Revista de Enfermagem do Centro-Oeste Mineiro 2020;10:e4038 DOI: 10.19175/recom.v10i0.4038 www.ufsj.edu.br/recom



PERFIL CLÍNICO E FUNCIONAL DO IDOSO NA ATENÇÃO PRIMÁRIA À SAÚDE EM BELO HORIZONTE

CLINICAL AND FUNCTIONAL PROFILE OF THE ELDERLY PATIENTS IN A PRIMARY HEALTHCARE IN BELO HORIZONTE

PERFIL CLÍNICO Y FUNCIONAL DEL ANCIANO EN LA ATENCIÓN PRIMARIA DE SALUD EN BELO HORIZONTE

Thaynná Neres dos Santos¹, Isabel Yovana Quispe Mendoza², Silmar Maria da Silva³, Marcia Regina Martins Alvarenga⁴, Edmar Geraldo Ribeiro⁵

RESUMO

Objetivo: Analisar o perfil clínico e funcional do idoso assistido pela Atenção Primária de Saúde. **Método:** Trata-se de um estudo transversal, analítico descritivo, com abordagem quantitativa, realizado na Atenção Primária à Saúde, com 396 idosos. Aplicaram-se dois instrumentos: questionário sociodemográfico e o Índice de Vulnerabilidade Clínico Funcional 20. As análises estatísticas foram realizadas com o auxílio do software *Statistical Package for the Social Sciences* (versão 23), por meio dos testes Qui-Quadrado Simulado e Qui-Quadrado. Para variáveis qualitativas utilizaram-se frequências absoluta e relativa e para variáveis quantitativas medidas de tendência central, posição e dispersão. **Resultados:** Predomínio de idosos entre 60 e 74 anos (64,81%); sexo feminino (65,40%); casados (43,69%); que mantiveram frequência escolar (83,59%); católicos (70,33%); sem cuidador (87,63%); e renda média de R\$ 2194,95 (DP=4153,02). O Índice de Vulnerabilidade Clínico Funcional- 20 apontou que 44,9% dos idosos eram robustos, 42,4% pré- frágeis, e 12,7% frágeis. **Conclusão:** Constatou-se maior prevalência de idosos robustos e recomendam-se ações voltadas à promoção da saúde e prevenção da fragilidade, além de incentivos na utilização de instrumentos de avaliação multidimensional da saúde da pessoa idosa.

Descritores: Envelhecimento; Saúde do Idoso; Enfermagem Geriátrica; Avaliação Geriátrica; Atenção Primária a Saúde.

ABSTRACT

Objective: To analyze the clinical and functional profile of the elderly patient assisted by Primary Healthcare. **Method:** This is a cross-sectional, analytical and descriptive study, with a quantitative approach, carried out in Primary Healthcare, with 396 elderly people. Two instruments were applied: a sociodemographic questionnaire and the Functional Clinical Vulnerability Index 20. Statistical analyses were performed with the aid of software Statistical Package for the Social Sciences (version 23), using the Simulated Chi-Square and Chi-Square tests. For qualitative variables, absolute and relative frequencies were used and for quantitative variables, measures of central tendency, position and dispersion were used. **Results:** Predominance of elderly people between 60 and 74 years-old (64.81%); women (65.40%); married (43.69%); who maintained school attendance (83.59%); Catholic (70.33%); without caregiver (87.63%); and average income of R\$ 2,194.95 (SD = 4,153.02). The Clinical Functional Vulnerability Index- 20 showed that 44.9% of the elderly were robust, 42.4% pre-frail, and 12.7% frail. **Conclusion:** There is a higher prevalence of robust elderly people. Actions aimed at promoting health and preventing frailty are recommended, and the use of multidimensional assessment instruments for the health of the elderly is advised.

Descriptors: Aging; Elderly people's health; Geriatric Nursing; Geriatric Assessment; Primary Health Care.

