ORIGINAL ARTICLE

Life satisfaction and health self-assessment of older adults assisted through home care

Autoavaliação de saúde e satisfação com a vida de idosos acompanhados pela atenção domiciliar

Autoevaluación de salud y satisfacción con la vida de ancianos seguidos por atención domiciliaria

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ABSTRACT
Objective: to identify sociodemographic and health characteristics according to age groups and to analyze the association between self-assessed health status and satisfaction with regular/bad life with sociodemographic characteristics, global functioning and falls of older adults linked to home care within the primary health care network. **Method:** cross-sectional study with 124 older adults, conducted using home interviews. A sociodemographic data and health status questionnaire was used, together with Barthel Index, Lawton Instrumental Activities of Daily Living Scale (IADL), the Mini-Mental State Examination, the Geriatric Depression Scale and the Timed Up and Go Test. Bivariate and multivariate analyses (Poisson regression) were applied. **Results:** there was a predominance of female octogenarians. Self-assessment of regular/bad health was associated with mild (p=0.002) and severe (p<0.001) depressive symptoms. Satisfaction with regular/bad life was associated with fear of falling (p=0.019) and with mild (p<0.001) and severe (p<0.001) depressive symptoms. **Conclusion:** depressive symptoms were associated with a worse life satisfaction and health self-assessment.
Descriptors: Personal Satisfaction; Aged; Geriatric Nursing; Home Nursing; Primary Health Care.

RESUMO
Objetivo: identificar características sociodemográficas e de saúde de acordo com faixas etárias e analisar associação da autoavaliação do estado de saúde e da satisfação com a vida regular/ruim com características sociodemográficas, funcionalidade global e quedas de idosos vinculados à Atenção Domiciliar da Atenção Básica. **Método:** estudo transversal com 124 idosos, realizado através de entrevistas domiciliares. Utilizou-se questionário de dados sociodemográficos e condições de saúde, Índice de Barthel, Escala de Lawton, Mini Exame do Estado Mental, Escala Depressão Geriátrica e Teste *Timed Up and Go*. Aplicaram-se análises bivariada e multivariada (Regressão de Poisson). **Resultados:** houve predomínio de octogenários do sexo feminino. Autoavaliação de saúde regular/ruim apresentou associação com sintomas depressivos leves (p=0,002) e severos (p<0,001). Satisfação com a vida regular/ruim teve associação com medo de cair (p=0,019) e com sintomas depressivos leves (p<0,001) e severos (p<0,001). **Conclusão:** sintomas depressivos estiveram associados com pior autoavaliação de saúde e satisfação com a vida.
Descritores: Satisfação Pessoal; Idoso; Enfermagem Geriátrica; Assistência Domiciliar; Atenção Primária à Saúde.

RESUMEN
Objetivo: Identificar características sociodemográficas y de salud según fajas etarias y analizar asociación de autoevaluación del estado de salud y de satisfacción con la vida regular/mala con características sociodemográficas, funcionalidad global y caídas de ancianos en seguimiento por Atención Domiciliaria de la Atención Básica. **Métodos:** Estudio transversal con 124 ancianos, realizado mediante entrevistas domiciliarias. Se utilizó cuestionario de datos sociodemográficos y condiciones de salud, Índice de Barthel, Escala de Lawton, Mini Examen del Estado Mental, Escala de Depresión Geriátrica y Test *Timed Up and Go*. Se aplicó análisis bivariado y multivariado (Regresión de Poisson). **Resultados:** Predominaron octogenarias de sexo femenino. Autoevaluación de salud regular/mala presentó asociación con síntomas depresivos leves (p=0,002) y severos (p<0,001). Satisfacción con la vida regular/mala estuvo asociada con miedo a caer (p=0,019) y con síntomas depresivos leves (p<0,001) y severos (p<0,001). **Conclusión:** Los síntomas depresivos estuvieron asociados con peor autoevaluación de salud y satisfacción con la vida.
Descriptores: Satisfacción Personal; Anciano; Enfermería Geriátrica; Atención Domiciliaria de Salud; Atención Primaria de Salud.

INTRODUCTION

The functional decline resulting from age and chronic diseases may cause repercussions on the need for prolonged health care[1]. Thus, it is necessary to adapt the management of care in the health services, in order to meet the new demands and allow greater participation in the self-care and well-being of older adults[2].

The concept of older adult health relates directly to their functionality and well-being[2]. With regard to individual well-being, self-assessed health status and satisfaction with life are two important subjective measures. Self-assessed health status, also called self-perception of health, reveals the individual's understanding of their own health, and in the older adult it may express the loss of functional capacity[3-4]. Satisfaction with life, in turn, integrates well-being in several aspects and is understood as an individual feeling about life, derived from a comparison of what one has with what one expects to have[5].

A Canadian study shows that older adults who had their needs provided for by home care reported higher levels of life satisfaction and lower levels of loneliness and perceived stress[6]. In Brazil, Home Care Type 1 (HC1), provided for in the organic laws of the Brazilian Unified Health System (SUS), serves as a health care strategy, being the link between the older adult and the health service. HC1 is intended for users who require care with less frequency and complexity, under responsibility of Primary Health Care[7]. The HC1 modality is still poorly structured in the primary health care network, with regard to the systematization of provided care, and it is little mentioned in scientific publications when compared to the modalities of Home Care types 2 and 3, which constitute the Brazilian program *Melhor em Casa* (Best at Home). Although it targets not only older adults, it is observed in practice that most users are over 60 years old, especially in locations with an older population. Thus, it is understood that HC1 is a conducive field to intervene in the well-being of older adults with limitations.

