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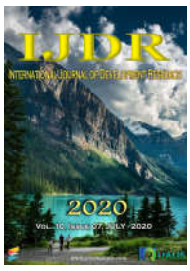

RESEARCH ARTICLE OPEN ACCESS

HYPERFREQUENT ELDERLY IN PRIMARY HEALTH CARE: SOCIODEMOGRAPHIC, CLINICAL-FUNCTIONAL, BEHAVIORAL AND MENTAL CHARACTERISTICS

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ABSTRACT

***Objective*:** Identify sociodemographic, clinical-functional, behavioral and mental characteristics in hyper-frequenting elderly people in Primary Health Care. ***Methods*:** Cross-sectional study, carried out at the Basic Health Unit of Granja do Torto, Brasília, Distrito Federal, using questionnaires to obtain sociodemographic, functional, clinical, mental and behavioral data, in 33 hyper-frequenting elderly (group one) and 37 non-elderly hyperfrequentadores (group two). For data analysis, descriptive analysis and the chi-square test were used, considering significant $p \leq 0.05$. ***Results*:** In both groups there was a prevalence of females. The variables significantly different between the two groups were: number of consultations ($p < 0.001$), age (74.4 ± 6.7 in group one and 69.7 ± 6.7 in group two) ($p = 0.04$), polypharmacy ($p = 0.02$), self-perceived health ($p = 0.05$), level of physical activity ($p = 0.001$), instrumental activities of daily living ($p = 0.05$) and chronic diseases (osteoporosis ($p = 0.03$) and neoplasia ($p = 0.01$)). ***Conclusion*:** Knowledge of the profile of hyper-frequenting elderly people will enable the development of a more resolutive approach to the demands of these users, contributing to the planning of public health actions and favoring the organization of health services provision in relation to the field of geriatrics and gerontology, developed within the scope of Primary Health Care.

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INTRODUCTION

The increase in life expectancy, caused by the demographic transition due to reduced fertility and mortality, is responsible for the accelerated growth of elderly people in Brazil (Camarano, 2014; Miranda; Mendes; Silva, 2016; IBGE, 2016), going from 9.8%, in 2005, to 14.3%, in 2015 (BRASIL, 2019). Aging is an individual and heterogeneous process, with changes occurring that lead to an increase in non-transmissible chronic-degenerative diseases (Reis; Noronha; Wajnman, 2016). Due to the increase in longevity, as in other countries, the proportion of elderly users seeking health services in Brazil has been growing, a reality with a tendency to intensify (Pliger; Menon; Mathias, 2013).

Thus, due to the impact of the Brazilian population aging process, in 2006 the National Health Policy for the Elderly was created (BRAZIL, 2006), with Primary Health Care (PHC) being the gateway for the elderly to the level of care. primary (BRASIL, 2006; BRASIL, 2010; BRASIL, 2014), according to the demands and needs of the territory (BRASIL, 2017). At the PHC level, hyperfrequent users (HF) or hyperusers were identified, who consume 21 to 67% of resources, being responsible for a large number of prescriptions and referrals to other levels of care, causing a high economic impact, human and social (Vedsted *et al*., 2004; Vedsted; Christensen, 2005; Robles *et al*., 2009). A study carried out with PHC users in the age group from 18 to 75 years old, showed a prevalence of 4.3% of the sample of hyper-frequenters, and this group

consumed an average of 201 consultations / year, that is, 24.2% of the total of consultations offered in the period (Carvalho; Carvalho; Lopes, 2015). Other significant characteristics that lead individuals to become HF are the presence of chronic diseases, mainly systemic arterial hypertension and diabetes mellitus, in addition to psychiatric diseases (Robles *et al*., 2009). Data from the National Health Survey (PNS), carried out in Brazil in 2013, corroborate by showing that the group of 60 years or older, had a higher proportion of medical consultations in the last 12 months (83.5%) that preceded the research, compared other age groups (Stopa *et al*., 2017). An international study found that 3% of users who frequently attended PHC were associated with 15% of all consultations, generating five times more hospital expenses, an increase in psychiatric disorders and functional somatic symptoms compared to normal care (Morris *et al*., 2012). Another international study, comparing the physical and mental health and health status of HF participants in PHC, in the last two years, showed an association with low quality of life and high clinical complexity characterized by physical and mental multimorbidity (Patel *et al*., 2015). In this scenario, the reasons that motivate the individual to resort frequently to PHC may be related to individual, pathological, sociodemographic factors, as well as to the health services themselves (Doup *et al*., 2012). In Brazil, there are few studies to understand who are HF patients and why they consume more health resources at the PHC level (Fernandes; Bertoldi; Barros, 2009). This fact points to the need for research by these users, aiming to provide subsidies for care goals in PHC services. Thus, the present study aimed to identify who are the PHF elderly PHC and to associate their sociodemographic, clinical-functional, behavioral and mental characteristics, comparing with the group of non-hyperfrequent elderly.

