# CUIDADO É FUNDAMENTAL

Universidade Federal do Estado do Rio de Janeiro · Escola de Enfermagem Alfredo Pinto

RESEARCH

DOI: 10.9789/2175-5361.2018.v10i1.97-105

## Sociodemographic and clinical profile of elderly persons accompanied by Family Health teams under the gender perspective

Perfil sociodemográfico e clínico de idosos acompanhados por equipes de Saúde da Família sob a perspectiva do gênero<sup>\*</sup>

Perfil sociodemográfico y clínico de años acompañados por equipos de Salud de la Familia bajo la perspectiva del género

Patrícia Aparecida Barbosa Silva<sup>1</sup>; Francielle Carolina Santos<sup>2</sup>; Sônia Maria Soares<sup>3</sup>; Líliam Barbosa Silva<sup>4</sup>

#### How to quote this article:

Silva PAB, Santos FC, Soares SM, et al. Sociodemographic and clinical profile of elderly persons accompanied by Family Health teams under the gender perspective. Rev Fund Care Online. 2018 jan./mar.; 10(1):97-105. DOI: http://dx.doi.org/10.9789/2175-5361.2018.v10i1.97-105

#### ABSTRACT

**Objective:** to evaluate the sociodemographic and clinical profile of elderly diabetic and/or hypertensive assisted by family health teams from a gender perspective. **Method:** it is a quantitative, cross-sectional study included 381 elderly enrolled in the twenty Health Basic Units in District Health Northwest of Belo Horizonte, Minas Gerais. Data were collected between October 2011 to March 2012. A Research Ethics Committee, approved the research project, number 0043.0.410.203-10 and 0043.0.410.203-10A. **Results:** The women are more prevalent, indicating the feminization phenomenon of old age, being mostly from countryside, widowed, with low education and income, and also high burden of disease and mortality. **Conclusion:** It is necessary to extend of public health studies and policies which should incorporate the gender concept in favor of building a less ageist and sexist society.

Descriptors: Demographic Aging, Gender Relations, Cross-sectional Studies, Family Health Strategy.

- <sup>4</sup> Department of Basic Nursing. Federal University of Minas Gerais. Belo Horizonte, MG, Brazil. Email: smsoares.bhz@terra.com.br.
- <sup>5</sup> Postgraduate Program in Health and Nursing. Federal University of Minas Gerais. Belo Horizonte, MG, Brazil. Email: ligemeasbh@yahoo.com.br.

DOI: 10.9789/2175-5361.2018.v10i1.97-105 | Silva PAB, Santos FC, Soares SM, et al. | Sociodemographic and clinical profile...





Funding: Foundation for Research Support of the State of Minas Gerais (FAPEMIG APQ 00108-11, APQ 02212-14 and APQ 03556-13) and CAPES for the granting of Scientific Initiation Scholarships. This article is derived from the research "Epidemiological study of chronic non-dialytic renal disease in elderly residents in the Northwest region of Belo Horizonte, Minas Gerais", developed by the Center for Studies and Research in Care and Human Development of the Federal University of Minas Gerais.

<sup>&</sup>lt;sup>2</sup> Postgraduate Program in Health and Nursing. Federal University of Minas Gerais. Belo Horizonte, MG, Brazil. Email: patriciaaparecidabarbosasilva@yahoo.com.br.

<sup>&</sup>lt;sup>3</sup> Master of Nursing. Federal University of Minas Gerais. Belo Horizonte, MG, Brazil. Email: francielle.carolina@yahoo.com.br.

#### RESUMO

**Objetivo:** avaliar o perfil sociodemográfico e clínico de idosos diabéticos e/ou hipertensos acompanhados pelas equipes de Saúde da Família sob a perspectiva do gênero. Métodos: estudo quantitativo, transversal envolvendo 381 idosos cadastrados nas vinte Unidades Básicas de Saúde do Distrito Sanitário Noroeste de Belo Horizonte, Minas Gerais. Coleta de dados ocorreu em outubro de 2011 a março de 2012. Utilizado questionário estruturado com variáveis sociodemográficas, clínicas e comportamentais. Projeto de pesquisa aprovado por Comitê de Ética, Parecer nº 0043.0.410.203-10 e 0043.0.410.203-10A. **Resultados:** o sexo feminino foi prevalente, indicando o fenômeno feminilização da velhice, sendo a maioria proveniente do interior de Minas Gerais, viúva, com baixa escolaridade e renda e, ainda, alta carga mórbida. **Conclusão:** É necessária ampliação de estudos e políticas de saúde pública que incorporem o conceito gênero, em prol da construção de uma sociedade menos gerofóbica e sexista.

**Descritores:** Envelhecimento da População, Relações de Gênero, Estudos Transversais, Estratégia Saúde da Família.

#### RESUMEN

**Objetivo:** evaluar el perfil sociodemográfico y clínico de ancianos diabetes y/o hipertensos acompañados por equipos de salud de la familia desde una perspectiva de género. **Métodos:** estudio cuantitativo, transversal, que incluyó 381 ancianos inscritos en las veinte Unidades Básica en el Distrito de Salud Noroeste de Belo Horizonte, Minas Gerais. Los datos fueron recogidos entre octubre de 2011 a marzo de 2012. Se utilizaron cuestionario estructurado con variables sociodemográficas, clínicas y comportamiento. El Comité de Ética en Investigación aprobó el proyecto, número 0043.0.410.203-10 y 0043.0.410.203-10A. **Resultados:** sexo femenino fue predominante, lo que indica el fenómeno de feminización de la vejez, y la mayoría provenía del interior de Minas Gerais, viuda, con bajo nivel de educación e ingresos, y también de alta carga mórbida. **Conclusión:** Es necesario expansión de estudios y políticas de salud pública que incorporan el concepto de género, para la construcción de un sociedad menos gerofóbica y sexista.