RESUMEN

Objetivo: Analizar el perfil clínico y funcional de los ancianos atendidos por la Atención Primaria de Salud. **Método:** Se trata de un estudio transversal, analítico y descriptivo, con abordaje cuantitativo, realizado en la Atención Primaria de Salud, con 396 ancianos. Se aplicaron dos instrumentos: cuestionario sociodemográfico y el Índice de Vulnerabilidad Clínica Funcional 20. Los análisis estadísticos se realizaron con la ayuda del software Statistical Package for the Social Sciences (versión 23), utilizando las pruebas de Chi-Cuadrado Simulado y Chi-Cuadrado. Para las variables cualitativas se utilizaron frecuencias absolutas y relativas, y para las cuantitativas se utilizaron medidas de tendencia central, posición y dispersión. **Resultados:** Predominio de ancianos entre 60 y 74 años (64,81%); sexo femenino (65,40%); casado (43,69%); quién mantuvo la asistencia escolar (83,59%); católicos (70,33%); sin cuidador (87,63%); e ingreso promedio de R\$ 2194,95 (DE = 4153,02). El Índice de Vulnerabilidad Clínica Funcional-20 mostró que el 44,9% de los ancianos eran robustos, el 42,4% prefrágiles y el 12,7% frágiles. **Conclusión:** Existe un mayor predominio de ancianos robustos, y se recomiendan acciones orientadas a promover la salud y prevenir la fragilidad, así como incentivos en el uso de instrumentos de evaluación multidimensional para la salud de los ancianos.

Descriptores: Envejecimiento; Salud del Anciano; Enfermería Geriátrica; Evaluación Geriátrica; Atención Primaria de Salud.

¹Enfermeira. Residente Multiprofissional em Saúde do Programa de Urgência e Emergência do Complexo Hospitalar de Contagem. ²Enfermeira. Doutora em Enfermagem. Professora Associada da Escola de Enfermagem da Universidade Federal de Minas Gerais. ³Enfermeira. Doutora em Enfermagem. Professora Adjunta da Escola de Enfermagem da Universidade Federal de Minas Gerais. ⁴Enfermeira. Pós-Doutorado em Enfermagem pela Universidade de São Paulo. Professora Adjunta do curso de Enfermagem da Universidade Estadual de Mato Grosso do Sul. ⁵Enfermeiro. Doutorando em Enfermagem pela Escola de Enfermagem da Universidade Federal de Minas Gerais.

How to cite this article:

Santos TN, Mendoza IYQ, Silva SM, et al. Clinical and functional profile of the elderly patients in a primary healthcare in Belo Horizonte. Revista de Enfermagem do Centro-Oeste Mineiro. 2020;10:e4038. [Access____]; Available in:_____. DOI: http://doi.org/10.19175/recom.v10i0.4038

INTRODUCTION

The aging process in recent decades stands out worldwide. In Brazil, this phenomenon is associated, among other aspects, with the reduction in the fertility rate and the increase in life expectancy. In 2000, the Brazilian population over 60 years-old was 14.5 million people, representing an increase of 35.5% in relation to 10.7 million in 1991. Currently, the projections for 2060, according to IBGE, are that the number of people over sixty will be approximately 82 million (1)

The growth of the elderly population poses new challenges for the health sector, because older adults have specific needs resulting from the presence of Non-Communicable Chronic Diseases (NCDs), which interferes with their quality of life. Most people aged 60 or over are affected by NCDs that require constant monitoring. In some cases, it generates a disabling process in this population, affecting the performance of their daily activities: the impairment of clinical and functional capacity (2)

Clinical and functional capacity assesses fitness, autonomy and independence in carrying out activities directly related to self-care and social participation. This concept characterizes the potential of the elderly people to decide and act in their daily lives in an independent and autonomous way ⁽³⁾.

The reduction in the functional capacity of elderly people can trigger the development of the frailty syndrome, defined as a geriatric clinical syndrome, of a multidimensional character. The frailty syndrome involves a physiological state that increases the vulnerability to stressors by decreasing the physiological reserves and the deregulation of multiple systems, associated with the greater occurrence of adverse outcomes such as decline in functional capacity, falls, hospitalization, institutionalization and death (4-5).

It appears that Primary Health Care (PHC) is the individual's first contact in the care network. Therefore, care involves recognizing social and individual determinants, in addition to the relationships involved for care in biological, psychosocial and cultural dimensions. The multidimensional assessment of the older population in PHC can identify and/or prevent the loss of functionality and, consequently, the development of the frailty syndrome ⁽⁶⁾.

Multidimensional evaluation is considered the gold standard for the management of frailty syndrome in elderly people, as it allows the recognition of the individual's biopsychosocial demands, that is, the clinical and functional diagnosis of his acute and/or chronic health conditions; this assessment allows recognizing the disabilities, both with regard to the independence and autonomy of the elders ⁽⁵⁾.

