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RESEARCH | PESQUISA

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Factors associated with frailty in elderly patients followed up in primary health care

Fatores associados à fragilidade em idosos acompanhados na Atenção Primária à Saúde

Factores asociados a la fragilidad en ancianos acompañados en la Atención Primaria de Salud

Pryscila Ravene Carvalho Oliveira[1]
Vitória Eduarda Silva Rodrigues[1]
Ana Karoline Lima de Oliveira[1]
Francisco Gerlai Lima Oliveira[1]
Gabriela Araújo Rocha[1]
Ana Larissa Gomes Machado[1]

1. Universidade Federal do Piauí. Picos, PI, Brasil.

Abstract

Objective: to verify the association between frailty markers and sociodemographic and clinical characteristics in elderly people in Primary Health Care. **Method:** cross-sectional research, carried out with 356 elderly people registered in family health units in the Northeast of Brazil. The collection instruments used were the Index of Clinical-Functional Vulnerability and another of socioeconomic and health profile. The data were analyzed by inferential statistics, using the chi-square test, with a significance level of 0.05. **Results:** the mean age was 72.85 years (±8.965); 63.8% were female, 39% were at risk of frailty and 22.5% were frail. There was an association between frailty, gender, age group, marital status, education, income, presence of heart disease and hypertension. **Conclusions and implications for practice:** the markers of frailty in the elderly showed an association between sociodemographic and clinical characteristics, indicating the need for early screening at the primary health care level.

Keywords: Health of the Elderly; Frailty. Primary Health Care; Health Vulnerability; Quality of Life.

Resumo

Objetivo: Verificar a associação entre os marcadores de fragilidade e as características sociodemográficas e clínicas em idosos na Atenção Primária à Saúde. **Método:** Pesquisa transversal, realizada com 356 idosos cadastrados em unidades de saúde da família, no Nordeste do Brasil. Os instrumentos de coleta utilizados foram o Índice de Vulnerabilidade Clínico-Funcional e outro de perfil socioeconômico e de saúde. Analisaram-se os dados pela estatística inferencial, utilizando o teste do Qui-quadrado, com nível de significância 0,05. **Resultados:** A média de idade foi de 72,85 anos (±8,965); 63,8% eram do sexo feminino, 39% apresentaram risco de fragilização e 22,5% demonstraram fragilidade. Houve associação entre fragilidade, sexo, faixa etária, estado civil, escolaridade, renda, presença de doença cardíaca e hipertensão. **Conclusões e implicações para a prática:** Os marcadores de fragilidade nos idosos evidenciaram associação entre as características sociodemográficas e clínicas, indicando a necessidade de rastreio precoce no nível primário de atenção à saúde.

Palavras-chave: Saúde do Idoso; Fragilidade; Atenção Primária à Saúde; Vulnerabilidade em Saúde; Qualidade de Vida.

Resumen

Objetivo: Verificar la asociación entre los marcadores de fragilidad y las características sociodemográficas y clínicas en ancianos en Atención Primaria de Salud. **Método:** Investigación transversal realizada con 356 ancianos registrados en unidades de salud familiar en Nordeste de Brasil. Los instrumentos de recolección utilizados fueron el Índice de Vulnerabilidad Clínico-Funcional y otro de perfil socioeconómico y de salud. Los datos se analizaron mediante estadística inferencial utilizando la prueba de Chi-cuadrado, con nivel de significancia de 0.05. **Resultados:** La edad media fue de 72,85 años (± 8,965), el 63,8% eran mujeres, el 39% tenían riesgo de fragilidad y el 22,5% eran frágiles. Hubo asociación entre fragilidad, sexo, edad, estado civil, educación, ingresos, presencia de cardiopatía e hipertensión. **Conclusiones e implicaciones para la práctica:** Los marcadores de fragilidad en ancianos se asociaron con características sociodemográficas y clínicas, lo que indica la necesidad de rastreo precoz en el nivel primario de atención a la salud.

Palabras clave: Salud del Anciano; Fragilidad; Atención Primaria de salud; Vulnerabilidad en Salud; Calidad de Vida.