The global functioning of older adults has a direct relationship with their well-being, affecting their life satisfaction and health self-assessment. Global functioning is a comprehensive concept that comprises the individual's ability to manage their life and take care of themselves, anchored by the main functional systems of cognition, communication, mood and mobility[8]. Changes in functional capacity and functional systems should therefore be thoroughly assessed in order to promote health and life satisfaction. The factors associated with the self-assessed health status and satisfaction with life among older adults in general have been described previously. They present an association with multiple sociodemographic, economic, functional and psychological factors[9-12]. However, there are few studies on older adults being assisted by home care (HC) within the primary health care network. Thus, this study seeks to identify the particularities of this population. Knowledge about the subjective measures that express the well-being and associated factors of older adults in HC1 monitoring will enable nurses, through good practices in Gerontological Nursing in HC, to plan and implement interventions with older adults and their families and/or caregivers, in order to maintain their autonomy and well-being in the perspective of the longitudinal nature of care.

OBJECTIVE

To identify sociodemographic and health characteristics according to age groups and to analyze the association between self-assessed health status and satisfaction with regular/bad life with sociodemographic characteristics, global functioning and falls among older adults linked to home care within the primary health care network.

METHODS

Ethical aspects

This study was approved by the Research Ethics Committees of the Hospital de Clínicas de Porto Alegre and the Municipal Health Department of Porto Alegre.

Study type, setting and period

This is a cross-sectional study, which was conducted in the Central Sanitary District of Porto Alegre. This district has the highest proportion of registered older adults in the municipality, representing approximately 28.5% of the older adult population in Porto Alegre[13]. It is made up of three primary care services: Santa Cecília, which contains a Primary Health Unit with four Family Health teams, Modelo and Santa Marta, both of which contain one Primary Health Unit with no Family Health teams and one Primary Health Unit with two Family Health teams. The interviews took place at the participants' homes. Data were collected from October 2018 to April 2019.

Sample and selection criteria

The sample consisted of 124 older adults. The inclusion criteria were: older adults (≥60 years old)[2] who were linked to the HC1 of the Central Sanitary District of Porto Alegre, while the exclusion criteria were: older adults who were not located after three attempts via telephone call, on different days and times or who were not at home during a home visit; older adults without verbal/written communication capacity or with a medical diagnosis of advanced dementia informed by the caregiver or the team professional, and institutionalized older adults.

WinPepi version 11.65 software was used to calculate the sample size. Based on the study by Sposito et al.[14], in order to detect a 35% difference in satisfaction rates between the different age groups, with a power of 80% and a significance level of 5%, at least 36 individuals were required for each age group, totaling 108 individuals. However, the choice was made to include the entire older adult population linked to HC1 of the three services, considering the inclusion and exclusion criteria (N=124).

Data collection

Data collection was carried out through structured interviews conducted by nurses and previously trained undergraduate nursing students. Initially, the identification of the users linked to HC1 of the Central Sanitary District was carried out through the lists provided by nurses and community health agents of each

service, which contained their full name, address and telephone number. In total, there were 227 users. However, only 124 met the inclusion criteria for this study. For those individuals who met the inclusion criteria, a telephone call was made to schedule an interview at home and then an attempted home visit, if telephone contact was not possible. The following instruments were used: Mini-Mental State Examination (MMSE); Sociodemographic data and health status questionnaire; Barthel Index (BI); Lawton Instrumental Activities of Daily Living Scale (IADL); Geriatric Depression Scale (GDS); Timed Up and Go Test (TUG). The interviews were approximately 60 minutes long.

The sociodemographic data and health status questionnaire was formulated by the authors of this study and contained the following variables: age, gender, education, marital status, family income, number of falls in the last 12 months, fear of falling, self-assessed health status and satisfaction with life. The self-assessed health status was analyzed by asking "in general, comparing your health with that of other people your age, would you say your health is: very good, good, regular or bad"? And satisfaction with life was analyzed by asking "in general, how do you evaluate your satisfaction with life: very good, good, regular and bad?"[3; 10].

Global functioning[8] was evaluated through functional capacity (BI and IADL), and three of its main functional systems: Cognition (MMSE), Mood (GDS) and Mobility (TUG).

The BI and the IADL were used to assess functional capability in Basic Activities of Daily Living (BADL) and Instrumental Activities of Daily Living (IADL), respectively. The BI was validated for use in Brazil[15]. This instrument evaluates ten BADLs with a score from 0 to 100. Scores below 20 indicates total dependency; from 20 to 35 indicates severe dependency; from 40 to 55, moderate dependency; from 60 to 99, slight dependency and 100 is considered independent[15]. The IADL is recognized by the Brazilian Ministry of Health[16] for functional assessment of older people in primary care, and it is widely used in clinical practice. This scale evaluates nine IADLs, with one to three points being assigned for each activity ("Independent" – three points; "Needs assistance" – two points; "Unable" – one point). The higher the sum of the total score, the greater the independence of the older person[16]. The author of the original scale and the version contained in the material by the Ministry of Health do not propose a cutoff point. Thus, as the distribution found in the present study is asymmetric, it was categorized into the lower dependence score if less than 12 (mean) and higher dependence when it is equal to or greater than 12 points.

For cognition assessment, the MMSE was used in the version adapted for use in Brazil[17]. The total score varies from 0 to 30 points, and the cutoff point for cognitive decline is established according to education: 13 points for illiterate people, 18 for people with low and medium education and 26 for people with high education.

The reduced version of the GDS (15 items) was used to evaluate depressive symptoms during the mood assessment of older adults[18]. The total score varies from 0 to 15 points: a score between 0 and 5 represents normal (absence of depressive symptoms), between 6 and 10 represents mild depressive symptoms and between 11 and 15 represents severe depressive symptoms[16].