MATERIALS AND METHODS

This is an observational and analytical, cross-sectional study with a quantitative approach. The research was carried out from January to August 2018 at the Basic Health Unit of Granja do Torto, of Primary Health Care (PHC), registered by the Ministry of Health. The PHC in Granja do Torto, within the scope of the Unified Health System (SUS), was opened in 2006 and has a team composed of a doctor, a resident doctor, a nurse, two nursing assistants, a Community Health Agent, a surgeon -dentist and two Oral Health Technicians. This PHC is easily accessible, with patients of all ages treated by appointment as well as on demand. Medical and nursing consultations last about 20 to 30 minutes, held from Monday to Friday, from 7 am to 5 pm, and on Saturday from 8 am to 12 pm. All patients who seek the service are welcomed and treated by the team, with basic medicines available in their internal pharmacy. In the sample, the following inclusion criteria were adopted: elderly (≥60 years), attendance with medical consultations at the PHC during 2017, normal cognition and signing the Informed Consent Form (ICF), after providing the relevant information. Exclusion criteria were: bedridden patients or physically unable to attend PHC, with significant visual and / or auditory deficit and, at the moment, they no longer live in Granja do Torto. The selected elderly people were invited, through telephone contact, to attend the Health Center of Granja do Torto, and a meeting was scheduled to explain the objectives of the study. After clarification, the participants who agreed to participate in the research signed the informed consent form and the study complied with the national ethical criteria of Resolution 466/2012 and international criteria of the Declaration of Helsinki for research involving human beings. The research was submitted for appreciation and approved by the Research Ethics Committee for Humans of the Catholic University of Brasília, under the opinion of nº 1,861,003, on December 12, 2016, being a research subproject entitled "Elderly hyperfrequenters in Primary Health Care: influence of expressive therapies on the frequency of consultations and sleep disorders." In the current study, those who had the highest frequency in the number of medical appointments in the last 12 months were considered hyperfrequent elderly (FH) (Pymont; Butterworth, 2015a; Pymont; Butterworth, 2015b Smits *et al*., 2016). The selected elderly were divided into two groups. In group one, the elderly were HF and, in group two, the elderly who were not hyperfrequent (NHF), that is, who were not included in the 10% who most sought medical consultations in the last year. In the collection of data, a sociodemographic questionnaire was initially applied, being questioned: age, sex, race, education (years of study), family arrangement, family income (in minimum wages), religion and retired. Then, a questionnaire about clinical data was applied, asking about the following chronic diseases diagnosed by a doctor: arterial hypertension, asthma, pulmonary emphysema, angina / acute myocardial infarction, heart failure, osteoporosis, diabetes mellitus, arthrosis / arthritis / rheumatism, dyslipidemia, depression, neoplasia, thyroid disease, hearing impairment, ophthalmic disease and others. Afterwards, he wondered about: number of falls and hospitalizations in the last year; number of drugs used considering the "concomitant use of five or more drugs" as polypharmacy (Silveira; Dalastra; Pagotto, 2014) and self-perceived health. The presence of behavioral factors (smoking, drinking and physical activity level) were investigated by adopting the WHO classification (WHO, 1992) for smoking, of the Ministry of Health (BRAZIL, 2006) for alcoholism and the International Physical Activity Questionnaire (IPAQ), short version and validated in Brazil to determine the level of physical activity (Matsudo *et al*., 2001). Next, scales for evaluating the functionality validated for use in Brazil, being basic activities of daily living with the Katz Index (Katz; Chinn, 1959) and instrumental activities of daily living with the Lawton and Brody Scale (Lawton; Brody, 1969). Finally, an assessment of mental status was performed using instruments validated for Brazil through the Beck Depression Inventory (Beck; Steer; Garbin, 1988; Cunha, 2001), Beck's Anxiety Inventory (Cunha, 2001), Scale of Perceived Stress (Luft *et al*., 2007) and UCLA Loneliness Scale (Barroso *et al*., 2016). The data were processed and analyzed using the SPSS-IBM program (Statistical Package for Social Sciences) version 22.0 for Windows, duly registered for the research. The normality of the data was verified using the Shapiro-Wilk test. The descriptive analysis of the data, described by means, standard deviation and frequencies (absolute and relative). For inferential analysis, the Chi-Square Test was used. The level of significance adopted was 5%, that is, $p \leq 0.05$.