Corresponding author:
Pryscila Ravene Carvalho Oliveira.
E-mail: prys_carvalho@outlook.com

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INTRODUCTION

The aging process has a progressive and multifaceted character, in which physical and mental alterations take place that, for the most part, generate a consequent gradual decrease in functional capacity.[1] These changes are closely related to frailty, making individuals more vulnerable to harm.[2]

An eventuality that concerns managers and professionals who work with the elderly is frailty, considered a multidimensional syndrome that involves the interaction of biological, psychological, and social factors. The individual becomes susceptible to dysregulation of the neuroendocrine and immune systems, and, consequently, his ability to resist stressful events in health is proven to be reduced.[3] Frailty is related to increased risk of adverse outcomes such as decline in functional capacity, falls, delirium, institutionalization, hospitalization, and death.[4]

The frailty phenotype is composed of the following factors: unintentional weight loss; presence of self-reported fatigue; reduced grip strength; slow gait speed; and little physical activity. Thus, weight loss for no apparent reason, weakness, decreased muscle strength, difficulty walking, and sedentary habits may be predictors and risk factors for developing frailty syndrome.[5]

Thus, it is necessary to recognize the symptomatology of all the dynamics of functional impairment, since frailty may be installed and negatively impacting the lives of the elderly, their caregivers and families. Moreover, it is necessary to understand that there is synergy of intrinsic and extrinsic factors, observing, thus, that advanced age, female gender, poverty, low education, smoking, low body mass index and presence of chronic diseases are predictive factors of frailty.[6]

The detection of the Clinical and Functional Frailty Syndrome (CFFS) can be done through the observation of risk factors and appropriate assessment tools, for example, the Clinical and Functional Vulnerability Index-20 (CFVI-20), which has simple and accessible language, can be used by lay people and health professionals, and standardizes the classification of frailty by identifying it quickly. The CFVI-20 represents a national breakthrough, for it is the first Brazilian instrument to identify the frail elderly; and it is ranked among the four best in the world, being a reference in geriatrics when performing frailty screening.[7]

In contemporary times, there are few studies that address the prognosis of frailty with simple and easily applicable indicators at the time of screening.[8] In this sense, the use of rapid screening instruments for CFFS in Primary Health Care (PHC) is considered relevant, supporting actions of the nursing team for better care planning for the elderly.

The nursing team working in PHC plays an important role as caregivers of the elderly, and the early identification of factors associated with CFFS in the population contributes greatly to the effectiveness and early gerontological care, delaying the loss of functionality.[9]

In this scenario, the relevance of identifying and discussing the markers of frailty in PHC is evident, since it favors the multidimensional assessment of the elderly and, from its deepening, provides subsidies to implement public policies and plan strategic health actions that positively impact the lives of the elderly, their families and communities, thus justifying this study.

The objective of this study was to verify the presence of markers of frailty and their relationship with sociodemographic and clinical characteristics in elderly people in primary health care.

METHOD

Quantitative, observational and cross-sectional study conducted in Family Health Units (FHU) in the city of Picos-PI, in Northeastern Brazil. The municipality has 36 Family Health Teams (FHT), 25 located in urban areas and 11 in rural areas.

The study population consisted of 4,895 elderly individuals followed-up by the municipality's FHT, who met the inclusion criteria: being 60 years old or older, being registered at the FHU in the urban area, presenting preserved verbal communication and understanding of the instructions passed on.

As exclusion criteria, we adopted the presence of cognitive deficits, identified by low performance in the Mini-Mental State Examination (MMSE). The use of this test is important to evaluate whether the elderly have cognitive deficits, identifying individuals at risk of developing a dementia syndrome. The MMSE is composed of questions grouped into seven categories: time orientation, immediate memory, attention and calculation, evocation, word recall, language, and visual constructive ability.[10]

For the sample calculation, a percentage of 50% (P=50% and Q=50%) was used as the endpoint, since this value provides a maximum sample size, with the level of significance (α=0.05), the tolerable sampling error of 5%, and the reduced variable (Z=1.96). The sample was calculated by formula for a finite population, consisting of 356 participants, and stratified with proportional division among all FHUs in the urban area, according to Chart1:

Data collection occurred in the period from September 2018 to June 2019, being performed both in the PHU and in the homes of the elderly, as it depended on the availability of the research participant. Two instruments were used: the CFVI-20 (Clinical-Functional Vulnerability Index -20), which has a multidimensional character and high reliability and proposes to assess the main markers of frailty of the elderly; and a form on sociodemographic data and health conditions.

