
0	16	12.1
1	36	27.3
2	38	28.8
≥ 3	42	31.8

**Note:** \*Total informed: 126 elderly women.

It was observed that half (50.0%) of the elderly women said they had had at least 3 medical consultations in the last 12 months prior to the survey; however, a higher percentage (53.0%) had not consulted a dentist in three years or more, and 13.6% had never visited this professional. Regarding the last preventive

exam for cervical cancer, 38.8% had been performed at least 3 years ago, and 14.6% had never performed such an exam. Most of the elderly women had never had a mammogram (67.2%) and had never been submitted to a clinical breast examination (56.9%). About 75.0% were already in menopause (Table 3).

**Table 3**

Prevalence of health service use among quilombola elderly women  $\geq 60$  years old, Bequimão (IQUIBEQ Project), Maranhão, Brazil, 2018.

Variables	N (132)	%
Number of doctor visits in the last twelve months		
None	12	9.1
One	31	23.5
Two	23	17.4
Three or more	66	50.0
When did you last visit the dentist		
Less than 1 year	20	15.2
From 1 to less than 2 years	15	11.4
2 to less than 3 years	9	6.8
3 years or more	70	53.0
Never	18	13.6
Last time you had a preventive exam for cervical cancer*		
Less than 1 year ago	28	21.7
1 to less than 3 years	33	25.6
3 years or more	50	38.8
Never	18	14.0
Last time you had a mammogram**		
Less than 1 year ago	12	9.4
1 to less than 3 years	14	10.9
3 years or more	16	12.5
Never	86	67.2
Last time a health care provider performed a clinical examination of your breasts***		
Less than 1 year	17	13.1
1 to 3 years	18	13.8
3 years or more	21	16.2
Never	74	56.9

**Notes:** \* Total reported: 129 elderly women; \*\*Total reported: 128 elderly women; \*\*\*Total reported: 130 elderly women.

## DISCUSSION

The results indicate that the 132 elderly quilombola women participating in this study live in a situation of inequalities and vulnerabilities, characterized by the absence of education, the worst socioeconomic status, exclusive dependence on the Unified Health System (UHS), and insufficient household and community health infrastructure. They presented the worst estimates in the indicators of all health dimensions evaluated. There was a high prevalence of negative self-assessment of health and involvement with two or more chronic diseases.

As for the most frequent morbidity pattern, cardiovascular and musculoskeletal diseases were the most frequent, which is related to the way of life

and rural work in quilombola communities. In general, chronic morbidities and the accumulation of multimorbidities were prevalent, especially among women, but in men there was a higher prevalence of morbidities associated with sequelae. The association between sex and age with multimorbidities suggests that aging in quilombos occurs with high social and health needs, but with differences according to sex in health care behaviors and use of health services.

Taken together, the results indicate that the quilombola elderly women still live with minimal social structure, characterized by precarious living and health conditions, by disinvestment and distance from average social and health levels already observed in other studies with elderly population.

Previous studies have already shown an unfavorable scenario for the aging of elderly Brazilians of color/race brown or black in relation to whites in different contexts, in relation to socioeconomic and demographic indicators, health conditions or access to and use of health services<sup>1,8,10, 11, 12,13</sup>.

In the study, another important piece of data is the oral health of the elderly women when they refer that they have not consulted for three years. Studies show that the oral health program is quite absent in the communities and that many elderly need to seek these services in the municipalities to obtain this care<sup>10, 25,26</sup>. It is necessary to point out that low school grades in the elderly are associated with a worse oral health condition<sup>26</sup>. This picture tends to be even worse for black elders living in rural or quilombola areas<sup>15,16,17,18</sup>. The results of this study on health and material deprivation are equivalent to those found in quilombos in other states.

Another worrisome fact is the prevalence of elderly women who have never had a mammogram, clinical breast exam, or preventive exam in their lives. It is important to note that this data was also evidenced in another study<sup>23</sup>. It is important to emphasize that the government has not guaranteed access to cervical and breast cancer prevention for women from quilombola communities, as recommended in the Brazilian guidelines for screening of cervical cancer and breast cancer<sup>27,28</sup>.

These inequalities are deep and are distributed throughout the social structure. Since the period of slavery to the present day, estimates of the material conditions of life and health of blacks in relation to whites have been worse, characterized by worse sanitary and health infrastructure in the places where they live, lack of access to social facilities and institutions such as school, income<sup>24</sup> and health services<sup>19, 20,21,22</sup>. Usually located in rural areas, quilombos present considerable geographical isolation, increasing the exposure of their populations to health inequities and limiting access to health services<sup>20,21,22,23</sup>. This situation of segregation and discrimination has accumulated throughout life cycles and generations, exposing the brown and black people to exclusion and marginalization, with multiple historical, logistical and practical barriers that are still captured by

the social and health indicators of the elderly in quilombos, especially in the state of Maranhão.

## CONCLUDING REMARKS

Quilombola women age in a context of precarious socioeconomic and sanitary conditions at home and in the community, suggesting that they reflect the inequities that have occurred throughout their lives.