RESULTS

In the PHC of Granja do Torto, during 2017, 160 elderly people were treated with medical appointments. When submitted to the inclusion and exclusion criteria of the study, 90 elderly people were excluded (16 not located, 14 due to change of district, 13 bedridden, 12 refused to participate, 12 with cognitive impairment, 11 deaths, 08 hospitalized and 04 with hearing impairment) and thus, 70 elderly people

participated in the research. The 70 elderly people were divided into two groups, being: in group one, 33 elderly people (47.1%) HF (with six or more consultations in the year); and in group two, 37 elderly (52.9%) NHF (with less than six visits per year). Regarding the number of medical visits by the elderly in PHC, the total number of consultations for HF was 253 consultations, with an average of 7.6 ± 1.9, with a minimum of 6 and a maximum of 12 consultations / year and of NHF 94 consultations, average of 2.5 ± 1.1, minimum of one and maximum of 4 consultations / year.

between the groups (p = 0.05). In HF, 19 (57.6%), and in NHF, 11 (29.7%) elderly people live 501-1000 meters (Table 1). Among HF users, 22 (66.7%) were women and 11 (33.3%) men, while in NHF users, 28 (75.7%) were women and nine (24.3 %) of the men. The mean age of the HF was 74.2 ± 6.7 years, minimum age of 63 and maximum of 90 years, while in the NHF it was 69.7 years ± 6.7, with a minimum age of 60 and a maximum of 87 years. Among the HF the predominant age group was 70 to 79 years old (60.6%) and in the NHF the one from 60 to 69 years old (51.4%), being identified

Table 1. Sociodemographic variables of 70 elderly people, 33 hyperfrequenters and 37 non-hyperfrequent at the Basic Health Unit of Granja do Torto, Distrito Federal, 2018

Variables	Hyperfrequenters		Non-hyperfrequent		
Number of medical appointments	n	%	n	%	p
1-2	0	0.0	15	40.5	<0.001
3-5	0	0.0	22	59.5	
6-8	22	66.7	0	0.0	
9+	11	33.3	0	0.0	
Mean (± standard deviation)	7.6	±1.9	2.5	±1.1	
Distance from the elderly's residence to UBS					0.05
Up to 500 meters	7	21.2	10	27.0	
Between 501 and 1000 meters	19	57.6	11	29.7	
More than 1000 meters	7	21.2	16	43.2	
Sex					0.40
Men	11	33.3	9	24.3	
Women	22	66.7	28	75.7	
Age					0.04
60 – 69	7	21.2	19	51.4	
70 – 79	20	60.6	14	37.8	
80 – 89	5	15.2	4	10.8	
90 or more	1	3.0	0	0.0	
Mean (± standard deviation)	74.2 years	± 6.7	69.7 years	± 6.7	
Breed					0.24
White	18	54.5	15	40.5	
Black / Brown	15	45.5	22	59.5	
Marital status					0.73
Married / Stable Union	18	54.5	20	54.1	
Single	4	12.1	2	5.4	
Widowed	10	30.3	13	35.1	
Divorced / Separated	1	3.0	2	5.4	
Education					0.78
illiterate	6	18.2	6	16.2	
1 to 4 years	11	33.3	16	43.2	
5 to 8 years	7	21.2	5	13.5	
9 years or more	9	27.3	10	27.0	
Instruction level					0.78
No education / less than one year of study	6	18.2	6	16.2	
Incomplete elementary school	15	45.5	16	43.2	
Complete Elementary School	2	6.1	5	13.5	
Incomplete high school	1	3.0	0	0.0	
Complete high school	7	21.2	6	16.2	
Graduated	2	6.1	4	10.8	
Retired					0.72
No	12	36.4	12	32.4	
Yes	21	63.6	25	67.6	
Monthly Income of the Elderly *					0.76
No income	4	12.1	4	10.8	
Up to 1 minimum wage	12	36.4	13	35.1	
Between 1 to 5 minimum wages	7	21.2	5	13.5	
More than 5 minimum wages	10	30.3	15	40.5	
Religion					0.41
Catholic	24	72.7	22	59.5	
Evangelical	7	21.2	13	35.1	
Spiritist	1	3.0	2	5.4	
Umbanda/Candomblé	1	3.0	0	0.0	
Family Arrangement					0.90
Single person	5	15.2	6	16.2	
Two or more people with a degree of kinship.	28	84.8	31	83.8	
Total	33	100.0	37	100.0	

Subtitles: UBS = Basic Health Unit; * Minimum Wage Base in 2018 (year of data collection): R $ 954.00 Source: Research with elderly people from the Basic Health Unit of Granja do Torto, Brasília / DF, 2018.