The CFVI-20 was created based on the Comprehensive Geriatric Assessment (CGA) and validated in 2014 as an interdisciplinary screening instrument that considers multidimensional aspects of the health status of the elderly. It consists of 20 questions distributed in 8 sections, including age (1 question), self-perception of health (1 question), activities of daily living (4 questions), cognition (3 questions), mood (2 questions), mobility (6 questions), communication (2 questions), and multiple comorbidities or recent hospitalization (1 question).[11]

The higher the score of the elderly in the CFVI-20 - whose total is 40 points - the worse their clinical-functional condition will be, stratifying them in: robust (0 to 6 points), that presents good homeostatic reserve, independence and autonomy and without any functional disability; frail risk (7 to 14 points), that, despite managing their life with independence and autonomy,

Chart 1. Stratification of the sample in the Primary Health Care Units of the urban area. Picos, PI, Brazil, 2019

PHU	POPULATION	SAMPLE
Unit A	222	16
Unit B	80	6
Unit C	92	8
Unit D	66	4
Unit E	223	16
Unit F	272	20
Unit G	145	11
Unit H	187	14
Unit I	296	22
Unit J	333	25
Unit K	178	12
Unit L	190	15
Unit M	238	18
Unit N	240	19
Unit O	291	20
Unit P	230	16
Unit Q	78	5
Unit R	269	19
Unit S	310	22
Unit T	193	14
Unit U	55	4
Unit V	84	7
Unit X	74	6
Unit W	143	10
Unit Y	187	13
Unit Z	219	14
TOTAL	4895	356

Source: survey data.

already presents functional limitations; and, finally, frail (15 or more points), that has functional decline and single or multiple disabilities, becoming unable to manage their own life.[12]

The sociodemographic and health variables selected were: age, education, marital status, income, presence of diseases, and Body Mass Index (BMI).

The results were tabulated in the Statistic Package for Social Science version 20.0 software, and the Kolmogorov-Smirnov normality test was performed on the distribution of the variables analyzed. As for data analysis, inferential statistics were chosen, using the Chi-square test to study the associations between categorical variables, with a significance level of 0.05.

The research was ethically approved by the Research Ethics Committee, with Opinion No. 2.389.117. Then, all participants were informed about its objectives and, after their consent, signed the Free and Informed Consent Term (FICT).

RESULTS

The study included 356 elderly individuals, with a mean age of 72.85 years (±8.965), 63.8% were female. Regarding the degree of frailty, according to the classification proposed by CFVI-20, it was observed that: 139 (39%) had risk of frailty, 137 (38.5%) were robust and 80 (22.5%) were frail.

The data about the sociodemographic profile of the elderly, as well as the frailty classification profile, were described in Table 1. There was a significant difference for all the variables analyzed.

Table 2 presents the health conditions of the elderly, according to the levels of frailty. There was a significant difference between the variables heart disease and hypertension - 14.3% and 64.3%, respectively -, which were reported more frequently by the elderly. Regarding BMI, the percentage of overweight elderly (54.0%) is striking, representing 46.3% of the frail.

In Table 3, the frailty markers presented by the elderly are highlighted.

Through the analysis of the frailty markers, it was noted that there were no high frequencies in the different aspects evaluated. Therefore, it is worth mentioning the self-perception of health reported as bad or very bad by 44.1% of the participants, and the percentage of elderly with dependence for instrumental ADL (23.6%), when compared to the elderly with dependence in basic ADL (4.8%).[13]

Another noteworthy fact was mood, as 44.7% of the elderly reported feeling discouraged, sad, or hopeless in recent months, and 26.7% lost interest in previously enjoyable activities.