**Descriptores:** Envejecimiento de la Población, Relaciones Interpersonales, Estudios Transversales, Estrategia de Salud Familiar.

### INTRODUCTION

The geriatric population is growing at a fast pace worldwide and Brazil follows this trend.<sup>1-2</sup> By 2013, there were 841 million individuals 60 years of age or older on the planet, representing 12.0% of the general population. It is projected that in 2050, the number of elderly will reach 2 billion, which will correspond to 21.0% of the total population.<sup>3</sup>

According to the latest Brazilian Demographic Census, in 2010, the number of individuals aged 60 or over exceeded 20 million people, corresponding to 11% of the population; Of these, 55.5% were women and 44.5% were men.<sup>2</sup> With a growth rate of the elderly estimated at 4% a year, in the period between 2012 and 2022, projections indicate that, in 2030, there will be 41.5 million elderly people in Brazil and in 2060, 73.5 million. This reality is due in part to the fall in fertility in the country and mortality in all age groups.<sup>4</sup>

In order to confront this scenario, we highlight the epidemiological studies aimed at analyzing the health and socio-demographic profile of this population segment. Such studies contribute to the planning of specific assistance to the elderly with their particularities and provide subsidies for the planning of actions and public policies in order to guarantee a more active and healthy aging.<sup>5</sup>

However, as it has been the subject of discussions in various international fora, such as the World Health Organization, the European Union, the United Nations Population Fund and the Council of Europe, it is imperative that such analyzes become gender-sensitive. Importance of permeating public policies with issues related to sex and gender.<sup>6</sup>

In 2010, the United Nations Development Program, in its Human Development Report, introduced the Gender Inequality Index (GDI) as a measure of gender disparities. This index demonstrates the loss in human development due to the inequality between the female and male conquests in three dimensions: reproductive health, autonomy and economic activity. The introduction of this new measure was due to the finding that countries with an unequal distribution of human development also suffered from high inequality between women and men, particularly in Central Africa, Haiti and Mozambique.<sup>7</sup>

The concept of gender is economically, politically, socially and historically constructed and adds attributes and functions that demarcate differences and interrelations between the sexes, which transcend the biological. This includes differences in the roles, statutes, responsibilities, and place of men and women in all sectors of society at all levels in what is constructed as characteristic of the behavior and attitudes of men and women. In this sense, both men and women incorporate these attributes and functions, as a form of representation, valuing and acting in a given culture.<sup>8-9</sup>

From this perspective, and in response to these demands, there is growing in the literature the expansion of the discussions undertaken in the field of Epidemiology, from a greater exchange of instruments, methodologies and concepts, with other disciplines, mainly Social Sciences, in such a way to converge to a Progress in the characterization of the disease determination process. One of these trends highlights the incorporation of the concept of gender in epidemiological models of determination that can represent a true interdisciplinary enterprise that allows thinking in certain situations beyond the variable sex.<sup>10</sup>

It is known that in the health-disease process, interactions with social and cultural factors occur throughout life, leading to a proportional reduction of the role of sex (biological difference) in relation to the broader category (gender).<sup>10</sup> Thus, it is extremely important to carry out studies for the multidimensional knowledge of the elderly living in the community and using the health services.

The present study makes it possible to detect health problems with various levels of influence on autonomy and dependence to develop the life activities of the elderly interviewed. In addition, it provides elements for the elaboration of proposals and direction of health actions that recognize the multi factors (social, economic, emotional) that interfere in the search for services and in the health perception of these elderly people.<sup>11</sup> Understanding these factors may help in the search for greater equity between men and women.

The hypothesis of the study is that there are differences and asymmetries in the distribution of sociodemographic and clinical characteristics among the elderly, with a less favored situation for the female population segment. The purpose of this study was to evaluate the sociodemographic and clinical profile of diabetic and / or hypertensive elderly people, accompanied by the Family Health Strategy teams from a gender perspective.

## **METHODS**

This is a cross-sectional study carried out with hypertensive and / or diabetic elderly enrolled in the twenty basic health units of the Northwest Sanitary District of Belo Horizonte, Minas Gerais, from October 2011 to March 2012. The District was elected, at the time, for having the highest absolute number of the population aged 60 or over residing in the areas of Belo Horizonte's basic health units (n = 44,801 elderly, 61.5% of this population consisting of women).<sup>12</sup>

The sample size was calculated from the formula of Lwanga and Lemeshow,<sup>13</sup> which requires the following information: proportion in the population; Level of significance and absolute precision.

The sample calculation was based on the prevalence of hypertension  $(60,0\%)^{14}$  and diabetes *mellitus*  $(18,0\%)^{15}$ in Brazilian elderly with a significance level of 5% and absolute precision of five percentage points. The sample size was 369 elderly hypertensives and 227 elderly diabetics. Considering 10.0% of possible losses, the final sample totaled 406 elderly hypertensives and 250 elderly diabetics.

The sample was distributed proportionally among the 20 basic health units belonging to the District, and later, in relation to sex, from the formula:  $n = N \times Ni / total$  (n: sample calculated; N: number of elderly enrolled in Number of elderly in the sample - 406 (hypertensive) and 250 (diabetic); Total: total number of elderly people in the study population - 44,801).