The absence of public policies and public power in quilombola communities has pointed to the lack of access of the elderly to health services such as consultations, exams, and to the oral health program, which could minimize the travel of the elderly to long distances to take care of their health.

Regarding health status, chronic morbidities and the accumulation of multimorbidities have been prevalent in older women.

This study has some limitations because it is about a quilombola population, which has few related studies. Moreover, the health of black and elderly women is not considered an area of knowledge or a relevant field in Health Sciences.

This study is relevant, since the state of Maranhão has a very high black population. And, because it is a region located in a rural area, this population has considerable geographical isolation, which contributes to the increased degree of exposure to disease, in addition to limiting access to health services.

Although women are more likely to use health services, this access is still unequal according to their age. Despite these limitations, the results show huge inequalities.

The lack of attention to the rights of quilombola elderly women leads to the reproduction and overlapping of social disadvantages resulting from the interaction between race/skin color, gender, work, place of residence, social class, and education and can be a marker of the overwhelming lack of actions to promote the various rights of citizenship.

## REFERENCES

1. Kalache, A., Silva, A. D., Giacomini, K. C., Lima, K. C. D., Ramos, L. R., Louvison, M., & Veras, R. (2020). Envelhecimento e desigualdades: políticas de proteção social



- aos idosos em função da pandemia Covid-19 no Brasil. *Revista Brasileira de Geriatria e Gerontologia*, 23.
2. Tavares, R. E., Jesus, M. C. P. D., Machado, D. R., Braga, V. A. S., Tocantins, F. R., & Merighi, M. A. B. (2017). Envelhecimento saudável na perspectiva de idosos: uma revisão integrativa. *Revista brasileira de geriatria e gerontologia*, 20, 878-889.
  3. Veras, R. P., & Oliveira, M. (2018). Envelhecer no Brasil: a construção de um modelo de cuidado. *Ciência & saúde coletiva*, 23, 1929-1936.
  4. Instituto Brasileiro de Geografia e Estatística. Projeção da população por sexo e idade - Indicadores implícitos na projeção - 2021/2059. [Internet]. 2021,27 de novembro. pesquisado em <https://www.ibge.gov.br/apps/populacao/projecao/index.html>.
  5. Ferretti, F., Nierotka, R. P., & da Silva, M. R. (2011). Health conception according to reports of elderly people living in an urban environment/Concepcao de saude segundo relato de idosos residentes em ambiente urbano/Concepcion de salud segun relato de ancianos que residen en el ambiente urbano. *Interface: Comunicação Saúde Educação*, 15(37), 565-573.
  6. Küchemann, B. A. (2012). Envelhecimento populacional, cuidado e cidadania: velhos dilemas e novos desafios. *Sociedade e estado*, 27, 165-180.
  7. Werneck, J. (2016). Racismo institucional e saúde da população negra. *Saúde e Sociedade*, 25, 535-549.
  8. Oliveira BLCA, Thomaz EBAF, Silva RA. Associação da cor/raça aos indicadores de saúde para idosos no Brasil: um estudo baseado na Pesquisa Nacional por Amostra de Domicílios (2008). *Cad Saúde Pública* 2014; 30(7): 1438-52
  9. Instituto Brasileiro de Geografia e Estatística. Dados do Censo 2010 publicados no Diário Oficial da União do dia 04/11/2010. Disponível em: [http://www.censo2010.ibge.gov.br/dados\\_divulgados/index.php?uf=31](http://www.censo2010.ibge.gov.br/dados_divulgados/index.php?uf=31). Acesso em: 31 jan. 2019.
  10. Costa, A. S. V., dos Santos Rodrigues, L., de Deus Cabral, J., Coimbra, L. C., & de Oliveira, B. L. C. A. (2021). Survey of the living conditions and health status of older persons living in Quilombola communities in Bequimão, Brazil: the IQIBEQ Project. *Journal of Public Health*, 29(5), 1061-1069.
  11. Lopes, R. D. C. D. (2020). Identidade e territorialidade na comunidade remanescente de quilombo Ilha de São Vicente-Tocantins.
  12. Santos, R. C. D., & Silva, M. S. (2014). Condições de vida e itinerários terapêuticos de quilombolas de Goiás1. *Saúde e Sociedade*, 23, 1049-1063..
  13. Batista, L. E., Monteiro, R. B., & Medeiros, R. A. (2013). Iniquidades raciais e saúde: o ciclo da política de saúde da população negra. *Saúde em Debate*, 37, 681-690.