In this sense, the frailty syndrome must be recognized as a target for investigations and interventions, in view of the impact on elderly individuals, their families and society as a whole. Thus, the early identification of the characteristics of different groups of elderly people - robust, at risk of frailty or fragile - can help prevent, delay or prevent the progression of frailty, through care programs and adaptation of health services to new ones demands of this specific population ⁽⁷⁾.

In view of the above, the assessment of the main health determinants of the elderly individuals in PHC is a fundamental element for the guidance of health professionals in the elaboration of a care plan, indication of multidisciplinary interventions, identification of clinical and functional dimensions and guidance for consultation in specialized geriatric, in order to improve maintain, their autonomy independence. This study aims to analyze the clinical and functional profile of the elderly patients assisted by PHC in the Center-south region of Belo Horizonte, Minas Gerais.

METHOD

This is a cross-sectional, analytical, descriptive study, guided by the Strengthening the Reporting of Observational Studies Epidemiology (STROBE) tool (8), with a quantitative approach, carried out in 12 Primary Healthcare (PHC) of PHC in the Center-south region of Belo Horizonte/Minas Gerais (BH / MG), Brazil. The Center-south region has 49 neighborhoods divided into five shared management territories. In 2016, the region had a population of 283,776 residents in which the largest range of people over 60 years-old in the capital of Minas Gerais was identified, making up 51,715 individuals (9).

The sample was calculated to allow the study to infer its results for the elderly population living in the Center-south region of BH/MG. For that, the method was used to estimate proportions to finite populations at random, with proportional allocation by UBS ⁽¹⁰⁾. Considering the margin of error of 5%, significance level of 5% and confidence interval of 95%, the minimum sample required for the study was 381 elderly people. And considering the 20% increase in losses, the sample

size would be 458 elderly people. Thus, 458 elderly people were invited, among whom 396 agreed to participate. The allocation of the proportional

sample by PHC and the collected sample are detailed in Figure 1.

Figure 1 - Sample size stratified by Primary healthcare (PHC).

Primary Healthcare	Population	Proportion (%)	Sample	Sample (20%)	Sample colected
Α	580	1,1	4	5	5
В	6.350	12,3	47	56	47
С	2.774	5,4	20	24	26
D	10.331	20,0	76	91	76
E	3.265	6,3	24	29	24
F	8.114	15,7	60	72	62
G	4.896	9,5	36	43	37
Н	2.565	5,0	19	23	19
1	1.110	2,1	8	10	8
J	7.119	13,8	53	63	53
K	555	1,1	4	5	8
L	4.056	7,8	30	36	31
Гotal	51.715	100,0	381	458	396

Source: Research data, 2018.

The sample was probabilistic and recruited, through simple random selection (draw), using the Microsoft Excel program (version 2016). Initially, PHC managers were asked to list the elderly patients registered in the Family Health Strategy (FHS) and the Community Health Agents Program (CHAP). The list had information such as: user name, medical record number, age, date of birth, street address, contact phone number, micro area where he lives and mother's name.

The inclusion criteria adopted were elderly people aged 60 years or over, of both genders, who lived in the Center-south region of Belo Horizonte/Minas Gerais and were duly registered in the Family Health Strategy (FHS) and / or in the Community Health Agents Program (CHAP). Among the exclusion criteria, we considered the elderly people who did not attend the assessment on the scheduled date and time and who did not have a contact phone in the list of registered elderly patients.

The evaluations were previously scheduled, via telephone contact, carried out by a member of the research team. Data were collected in the PHC, by a nurse and previously trained collaborators, under the coordination of the main researcher from January to April 2018.

Then, the assessment was carried out using the following instruments: sociodemographic questionnaire, semi-structured, containing the following information: sex, age, marital status, housing, education, religion, if they have a caregiver (formal or informal), family income, dependent on income and profession and instrument that measures the functional clinical

condition of the elderly people - Functional Clinical Vulnerability Index-20 (FCVI-20). Each evaluation lasted an average of 15 minutes. The collection was carried out from Monday to Friday, according to the availability of the research participant.

The FCVI-20 is an interdisciplinary screening instrument. which contemplates multidimensional aspects of the health condition of individuals aged 60 or over. It was designed considering the conceptual basis of frailty as a multidimensional syndrome and consists of 20 questions distributed in eight sections that contemplate several domains and factors related to health. Each section has a specific score that, in total, makes the maximum value of 40 points, identifying the functional clinical condition of the elderly. The higher the FCVI-20 score, the worse the functional clinical condition of the elderly person. Thus, he is classified as: robust (0 to 06 points), at risk of fragility (07 to 14 points) and frail elderly people (15 points or more) (5).