The sample selection process started with a list of names and addresses of hypertensive and / or diabetic elders raised from the Daily / Quadrennial Visits of the community health agent / Family (2F6-N) or List Generator System (SQL List, Network Health System / GEEPI / Municipal Health Department, Belo Horizonte) for each health unit.

The information was stored in a database created from the application Microsoft Excel, Windows 2013<sup>®</sup>, containing the user name, street address, date of birth, diagnosis of diabetes mellitus and / or arterial hypertension, name of the basic health unit and Name of the Community health agent. Then, a simple random selection was performed from the random lot, using a random number table for each health unit.

Included in this study were hypertensive and / or diabetic patients aged 60 and over, of both sexes, registered in one of the basic health units of the chosen district. Exclusion criteria were people unable to establish communication with the interviewer and senior citizens of Long Stay Institution. Older people who refused to participate in the study were considered as loss. Refusal was excluded from the sample without replacement.

The first contact with the randomly selected elderly was through the community health agents, with the delivery of the invitation letter to participate in the research. For those elderly people who had an interest in receiving the researchers, the day of the interview at home was scheduled. To ensure the quality of the data collected, the team of interviewers was previously trained, composed of four nurses and two fellows of Scientific Initiation. In addition, a pre-test was performed with 25 elderly individuals to verify the adequacy of the questionnaire to the outlined goal. There was no difficulty in understanding the informants' questions, and pretest data were not incorporated into the study.

The information was obtained through a structured questionnaire, organized in thematic blocks: sociodemographic variables (gender, age, naturalness, skin color / ethnicity, marital status, religion, education, illiteracy, monthly family income), clinics (comorbidities and hospitalization In the last 12 months) and behavioral (alcoholism and smoking).

The behavioral variables were categorized as follows: Smoking: yes (currently smokes or stopped smoking for 12 months or less), no (never smoked), former smoker (stopped smoking for more than 12 months); Alcoholism: yes (uses alcohol or has stopped drinking for 12 months or less), no (never ingested alcoholic beverage), ex-alcoholism (stopped drinking for more than 12 months).

Data analysis consisted of absolute and relative frequency calculations. Pearson's chi-square test or Fisher's exact test was used for comparison between sex ratios. A significance level of 5% was adopted. The Statistical Package for the Social Sciences (SPSS Inc. Chicago, USA) version 22.0 was used for data analysis.

Participation in the research was voluntary, through the signing of the Informed Consent Term. The study protocol was approved by the Research Ethics Committee of the Federal University of Minas Gerais - Opinion n ° 0043.0.410.203-10 and by the Ethics Committee of the Municipal Health Department of Belo Horizonte -Opinion n ° 0043.0.410.203- 10A, according to Resolution 466/12 of the National Health Council.<sup>16</sup> The informants were identified by Arabic numerals, sequencing them in the order they were interviewed to ensure anonymity. The authors declare no conflict of interest.

## **RESULTS AND DISCUSSION**

The sample of this study consisted of 381 elderly, 232 (60.9%) women, 195 (51.2%) only hypertensive, 17 (4.5%) only diabetics and 169 (44.3%) both. The study adherence rate was 90.4% for hypertensive patients and 76.8% for diabetics. There were higher percentages of refusal among diabetic men (28.1%) and hypertensive women (10.8%). Seven questionnaires were excluded because they contained only the completed identification form and two interviewees did not meet the criteria for inclusion in the study because they were less than 60 years old (Figure 1).

The age of the elderly ranged from 60 to 95 years, with a median of 71.0 years (interquartile range 65.0-77.0), the highest proportion of individuals was in the age range of 60 to 69 years (44.4%). The majority came from the interior of Minas Gerais (66.8%), followed by Belo Horizonte and the Metropolitan Region (26.5%). There was a higher proportion of brown or black elderly (52.5%), married or in stable union (53.3%) and Catholics (68.5%) (Table 1).

As for schooling, 16.8% of the elderly were illiterate; 73.9% had none or less than eight years of study. Only 8.7% had completed elementary education; 11.5% completed high school and 1.3% completed higher education. In relation to the monthly income, the purchasing power of the sample was low. The majority received less than two minimum wages (55.3%) (Table 1).

Significant differences were observed between the sexes for the sociodemographic characteristics, marital status and schooling. There was a higher proportion of female spouses (77.3% vs 22.7%, p <0.001) and lower educational level (64.4% vs 35.6%, p = 0.015), as well as illiteracy (75.0% vs 25.0%, p = 0.011) in relation to the male sex (Table 1).

There was a high percentage of morbidities, and 19.2% of the elderly interviewed reported 5 or more comorbidities; Among women, this prevalence was even higher (p < 0.001) (Table 2).

The most comorbidities reported by the interviewees were hypertension (95.5%), diabetes mellitus (48.8%), osteoarticular diseases (38.3%) and heart diseases (25.5%). It was observed that 13.6% of the elderly had urinary tract infection and 10.0% had already had a stroke. There was no significant difference in the reported prevalence of hypertension and diabetes mellitus between men and women. However, osteoarticular diseases were more prevalent among women when compared to men (67.1% vs 32.9%, p = 0.049). The same was observed for mental disorders (74.6% vs 25.4%, p = 0.015) (Table 2).

The prevalence of hospitalization in the last 12 months was 22.6%, with 1.1% reporting three or more admissions, and there was no difference between the sexes (Table 2).