The TUG was used in its Brazilian version for the mobility assessment[19]. Since this study considers a sample with limitations in mobility (inclusion criterion in HC1), a single cutoff point was used. Less than 20 seconds indicates good mobility and equal to or greater than 20 seconds indicates mobility problems .

Analysis of results and statistics

The data were typed twice in an Excel® spreadsheet, and analyzed with the support of the Statistical Package for the Social Sciences (SPSS) for Windows, version 21.0. In the descriptive analysis, mean and standard deviation or median and interquartile amplitude were calculated for the quantitative variables and for the categorical absolute and relative frequencies. The variables expressed by absolute and relative frequencies were associated through the Pearson's chi-squared test, complemented by the adjusted residues analysis. To evaluate the factors associated with the self-assessed health status and satisfaction with life, bivariate and multivariate Poisson regression analyses were applied, and the factors were analyzed in a dichotomous way, using "very good/good" and "regular/bad", while risk was presented in the results as "regular/bad". The criterion for the variable entering the multivariate model was that it presented a p value<0.20 in the bivariate analysis. The measure of effect used was the prevalence ratio together with the 95% confidence interval. The significance level adopted was 5% (p<0.05).

RESULTS

There was a predominance of females (75.8%), with the highest percentage of women in the age group of 80 to 89 years (38.7%). The mean age of the sample was 82.8 (±9.2) years.

Table 1 shows, in the age group of 60 to 79 years, a statistically significant higher proportion of males (p=0.001), married individuals (p=0.003), with good mobility (TUG<20 seconds, p=0.025) and lower dependence for IADLs (p=0.012). In the age group of 80 to 89 years, there was a higher concentration, statistically significant, of females (p=0.001), while in the age group equal to or greater than 90 years, there was a higher proportion of widowed individuals (p=0.003) and mobility problems (TUG≥20 seconds, p=0.025).

There was a higher percentage of older adults who chose the "good" alternative both in self-assessed health status (50.8%) and in satisfaction with life (45.2%). A significantly positive correlation was noted between self-assessed health status and satisfaction with life (r =0.489; p<0.001). These data are presented in Figure 1.

The bivariate analysis of the variables associated with the self-assessed health status and satisfaction with regular/bad life is presented in Table 2.

Table 3 shows that, after multivariate analysis, only mild (p=0.002) and severe (p<0.001) depressive symptoms maintained a statistically significant association with the self-assessment of regular/bad health status. Regarding satisfaction with regular/bad life, statistically significant associations remained with mild (p<0.001) and severe (p<0.001) depressive symptoms, and with fear of falling (p=0.019).

Table 1 – Sociodemographic and health profiling of the total sample and age groups comparison, Porto Alegre, Rio Grande do Sul, Brazil, 2019
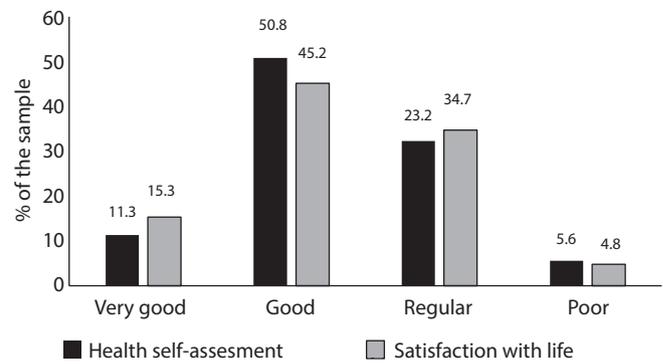
Variables	Total sample N=124 (100%)	60 to 79 years n=40 (32.3%)	80 to 89 years n=54 (43.5%)	≥ 90 years n=30 (24.2%)	p*
Gender					0.001
Male	30 (24.2)	18 (45.0)**	6 (11.1)	6 (20.0)	
Female	94 (75.8)	22 (55.0)	48 (88.9)**	24 (80.0)	
Education					0.121
0 to 4 years	56 (45.2)	13 (32.5)	25 (46.3)	18 (60.0)	
5 to 8 years	37 (29.8)	14 (35.0)	14 (25.9)	9 (30.0)	
> 8 years	31 (25.0)	13 (32.5)	15 (27.8)	3 (10.0)	
Marital status					0.003
Married	33 (26.6)	16 (40.0)**	12 (22.2)	5 (16.7)	
Single/Divorced	32 (25.8)	13 (32.5)	16 (29.6)	3 (10.0)	
Widowed	59 (47.6)	11 (27.5)	26 (48.1)	22 (73.3)**	
Family income***					0.299
1 to 2 minimum wages	43 (34.7)	15 (37.5)	18 (33.3)	10 (33.3)	
3 to 5 minimum wages	58 (46.8)	22 (55.0)	23 (42.6)	13 (43.3)	
> 5 minimum wages	23 (18.5)	3 (7.5)	13 (24.1)	7 (23.3)	
BADLs – Dependence					0.236
Moderate/Severe/Total	57 (46.0)	14 (35.0)	28 (51.9)	15 (50.0)	
Slight/Independent	67 (54.0)	26 (65.0)	26 (48.1)	15 (50.0)	
IADLs					0.012
< 12	64 (51.6)	13 (32.5)	32 (59.3)	19 (63.3)	
≥ 12	60 (48.4)	27 (67.5)**	22 (40.7)	11 (36.7)	
Cognitive decline					0.967
With	61 (49.2)	19 (47.5)	27 (50.0)	15 (50.0)	
Depressive symptoms					0.565
Normal	63 (50.8)	19 (47.5)	26 (48.1)	18 (60.0)	
Mild	47 (37.9)	18 (45.0)	21 (38.9)	8 (26.7)	
Severe	14 (11.3)	3 (7.5)	7 (13.0)	4 (13.3)	
Mobility					0.025
< 20 s	27 (21.8)	13 (32.5)**	12 (22.2)	2 (6.7)	
≥ 20 s	48 (38.7)	10 (25.0)	20 (37.0)	18 (60.0)**	
Bedridden/Wheelchair user	49 (39.5)	17 (42.5)	22 (40.7)	10 (33.3)	
Fall during the last year					0.325
Yes	49 (39.5)	12 (30.0)	24 (44.4)	13 (43.3)	
Fear of falling					0.163
Yes	88 (71.0)	24 (60.0)	42 (77.8)	22 (73.3)	