Regarding mobility, there was a predominance of answers referring to good mobility in all items evaluated. However, it should be considered that, regarding the aerobic/muscular capacity of the elderly, calf circumference lower than 31cm was present in 23.6% of the participants, showing the existence of sarcopenia among them. Regarding multiple comorbidities, polypharmacy was the item most often mentioned in the sample studied (15.7%).[13]

DISCUSSION

Considering the sociodemographic variables, it was possible to map a population composed predominantly of women - a finding already expected and in agreement with several literatures.[14,15] The prevalence of frailty among elderly women is similar to another population-based survey,[16] in which 11,015 men and women over 60 years of age were followed for two years and assessed for frailty phenotype. The study concluded that there was a specific prevalence of frailty in females, as elderly women are almost twice as likely to be frail as men (16.4% vs. 8.6%), and are also more prone to the risk of frailty.[16]

Women have a longer life expectancy when compared to men; on the other hand, they have a lower quality of life. Gender differences interfere in the achievement of social opportunities - such as access to health care - and are present throughout the

Table 1. Sociodemographic variables and levels of frailty (n=356). Picos, PI, Brazil, 2019

Variables	Robust	Risk of fragilization	Frail	Total	p-value*
	n (%)	n (%)	n (%)	n (%)	
Sex					0.046
Female	80 (58.4)	87 (62.6)	60 (75.0)	227 (63.8)	
Male	57 (41.6)	52 (37.4)	20 (25.0)	129 (36.2)	
Age group					0.001
60 – 74	110 (80.3)	86 (61.9)	32 (40.0)	228 (64.0)	
75 – 84	27 (19.7)	41 (29.5)	25 (31.2)	93 (26.1)	
≥85	0 (0)	12 (8.6)	23 (28.8)	35 (9.8%)	
Marital Status					0.001
Married or in a stable union	97 (70.8)	72 (51.8)	34 (42.5)	203 (57.0)	
Widower	25 (18.2)	51 (36.7)	33 (41.3)	109 (30.6)	
Single	15 (10.9)	16 (11.5)	13 (16.3)	44 (12.4)	
Education					0.001
Not literate	50 (36.5)	55 (39.6)	35 (43.8)	140 (39.3)	
Up to 8 years of schooling	50 (36.5)	66 (47.5)	40 (50.0)	156 (43.8)	
More than 8 years of study	37 (27.0)	18 (12.9)	5 (6.3)	60 (16.9)	
Income					0.047
≥ 1 minimum wage	107 (78.1%)	122 (87.8)	61 (76.3)	290 (81.5)	
< 1 minimum wage	30 (21.9)	17 (12.2)	19 (23.8)	66 (18.5)	

Source: research data. * Chi-square association test (p<0.05).

life cycle.[17] Inequality occurs both because they are women and because they are elderly, a fact that puts them in a situation of double vulnerability and potentializes the occurrence of health problems. This finding suggests the need for a more focused attention to this public in question, aiming for an equitable care.[18]

The results confirm a higher frequency of frail elderly, and risk of frailty due to increasing age, being possible to observe the reduction of robust elderly increasing age. The risk of becoming frail is more present after the age of 80, with a risk 1.24 times higher compared to the range between 65 and 79 years.[19,20] However, other factors are also preponderant for the onset of frailty syndrome, such as one or more hospitalizations, increasing by 4.3 the prevalence of occurrence of frailty. Moreover, polypathology and polypharmacy are other synergistic and contributing causes of clinical and functional frailty syndrome.[21] One realizes, then, that the development of frailty is not solely related to age or the aging process.

The low education level presented by the elderly at risk of frailty and frail has a negative impact on the search for assistance and self-care practices. Added to this, the few years of education or the lack of literacy suggest an unfavorable socioeconomic situation, resulting in social inequalities.[22] Elderly people with low education seek health services less frequently, because they have little or no knowledge about the need to access services. In addition, it is also strongly related to functional disability, cognitive impairment, and risk of frailty in the elderly.[23] This encourages reflection on the care and management processes, in the search for quality and specific care for individual demands in PHC.