Regarding smoking, it was observed that only 9.8% of the elderly currently smoke and 33.4% are former

Figure I – Flowchart of the participants' selection. Northwest Sanitary District, 2011-2012. Belo Horizonte, Minas Gerais

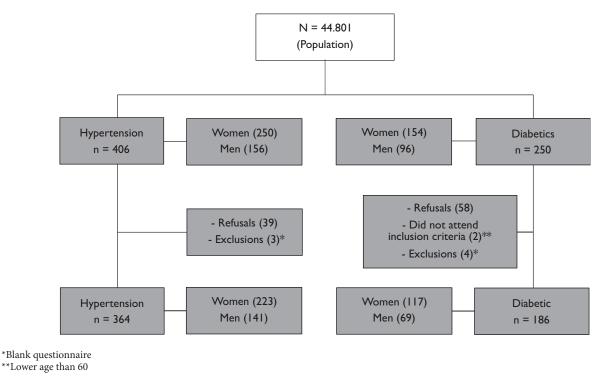


Table 1 – Socioeconomic and demographic characteristics of elderly hypertensive and / or diabetic patients accompanied by the Family Health Strategy according to gender. Northwest Sanitary District, Belo Horizonte, MG, 2011-2012 (n = 381)

Variables	Total	Male (n = 149)		Feminino (n = 232)		p-value <sup>a</sup>
	<u>(n = 381)</u> n %					
		n	%	n	%	-
Age group (years old)						
60-69	169 (44,4)	65	38,5	104	61,5	0,139
70-79	138 (36,2)	48	34,8	90	65,2	
≥ 80	74 (19,4)	36	48,6	38	51,4	
Place of birth*						
BH or surroundings	99 (26,5)	41	41,4	58	58,6	0,062
Minas Gerais	250 (66,8)	91	36,4	159	63,6	
Others	25 (6,7)	15	60,0	10	40,0	
Race/ethnicity*						
White	180 (47,5)	70	38,9	110	61,1	0,872
Brown/black	199 (52,5)	79	39,7	120	60,3	
Marital status*						
Single	48 (12,7)	11	22,9	37	77,1	<0,001
Married/stable union	202 (53,3)	107	53,0	95	47,0	
Widow	104 (27,4)	22	21,2	82	78,8	
Separated/divorced	25 (6,6)	8	32,0	17	68,0	
Marital situation*	$\mathbf{x} + \mathbf{z}$					
Absence of the spouse	176 (46,4)	40	22,7	136	77,3	<0,001
Presence of the spouse	203 (53,6)	108	53,2	95	46,8	
Religion*	× 1					
Catholic	259 (68,5)	108	41,7	151	58,3	0,277
Protestant	93 (24,6)	30	32,3	63	67,7	
Others	26 (6,9)	10	38,5	16	61,5	
Education (years)*						
0-8	281 (73,9)	100	35,6	181	64,4	0,015
8 or more	99 (26,1)	49	49,5	50	50,5	
Literacy*	× /					
Literate	316 (83,2)	133	42,1	183	57,9	0,011
Illiterate	64 (16,8)	16	25,0	48	75,0	
Income (m.w.)*						
<1	50 (13,2)	14	28,0	36	72,0	0,141
1 + 2	159 (42,1)	59	37,1	100	62,9	
2 + 3	92 (24,3)	40	43,5	52	56,5	
≥ 3	77 (20,4)	36	46,8	41	53,2	

BH: Belo Horizonte; m.w.: minimum wage; \*Variations in n are due to missing; \*p-value: Differences in the proportions (Pearson's chi-square test).

Table 2 – Self-reported morbidities of hypertensive and / or diabetic elderly accompanied by the Family Health Strategy according to gender. Northwest Sanitary District, Belo Horizonte, MG, 2011-2012 (n = 381).

Variables	Total (n = 381) n (%)	Male (n = 149)		Female (n = 232)		p-valuea
		n	%	n	%	
Number of comorbidities						
1-2	144 (37,8)	74	51,4	70	48,6	<0,001
3-4	164 (43,0)	55	33,5	109	66,5	
5 or more	73 (19,2)	20	27,4	53	72,6	
Comorbidities						
Arterial hypertension	364 (95,5)	141	38,7	223	61,3	0,492
Diabetes mellitus	186 (48,8)	69	37,1	117	62,9	0,432
Osteomuscular diseases	146 (38,3)	48	32,9	98	67,1	0,049
Cardiac diseases	97 (25,5)	34	35,1	63	64,9	0,343
Depression	63 (16,5)	16	25,4	47	74,6	0,015
Urinary tract infection	52 (13,6)	14	26,9	38	73,1	0,053
Respiratory diseases	49 (12,9)	18	36,7	31	63,3	0,715
Stroke	38 (10,0)	18	47,4	20	52,6	0,271
Neoplasm	35 (9,2)	16	45,7	19	54,3	0,401
Internment (last 12 months) *						
0	284 (77,4)	113	39,8	171	60,2	0,873
1-2	79 (21,5)	30	38,0	49	62,0	
3 or more	4 (1,1)	2	50,0	2	50,0	

Note: \* Variations in the total n are due to missing; ap-value: differences in proportions (Pearson chi-square test or Fisher's exact test).

smokers; Of which the majority (64.7%) reported smoking or having smoked 20 or more cigarettes per day and 85.2% of the elderly reported smoking time greater than 10 years. It was observed that 3.2% of the sample started smoking recently. Among smokers, more than half tried to quit smoking, without success. In relation to the differences between men and women, a higher proportion of smokers (62.2% vs 37.8%, p <0.001) was observed, with a higher intensity of nicotine dependence (74.7% vs 25.3%; P = 0.001) and longer duration of smoking (70.0% vs 30.0%, p = 0.008) compared to women (Table 3).