The average number of HF consultations was three times higher than that of NHF, with a significant difference between groups (p <0.001). The distance from the elderly person's residence to the Health Center showed a significant difference

significant difference between the groups (p = 0.04) (Table 1). White color was self-reported more frequently in HF, corresponding to 18 (54.5%) elderly people, and in NHF it was black / brown color / race, self-reported in 23 (59.5%) elderly

people. Data on marital status showed that 18 (54.5%) and 10 (30.3%) HF and 20 (54.1%) and 13 (35.1%) NHF were married and widowed, respectively (Table 1). The highest prevalence of education was low education (up to four years of study), occurring in 11 (33.3%) elderly people in HF and 16 (43.2%) in NHF. Nine (27.3%) of HF and 10 (27.0%) of NHF had nine or more years of schooling. As for religion, 24 (72.7%) of the HF and 22 (59.5%) of the NHF were Catholic. With regard to retirement, 21 (63.6%) HF and 25 (67.6%) NHF were retired (Table 1). Regarding monthly income, up to one minimum wage in HF (36.4%) and five or more wages in NHF (40.5%) prevailed. As for the family arrangement, 28 (84.8%) HF and 31 (83.8%) NHF lived with two or more people who were related (Table 1). No significant differences were found between the two groups in the following sociodemographic variables: sex, race, marital status, education, if retired, monthly income, religion and family arrangement.

16 (43.2%) NHF. The less frequent morbidities were: asthma (9.1%), pulmonary emphysema (9.1%) and hearing impairment (9.1%) in HF, whereas in NHF we had neoplasia (2.7%) and pulmonary emphysema (2.7%). A significant association was found in the groups regarding diseases: osteoporosis (p = 0.03) and neoplasia (p = 0.01) (Table 3). In the assessment of functionality, regarding instrumental activities of daily living, 26 (78.8%) HF had partial dependence and 7 (21.2%) NHF had independence, with a significant difference (p = 0.05). As for basic activities of daily living, 32 (97%) HF and 34 (91.9%) NHF were independent, with no significant difference (Table 4). As for depression, 17 (51.5%) HF and 21 (56.7%) NHF had depression (mild, moderate or severe). Although this difference in the two groups was not significant, the intensity of depression was greater in the NHF group. As for anxiety, 13 (39.4%) HF and 13 (35.1%) NHF did not present it, while 7 (21.2%) and 15 (40.5%) showed mild anxiety, and 5 (15, 2%) and 6 (16.2%)

Table 2. Hospitalizations and falls in the last year, polypharmacy and behavioral variables of the 70 elderly people, 33 hyperfrequent and 37 non-hyperfrequent at the Basic Health Unit of Granja do Torto, Distrito Federal, 2018

Variables	Hyperfrequenters		Non-hyperfrequent		
	n	%	n	%	p
Hospitalizations					0.89
No	21	63.6	23	62.2	
Yes	12	36.4	14	37.8	
Falls					0.71
No	20	60.6	24	64.9	
Yes	13	39.4	13	35.1	
Number of medicines					0.02
None	1	3.0	4	10.8	
Between 1 and 4 medications	10	30.3	20	54.1	
5 or more (Polypharmacy)	22	66.7	13	35.1	
Smoker					0.19
Ex-Smoker	7	21.2	12	32.4	
No	23	69.7	18	48.6	
Yes	3	9.1	7	18.9	
Alcoholic					0.33
No	28	84.8	28	75.7	
Yes	5	15.2	9	24.3	
Physical activity level					0.001
Sedentary / irregularly active	28	84.8	17	45.9	
Active / very active	5	15.2	20	54.1	
Total	33	100.0	37	100.0	

Source: Research with elderly people from the Basic Health Unit of Granja do Torto, Brasília / DF, 2018.

