



Original Article

# Functional capacity and self-care practices of older primary healthcare users and their association with indicators of social vulnerability

*Capacidade funcional e práticas de autocuidado de idosos usuários da atenção primária à saúde e sua associação com indicadores de vulnerabilidade social*

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## Abstract

**Introduction:** Public policies for older people encourage interventions aimed at preserving or improving their functional capacity and autonomy. Some of these policies emphasize self-care practices and the strengthening of daily activities, especially in primary healthcare. **Objective:** The objective of this study was to assess the functional capacity and self-care practices of older users of primary healthcare in Brazil and their association with indicators of social vulnerability. **Method:** This is a quantitative, cross-sectional, descriptive, and analytical study conducted with 128 older individuals. **Results:** The results showed that being male, frail, and having diabetes and depression increases the likelihood of having difficulties in basic activities. They also showed that being female, aged over 80 years, frail, having poor self-perception of health, chronic conditions, anemia, osteoarthritis, and depression influence functional outcomes in instrumental activities. **Conclusion:** The characterization of older people regarding sociodemographic data, self-perception of health, chronic conditions, level of frailty, and their relation to functional capacity and self-care is novel and relevant, given the scarcity of scientific studies assessing these aspects as compensatory practices for functional difficulties, as well as the associated factors, especially in older individuals residing in areas with indicators of vulnerability.

**Keywords:** Self-care; Aged/Physiology; Primary Healthcare; Activities of Daily Living; Social Vulnerability.

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## **Resumo**

**Introdução:** As políticas públicas para idosos incentivam intervenções que visam preservar ou melhorar sua capacidade funcional e a autonomia. Algumas dessas políticas enfatizam as práticas de autocuidado e o fortalecimento das atividades diárias, especialmente na atenção primária à saúde. **Objetivo:** O objetivo deste estudo foi avaliar a capacidade funcional e as práticas de autocuidado de idosos usuários da atenção primária no Brasil e sua associação com indicadores de vulnerabilidade social. **Método:** Estudo quantitativo, transversal, descritivo e analítico conduzido com 128 idosos. **Resultados:** Os resultados mostraram que ser homem, fragilizado, com diabetes e depressão aumenta a probabilidade de ter dificuldades nas atividades básicas. Eles também mostraram que ser mulher, com idade superior a 80 anos, fragilidade, má autopercepção de saúde, condições crônicas, anemia, artrose e depressão influenciam os resultados funcionais nas atividades instrumentais. **Conclusão:** A caracterização dos idosos quanto aos dados sociodemográficos, autopercepção de saúde, condições crônicas, nível de fragilidade e sua relação com a capacidade funcional e o autocuidado é inédita e relevante, dada a escassez de estudos científicos que avaliem esses aspectos como práticas compensatórias para dificuldades funcionais, bem como os fatores associados, especialmente em idosos residentes em áreas com indicadores de vulnerabilidade.

**Palavras-chave:** Autocuidado; Idoso/Função; Atenção Primária à Saúde; Atividades Cotidianas; Vulnerabilidade Social.

## **Introduction**

Functional capacity, essential for healthy aging, is the ability to maintain physical and mental functions to preserve autonomy and independence (Rodrigues & Rodrigues, 2019). The concept of functional capacity presented by the OPAS/OMS in the document “Década del Envejecimiento Saludable en las Américas (2021-2030)” (Organización Panamericana de la Salud, s.d.) is broader, involving the person's intrinsic capacity, the environment in which they live and the interaction between both.

Self-care promotes functional capacity of older individuals (Almeida et al., 2012) and involves activities of daily living, health and well-being, including behavioral and environmental changes and the use of assistive devices to compensate for deficits in daily activities (Almeida, 2004; Almeida et al., 2012; Orem, 1991).

Public policies for older people encourage interventions aimed to preserve or improve the functional capacity and autonomy of the elderly (Organização Mundial da Saúde, 2005; Organização Pan-Americana da Saúde, 2019). Some of these policies emphasizes self-care practices and strengthening of daily activities (Brasil 2006b; Orem, 1991). The World Health Organization (2019) proposes Integrated Care for Older People (ICOPE), which reaffirms that primary care services can respond to the greatest needs of older people. The ICOPE approach recognizes this level of care as a strategic scenario for developing and implementing a care plan with an emphasis on functional capacity, self-care and supported care. The World Health Organization (2019) further considers that the partnership between elderly people, primary care workers, family and community has potential for healthy aging.