Regarding the pattern of alcohol consumption, it was verified that 18.8% of the individuals reported using alcohol and 21.7% were ex-alcoholics. A considerable number of

elderly people consumed or consumed alcoholic beverages (34.1%) daily. Regarding the volume of alcohol consumed, 30.3% reported drinking 9 or more glasses of alcoholic beverages (Table 4).

Likewise, the pattern of alcohol consumption was higher in all questions for males than females (p < 0.001).

Population aging has become more prominent and prominent in scientific discussions, as well as having a direct impact on public policy demands. As the United Nations Population Fund points out,<sup>17</sup> the long-lived age groups are markedly disparate, and can not be treated as a homogeneous group with generalist policies. It is imperative to recognize that the elderly are part of a specific contingent, with diversified characteristics, and

Table 3 – Pattern of smoking among hypertensive and / or diabetic elderly followed by Family Health Strategy according to sex. Northwest Sanitary District, Belo Horizonte, MG, 2011-2012 (n = 381)

Variables	Total	Male (n = 149)		Fe	Feminino	
	(n = 381)			(n = 232)		p-value <sup>a</sup>
	n %	n	%	n	%	•
Smoking*						
Non smoker	214 (56,8)	49	22,9	165	77,1	<0,001
Smoker	37 (9,8)	23	62,2	14	37,8	
Former smoker	126 (33,4)	77	61,1	49	38,9	
N. of cigarettes/day**						
1-9	38 (24,8)	16	42,1	22	57,9	0,001
10-19	16 (10,5)	8	50,0	8	50,0	
20 or more	99 (64,7)	74	74,7	25	25,3	
Years of smoking**						
≤ 1	5 (3,2)	2	40,0	3	60,0	0,008
1- 10	18 (11,6)	5	27,8	13	72,2	
10 + 20	26 (16,8)	19	73,1	7	26,9	
20 + 30	26 (16,8)	17	65,4	9	34,6	
30 or more	80 (51,6)	56	70,0	24	30,0	
Tried to quit* <sup>£</sup>						
Yes	21 (58,3)	14	66,7	7	33,3	0,681
No	15 (41,7)	9	60,0	6	40,0	

\* Variations in total n are due to missing.

<sup>a</sup>p-value: differences in proportions (chi-square test or Fisher exact).

<sup>¥</sup> Refers to smokers and former smokers.

<sup>£</sup> Refers to smokers.

Table 4 – Alcohol consumption pattern among hypertensive and / or diabetic elderly accompanied by Family Health Strategy according to sex. Northwest Sanitary District, Belo Horizonte, MG, 2011-2012 (n = 381)

	Total	Male (n = 149)		Feminino (n = 232)		p-value <sup>a</sup>
Variables	(n = 381)					
	n %	n	%	n	%	
Alcohol consumption*						
No	225 (59,5)	53	23,6	172	76,4	<0,001
Yes	71 (18,8)	41	57,7	30	42,3	
Former alcoholic	82 (21,7)	54	65,9	28	34,1	
Frequency of alcohol consumption**						
Rarely	51 (41,5)	19	37,3	32	62,7	<0,001
2x/week	23 (18,7)	16	69,6	7	30,4	
3x/week or more	7 (5,7)	4	57,1	3	42,9	
Daily	42 (34,1)	36	85,7	6	14,3	
Ingested volume of alcohol (cups)**						
1-2	56 (45,9)	23	41,1	33	58,9	<0,001
3-4	18 (14,8)	15	83,3	3	16,7	
5-8	11 (9,0)	8	72,7	3	27,3	
9 or more	37 (30,3)	30	81,1	7	18,9	

\*Variations in total n are due to missing.

<sup>a</sup>p-value: differences in proportions (chi-square test or Fisher exact).

\*Refers to alcoholics and former alcoholics.

should be treated as active subjects of the development process, whose rights must be respected.

In addition, there is a consensus of the feminization of old age pointed out by several authors,<sup>18-21</sup> including this study. It is a worldwide phenomenon justified by the greater longevity of women in relation to men. A plausible explanation for this higher life expectancy among women is attributed to the higher percentage of violent deaths (murders and accidents) among young men and adult males in more than 90% of cases.<sup>22</sup> There is also a tendency for women to exercise less risky work, to consume less alcohol and tobacco, and to show greater concern for their own health, with more positive attitudes towards self-care.<sup>23-25</sup> At the governmental level, the disparate investment in the coverage of health care contributes to endorsing this scenario, and the gynecological-obstetric and maternal-child policies are much higher than those related to men's health policies.<sup>26</sup>

This higher life expectancy may explain the higher percentage of widowed women (78.8%) found in this investigation. It is also necessary to consider that many men contract new marriage after the death of their wives, being culturally accepted and diffused between the generations.<sup>27</sup> It is incumbent upon the elderly widows to remain without a companion, and to accept the eternal mourning, dedicating themselves exclusively to the household tasks and the children.<sup>28</sup> Therefore, these aspects gain relevance in the planning of care strategies by the Family Health Strategy teams, since these elderly women are more vulnerable to social isolation and depression, decreasing their quality of life.<sup>29</sup>