In a study that aimed to assess the adequacy of FCVI-20, at the Elderly Reference Center (ERC) and at PHC, the authors demonstrated that the instrument is positively correlated with the Comprehensive Geriatric Assessment (CGA). The validation results by the Receiver Operating Characteristic (ROC) curve were 0.903 (95% CI 0.871–0.934) and Cronbach's alpha coefficient was 0.74 (5).

For the construction of the database, the double entry validation technique was used in the Epi Info Program version 3.5.1 (2008).

In the description of the sample's qualitative variables, absolute and relative

frequencies were used and, to describe the quantitative variables, measures of central tendency, position and dispersion were used. To analyze the sociodemographic variables in relation to the condition of frailty, the Simulated Chi-Square and Chi-Square tests were used. A significance value of p <0.05 was adopted. The software used in the analysis was SPSS (version 23).

This study was approved by the Research Ethics Committee of the proposing institutions: Federal University of Minas Gerais and Municipal Secretariat of the City of Horizonte/Minas Gerais, by means of the substantiated opinions CAAE: 75797617.6.3001.5140 and CAAE: 75797617.6. 0000.5149, respectively. The project met the criteria of Resolution 466/12 and 510/2016 of the National Health Council. All participants were instructed on the research and, if they agreed to participate, they were asked to sign the Free and Informed Consent (FIC) Form.

RESULTS AND DISCUSSION

When evaluated by the FCVI-20, the highest percentage (44.9%) of the elderly patients was classified as robust (Table 1). A similar result was identified in a study carried out with elderly people from the community in Minas Gerais (11). In a study in southern Brazil, the prevalence of frailty was 17.7%, elderly people at risk of frailty represented 45.4% and 36.9%, and were considered robust. Compared to sex, the prevalence of frailty in females was 18.0% and at risk of frailty 47%, whereas in males it was 17.1% frail and 42.9% at risk of frailty (12).

Table 1 – Distribution of participants according to the Functional Clinical Vulnerability Index 20. Belo Horizonte, MG, Brazil, 2018 (n=396).

FCVI-20	N	%
Robust	178	44,9
Frailty risk	168	42,4
Frail	50	12,7
Total	396	100,0

Source: Research data, 2018.

Studies about the elderly people's frailty and functionality highlight the importance of the health professional being able to early identify signs and symptoms of the frailty risk condition of the elderly people, based on specific and individualized measures, with interventions that seek to enhance their quality of life and avoid the onset of frailty syndrome ⁽¹²⁾.

In a study carried out in Paraíba that used the FCVI-20, the results showed that the majority of the elderly people were fragile (13). From the results of this study, it appears that the elderly patients are in full condition to carry out their activities, with autonomy and independence, that is, have an active aging. The purpose of active aging is to increase healthy life expectancy and quality of life for all people who are aging. The World Health Organization (WHO) highlights that cultural factors, gender, social and health services, economic aspects, social aspects and physical, personal and behavioral environment are determinants of active aging (14-16).

Lower percentages of frail elderly people were found in the present study. The frail elderly show a decline in their functional capacity, not being able to manage their life with autonomy and independence. Most of the time, this syndrome sets in quickly or is aggravated by the presence of chronic diseases that accelerate the process of loss of resistance to stressors (17). However, studies show that frailty is a syndrome that can be reversed, provided that effective actions are taken to stop the progression of the syndrome (17).

The adoption of a multidimensional concept with the physical, psychological and social components, in addition to knowledge of the heterogeneity of aging and the factors that influence quality of life, is essential to define policies and programs aimed at the elderly population. Here, the integrated and continuous care of the elderly people in PHC stands out ⁽⁵⁾.

Thus, the use of a multidimensional screening instrument for the health of the elderly people in PHC, such as FCVI-20, is very important as it may help to stratify the older people and identify which dimensions of the elderly people's health have been affected. Thus, interdisciplinary care plans are implemented in addition to guiding referrals and counter-referrals to elderly reference centers ⁽⁵⁾.

Table 2 shows the relation between the condition of frailty assessed by the FCVI-20 and the sociodemographic variables. PHC C detains the majority of elderly people who are robust and at risk of frailty and PHC A has more elderly people classified as fragile. It is noteworthy that females predominate significantly in relation to the three types of frailty condition classifications. With regard to years of study, having less education reflects/interferes with or is associated with conditions of fragility. Most of the elderly people did not have a caregiver.