There was a report of hospitalization in the last 12 months in both groups, with 12 (36.4%) HF and 14 (37.8%) NHF. Quanto às quedas nos últimos 12 meses, ocorreram em 13 (39,4%) HF e 13 (35,1%) NHF. Regarding medication consumption, 22 (66.7%) HF and 13 (35.1%) NHF reported using five or more medications (polypharmacy), with a significant difference between groups regarding this variable (p = 0.02) (Table 2). Among the behavioral variables, it was observed that: three (9.1%) HF and seven (18.9%) NHF were smokers; and 5 (15.2%) HF and 9 (24.3%) NHF used alcohol. Regarding the level of physical activity, 28 (84.8%) HF and 17 (45.9%) NHF were classified as sedentary / irregularly active and a significant difference was found between the groups (p = 0.001) (Table 2). As for self-perceived health, 16 (48.5%) HF considered their health to be regular, and 24 (64.9%) of the NHF reported their health as good / very good, with a significant difference between groups (p = 0, 05) (Table 3). Regarding the presence of chronic conditions, 28 (84.8%) HF and 26 (70.3%) NHF had three or more chronic conditions. In decreasing order of frequency, 29 (87.9%) HF and 27 (73%) NHF had arterial hypertension; followed by ophthalmic disease in 19 (57.6%) HF and 22 (59.5%) NHF; dyslipidemia in 19 (57.6%) HF, and osteoarthritis / arthritis / rheumatism in

moderate anxiety, in the HF and NHF groups, respectively. It was observed that in the HF group, 8 (24.2%) elderly people had severe anxiety. There was no significant difference between the two groups (Table 5). As for loneliness, 19 (57.6%) HF and 26 (70.3%) NHF did not show signs of loneliness. Among the 14 (42.4%) and 11 (29.7%) who felt loneliness, in 10 (30.3%) and 9 (24.3%) it was of light intensity, and in 1 (3.0 %) and 2 (5.4%) moderate, in the groups of HF and NHF, respectively. It is noteworthy in the FH, that 3 (9.1%) elderly people had loneliness of intense intensity. Considering the intensity of perceived stress, 24 (72.7%) HF and 29 (78.4%) NHF presented low / moderate stress. However, 9 (27.3%) HF and 8 (21.6%) NHF were identified with high / very high stress, with no significant difference between groups (Table 5).

DISCUSSION

The current research had as a guiding question to identify who are the elderly FH in PHC and to associate their sociodemographic, clinical-functional, behavioral and mental characteristics, comparing with the group of non-hyperfrequent elderly.

Table 3. Self-perceived health, self-reported clinical variables of the 70 elderly, 33 hyperfrequent and 37 non-hyperfrequenters at the Basic Health Unit of Granja do Torto, Federal District, 2018

Variables	Hyperfrequenters		Non-hyperfrequent		
	n	%	n	%	p
Self-perceived health					0.05
Very good / good	15	45.5	24	64.9	
Regular	16	48.5	8	21.6	
Bad / very bad	2	6.1	5	13.5	
Comorbidities					0.14
Between 01 and 02	5	15.2	11	29.7	
3 or more	28	84.8	26	70.3	
Arterial hypertension					0.12
No	4	12.1	10	27.0	
Yes	29	87.9	27	73.0	
Angina / Acute Myocardial Infarction					0.23
No	26	78.8	33	89.2	
Yes	7	21.2	4	10.8	
Asthma					0.37
No	30	90.9	31	83.8	
Yes	3	9.1	6	16.2	
Cardiac insufficiency					0.48
No	28	84.8	29	78.4	
Yes	5	15.2	8	21.6	
Osteoporosis					0.03
No	18	54.5	29	78.4	
Yes	15	45.5	8	21.6	
Diabetes mellitus					0.67
No	18	54.5	22	59.5	
Yes	15	45.5	15	40.5	
Arthrosis / Arthritis / Rheumatism					0.48
No	16	48.5	21	56.8	
Yes	17	51.5	16	43.2	
Dyslipidemia					0.15
No	14	42.4	22	59.5	
Yes	19	57.6	15	40.5	
Depression					0.27
No	20	60.6	27	73.0	
Yes	13	39.4	10	27.0	
Neoplasm					0.01
No	26	78.8	36	97.3	
Yes	7	21.2	1	2.7	
Thyroid disease					0.40
No	25	75.8	31	83.8	
Yes	8	24.2	6	6.2	
Hearing difficulties					0.37
No	30	90.9	31	83.8	
Yes	3	9.1	6	16.2	
Ophthalmic Disease					0.87
No	14	42.4	15	40.5	
Yes	19	57.6	22	59.5	
Pulmonary emphysema					0.25
No	30	90.9	36	97.3	
Yes	3	9.1	1	2.7	
Others *					0.001
No	8	24.2	22	64.9	
Yes	25	75.8	13	35.1	
Total	33	100.0	37	100.0	

*Anxiety, Rhinitis, Sinusitis, Gastritis, Insomnia, Stroke, Fibromyalgia, Labyrinthitis, Malnutrition, Ankylosing Spondylitis, Allergy, Breath, Osteopenia, Arrhythmia.

