

## 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\*

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

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### 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.

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## 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 feminização 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 Básicas 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%)<sup>14</sup> and diabetes *mellitus* (18,0%)<sup>15</sup> 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:  $n = N \times Ni / \text{total}$  ( $n$ : 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®, 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).

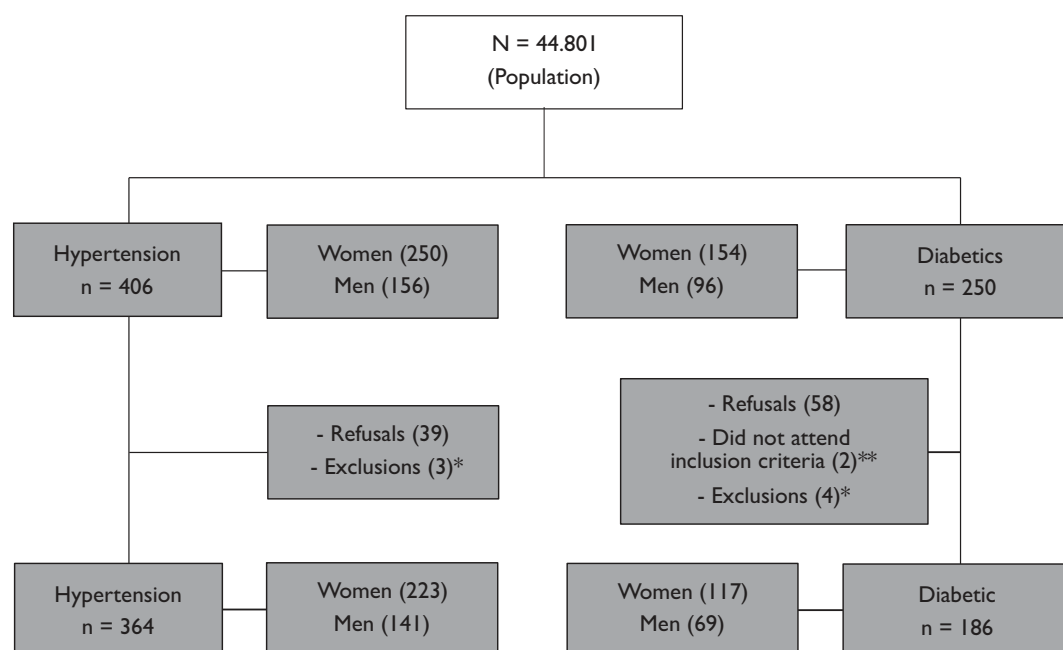
There was a high percentage of morbidities, and 19.2% of the elderly interviewed reported 5 or more comorbidities; Among women, this prevalence was even higher ( $p < 0.001$ ) (Table 2).

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



\*Blank questionnaire

\*\*Lower age than 60

**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<br>(n = 381)<br>n % | Male<br>(n = 149)<br>n % |      | Feminino<br>(n = 232)<br>n % |      | p-value <sup>a</sup> |
|------------------------------|---------------------------|--------------------------|------|------------------------------|------|----------------------|
| <b>Age group (years old)</b> |                           |                          |      |                              |      |                      |
| 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 |                      |
| <b>Place of birth*</b>       |                           |                          |      |                              |      |                      |
| 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 |                      |
| <b>Race/ethnicity*</b>       |                           |                          |      |                              |      |                      |
| White                        | 180 (47,5)                | 70                       | 38,9 | 110                          | 61,1 | 0,872                |
| Brown/black                  | 199 (52,5)                | 79                       | 39,7 | 120                          | 60,3 |                      |
| <b>Marital status*</b>       |                           |                          |      |                              |      |                      |
| 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 |                      |
| <b>Marital situation*</b>    |                           |                          |      |                              |      |                      |
| 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 |                      |
| <b>Religion*</b>             |                           |                          |      |                              |      |                      |
| 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 |                      |
| <b>Education (years)*</b>    |                           |                          |      |                              |      |                      |
| 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 |                      |
| <b>Literacy*</b>             |                           |                          |      |                              |      |                      |
| Literate                     | 316 (83,2)                | 133                      | 42,1 | 183                          | 57,9 | 0,011                |
| Illiterate                   | 64 (16,8)                 | 16                       | 25,0 | 48                           | 75,0 |                      |
| <b>Income (m.w.)*</b>        |                           |                          |      |                              |      |                      |
| < 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; <sup>a</sup>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<br>(n = 381) | Male<br>(n = 149) |      | Female<br>(n = 232) |      | p-value <sup>a</sup> |
|-------------------------------|--------------------|-------------------|------|---------------------|------|----------------------|
|                               | n (%)              | 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<br>(n = 381) | Male<br>(n = 149) |      | Feminino<br>(n = 232) |      | p-value <sup>a</sup> |
|-----------------------------------|--------------------|-------------------|------|-----------------------|------|----------------------|
|                                   | n %                | n                 | %    | n                     | %    |                      |
| <b>Smoking*</b>                   |                    |                   |      |                       |      |                      |
| 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 |                      |
| <b>N. of cigarettes/day**</b>     |                    |                   |      |                       |      |                      |
| 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 |                      |
| <b>Years of smoking**</b>         |                    |                   |      |                       |      |                      |
| ≤ 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 |                      |
| <b>Tried to quit*<sup>‡</sup></b> |                    |                   |      |                       |      |                      |
| 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)

| Variables   | Total<br>(n = 381) | Male<br>(n = 149) |      | Feminino<br>(n = 232) |      | p-value <sup>a</sup> |
|---|--------------------|-------------------|------|-----------------------|------|----------------------|
|   | n %                | n                 | %    | n                     | %    |                      |
| <b>Alcohol consumption*</b>                           |                    |                   |      |                       |      |                      |
| 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 |                      |
| <b>Frequency of alcohol consumption**</b>             |                    |                   |      |                       |      |                      |
| 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 |                      |
| <b>Ingested volume of alcohol (cups)*<sup>‡</sup></b> |                    |                   |      |                       |      |                      |
| 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).

<sup>‡</sup>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.<sup>29,34</sup>

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 non-probabilistic 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.

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