Table 2 - Characterization of participants according to the condition of fragility. Belo Horizonte, MG, Brazil, 2018 (n=396).

Variables\Condition of Fra	agility	Robust elder		Risk	Risk of frailty		Frail elder		
		N	%	N	%	N	%		
	Α	17	9,55	13	9,42	17	21,25		
	В	13	7,30	06	4,35	07	8,75		
	С	35	19,66	31	22,46	10	12,50		
	D	16	8,99	05	3,62	03	3,75		
Primary healthcare	E	11	6,18	05	3,62	03	3,75	0,002 ¹	
Primary nearmeare	F	21	11,80	25	18,12	16	20,00	0,002	
	G	23	12,92	07	5,07	07	8,75		
	Н	14	7,87	30	21,74	09	11,25		
	1	17	9,55	09	6,52	05	6,25		
	Others (J, K, L)	11	6,18	07	5,07	03	3,75		
Candan	Male	76	42,70	44	31,88	17	21,25	0.0003	
Gender	Female	102	57,30	94	68,12	63	78,75	0,003²	
	With partner	82	46,07	55	39,86	36	45,00		
Marital status	Without partner	96	53,93	83	60,14	44	55,00	0,525²	
	Yes	146	82,02	113	81,88	61	76,25		
Homeowner	No	32	17,98	25	18,12	19	23,75	0,511²	
	Sim	34	19,10	20	14,49	07	8,75	0,097²	
Live alone	Não	144	80,90	118	85,51	73	91,25		
Years of study	≤ 8 years of study	106	60,57	97	72,39	61	78,21	n nng²	
rears or study	> 8 years of study	69	39,43	37	27,61	17	21,79		
	Catholic	114	65,14	102	75,00	59	73,75		
Religion	Protestant	40	22,86	24	17,65	18	22,50	0,285²	
Keligion	Others	09	5,14	04	2,94	02	2,50	0,203	
	No religion	12	6,86	06	4,41	01	1,25		
Caregiver	Yes	03	1,69	16	11,59	30	37,50	0,000²	
Cai egivei	No	175	98,31	122	88,41	50	62,50	0,000	
Occupation	Retired	159	90,34	127	92,70	72	91,14	0,761²	
Occupation	Others	17	9,66	10	7,30	07	8,86	0,/61-	

Source: Research data, 2018.

Note: ¹ Simulated Chi-Square; ²Qui-Square.

When relating the sociodemographic data to the FCVI-20, a significant association with the PHC variable stands out. It is important to highlight that city halls use the Health Vulnerability Index (HVI) as an indicator to allocate human resources to areas of greatest risk of illness and vulnerability (9)

According to the HVI, registered by the Belo Horizonte City Hall (BHCH), the population described in PHCs D, F, J and B is classified as low risk of vulnerability, that is, they live in areas with less risk of illness ⁽⁹⁾. However, when the respective PHCs were evaluated by the FCVI-20,

fragile elderly people and those at risk of fragility were identified. On the other hand, PHCs K and A, according to HVI, were classified as areas of high and very high risk of vulnerability; in the present study, when evaluated by the FCVI-20, the elderly patients were classified as robust.

The divergences identified can be justified by the heterogeneity existing in older people and because the HVI analyzes the social, economic and basic sanitation variables. Thus, it can be inferred that the HVI is an instrument that assesses certain variables, which differ from the variables contemplated by the FCVI-20 - which assesses the

clinical and functional status. However, it is emphasized that the HVI and FCVI-20 can be used in an associated way, in order to portray the situations of vulnerabilities and, consequently, frailty in the elderly people.

Regarding gender, it is statistically associated with the FCVI-20; international cohort studies, such as the United States, France and Spain, showed a higher prevalence of frailty in elderly women ⁽¹⁸⁾. A national study also shows a similar result: prevalence of 20.1% of frail elderly people, 31.2% of pre-frail elderly people and, among the associated factors, the following stand out: female gender ⁽⁷⁾.

Tables 3 and 4 present the descriptive analysis of qualitative and quantitative demographic and socioeconomic variables, respectively.

Table 3 - Descriptive analysis of demographic and socioeconomic variables. Belo Horizonte, MG, Brazil, 2018 (n=396).