Source: Research with elderly people from the Basic Health Unit of Granja do Torto, Brasília / DF, 2018.

Table 4. Classification of the degree of functional capacity of the 70 elderly people, 33 hyperfrequent and 37 non-hyperfrequenters at the Basic Health Unit of Granja do Torto, Federal District, 2018

Variables	Hyperfrequenters		Non-hyperfrequent		
	n	%	n	%	p
AIVD*					0.05
Partial Dependence	26	78.8	21	56.8	
Independent	7	21.2	16	43.2	
ABVD**					0.16
Important Dependency	1	3.0	0	0.0	
Partial Dependence	0	0.0	3	8.1	
Independent	32	97.0	34	91.9	
Total	33	100.0	37	100.0	

Legend: * Instrumental activities of daily living .; ** Basic activities of daily living.

Source: Research with the elderly at the Basic Health Unit of Granja do Torto, Brasília / DF, 2018.

Table 5. Prevalence according to the severity classification of depression, anxiety, loneliness and stress among the 70 elderly, 33 hyper-frequenters and 37 non-hyperfrequenters at the Basic Health Unit of Granja do Torto, Federal District, 2018

Variables	Hyperfrequenters		Non-hyperfrequent		
	n	%	n	%	p
Depression					0.38
No depression	16	48.5	16	43.2	
Mild depression	9	27.3	16	43.2	
Moderate depression	7	21.2	5	13.5	
Severe depression	1	3.0	0	0.0	
Anxiety					0.16
Minimal anxiety	13	39.4	13	35.1	
Mild anxiety	7	21.2	15	40.5	
Moderate anxiety	5	15.2	6	16.2	
Severe anxiety	8	24.2	3	8.1	
Loneliness					0.23
Minimal loneliness	19	57.6	26	70.3	
Light loneliness	10	30.3	9	24.3	
Moderate loneliness	1	3.0	2	5.4	
Intense loneliness	3	9.1	0	0.0	
Stress					0.58
Low / moderate	24	72.7	29	78.4	
High / very high	9	27.3	8	21.6	
Total	33	100.0	37	100.0	

Source: Research with elderly people from the Basic Health Unit of Granja do Torto, Brasília / DF, 2018.

The reasons that motivate the individual to resort frequently to health services may be related to individual, sociodemographic, pathological factors, as well as to the health services themselves (Vedsted; Christensen, 2005), suggesting that the pathology presented by the patient and the search for consultation is related to the characteristics of each individual, regardless of the symptoms or diagnoses presented (Al-Abaldi *et al*., 2018). A study shows that up to 40% of HF will still be HF the following year (Vedsted; Christensen, 2005). In this perspective, it is relevant the multidisciplinary team's performance in PHC in an integrated manner through non-pharmacological interventions, thus being able to minimize the number of medical consultations per year and a worse assessment of health status, contributing to actions to promote health and comprehensive health care. elderly, including their formal and informal caregivers, resulting in lower expenditures for public health services. In the current study, a significant difference was found between the groups of HF and NHF in terms of age, functionality and self-perceived health. Quanto à idade, predominou nos HF o grupo etário de 70 a 79 anos, em concordância com a literatura que relaciona HF com o aumento da idade (Vedsted; Christensen, 2005). In the current study, no significant difference was found between the two groups in relation to the gender variable, but found a predominance of women, corroborating the finding of the study by Gomes *et al* (2013), which observed a greater number of FH and five times greater number of women medical visits.

In Portugal, the profile of the HF user as an individual was evidenced: women, sixth decade of life, low education, married and belonging to a nuclear family (Tallon *et al*., 2004). Although another study points out that HF are presented as a heterogeneous group, some characteristics such as women gender, advanced age and lower socio-educational and economic classes have been identified (Vedsted, 2004). In the current study, no significant differences were found regarding education and monthly income in the two groups. In the current research, there was no significant difference between the two groups regarding smoking and alcoholism. A study carried out in Spain showed that 25.7% of FHs were addicted to tobacco. This discordant finding is probably due to the different level of smoking in different populations (De Waal *et al*., 2008).