Note: BADLs = Basic Activities of Daily Living; IADLs = Instrumental Activities of Daily Living; * Pearson's chi-squared test supplemented by the analysis of adjusted residues;**statistically significant association according to the test of adjusted residues at 5% significance; ***minimum wage of 2018: R$ 954.00.

Figure 1 – Self-assessed health status and satisfaction with life among older adults (N=124) linked to HC1, Porto Alegre, Rio Grande do Sul, Brazil, 2019

DISCUSSION

The predominance of female octogenarians found in this study is related to the already known process of feminization of aging and to the characteristics of the age group cared for in HC, which tends to be older[20]. Therefore, it is essential that nursing professionals working in HC1 consider the particularities of health care for the older females in their interventions. Thus, health care needs to cover the consequences of hormonal and functional losses, directing actions to self-image, self-esteem, sexuality, autonomy and engagement with life of the older female, bringing consequences on their personal satisfaction[21].

As expected, the older adults in the age group of 60 to 79 years, the youngest in the present study, had a statistically significant association with the married marital status, TUG<20 seconds, and lower dependence for IADLs. These findings corroborate other studies showing that being married reduces the likelihood of worse functional capacity, and that being 80 years old or older increases the chance of greater dependence on daily life activities, especially instrumental activities[14,22].

The proportion of older adults aged 90 years or older who are being followed up by HC1 is noteworthy. This group had a significant association with TUG≥20 seconds, which may be related

Table 2 – Bivariate analysis of variables associated with self-assessed health status and satisfaction with regular/bad life, Porto Alegre, Rio Grande do Sul, Brazil, 2019

Variables (N=124)	Self-assessed health status Regular/Bad n=47 (%)	PR (CI 95%)	p*	Satisfaction with life Regular/Bad n=49 (%)	PR (CI 95%)	p*
Gender						
Male (n=30)	10 (33.3)	1.00		11 (36.7)	1.00	
Female (n=94)	37 (39.4)	1.18 (0.67 a 2.08)	0.564	38 (40.4)	1.10 (0.65 a 1.87)	0.718
Age group						
60 to 79 years (n=40)	13 (32.5)	1.00		17 (42.5)	1.00	
80 to 89 years (n=54)	23 (42.6)	1.31 (0.76 a 2.26)	0.329	21 (38.9)	0.92 (0.56 a 1.50)	0.723
≥ 90 years (n=30)	11 (36.7)	1.13 (0.59 a 2.16)	0.715	11 (36.7)	0.86 (0.48 a 1.56)	0.625
Education						
0 to 4 years (n=56)	10 (32.3)	1.27 (0.70 a 2.32)	0.429	23 (41.1)	0.98 (0.58 a 1.65)	0.937
5 to 8 years (n=37)	14 (37.8)	1.17 (0.61 a 2.26)	0.634	13 (35.1)	0.84 (0.46 a 1.53)	0.565
> 8 years (n=31)	23 (41.1)	1.00		13 (41.9)	1.00	
Marital status						
Married (n=33)	10 (30.3)	1.00		12 (36.4)	1.00	
Single/Divorced (n=32)	17 (53.1)	1.75 (0.95 a 3.23)	0.072	20 (62.5)	1.72 (1.02 a 2.91)	0.043
Widowed (n=59)	20 (33.9)	1.12 (0.60 a 2.10)	0.727	17 (28.8)	0.79 (0.43 a 1.45)	0.450

Table 2 (concluded)

Variables (N=124)	Self-assessed health status			Satisfaction with life		
	Regular/Bad n=47 (%)	PR (CI 95%)	p*	Regular/Bad n=49 (%)	PR (CI 95%)	p*
Family income**						
1 to 2 minimum wages (n=43)	19 (44.2)	1.13 (0.61 a 2.08)	0.696	20 (46.5)	0.97 (0.57 a 1.66)	0.918
3 to 5 minimum wages (n=58)	19 (32.8)	0.84 (0.45 a 1.57)	0.580	18 (31.0)	0.65 (0.37 a 1.15)	0.140
> 5 minimum wages (n=23)	9 (39.1)	1.00		11 (47.8)	1.00	
BADLs – Dependency						
Moderate/Severe/Total (n=57)	28 (49.1)	1.73 (1.09 a 2.75)	0.020	27 (47.4)	1.44 (0.93 a 2.24)	0.101
Slight/Independent (n=67)	19 (28.4)	1.00		22 (32.8)	1.00	
IADLs						
< 12 (n=64)	31 (48.4)	1.82 (1.11 a 2.97)	0.017	31 (48.4)	1.62 (1.02 a 2.56)	0.042
≥12 (n=60)	16 (26.7)	1.00		18 (30.0)	1.00	
Cognitive decline						
Without (n=63)	21 (33.3)	1.00		23 (36.5)	1.00	
With (n=61)	26 (42.6)	1.28 (0.81 a 2.02)	0.289	26 (42.6)	1.17 (0.75 a 1.81)	0.487
Depressive symptoms						
Normal (n=63)	9 (14.3)	1.00		9 (14.3)	1.00	
Mild (n=47)	25 (53.2)	3.72 (1.92 a 7.22)	<0.001	27 (57.4)	4.02 (2.09 a 7.73)	<0.001
Severe (n=14)	13 (92.9)	6.50 (3.49 a 12.1)	<0.001	13 (92.9)	6.50 (3.49 a 12.1)	<0.001
Mobility						
<20 s (n=27)	9 (33.3)	1.00		8 (29.6)	1.00	
≥ 20 s (n=48)	17 (35.4)	1.06 (0.55 a 2.05)	0.856	21 (43.8)	1.48 (0.76 a 2.87)	0.250
Bedridden/Wheelchair user (n=49)	21 (42.9)	1.29 (0.69 a 2.40)	0.430	20 (40.8)	1.38 (0.70 a 2.69)	0.350
Fall						
Without (n=75)	23 (30.7)	1.00		26 (34.7)	1.00	
With (n=49)	24 (49.0)	1.60 (1.02 a 2.49)	0.039	23 (46.9)	1.35 (0.88 a 2.08)	0.167
Fear of falling						
Yes (n=88)	38 (43.2)	1.73 (0.93 a 3.19)	0.081	42 (47.7)	2.46 (1.22 a 4.94)	0.012
No (n=36)	9 (25.0)	1.00		7 (19.4)	1.00	