Variables	N	%

Gender	Male	137	34,60
(n=396)	Female	259	65,40
Marital status	Single	94	23,74
(n=396)	Married/Stable	173	43,69
	union	35	8,84
	Separated/Divorced	94	23,74
	Widower		
School	Yes	331	83,59
frequency	No	65	16,41
(n=396)			
	Catholic	275	70,33
	Protestant	82	20,97
Religion	Spiritist	11	2,81
(n=391)	No religion	15	3,84
	Did not mention it	03	0,77
	Others	05	1,29
Caregiver	Yes	49	12,37
(n=396)	No	347	87,63

Source: Research data, 2018.

Table 4 - Descriptive analysis of demographic and quantitative socioeconomic variables. Belo Horizonte, MG, Brazil, 2018 (n=396).

Variables	N	Median	S.D.	Minimum	1st Q.	2 nd Q.	3 rd Q.	Maximum
Years of study	387	7,13	5,25	0,00	4,00	6,00	10,00	30,00
Age	395	72,04	7,34	60,00	66,00	71,00	77,00	98,00
Income	374	2194,95	4153,02	0,00	954,00	954,00	2000,00	60000,00
Nº of income dependents	379	2,03	1,74	0,00	1,00	2,00	2,00	20,00

Source: : Research data, 2018.

Note: 1st Q. – First Quartile / 2nd Q. - Second Quartile / 3rd Q. Third Quartile / S.D. - Standard deviation.

In a survey carried out in southern Brazil, there were results similar to those presented in this study, when the predominance of the variables is identified: female gender (68.4%), married (53.8%) and low income (between 1 and 2 minimum wages with 2 dependents) (19).

Another factor associated with the FCVI-20 is the years of study, most participants have less than eight years of study. These data are higher than the average years of study found by other authors in which the average years of study was 2.79 years studied ⁽¹³⁾. Years of study are considered a social determinant that is related to access to means of care and enhances the vulnerability of the elderly to be affected by diseases, especially NCDs ^(13,20).

The variable formal and/or informal caregiver was also associated with the FCVI-20. Most robust elderly people prefer not to have a caregiver, which may be due to the predominance of "young elderly people" who still have a spouse. Many elderly people are also accompanied by

their children and/or family members. Therefore, it is considered that the family presence and the role of the family in caring for the elderly people are fundamental to their emotional stability and consequent improvement in the quality of life. However, a significant number of pre-frail and frail elderly people without a caregiver are identified, which results in impaired ability to react to adverse situations, reflecting on the socio-cultural environment and the quality of life of the elderly people (21-23).

In the present study, with regard to sociodemographic data, the results are consistent with that described in the literature, that is, there was a predominance of elderly people between 60 and 74 years old, with feminization of old age, married or in a stable relationship ⁽⁷⁾.

A variable that calls attention is the values of income that varied significantly, from elders without income to elders with an approximate income of R\$ 60,000.00; with a median value of R\$ 954.00. These results demonstrate the inequality

in the distribution of income in which the study was carried out, as the region has traditional neighborhoods considered to be of high standard, even towns and clusters.

According to the National Household Sample Survey (*Pesquisa Nacional por Amostra de Domicílios* - PNAD-2018), Brazil has diverging income distribution percentages when analyzing the five regions. Among the categories on income from other sources, the item retirement or pension is the highest. There is also income inequality when gender and color/race are analyzed, and the highest values of family income per capita for the elderly population, as well as for the population as a whole, are concentrated at the top of the population pyramid (24).

Based on the above, it can be considered that education and family income are social determinants that are related to the style and quality of life of individuals ⁽¹²⁾.

Another variable that is worth highlighting is the number of dependents per elderly person, a minimum of two dependents and a maximum of 20 was identified for the same elderly person. More and more the elderly person becomes the head of the family again, contributing financially with his retirement. This phenomenon of leading the family financially is due to the high rates of unemployment, the birth of children out of wedlock and the divorces of their next generations. Social inequality in Brazil is also related to the number of income dependents, which impacts the health of the elderly person, with a decline in the conditions that support their quality of life (25).

The results of the present study highlight significant contributions to gerontological knowledge, especially for nursing in PHC in the Center-south region of Belo Horizonte, thus providing scientific support for interdisciplinary teams to plan assistance for the elderly patients. It is worth mentioning that nursing tends to promote health promotion actions, through the clinical and functional evaluation of the elderly individuals, aiming at active aging and better quality of life. The use of low-cost tools for the preservation of functional independence, as well as the reduction of adverse events such as institutionalization and early mortality, must be implemented by the PHC nurse.

As for advances in the nursing area, they involve the production and improvement of gerontological care based on the adoption of

interventions that will have a positive impact on this population.