Regarding the level of physical activity, the elderly HF had a significantly higher prevalence of sedentary lifestyle / irregularly active (84.8%) than the elderly NHF (45.9%) with a significant difference. A study by Oliveira *et al*. (2017), with elderly people in PHC, points to data referring to the level of physical activity, indicating that 88.9% of them are active or very active, and this finding is different from the present study, however, these same authors report that for sedentary elderly people / irregularly active, the lack of financial resources and the unsafe environment at the place of physical activity were frequent obstacles to the practice of physical activities. The literature points to great relevance for the practice of physical activity in the elderly, with cost reduction in the health sector, as it favors physical and psychosocial benefits, delaying the onset of chronic non-communicable diseases (Barros *et al*., 2016). The importance of stimulating the elderly public of PHC is emphasized, so that they adopt the habit of practicing an active and healthy lifestyle (Saajanaho *et al*., 2015). As for functionality, the current study showed that in instrumental activities of daily living, HF were significantly more dependent. This finding shows that they were probably with negative outcomes in physical health and risks of acute complications, thus seeking more medical assistance and avoiding the installation of other morbidities and worsening of the workforce. Although with no significant difference, the least number of hospitalizations in the last 12 months was found in the HF group. It is possible that this finding is due to the better follow-up of the elderly, as they sought medical appointments more frequently and were properly medicated, with no worsening of their disease to the point of requiring hospitalization. Thus, the greater frequency of medical consultations, even increasing direct expenses in SUS, indirectly may have prevented greater harm and, even, hospital admissions. A study showed that more than 50% of HF suffer from physical and psychological changes, social factors (inadequate social support, unemployment and divorce). They were found in 1/3 of the multiproblems HF (physical, psychological and social) according to Vedsted and Christensen (2005). In the Netherlands, a study estimated that more than 50% of HF had a physical illness and about 33% had a combination of physical, mental and social problems (Foster; Jordan; Croft, 2006). Other studies, in line, have highlighted that these individuals have a high prevalence of

chronic, psychiatric and physical illnesses, as well as emotional and social problems (Vedsted; Christensen, 2005; Foster; Jordan; Croft, 2006). In the current study, although without significant difference, there was a greater number of chronic self-reported diseases in HF, such as: arterial hypertension, dyslipidemia, diabetes mellitus, osteoarthritis / arthritis / rheumatism and ophthalmic disease. Accordingly, a study indicated that HF are generally carriers of chronic disease (Tallon *et al*., 2004). Another study showed that 86.3% of HF had some risk factor (34% high blood pressure, 27.7% obesity and 17.7% diabetes mellitus (De Waall *et al*., 2008). In the current study, HF used polypharmacy more frequently with significant difference between groups. Previous work showed a strong association between HF and the use of polypharmacy, this group being responsible for a high proportion of medical prescriptions. In that same study, 46-88% of HF used three or more medications, verifying that HF received a prescription in 95% of cases and used 27% of all drugs prescribed. The most used drugs among HF were: antibiotics, strong analgesics, psychotropic and drugs for the cardiovascular, musculoskeletal and gastrointestinal systems (Vedsted *et al*., 2004). Research has identified an association of HF with a diagnosis of mental illness rather than with a somatic diagnosis. Thus, patients with mental illness are at greater risk of using PHC (Schneider *et al*., 2011). Another study showed that 50% of HF showed physical illness, more than 50% had some type of psychological disorder, and that multiple problems were found in one third of this population (Vedsted; Christensen, 2005). Research has shown a higher prevalence of mental disorders among the PHC HF group, with up to 40% of this group presenting with depression (Schneider *et al*., 2011). In the current study, depression was not reported more frequently in the HF group, but, when present, it occurred in greater intensity in this group. A study carried out in Porto Alegre, RS, verifying the association between a history of depression and HF users in PHC, found that people with a history of depression tended to use PHC services more, with a higher prevalence in the HF group (Carvalho; Carvalho; Lopes, 2015). However, symptoms of other diseases that resemble those of depression or non-classical depressive disorder, characterized only by somatic changes, are some of the difficulties encountered in the recognition of this mental disorder among HF, leading to conflicting data in the literature.