Although the presence of chronic diseases is not accompanied by frailty, it predisposes the elderly to increased clinical and functional vulnerability.[24] This was demonstrated in a study in which the onset of chronic diseases was associated with advancing age, and the prevalence of diabetes was associated with task dependence.[22]

Table 2. Health characteristics and levels of frailty (n=356). Picos, PI, Brazil, 2019

Variables n (%)	Robust n (%)	Risk of fragilization n (%)	Frail n (%)	Total	p-value*
Heart Disease					0.003
Yes	11 (8.0)	20 (14.4)	20 (25.0)	51 (14.3)	
No	126 (92.0)	119 (85.6)	60 (75.0)	305 (85.7)	
Hipertension					0.040
Yes	77 (56.2)	97 (69.8)	55 (68.8)	229 (64.3)	
No	60 (43.8)	42 (30.2)	25 (31.3)	127 (35.7)	
Diabetes					0.249
Yes	28 (20.4)	37 (26.6)	24 (30.0)	89 (25.0)	
No	109 (79.6)	102 (73.4)	56 (70.0)	267 (75.0)	
BMI**					0.133
Low weight	5 (3.6)	6 (4.3)	8 (10.0)	19 (5.3)	
Adequate	50 (36.5)	60 (43.2)	35 (43.7)	145 (40.7)	
Overweight	82 (59.9)	73 (52.5)	37 (46.3)	192 (54.0)	

Source: research data. * Chi-square association test (p<0.05). ** BMI: Body mass index.

An American study has shown that heart disease is associated with biological aging and, as a result, geriatric syndromes such as frailty are more likely to present.[25] Furthermore, a meta-analysis demonstrated that frailty affects almost one in two patients with HF. Another study evidenced that older age patients,[26,27] prone to several chronic conditions - such as heart disease and hypertension - are more likely to be diagnosed with frailty.

The frailty syndrome results from multiple deficiencies in different organs and is characterized by reduced physiological reserves and increased vulnerability to stressors. In addition, cardiovascular disease is a common problem in the elderly population. Evidence shows that frail patients with cardiovascular disease have a worse prognosis than non-frail patients, and that frailty is a risk factor for incident heart failure among the elderly.[28]

Although hypertension has not been presented as one of the diseases with the highest association with frailty, it should be taken into consideration in the group of morbidities most related to frailty, due to its high prevalence in the elderly population, prioritizing its screening among the elderly.[29]

Body Mass Index (BMI) showed significant differences regarding frailty, with the prevalence of overweight among frail and frail-at-risk elderly. Similarly, another cross-sectional study on frailty syndrome in the elderly concluded that muscle patterns in the frail and frail elderly at risk of frailty are lower, and BMI and fat centeredness measures higher with the progression of the syndrome.[30]

The predominance of overweight in frail elderly at risk of frailty contrasts with the results of another Brazilian study, which related low BMI values to frailty,[8] and demonstrated that individuals with BMI values below 23.4 kg/m^2 are more likely to be frail. In this sense, overweight was not associated with frailty.

The nutritional status of the elderly accelerates or delays the onset of frailty.[30] Furthermore, excess body weight can contribute to the development of comorbidities during the aging process - such as metabolic and chronic diseases, namely: hypertension, type 2 diabetes mellitus, cancer, and cardiovascular diseases.[31]

Another important marker of frailty was detected in 23.6% of the research participants, who presented calf measurements less than 31cm, demonstrating the presence of sarcopenia. This condition is characterized by a gradual and generalized loss of muscle mass, strength, and function, caused by central and peripheral neuronal degeneration, muscle atrophy, and increased adipose tissue in the muscle. Sarcopenia is highly prevalent and increases the occurrence of disability and dependence.[32]

The decrease or loss of skeletal muscle mass and consequent loss of muscle function associated with aging negatively impact activities of daily living and increase the vulnerability of the elderly to falls, culminating in dependence.[33]

In the international scenario, studies focused on self-perception of health are widely used in population-based research. Similarly, those that show a decline in health and quality of life of the