Note: PR = Prevalence ratio; BADLs = Basic Activities of Daily Living; IADLs = Instrumental Activities of Daily Living. * Poisson regression bivariate analysis; ** minimum wage of 2018: R$ 954.00.

Table 3 – Multivariate analysis of variables associated with the self-assessed health status and satisfaction with regular/bad life, Porto Alegre, Rio Grande do Sul, Brazil, 2019

Variables	Self-assessed health status		Satisfaction with life	
	PR (CI 95%)	p*	PR (CI 95%)	p*
Marital status				
Married	1.00		1.00	
Single/Divorced	1.43 (0.84 a 2.43)	0.186	1.37 (0.81 a 2.33)	0.243
Widowed	0.92 (0.54 a 1.56)	0.750	0.67 (0.39 a 1.14)	0.139
Family income**				
1 to 2 minimum wages	------	------	0.91 (0.48 a 1.70)	0.760
3 to 5 minimum wages	------	------	0.66 (0.40 a 1.11)	0.115
> 5 minimum wages	------	------	1.00	
BADLs – Dependency				
Moderate/Severe/Total	1.25 (0.79 a 1.96)	0.345	1.06 (0.63 a 1.77)	0.840
Slight/Independent	1.00		1.00	
IADLs				
< 12	1.02 (0.59 a 1.77)	0.947	0.98 (0.57 a 1.66)	0.926
≥12	1.00		1.00	
Depressive symptoms				
Normal	1.00		1.00	
Mild	3.09 (1.54 a 6.19)	0.002	3.34 (1.79 a 6.25)	<0.001
Severe	5.64 (2.86 a 11.1)	<0.001	5.93 (2.95 a 11.9)	<0.001
Fall				
Without	1.00		1.00	
With	1.39 (0.94 a 2.06)	0.103	1.10 (0.78 a 1.56)	0.595
Fear of falling				
Yes	1.19 (0.68 a 2.11)	0.542	2.02 (1.12 a 3.63)	0.019
No	1.00		1.00	

Note: PR = Prevalence ratio; BADLs = Basic Activities of Daily Living; IADLs = Instrumental Activities of Daily Living. * Poisson regression multivariate analysis; ** minimum wage of 2018: R$ 954.00.

to sarcopenia and the consequent functional decline which, in general, increases with advancing age, raising the chance of mobility reduction[23]. The role of nurses in HC1 is highlighted during the elaboration, implementation and monitoring of the individualized care plan with the multidisciplinary team. From this perspective, it is essential to assess the risk of falls and introduce preventive measures. Similarly, to maintain mobility, it is suggested to stimulate movement in this group, if possible, even at home.

Regarding the self-assessed health status and satisfaction with life, more than half of the older adults evaluated it as good or very good, similar to findings from older adults in general[4,10]. Satisfaction with life and self-assessment of health status serve in research as indicators of quality of life and well-being[6,24]. The results found in this study may be indicative of resolution and benefits of home health monitoring[6]. It is possible that the work carried out by the PHC team at home is providing greater well-being for older adults through bonding, expanding access to health, training older adults and their family for self-care when needed, and monitoring of their health status.

Regarding the factors associated with the self-assessed health status and satisfaction with regular/bad life, there was no significant association with sociodemographic variables, differing from other studies with older adults in general[9-12]. It is noteworthy that within the Brazilian socioeconomic status, the southern region has a higher average income, when compared to the others, a factor that can positively impact the quality of life of its inhabitants[25].

In older adults, negative self-assessments of health usually result from limitations in the performance of activities

of daily living, related to worse functional capacity[26]. In the present study, there was a higher prevalence ratio between the most dependent older adults in the BADLs and the IADLs with the worst self-assessed health status and satisfaction with life. However, this association did not remain significant in the multivariate analysis. By increasing the sample size, possibly the significance would also be maintained. Nevertheless, it was noticeable that the study participants, despite having functional limitations, assessed their health and satisfaction with life as good. This perception matches that of Sposito et al.[14] as they suggest that older adults present better satisfaction with life, even with greater functional impairment. Although it is expected that the greater dependence older adults have, the worse their self-assessed health status and satisfaction with life will be, it can be inferred that the expansion of resources and access to health, including home care, can have positive impacts on individual well-being, affecting their perception of health and satisfaction with life.