Although the trend of women to survive more in relation to men does not mean that they enjoy better health conditions. Mortality is only a reflection of the extreme deterioration of health, which does not account for the profound variations in the quality of life of those who survive.<sup>30</sup> In this regard, it is recalled that in many situations the elderly have lower levels of education, hampering their access to work; Are more subject to abuse; Have denied the right to own property and receive inheritance; They lack basic income and social security when compared to men. However, older men may also become vulnerable due to the greater fragility of their social support networks and also because they are subject to abuse, particularly financial abuse. These differences have important implications for policy and public program planning.<sup>17,21</sup>

Specifically, when analyzing schooling in the present study, it was verified that the majority of the elderly were not literate or had incomplete elementary education, reflecting the difficulties of accessing the schools at the time they were born and grew, marked by an environment of devaluation of Formal education and precarious socioeconomic conditions.<sup>31</sup>

The social cleavages relegate the female sex to a disadvantaged position in the education landscape, it is the elderly women who have the highest illiteracy rates and low schooling, because they grew up in a system where girls' school education was not seen with good eyes. Women should learn housework with their mothers so they could later marry and become housewives. Moreover, it is important to remember that historically old age was clearly excluded from the capitalist education project, since the industrial elite did not care about projects for aging workers, especially women, except to create strategies to exclude them from the sphere Productive, extending to the right to retirement, which gave way to young workers, recently "educated" or "formed",<sup>32</sup> being, therefore, one of the determinants of the economic fragility of many elderly people today.

Regarding family income, although scientific evidence indicates a greater financial contribution among men, although this difference declined in the years 1998 and 2008,<sup>33</sup> no statistical association was found for the study sample. It is known that income represents a determinant factor in the health situation of the elderly, because at this stage there is a greater need for medication, food and other costs resulting from the limiting processes.<sup>29</sup> In addition, due to the many changes that have occurred in family arrangements in recent times, the elderly have been identified as a fundamental family support, not only for the income of their pensions, supporting unemployed or sick relatives and providing the family, but also actively participating in the organization of the family, such as support for home care and with small children.29,34

In this same line of thought, schooling and income are factors that strongly influence the health situation of the population. Older people with higher levels of schooling and income are more empowered and independent for self-care, including the correct use of medicines, means of transportation and communication, whereas those with lower purchasing power and intellectual, most of them women, are more susceptible Diseases and, consequently, need more attention to health..<sup>35-36</sup>

Another important aspect to be highlighted is the transformation of aging as a social issue, previously seen only as a particularity of the private and family sphere. The social representations of old age as a continuous phenomenon of losses, witnessing a scenario of abandonment to an existence without meaning, contempt and absence of social roles raise a concern for the apparatus of the State and society.<sup>37</sup> This negative experience of losses is a useful scenario for long-lived individuals to expose themselves to behavioral risk factors, such as abusive alcohol use and smoking. These two conditions mainly involve the elderly in a male polarization whose tendency, for centuries, has been attributed to men, and evidenced in the present study, in resonance with other international studies<sup>38</sup> and national.<sup>39</sup> However, it should be noted that this disparity has been deferred with less force between the sexes, due to changes in the pattern of consumption of these psychotropic drugs in the last decades, which can be evidenced in the study carried out in Sweden.<sup>40</sup> In this study, over a 30-year period, there was a 10-fold increase in the proportion of septuagenarian women at risk for alcohol intake, compared to a risk equivalent to one-fourth among men.

Within the scope of the analyzes, the clinical characteristics described in this study also beckon for a differentiation between the sexes. The self-reported comorbidities found in the sample were higher in females, as well as osteoarticular diseases and mental disorders.

The higher prevalence of osteoarticular diseases in women (67.1%) can be explained by the underdiagnosis of this pathology among men and also by the greater tendency of women to develop osteoarticular problems after the end of the reproductive period due to the fall in hormones Of estrogen. The end of this period has special significance for women, who face major transformations at this stage, physical, emotional, family and social. Other factors such as marital separations, children leaving the family, personal or companion retirement also affect a woman's life and family dynamics, often leading to mental disorders,<sup>41</sup> identified in the present study (74.6%).

The progressive physical weakness characteristic of aging coupled with the numerous social and economic problems facing the elderly lead many health professionals to conclude that mental disorders are a natural consequence of this context.<sup>42</sup> Therefore, it is fundamental to understand in a contextualized way the physical and psychological symptoms and difficulties, taking into account individual, family and social characteristics of the elderly who seek health services.<sup>43</sup>

It is also added that the greater number of comorbidities observed in women corroborates the findings of other studies,<sup>25,44</sup> thus reiterating that the issue of gender is also complex in relation to morbidity. This greater number of pathologies found among women can be attributed to the differences in the pattern of female illness, due to the greater commitment of women in relation to the control and treatment of diseases and disabilities when compared to men.<sup>24,45</sup>

Still, it is not cultural within our society that men care for their health, seek prevention and health promotion groups or perform periodic examinations. This culturally constructed model of masculinity runs through a matter of cultural domination between generations and has direct implications for the health of men. Thus, the literary scope indicates that the highest hospitalization rates are presented among men, while women have a higher frequency of outpatient visits. Since men seek late medical care with a weaker clinical picture, which could have been lessened if they adopted preventive behaviors.<sup>45-47</sup>

Among the limits of the present study, we cite the nonprobabilistic intentional sampling that makes it impossible to reproduce these data for the population of other areas; Second, the possible memory bias and, third, the information bias due to a tendency towards socially desirable responses, mainly in behavioral issues.

## CONCLUSION

This study confirmed the hypothesis that there are differences and asymmetries in the distribution of sociodemographic and clinical characteristics among the elderly, with a less favored situation for the female population segment.