  14. Oliveira, B. L. C. A., Silva, A. M. D., Rodrigues, L. D. S., & Rêgo, A. S. (2016). O uso da modelagem com equações estruturais na análise da influência da cor/raça e status socioeconômico na saúde de idosos brasileiros. *Rev Bras Cienc Saúde [Internet]*, 20(2), 149-56.
  15. Oliveira, S. K. M., Pereira, M. M., Guimarães, A. L. S., & Caldeira, A. P. (2015). Autopercepção de saúde em quilombolas do norte de Minas Gerais, Brasil. *Ciência & Saúde Coletiva*, 20, 2879-2890.
  16. dos Santos Tavares, D. M., dos Santos Ferreira, P. C., Dias, F. A., de Moraes Souza, L., Gonçalves, J. R. L., & Rodrigues, L. R. (2017). Aspectos sociodemográficos e desempenho cognitivo de idosos residentes na zona rural. *Avances en Enfermería*, 35(3), 275-283.
  17. Bezerra, V. M., Medeiros, D. S. D., Gomes, K. D. O., Souza, R., Giatti, L., Steffens, A. P., ... & Guimarães, M. D. C. (2014). Inquérito de Saúde em Comunidades Quilombolas de Vitória da Conquista, Bahia, Brasil (Projeto COMQUISTA): aspectos metodológicos e análise descritiva. *Ciência & Saúde Coletiva*, 19, 1835-1847..
  18. Carvalho, R. M. A., & da Costa Lima, G. F. (2013). Comunidades quilombolas, territorialidade e legislação no Brasil: uma análise histórica. *Política & Trabalho*, (39).
  19. Girardi, S. N., Carvalho, C. L., Araújo, J. F., Farah, J. M., Wan der Maas, L., & Campos, L. A. D. (2011). Índice de escassez de médicos no Brasil: estudo exploratório no âmbito da Atenção Primária. *Pierantoni CR, Dal Poz MR, França T, organizadores. O trabalho em saúde: abordagens quantitativas e qualitativas. Rio de Janeiro: Cepsc/IMS/UERJ, ObservaRH*, 171-186.
  20. Garnelo, L., Lima, J. G., Rocha, E. S. C., & Herkrath, F. J. (2018). Acesso e cobertura da Atenção Primária à Saúde para populações rurais e urbanas na região norte do Brasil. *Saúde em Debate*, 42, 81-99.
  21. Kochergin, C. N., Proietti, F. A., & César, C. C. (2014). Comunidades quilombolas de Vitória da Conquista, Bahia, Brasil: autoavaliação de saúde e fatores associados. *Cadernos de Saúde Pública*, 30, 1487-1501..
  22. Tavares, V. O., Teixeira, K. D., Wajnman, S., & de Loreto, M. D. D. S. (2011). Interfaces entre a renda dos idosos aposentados rurais e o contexto familiar. *Textos & Contextos (Porto Alegre)*, 10(1), 94-108.Santos, M. B. D., & Ribeiro, S. A. (2011). Dados sociodemográficos e condições de saúde de idosos inscritas no PSF de Maceió, AL. *Revista brasileira de geriatria e gerontologia*, 14, 613-624.
  23. Miranda, L. D. P., Oliveira, T. L., Queiroz, P. D. S. F., Oliveira, P. S. D., Fagundes, L. S., & Rodrigues, J. F. (2020). Saúde bucal e acesso aos serviços odontológicos em idosos quilombolas: um estudo de base populacional. *Revista Brasileira de Geriatria e Gerontologia*, 23.
  24. Oliveira MB, Lopes FF, Rodrigues VP, Alves CMC, Hugo FN. Associação entre fatores socioeconômicos, comportamentais, saúde geral e condição da mucosa bucal em idosos. *Ciênc Saúde Colet*. 2018;23(11):3663-74.
  25. Oliveira, M. B., Lopes, F. F., Rodrigues, V. P., Alves, C. M. C., & Hugo, F. N. (2018). Associação entre fatores socioeconômicos, comportamentais, saúde geral e condição da mucosa bucal em idosos. *Ciência & Saúde Coletiva*, 23, 3663-3674.



26. Instituto Nacional de Câncer José Alencar Gomes da Silva. Coordenação de Prevenção e Vigilância. Divisão de Detecção Precoce e Apoio à Organização de Rede. Diretrizes brasileiras para o rastreamento do câncer do colo do útero / Instituto Nacional de Câncer José Alencar Gomes da Silva. Coordenação de Prevenção e Vigilância. Divisão de Detecção Precoce e Apoio à Organização de Rede. – 2. ed. rev. atual. – Rio de Janeiro: INCA, 2016. 114p
27. Instituto Nacional de Câncer José Alencar Gomes da Silva. Coordenação de Prevenção e Vigilância. Divisão de Detecção Precoce e Apoio à Organização de Rede. Diretrizes brasileiras para o rastreamento do câncer de mama / Instituto Nacional de Câncer José Alencar Gomes da Silva. Coordenação de Prevenção e Vigilância. Divisão de Detecção Precoce e Apoio à Organização de Rede. – 2. ed. rev. atual. – Rio de Janeiro: INCA, 2015. 114p

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We declare that there are no conflicts of interest.

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Corresponding Author:  
Andréa Suzana Vieira Costa  
andrea.viera@ufma.br

Editor:  
Ada Clarice Gastaldi

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