Regarding the global functioning of older adults, changes in mobility and cognitive decline also did not show a significant association with self-assessment of health status and satisfaction with regular/bad life, thus differing from other studies with older adults in general[11,27-29]. It is noteworthy that the sample under study has particularities compared to older adults in the community in general, because they are visited by health professionals at home and have differentiated access to health services, which may have had some impact on the findings. In addition, it is worth noting that the older adults with advanced dementia have not been included in the study.

As for mood, a significant association between mild and severe depressive symptoms was maintained, both with self-assessed health status, and with satisfaction with regular/bad life, after control for confounding variables. This confirms national and international studies, although these have been carried out with the older adults in general[11,29-33]. A Korean study found that social support has an effect on depression through stress relief[34]. Strengthening the support network is suggested as an alternative. With the nurse in the role of stimulating inter-generational contact with family and friends, encouraging audio or video calls, exploring the resources they have. Day care centers, already implemented in other countries, are spaces that allow dependent older adults to leave home for a few hours of the day and interact with people from other age groups. The nurses themselves assist these older adults at home and then refer them to the day care center. This space provides social interactions and participation of the older adults in activities that positively impact the perception of loneliness, quality of life and attitudes of the older adults[35]. In order to promote the older adults' well-being and reduce the burden on their family, the development of similar spaces in the Brazilian context is recommended.

Best practices in gerontological nursing in HC require constant planning and reorganization[36]. Therefore, there is the need to expand the actions aimed at the well-being of the individual at home, in order to reduce depressive symptoms, considering the evidence that involvement in social and cultural activities is related to greater well-being and resilience[37]. Thus, it is suggested that nurses involved in the Systematization of Nursing Care develop individualized care plans that involve differentiated activities with the older person in their own home, to stimulate their autonomy and pay attention to

their individual preferences, such as: painting, reading, wish/dreams list, activity journal, crochet, yoga, meditation, food preparation, activities with family/caregivers, among others. It is essential that not only tasks are proposed to fill time, but that they bring meaning to their life, helping to set goals for their existence.

The presence of falls was not significant with any of the variables under study. It should be noted that more than half of the sample did not show any episode of decline in the last year. This may be related to the differentiated care they receive, with health professionals who frequently visit their homes and who assess the risk of falls and establish preventive interventions to avoid falls[38]. However, the fear of falling presented a significant association with the evaluation of satisfaction with regular/bad life. Fear of falling has been related to decreased quality of life, functional decline, risk of falls, and increased social isolation in the older population, which reinforces the need for evaluating fear of falling, in addition to applying an instrument that evaluates the risk of falls[39]. On the other hand, fear of falling can also be considered as a positive aspect when it encourages the older person to pay more attention to the risk factors for falls and even to adopt preventive measures. However, the importance of monitoring and intervening when necessary in the face of fear of falling must be emphasized, in order to reduce its consequences on the physical and mental health of the older adult. Educational activities can be carried out with older adults, their family members and/or caregivers, so that they understand that the fear of falling is subject to control, through the supervision of modifiable risk factors in households, training of those who provide care and the execution of supervised physical exercises for balance development and muscle strengthening[39].

Nursing interventions in HC have the potential to cause changes in life habits due to the strong bond between users and providers, who know the family and social context in which the individual is inserted. Such interventions contribute to the well-being and maintenance of the older adult's functionality, as they welcome their needs and their family and/or caregiver, facilitating access to health services[38,40]. In addition, it is up to the nurse to accommodate the demand, list nursing diagnoses, establish a nursing planning and implement necessary and tangible interventions.

Limitations of the Study

This study presents as a limitation its cross-sectional design, making causal inferences impossible. Moreover, the results cannot be generalized, as they bring specific characteristics of a given region in a municipality, and due to the sample size. The lack of studies with specific populations addressed in this research limited a comparative discussion with other realities.

Contributions to the areas of Nursing, Health or Public Policies

The results of this research can lead nurses to rethink their planning and implementing of the care provided to older adults at home, with an emphasis on their well-being. Through the nurse's work, by listing nursing diagnoses, planning, implementing interventions and evaluating them after they have been developed, it

is possible to understand how the older adult in HC1 monitoring perceives their own health and their satisfaction with life, as well as the associated factors. Actions such as strengthening the support network, care plan addressing psychosocial factors, and fear of falling provide improvements in the well-being and quality of life of this population. Furthermore, these findings make it possible to increase visibility to the potential of HC1 in the face of new health demands, to encourage the discussion of public policies, as well as to strengthen its coordination in health care networks. Thus, the importance of expanding this modality of health, which adds well-being to longevity, is emphasized, providing aid and support to the older adults, their family members and/or caregivers.

CONCLUSION

There was a predominance of female octogenarians, which highlights the importance of professionals, services and health systems prepared to meet new demands. Regarding the self-assessed health status and satisfaction with life, most of the older adults chose the option "good", which emphasizes the importance of receiving home monitoring, depending on their health condition. Self-assessed regular/bad health status was associated with mild and severe depressive symptoms, while satisfaction with

regular/bad life was associated with fear of falling and with mild and severe depressive symptoms.

There is an evident need for psychosocial interventions for the older person in home monitoring, implemented through an individualized care plan. These can be carried out in the elderly's home, focusing at the early detection of depressive symptoms and their implications. In addition, it is possible to understand the need to address the limitations, risks and consequences that involve the fear of falling.

In this context, the importance of the health modality HC1 in the monitoring of the older population with limitations stands out, because it serves as a strategy for continuity of care for older adults who require less complex care. It is possible to implement actions aimed at the functionality and well-being of individuals who have restrictions to leave their homes. Thus, new intervention studies that present benefits and limitations of the care provided by HC1 are suggested, to broaden the discussion and improve the systematization of this modality of care within the Brazilian Unified Health System.