Table 3. Frequency of frailty markers (n=356). Picos, PI, Brazil, 2019

Frailty markers	n	%
Age		
60 -74	228	64.0
75 -84	93	26.1
≥ 85	35	9.8
Self-perception of health		
Excellent/Very Good/Good	199	55.9
Fair/Bad	157	44.1
Activities of Daily Living (ADL)		
Instrumental ADL		
Stopped shopping		
Yes	82	23.0
No	274	77.0
You no longer control your money		
Yes	84	23.6
No	272	76.4
Stopped doing small household chores		
Yes	58	16.3
No	298	83.7
Basic ADL		
Did you stop bathing yourself		
Yes	17	4.8
No	339	95.2
Cognition		
Some relative has told you that you are getting forgetful		
Yes	137	38.5
No	219	61.5
This forgetfulness is getting worse		
Yes	82	23.0
No	274	77.0
Forgetfulness prevents you from doing some activity		
Yes	64	18.0
No	292	82.0
Humor		
Discouragement, sadness or hopelessness		
Yes	159	44.7
No	197	55.3
Lost interest/enjoyment in previously pleasurable activities		
Yes	95	26.7
No	261	73.3
Mobility		
Reaching, grasping and pinching		
Unable to raise arms above shoulder level		
Yes	21	5.9
No	335	94.1
Unable to handle/secure small objects		
Yes	13	3.7

Source: research data. * BMI: Body mass index. ** CC: Calf circumference

Table 3. Continued...

Frailty markers	n	%
No	343	96.3
Aerobic and/or muscular capacity		
Unintentional weight loss		
Yes	38	10.7
No	318	89.3
BMI* < 22 kg/m2		
Yes	66	18.5
No	290	81.5
CC** < 31 cm		
Yes	85	23.9
No	271	76.1
Gait speed test > 5 sec		
Yes	40	11.2
No	316	88.8
Gait		
Difficulty walking		
Yes	93	26.1
No	263	73.9
≥ 2 falls in the last year		
Yes	77	21.6
No	279	78.4
Sphincteric Continence		
Do you accidentally lose urine or feces		
Yes	41	11.5
No	315	88.5
Comunication		
View		
Yes	150	42.1
No	206	57.9
Hearing		
Yes	72	20.2
No	284	79.8
Multiple Comorbidities		
Polypathology		
Yes	12	3.4
No	344	96.6
Polypharmacy		
Yes	56	15.7
No	300	84.3
Recent hospitalization		
Yes	33	9.3
No	323	90.7

Source: research data. * BMI: Body mass index. ** CC: Calf circumference

elderly have grown, determining the negative self-perception of the elderly.[34]

The results showed that the elderly have a bad or very bad perception of their own health, which becomes an alert as to the repercussions of this potential marker for frailty. When positive, the self-perception of health indicates that the elderly have preserved autonomy, mobility and functional capacity, as well as the desire to remain active and independent in their

daily activities, important conditions for the development of fall prevention practices.[35]

Another Brazilian study found a strong association between poor or very poor health perception and the occurrence of chronic spinal disorders, reinforcing the self-assessment of health by the elderly as a positive indicator of quality of life and morbidity.[36] Individuals who self-assess their health as negative compared to those who self-assess their health as excellent are twice as likely to die within five years.[37]

In a complementary manner, a national survey showed a high prevalence of negative self-perception of health status among the elderly aged 65 to 79 years. This population presented frailty, depressive symptoms, and provided care to someone, being possible to conclude that there is a strong association of these factors with the high prevalence of negative self-perception of health.[34] The development of measures by health managers, aimed at improving the quality of life of the elderly, can be supported by studies that cover the singularities of self-perception of health.[38]

As for the functionality of the elderly, the study observed a greater dependence on instrumental activities of daily living. This effect occurs because the ability to perform complex activities seems to decline more rapidly in relation to basic activities, which may, in the short term, increase the degree of dependence of the elderly.[39] Thus, the expectation is that the basic ADLs are not the first to be affected in the daily lives of the elderly. The losses to perform both activities represent a loss of quality of life for the elderly, since, besides presenting a functional disability in the instrumental ADLs, it can be related to the negative self-perception of health.[40]

Therefore, it is important, in health care, that the functional capacity of the elderly is assessed, as it allows risk factors to be identified and the clinical evolution of health problems to be monitored, such as the emergence of chronic disease or its complications, risk of falls, among others, thus enabling the independence and autonomy of the elderly to be preserved.