Gender inequalities have been diminished and the historical social system based on men's control over women has been deconstructed. In this way, women have conquered their space in society, even if slowly and gradually. However, the challenges for older women are still great, caused by this still sexist culture and by the system of symbolic and practical elaborations of gerophobia, prevalent in society.

#### REFERENCES

- 1. United Nations. Department of Economic and Social Affairs. Population Division. The World Population Situation in 2014. New York: United Nations; 2014.
- Instituto Brasileiro de Geografia e Estatística. Ministério do Planejamento, Orçamento e Gestão. Censo demográfico 2010: características gerais da população, religião e pessoas com deficiência. Rio de Janeiro: IBGE; 2010.
- 3. United Nations. Department of Economic and Social Affairs. Population Division. World Population Ageing 2013. New York: United Nations; 2013.
- 4. Instituto Brasileiro de Geografia e Estatística. Mudança demográfica no Brasil no início do século XXI. Subsídios para as projeções da população. Informação Demográfica e Socioeconômica. Brasília: IBGE; 2015.
- Pilger C, Menon MH, Mathias TAF. Características sociodemográficas e de saúde de idosos: contribuições para os serviços de saúde. Rev Latinoam Enferm. 2011; 19(5):1230-8.
- 6. Prazeres V. Saúde, sexo e género: factos, representações e desafios. Lisboa: DGS; 2008.
- 7. Programa das Nações Unidas para o Desenvolvimento (PNUD). Relatório de Desenvolvimento Humano 2010. A verdadeira riqueza das nações: vias para o desenvolvimento humano. New York: PNUD; 2010.
- 8. Fernandes MGM. Papéis sociais de gênero na velhice: o olhar de si e do outro. Rev Bras Enferm. 2009; 62(5):705-10.
- 9. Gomes R, Nascimento EF, Araújo FC. Porque os homens buscam menos os serviços de saúde do que as mulheres? Cad Saúde Pública. 2007; 23(3):565-74.
- Olinto MTA. Reflexões sobre o uso do conceito de gênero e/ou sexo na epidemiologia: um exemplo nos modelos hierarquizados de análise. Rev Bras Epidemiol. 1998; 1(2):161-9.
- Marin MJS, Cecílio LCO. Necessidades de saúde de idosos de uma Unidade de Saúde da Família. Rev Bras Geriatr Gerontol. 2009; 12(1):63-76.
- Belo Horizonte. SCOMPS. Secretaria Municipal de Saúde. PRODABEL. Censo BH Social: consolidado das famílias indivíduos cadastrados por município. 2010 [acesso em 2010 jun 20]. Disponível em: http://portalpbh.gbv.br/pbh
- 13. Lwanga SK, Lemeshow S. Sample size determination in health studies: a practical manual. Geneva: WHO; 1991.
- 14. Brasil. Indicadores e Dados Básicos Brasil 2011. 2011 [acesso em 2011 jun 12). Disponível em: http://tabnet.datasus.gov.br/cgi/ idb2011/matriz.htm