FUNDING

REFERENCES

1. Paschoal SMP. Qualidade de vida na velhice. In: Freitas EV, Py L, (Eds.). Tratado de Geriatria e Gerontologia. Rio de Janeiro: Guanabara Koogan; 2017. 99-104 p.

2. Organização Mundial da Saúde (OMS). Relatório mundial de envelhecimento e saúde: resumo [Internet]. Genebra: Organização Mundial da Saúde; 2015 [cited 2020 Aug 14]. 30 p. Available from: https://sbgg.org.br/wp-content/uploads/2015/10/OMS-ENVELHECIMENTO-2015-port.pdf

3. Borges AM, Santos G, Kummer JA, Fior L, Dal Molin V, Wibelinger LM. Self-perceived health in elderly living in a city in Rio Grande do Sul state. Rev Bras Geriatr Gerontol. 2014;17(1):79-86. doi: 10.1590/S1809-98232014000100009

4. Carvalho ML, Barbosa CNS, Bezerra VP, Santos AMR, Silva CRDT, Brito CMS, et al. Health situation in the perception of elderly widows assisted by primary health care. Rev Bras Enferm. 2019;72(suppl 2):199-204. doi: 10.1590/0034-7167-2018-0549

5. Neugarten BL, Havighurst RJ, Tobin SS. The measurement of life satisfaction. J Gerontol. 1961;16(2):134-143. doi: 10.1093/geronj/16.2.134

6. Kadowaki L, Wister AV, Chappell NL. Influence of home care on life satisfaction, loneliness, and perceived life stress. Can J Aging. 2014;34(1):1-15. doi: 10.1017/S0714980814000488

7. Ministério da Saúde (BR). Portaria n° 825, de 25 de abril de 2016. Redefine a Atenção Domiciliar no âmbito do Sistema Único de Saúde (SUS) e atualiza as equipes habilitadas [Internet]. Brasília (DF): Ministério da Saúde; 2016 [cited 2020 Apr 12]. Available from: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2016/prt0825_25_04_2016.html

8. Moraes EN. Atenção à saúde do idoso: aspectos conceituais [Internet]. Brasília: Organização Pan-Americana da Saúde; 2012 [cited 2020 Aug 14]. Available from: http://subpav.org/download/prot/atencao_a_saude_do_idoso_apectos_conceituais.pdf.

9. Kolosnitsyna M, Khorkina N, Dorzhiev H. Determinants of life satisfaction in older russians. Ageing Int. 2017;42(3):354-373. doi: 10.1007/s12126-017-9297-3

10. Banhato EFC, Ribeiro PCC, Guedes DV. Life satisfaction in community-dwelling elderly. Rev Hosp Univ Pedro Ernesto. 2018;17(2):16-24. doi:10.12957/rhupe.2018.40807

11. Ng ST, Tey NP, Asadullah MN. What matters for life satisfaction among the oldest-old? evidence from China. PLoS One. 2017;12(2):e0171799. doi: 10.1371/journal.pone.0171799

12. Souza MS, Coqueiro RS, Fernandes MH. Population study on the determinants for self-rated health of elderly residents in community. Cienc Enferm. 2016;22(2):13-26. doi: 10.4067/S0717-95532016000200002

13. Prefeitura Municipal de Porto Alegre. Dados demográficos IBGE 2010 [Internet]. Porto Alegre: Prefeitura Municipal de Porto Alegre; 2020 [cited 2020 Apr 12]. Available from: http://www2.portoalegre.rs.gov.br/sms/default.php?p_secao=918

14. Sposito G, D'Elboux MJ, Neri AL, Guariento ME. Satisfaction with life and functionality among elderly patients in a geriatric outpatient clinic. Ciênc Saúde Colet. 2013;18(12):3475-82. doi: 10.1590/S1413-81232013001200004

15. Minosso JSM, Amendola F, Alvarenga MRM, Oliveira MAC. Validation of the Barthel Index in elderly patients attended in outpatient clinics, in Brazil. Acta Paul Enferm. 2010;23(2):218-23. doi: 10.1590/S0103-21002010000200011

16. Ministério da Saúde (BR). Envelhecimento e saúde da pessoa idosa [Internet]. Brasília (DF): Ministério da Saúde; 2006 [cited 2020 Aug 14]. Available from: http://bvsms.saude.gov.br/bvs/publicacoes/evelhecimento_saude_pessoa_idosa.pdf

17. Bertolucci PHF, Brucki SMD, Campacci SR, Juliano Y. The Mini-Mental State Examination in an outpatient population: influence of literacy. Arq Neuropsiquiatr. 1994;52(1):1-7. doi: 10.1590/S0004-282X1994000100001

18. Almeida OP, Almeida SA. Reliability of the Brazilian version of the Geriatric Depression Scale (GDS) short form. Arq. Neuro-Psiquiatr. 1999;57(2B):421-426. doi: 10.1590/S0004-282X1999000300013

19. Dutra MC, Cabral ALL, Carvalho GA. Brazilian version of Timed Up and Go test. Rev Interfaces, Saúde, Hum Tecnol. 2016;3(9):81-88. doi: 10.16891/2317-434X.430

20. Paskulin LMG, Bierhals CCBK, Santos NO, Day CB, Machado DO, Morais EP, et al. Depressive symptoms of the elderly people and caregiver's burden in home care. Invest Educ Enferm. 2017;35(2):210-20. doi: 10.17533/udea.iee.v35n2a10