As a limitation of the study, we highlight: the restriction only to a specific regional of Belo Horizonte, failing to extend it to the entire city.

CONCLUSION

The present study showed a higher prevalence of robust elderly people (44.9%), considered to have low clinical-functional vulnerability, followed by elderly people at risk of frailty (42.4%) and frail elderly people (12.7%). It is recommended to use multidimensional assessment instruments for the health of the elderly people, in order to subsidize health actions in PHC and generate new specific public policies for the population over 60 years-old.

Frailty influences the quality of life of the elderly person, generating or enhancing disabilities that can have a negative impact on the person in the fragile condition and on the family. Thus, it is necessary to analyze the profile of the elderly population assisted in PHC in order to identify early situations that may generate the frailty syndrome and conduct actions aimed at each specific group. Multi-professional and interdisciplinary work is fundamental in this process, since it acts by actively seeking and identifying the population of the territory, in addition to health care.

Finally, it is extremely important that PHC teams develop actions to recover and rehabilitate functionality, by promoting health and preventing clinical-functional vulnerability, delaying the development of frailty and complications in the elderly people.

REFERENCES

- 1- Instituto Brasileiro de Geografia e Estatística. Projeções da população do Brasil e unidades da Federação por sexo e idade: 2010-2060. Brasília: IBGE; 2020 [citado em 15 jul 2020]. Acesso em: https://www.ibge.gov.br/estatisticas/sociais/populacao/9109-projecao-da-populacao.html?=&t=resultados
- 2- Souza MAH, Porto EF, Souza EL, Silva KI. Perfil do estilo de vida de longevos. Rev Bras Geriatr Gerontol. 2016;19(5):819-26. DOI: 10.1590/1809-98232016019.150224
- 3- Carneiro JA, Ramos GC, Barbosa AT, Mendonça JM, Costa FM, Caldeira AP. Prevalence and factors associated with frailty in non institutionalized older adults. Rev Bras Enferm. 2016;69(3):435-42. DOI: 10.1590/0034-7167.2016690304i

- 4- Maciel GMC, Santos RS, Santos TM, Menezes RMP, Vitor AF, Lira ALBC. Avaliação da fragilidade no idoso pelo enfermeiro: Revisão integrativa. Rev Enferm Cent-Oeste Min. 2016;6(3):2430-38. DOI: 10.19175/recom.v6i3.1010
- 5- Moraes EN, Carmo JA, Lanna FM, Azevedo RS, Machado CJ, Romero DEM. Clinical-Functional Vulnerability Index-20 (IVCF-20): Rapid recognition of frail older adults. Rev Saúde Pública 2016; 50:81. DOI: 10.1590/s1518-8787.2016050006963
- 6- Pereira LSM. O Cuidado ao idoso frágil na Atenção Primária a Saúde: Programa Mais Vida [dissertação]. Belo Horizonte: Universidade Federal de Minas Gerais; 2017.
- 7- Maia LC, Colares TFB, Moraes EN, Costa SM, Caldeira AP. Robust older adults in primary care: Factors associated with successful aging. Rev Saúde Pública 2020;54(35):1-11. DOI: 10.11606/s1518-8787.2020054001735
- 8- STROBE Statement—checklist of items that should be included in reports of observational studies. Equator Network 2020 [cited 2020 July 1]. Available in: https://www.equator-network.org/wp-
- content/uploads/2015/10/STROBE checklist v4
 combined.pdf
- 9- Secretaria de Estado de Saúde de Minas Gerais. Região Centro Sul 2016 [citado em 10 out 2020]. Acesso em: http://www.saude.mg.gov.br/
- 10- Bolfarine H, Bussab WO. Elementos de amostragem. São Paulo: Blucher; 2005.
- 11- Vieira RA, Guerra RO, Giacomin KC, Vasconcelos KSS, Andrade ACS, Pereira LSM, et al. Prevalência de fragilidade e fatores associados em idosos comunitários de Belo Horizonte, Minas Gerais, Brasil: Dados do estudo FIBRA. Cad Saúde Pública 2013 [citado em 10 out 2020]; 29(8):1631-43. DOI: 10.1590/0102-311X00126312
- 12- Gross CB, Kolankiewicz ACB, Schmidt CR, Berlezi EM. Frailty levels of elderly people and their association with sociodemographic characteristics. Acta Paul Enferm. 2018;31(2):209-16. DOI: 10.1590/1982-0194201800030
- 13- Alexandrino A, Cruz EKL, Medeiros PYD, Oliveira CBS, Araújo DS, Nogueira MF. Evaluation of the clinical-functional vulnerability index in older adults. Rev Bras Geriatr Gerontol. 2019;22(6): e190222. DOI: 10.1590/1981-22562019022.190222
- 14- Organização Mundial da Saúde (OMS). Relatório mundial de envelhecimento e saúde. Organização Genebra: OMS; 2015.