In disagreement with the current study, research found a significant difference between the HF and NHF groups with depression, and those with a positive history of depression tended to use PHC services more, with a higher prevalence of HF (Carvalho; Carvalho; Lopes, 2015). The feeling of loneliness arose equally in frequency and intensity in both groups. It is possible that HF users, when going to the medical consultation, have been listened to carefully, obtaining some degree of support, which led to no difference being seen between the two groups. A study reported that 54.5% of the participants wished to discuss loneliness, relationships or social activities (Hand *et al*., 2014). A study on the prevalence of loneliness among the elderly in 12 countries showed a variation in the prevalence of loneliness from 25% in Denmark to 60% in Greece. In Brazil, this information has not yet been estimated (Sudstrom *et al*., 2009). A study conducted in Kingston, Ontario, inferred that social isolation in the elderly leads to frequent use of PHC (Hand *et al*., 2014). In the current study, the negative self-perception of health status (fair / bad / very bad) appeared more frequently in HF, with a significant difference being found between the two groups. The current research used the "very good and good" responses as a positive perception of health and the sum of "regular, bad and very bad" responses as a negative perception of health, as done in other national studies (Lim *et al*., 2007; Barros *et al*., 2009; Park, 2014; Baruth *et al*., 2014; Silva; Junior; Vilela, 2014; Medeiros *et al*., 2016; Dresch *et al*., 2017; Poubel *et al*., 2017; Lindemann *et al* ., 2019). Dresch *et al*. (2017) showed that in 50 elderly people assisted in the Family Health Strategy in a city in the south of the country, 28% had negative self-perception of health. In the population of adults and the elderly assisted at PHC in Pelotas, RS, 41.6% had negative self-perceived health. Medeiros *et al*. (2016), in a sample comprising 686 elderly people living in the community in the Southeast region of Brazil, found a high prevalence of negative self-perceived health status (57.5%), justifying this high prevalence due to the presence of multiple comorbidities. These authors highlighted the relevance of evaluating this variable, which should be used as an indicator of morbidity and decreased functionality, analyzing both physical and emotional aspects, and being a good predictor of mortality. Regarding negative self-perception of health and instrumental activities of daily living, cross-sectional studies (Silva; Junior; Vilela, 2014; Poubel *et al*., 2017) carried out with elderly people assisted in Basic Health Units in the Northeast and North of Brazil, reported that 59.1% and 46.3%, respectively, presented negative self-perception of health. These elderly people needed assistance to perform instrumental activities of daily living, associated with the existence of chronic non-communicable diseases similar to that found in the current study, impacting on greater access to the use of primary health services and economic expenditure for the public service.

Various surveys of older population groups show a high prevalence of negative self-perceived health (Lim *et al*., 2007; Barros *et al*., 2009; Park, 2014; Baruth *et al*., 2014; Lindemann *et al*., 2019). Among the limitations of current research is the scarcity of national studies that identify who are the elderly HF in the country, leading to difficulties in discussing the findings. It is not ideal to compare the data found in developing countries, such as Brazil, which is experiencing the advent of rapid population aging, with a high burden of chronic non-communicable diseases, with developed countries that experienced this much slower aging. This aging population in Brazil generates growing care demands in PHC, the gateway for the elderly to the health system. Public policies in the country should focus on this age group, as the absence of adequate interventions that make care for the elderly person integrally viable, with a vision of the health team encompassing the elderly, their family and the social network that protects them, will cause deleterious effects on the quality of life of this age group. This research showed that the elderly HF in the PHC of Granja do Torto, in relation to the elderly in the same community who also sought the same service at a significantly lower frequency, showed the following significant differences: older age (predominantly 70-79 years); greater number of comorbidities, polypharmacy, greater dependence on instrumental activities of daily living and negative self-perception of health. These HF patients were probably more severely ill, leading to decreased functionality and poor health perception. It is possible that these users, realizing that their health was of worse quality, sought medical services in PHC more frequently. With population aging, and with the largest number of chronic diseases in the very elderly, this is a problem that will be growing, with greater demand for

medical services, causing greater economic impact for SUS and the country. The results allowed the systematization of the characteristics of the elderly HF who consume more resources in the PHC unit. In this way, a study about the profile of these FHs will enable the development of a more resolutive approach to the demands of these users, in addition to better management of medical consultations, contributing to the planning of public health actions and favoring the organization of health service provision in relation to the field of geriatrics and gerontology, developed within the scope of Primary Health Care.

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