21. Souza CL, Gomes VS, Silva RL, Silva ES, Alves JP, Santos NR, et al. Aging, sexuality and nursing care: the elderly woman's look. Rev Bras Enferm. 2019;72(suppl2):71-8. doi: 10.1590/0034-7167-2018-0015

22. Matos FS, Jesus CS, Carneiro JAO, Coqueiro RS, Fernandes MH, Brito TA. Reduced functional capacity of community-dwelling elderly: a longitudinal study. Ciênc Saúde Colet. 2018;23(10):3393-401. doi: 10.1590/1413-812320182310.23382016

23. Santos VR, Gomes IC, Bueno DR, Christofaro DGD, Freitas Jr. IF, Gobbo LA. Obesity, sarcopenia, sarcopenic obesity and reduced mobility in Brazilian older people aged 80 years and over. Einstein. 2017;15(4):435-40. doi: 10.1590/S1679-45082017AO4058

24. Lindemann IL, Reis NR, Mintem GC, Mendoza-Sassi RA. Self-perceived health among adult and elderly users of Primary Health Care. Ciênc Saúde Colet. 2019;24(1):45-52. doi: 10.1590/1413-81232018241.34932016

25. Instituto Brasileiro de Geografia e Estatística (IBGE). Síntese de indicadores sociais: uma análise das condições de vida da população brasileira – 2018 [Internet]. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística; 2018 [cited 2020 Aug 18]. 151 p. Available from: https://agenciadenoticias.ibge.gov.br/media/com_mediaibge/arquivos/ce915924b20133cf3f9ec2d45c2542b0.pdf.

26. Bortoluzzi EC, Doring M, Portella MR, Cavalcanti G, Mascarelo A, Delani MP. Prevalence and factors associated with functional dependence in the oldest old. Rev Bras Ativ Fís Saúde. 2017;22(1):85-94. doi: 10.12820/rbafs.v.22n1p85-94

27. Soares VN, Fattori A, Neri AL, Fernandes PT. Influence of physical performance on elderly mortality, functionality and life satisfaction: FIBRA's study data. Ciênc Saúde Colet. 2019;24(11):4181-90. doi: 10.1590/1413-812320182411.07592018

28. Freitas DHM, Campos FCA, Linhares LQ, Santos CR, Ferreira CB, Diniz BS, et al. Self-perception of health and cognitive performance in community-dwelling elderly. Arch Clin Psychiatr. 2010;37(1):32-35. doi: 10.1590/S0101-60832010000100007

29. Santos EC, Couto BM, Bastone AC. Factors associated with negative self-assessment of health in elderly enrolled in Primary Care Units. ABCS Health Sci. 2018;43(1):47-54. doi: 10.7322/abcshs.v43i1.999

30. Mantovani EP, Lucca SR, Neri AL. Negative self-rated health in the elderly in cities with different levels of economic well-being: data from FIBRA. Ciênc Saúde Colet. 2015;20(12):3653-68. doi: 10.1590/1413-812320152012.20492014

31. Pagotto V, Bachion MM, Silveira EA. Self-assessment of health by older Brazilians: systematic review of the literature. Rev Panam Salud Publica. 2013;33(4):302-310. doi: 10.1590/S1020-49892013000400010

32. Lau BH, Kwan JS, Cheung KS, Martin P. Depression moderates the frailty-subjective health link among Chinese near centenarians and centenarians. Am J Geriatr Psychiatr. 2016;24(9):753-61. doi: 10.1016/j.jagp.2016.05.014

33. Gigantesco A, Fagnani C, Toccaceli V, Stazi MA, Lucidi F, Violani C, et al. The relationship between satisfaction with life and depression symptoms by gender. Front Psychiatr. 2019;10:419. doi: 10.3389/fpsyt.2019.00419

34. Lee HS, Kim C. Structural equation modeling to assess discrimination, stress, social support, and depression among the elderly women in South Korea. Asian Nurs Res. 2016;10(3):182-8. doi: 10.1016/j.anr.2016.06.003

35. Esmaeilzadeh S, Oz F. Effect of psychosocial care model applied in an "elderly day care center" on loneliness, depression, quality of life, and elderly attitude. Niger J Clin Pract. 2020;23(2):189-97. doi: 10.4103/njcp.njcp_366_19

36. Rodrigues RAP, Bueno AA, Casemiro FG, Cunha AN, Carvalho LPN, Almeida VC, et al. Assumptions of good practices in home care for the elderly: a systematic review. Rev Bras Enferm. 2019;72(suppl 2):302-310. doi: 10.1590/0034-7167-2018-0445

37. Rapacciuolo A, Filardi PP, Cuomo R, Mauriello V, Quarto M, Kisslinger A, et al. The impact of social and cultural engagement and dieting on well-being and resilience in a group of residents in the metropolitan area of Naples. J Aging Res. 2016;2016(4768420):1-11. doi: 10.1155/2016/4768420

38. Nogueira IS, Previato GF, Scolari GAS, Gomes ACO, Carreira L, Baldissera VDA. Home intervention as a tool for nursing care: evaluation of the satisfaction of the elderly. Rev Gaúch Enferm. 2016;37(spe):e68351. doi: 10.1590/1983-1447.2016.esp.68351

39. Vitorino LM, Teixeira CAB, Vilas Boas EL, Pereira RL, Santos NO, Rozendo CA. Fear of falling in older adults living at home: associated factors. Rev Esc Enferm USP. 2017;51:e03215. doi: 10.1590/S1980-220X2016011803215

40. Procópio LCR, Seixas CT, Avelar RS, Silva KL, Santos MLM. Home Care within the Unified Health System: challenges and potentialities. Saúde Debate. 2019;43(121):592-604. doi: 10.1590/0103-1104201912123