- 15- Goncalves Envelhecimento CD. bem sucedido, envelhecimento produtivo e envelhecimento reflexões. Estud. ativo: interdiscipl. envelhec. [internet]. 2015 [citado em 5 out. 2020]. 20(2): 645-57. Disponível em: https://seer.ufrgs.br/RevEnvelhecer/article/view/ 49428/35463.
- 16- Massi G, Wosiacki FT, Guarinello AC, Lacerda ABM, Carvalho TP, Wanderbrooke AC, Cairo NG, Lima RR. Envelhecimento ativo: um relato de pesquisa-intervenção. Rev. CEFAC [internet]. 2018 Fev [citado em 5 out. 2020]; 20(1):5-12. Disponível em: http://www.scielo.br/scielo.php?script=sci arttex t&pid=S1516-18462018000100005&Ing=en. doi: 10.1590/1982-0216201820113017.
- 17- Duarte YAO, Nunes DP, Andrade FB, Corona LP, Brito TRP, Santos JLF, Lebrão ML. Frailty in older adults in the city of São Paulo: Prevalence and associated factors. Rev. bras. Epidemiol. [internet]. 2018 [citado em 5 jun 2020]; 21(2): e180021. Disponível em: http://www.scielo.br/scielo.php?script=sci arttex t&pid=S1415-790X2018000300418&Ing=en. doi: 10.1590/1980-549720180021.supl.2.
- 18- Mello AC, Engstrom EM, Alves LC. Health-related and socio-demographic factors associated with frailty in the elderly: A systematic literature review. Cad Saúde Pública 2014;30(6):1-25. DOI: 10.1590/0102-311X00148213
- 19- Luz EP, Dallepiane LB, Kirchner RM, Silva LAA. Perfil sociodemográfico e de hábitos de vida da população idosa de um município da região norte do Rio Grande do Sul, Brasil Rev Bras Geriatr Gerontol. 2014;17(2):303-14. DOI: 10.1590/S1809-98232014000200008
- 20- Matos AIP, Mourao I, Coelho I. Interação idade, escolaridade, tempo institucionalização e exercício físico na função cognitiva e depressão em idosos. Motri. 2016;12(2):38-47. DOI: 10.6063/motricidade.6805 21- Rabelo DF, Neri AL. Avaliação das relações familiares por idosos com diferentes condições sociodemograficas e saúde. Psico-USF de 2016;21(3):663-75. DOI: 10.1590/1413-82712016210318
- 22- Lino VTS, Rodrigues NCP, Camacho LAB, O'Dwyer G, Lima IS, Andrade MKN, et al. Prevalência de sobrecarga e respectivos fatores associados em cuidadores de idosos dependentes, em uma região pobre do Rio de Janeiro, Brasil. Cad Saúde Pública 2016;32(6): e00060115. DOI: 10.1590/0102-311X00060115

23- Labegalini CMG, Nogueira IS, Moretti AZP, Carreira L, Baldissera VDA. Demandas educativas de cuidadores familiares de idosos dependentes. Rev Enferm Cent-Oeste Min. 2016;1(6):1994-2008. DOI: 10.19175/recom.v0i0.1129

24- Instituto Brasileiro de Geografia e Estatística. Rendimento de todas as fontes 2017. Brasília: PNAD; 2018.

25- Barros MBA, Goldbaum M. Challenges of aging in the context of social inequalities. Rev Saúde Pública 2018;52(supl 2):S1-3. DOI: 10.11606/s1518-8787.201805200supl2ed

Note: Article from the Master's Dissertation entitled "Psychometric Analysis of the Functional Clinical Vulnerability Index - FCVI-20", from the Postgraduate Program in Nursing at the School of Nursing at the Federal University of Minas Gerais.

Received in: 16/10/2020 **Approved in:** 14/12/2020

Address for correspondence:

Edmar Geraldo Ribeiro

Av. Alfredo Balena, 190, sala 230. Santa Efigênia, Belo

Horizonte, MG, Brasil. CEP: 30130-100. E-mail: edmargribeiro@gmail.com