- 15. Sociedade Brasileira de Diabetes. Diabetes no idoso. 2011 [acesso em 2011 jun 12]. Disponível em: http://www.diabetes.org.br/ colunistas-da-sbd/diabetes-em-pacientes-especiais/1826
- 16. Conselho Nacional de Saúde. Resolução nº 466 de 12 de dezembro de 2012. Aprova as diretrizes e normas regulamentadoras de pesquisas envolvendo seres humanos. Diário Oficial da União. 2013; 12(seção 1):59.
- 17. United Nations Population Fund. Ageing in the twenty-first century: a celebration and a challenge. New York: UNFPA; 2012.
- Victor JF, Ximenes LB, Almeida PC, Vasconcelos FF. Perfil sociodemográfico e clínico de idosos atendidos em Unidade Básica de Saúde da Família. Acta Paul Enferm. 2009; 22(1):49-54.
- Instituto de Pesquisa Econômica Aplicada IPEA. Retrato das desigualdades de gênero e raça. 4ª ed. Brasília: Ipea; 2011.
- 20. Rodrigues NO, Neri AL. Vulnerabilidade social, individual e programática em idosos da comunidade: dados do estudo FIBRA, Campinas, SP, Brasil. Ciênc Saúde Coletiva. 2012; 17(8):2129-39.
- 21. Venkatesh S, Vanishree MR. Feminization among elderly population in India: role of micro financial institutions. Global Journal of Finance and Management. 2014; 6(9):897-906.
- 22. Bandeira LM, Melo HP, Pinheiro LS. Mulheres em dados: o que informa a PNAD/IBGE, 2008. In: Secretaria de Políticas para as Mulheres. Presidência da República. Revista do Observatório Brasil da Igualdade de Gênero. Brasília: Secretaria de Políticas para as Mulheres; 2009. p. 107-19.
- 23. Silva MJ, Lopes MVO, Aragão MFM, Moraes LA. Avaliação do grau de dependência nas atividades de vida diária em idosos da cidade de Fortaleza, Ceará. Acta Paul Enferm. 2006; 19(2):14-20.
- 24. Torres GV, Reis LA, Reis LA, Fernandes MH. Características sócio-demográficas e de saúde de idosos dependentes residentes em domicílio. Rev Espaço Saúde. 2009; 10(2):12-7.
- 25. Silva PAB. Fatores associados à qualidade de vida de idosos adscritos no Distrito Sanitário Noroeste de Belo Horizonte, Minas Gerais [dissertação]. Belo Horizonte: Universidade Federal de Minas Gerais; 2012.
- 26. Camarano AA, Kanso S, Mello JL. Como vive o idoso brasileiro? In: Camarano AA, organizador. Os novos idosos brasileiros: muito além dos 60? Rio de Janeiro: IPEA; 2004. cap. 1, p. 25-73.
- 27. Salgado CDS. Mulher idosa: a feminização da velhice. Estud Interdiscip Envelhec. 2002; 4:7-19.
- 28. Debert GG, Simões JA. A aposentadoria e a invenção da terceira idade. In: Debert GG, organizador. Antropologia e velhice. Campinas: Unicamp; 1994.
- 29. Clares JWB, Freitas MC, Almeida PC, Galiza FT, Queiroz TA. Perfil de idosos cadastrados numa unidade básica de saúde da família de Fortaleza-CE. Rev RENE. 2011; 12:988-94.
- 30. Instituto Brasileiro de Geografia e Estatística. Indicadores sociodemográficos e de saúde no Brasil. Rio de Janeiro, 2009 [acesso em 2014 jun 19]. Disponível em: http://www.ibge.gov.br/ home/estatistica/populacao/indic\_sociosaude/2009/indicsaude.pdf
- Sousa AI, Silver LD, Griep RH. Apoio social entre idosas de uma localidade de baixa renda no município do Rio de Janeiro. Acta Paul Enferm. 2010; 23(5):625-31.
- 32. Peres MAC. Velhice e analfabetismo, uma relação paradoxal: a exclusão educacional em contextos rurais da região Nordeste. Soc Estado. 2011; 26(3):631-62.
- Alves JED, Cavenaghi SM. Indicadores de desigualdade de gênero no Brasil. Mediações. 2012; 17(2):83-105.
- 34. Walter MIMT. A dualidade na inserção política, social e familiar do idoso: estudo comparado dos casos de Brasil, Espanha e Estados Unidos. Opin Publica. 2010; 16(1):186-219.
- 35. Lemos M, Souza NR, Mendes MMR. Perfil da população idosa cadastrada em uma unidade de saúde da família. Rev Min Enferm. 2006; 10(3):218-25.
- 36. Louvison MCP, Lebrão ML, Duarte YAO, Santos JLF, Malik AM, Almeida ES. Desigualdades no uso e acesso aos serviços de saúde entre idosos no município de São Paulo. Rev Saúde Pública. 2008; 42(4):733-40.
- 37. Debert GG, Oliveira AM. A feminização da violência contra o idoso e as delegacias de polícia. Mediações. 2012; 17(2):196-213.
- French DJ, Sargent-Cox KA, Kim S, Anstey KJ. Gender differences in alcohol consumption among middle – aged and older adults in

Australia, the United States and Korea. Aust N Z J Public Health. 2014; 38(4):332-9.

- 39. Szklo AS, Levy D, Souza MC, Szklo M, Figueiredo VC, Perez CA, et al. Mudanças nos padrões de consumo de cigarros dos fumantes brasileiros entre 1989 e 2008. Cad Saude Publica. 2012; 28(11): 2211-5.
- 40. Waern M, Marlow T, Morin J, Ostling S, Skoog I. Secular changes in at-risk drinking in Sweden: birth cohort comparisons in 75-yearold men and women 1976-2006. Age Ageing. 2014; 43(2):228-34.
- 41. Linhares CRC, Guimarães RM, Campos APM, Carvalho NT, Coelho VLD. Perfil da clientela de um ambulatório de geriatria do Distrito Federal. Psicol Reflex Crit. 2003; 16(2):319-26.
- 42. Nardi EFR, Andrade OG. Estados depressivos entre idosos na comunidade Jandaia do Sul, Paraná, Brasil. Arq Ciênc Saúde Unipar. 2005; 9(2):109-16.
- 43. Maciel ÁCC, Guerra RO. Prevalência e fatores associados à sintomatologia depressiva em idosos residentes no Nordeste do Brasil. J Bras Psiquiatr. 2006; 55(1):26-33.
- 44. Barreto SM, Figueiredo RC. Chronic diseases, self-perceived health status and health risk behaviors: gender differences. Rev Saude Publica. 2009; 43(supl.2):38-47.
- 45. Barreto SM, Kalache A, Giatti L. Does health status explain gender dissimilarity in healthcare use among older adults? Cad Saúde Pública. 2006; 22(2):347-55.
- 46. Song Y, Bian Y. Gender differences in the use of health care in China: cross-section al analysis. Int J Equity Health. 2014; 13:8.
- 47. Santos VC, Santos MG, Vilela ABA, Nery AA, Casotti CA, Boery EN. Padrões de mudanças na saúde do homem a partir de indicadores demográficos e epidemiológicos. Rev pesq cuid fundam [Internet]. 2015; 7(2):2569-81.

P. A. B. Silva was responsible for the conception of the original idea of the article, planning, data collection, writing, analysis and interpretation of the data. F. C. Santos, for data collection, bibliographic review, writing, analysis and interpretation of the data. S. M. Soares, for the orientation, structuring of the article and critical review of the content. L. B. Silva, for data collection, writing, bibliographic review and data interpretation. All authors participated in the approval of the final version of the manuscript.

Received on: 08/30/2016 Reviews required: 02/08/2017 Approved on: 09/19/2016 Published on: 01/08/2018

Author responsible for correspondence: Francielle Carolina Santos Av. Prof. Alfredo Balena, 190, Santa Efigênia

Belo Horizonte/MG, Brazil ZIP-code: 30130-100