Another potential factor for frailty, evidenced in the results, was the presence of elderly individuals with loss of interest in previously pleasurable activities, and mood swings that suggest depressive states. Both conditions are related to the process of instrumental ADL dependence, since depression is associated with dependence and loss of autonomy. Depression and frailty can occur separately or together. One in ten elderly persons are frail or have depressive symptoms, and a high percentage indicates occurrence of both conditions.[41]

Depression needs to be investigated in the elderly, because if not identified early and the individual does not receive treatment, it is followed by frailty. This relationship is explained by physiological mechanisms, since both associate neural symptoms and conditions such as fatigue, decreased walking speed, lack of physical activity, reduced body mass, morbidities, cognitive and functional impairment.[42]

In addition to the frailty markers discussed, the presence of polypharmacy was verified. A similar result was found in a research carried out with institutionalized elderly people in the Northeast region of Brazil, showing that, due to frailty, the need and quantity of medications prescribed to the elderly increases.[43]

Screening and management programs for frailty in health care settings for the elderly are indispensable and urgent.[44] For this reason, we propose that screening for frailty be included in the multidimensional assessment of the elderly in Primary Health Care (PHC), aiming at the early detection of markers.[45]

PHC represents a timely and important scenario for gerontological nursing in the early identification of frailty, as it is the gateway to the health system responsible for the close and longitudinal follow-up of the elderly.[46] The nurse's knowledge about the health situation of the elderly enables the planning of effective preventive and rehabilitative care actions.

The increase in life expectancy, aging, and the prevalence of chronic diseases generate functional dependence in the elderly. Therefore, it is necessary to train caregivers, family members, and the healthcare team in the early recognition of frailty.[47]

The use of the CFVI-20 instrument was chosen for the detection of frailty, which is validated for the Brazilian context.[48] Its use proved appropriate in the recognition of markers of frailty, indicating its importance in facilitating the screening of frail elderly by PHC nurses. In this sense, we recommend the integration of this instrument for identifying and monitoring the health situation of the elderly in PHC, with a view to improving the care provided to the elderly.

Nevertheless, the study presents some limitations to be considered for the interpretation and generalization of the findings. The cross-sectional design makes it impossible to determine the randomness; in addition, the sample was limited to the elderly assisted by FHT teams from a given city, indicating that the determinants of frailty may be different in other regions of the country, and at other levels of health care.

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

The markers of frailty showed significant association with gender, age, marital status, education, income, presence of heart disease and hypertension.

The identification of frail elderlies, in the scope of Primary Health Care, is fundamental for the planning of actions, subsidizing the nurse's care practice and other professionals of the team that consider the needs of the elderly person through the early identification of the determinants of frailty, a predictor condition of disabilities, institutionalization, hospitalization and death.

The study, therefore, contributes to the discussion and reflection on health actions for the elderly, regarding the rapid screening of factors related to frailty within the FHT.

AUTHORS' CONTRIBUTIONS

Study design: Ana Larissa Gomes Machado

Data collection or production; Pryscila Ravene Carvalho Oliveira, Vitória Eduarda Silva Rodrigues, Ana Karoline Lima de Oliveira, Francisco Gerlai Lima Oliveira, Gabriela Araújo Rocha

Data analysis; Pryscila Ravene Carvalho Oliveira, Vitória Eduarda Silva Rodrigues, Gabriela Araújo Rocha, Ana Larissa Gomes Machado.

Interpretation of results; Pryscila Ravene Carvalho Oliveira, Vitória Eduarda Silva Rodrigues, Ana Karoline Lima de Oliveira, Francisco Gerlai Lima Oliveira, Gabriela Araújo Rocha, Ana Larissa Gomes Machado.

Writing and critical revision of the manuscript; Pryscila Ravene Carvalho Oliveira, Vitória Eduarda Silva Rodrigues, Ana Karoline Lima de Oliveira, Francisco Gerlai Lima Oliveira, Gabriela Araújo Rocha, Ana Larissa Gomes Machado

Approval of the final version of the article: Pryscila Ravene Carvalho Oliveira, Vitória Eduarda Silva Rodrigues, Ana Karoline Lima de Oliveira, Francisco Gerlai Lima Oliveira, Gabriela Araújo Rocha, Ana Larissa Gomes Machado

Responsibility for all aspects of the content and integrity of the published article: Pryscila Ravene Carvalho Oliveira, Vitória Eduarda Silva Rodrigues, Ana Karoline Lima de Oliveira, Francisco Gerlai Lima Oliveira, Gabriela Araújo Rocha, Ana Larissa Gomes Machado

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Maria Catarina Salvador da Motta

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