The focus on functional capacity reduces the risk of hospitalization, institutionalization and death of the elderly, since the presence of disabilities is an important criteria for frailty in this population (Brasil, 2006a).

The care provided by primary care is guided by the principles of accessibility and coordination of care, bond, longitudinality, integrality and humanization. Based on these principles, the interventions in primary care are conducted on the social and health needs of the population in the territory, they take into account the singularities of the territory and ranges from health promotion to rehabilitation (Brasil, 2006a).

In the city of São Paulo/Brazil, the care for the elderly is provided by a net of services and is coordinated by the primary care. At this level, a multidimensional assessment of the elderly with an emphasis on functional capacity is carried out, whose results organizes the care. Elderly with low-complexity conditions are cared by primary care, those with more complex pathologies are cared for at the secondary level (Brasil, 2014).

Thus, public policies in Brazil recognize the assessment of functional capacity as an organizer of integral care for the elderly at the level of primary care and, self-care practices are considered strategies for the health, independence and autonomy of this population. Despite this acknowledgment, there is no study that had assessed the self-care practices of older people oriented toward daily living activities and their association with indicators of social vulnerability. The present study aims to assess the functional capacity and self-care practices of older primary health care users in a region of high social vulnerability in the city of São Paulo/Brazil and their association with indicators of vulnerability, in terms of demographic, socioeconomic, health perception and clinical condition variables.

## **Materials and Methods**

This is a quantitative, cross-sectional, descriptive, analytical study conducted at two primary healthcare facilities in the Itaim Paulista district of São Paulo, Brazil, where there is a lack of support programs for older adults, such as secondary health care. In addition, other conditions of social vulnerability in the area were observed, including low schooling levels, lack of basic sanitation, public transportation and green areas, high youth homicide rates and, precarious living conditions. It was a convenience sampling composed of: individuals aged 60 years or older treated at the facilities between June and October 2019. The sample consisted of 128 subjects. To its calculation it were considered the variables of interest in this study and that the maximum percentage of subjects with one or more difficulty in activities of daily living is 48% (Almeida et al., 2012). The data were obtained at individual interviews where two standard instruments were applied.

- I) Multidimensional Assessment of Older People in Primary Care (AMPI/AB) (Saraiva et al., 2020): an instrument to assess older adults in primary care that contains questions on health and functions, history of hospitalization and falls, unintentional weight loss, changes in oral health, mood swings, demographic and social aspects. According to the AMPI/AB score, the older adults were classified into three levels: 0 - 5: healthy, 6 - 10: pre-frail and > 11: frail;
- II) Classification of Older People in terms of Self-care Capacity (CICAc): classifies older adults according to their self-care capacity in basic and instrumental activities of daily

living (Almeida, 2004). The subjects were recruited at the facilities and, the interview was held at a time and on a date convenient to each participant.

Descriptive analysis was conducted for sociodemographic, health, functional and frailty level data, followed by statistical analysis using the chi-squared, Fisher's exact or likelihood ratio tests to identify possible associations between the functional parameters (presence, number and degree of difficulties in BADL and IADL) and social, demographic, clinical, self-perceived health and frailty level variables. The odds ratio of each variable was estimated in relation to functional parameters and their 95% confidence intervals, and bivariate logistic regression was applied. Finally, multiple logistic regression models were created, selecting the variables with a significance level less than 0.2 ( $p < 0.2$ ) in bivariate analyses and whose categories are not marked with zero, with all the variables included in the full model. IBM-SPSS software version 22.0 was used for analysis and Microsoft Excel 2010 for tabulating. The tests were conducted at a 5% significance level. The study was approved by the Research Ethics Committee of the University of São Paulo's School of Medicine (CAAE: 97957718.8.0000.0065) and the Municipal Health Department of São Paulo (CAAE: 97957718.8.3001.0086). All persons gave their informed consent prior to their inclusion in the study.

## **Results**

A total of 128 older people participated in the study. Their sociodemographic and economic variables are presented in Table 1.

Table 1 shows that the sample consists predominantly of women, up to 69 years old, with 4 years of schooling, married, receiving financial resources from retirement and who partially meet their basic needs.

Table 2 shows that most of the participants had poor self-perceived health, 3 or more chronic conditions and mood swings, being classified as pre-frail.

Table 3 shows that 25% of the older adults have difficulties in BADL, for 1 or 2 activities (21.1%) and some of them compensate these difficulties with self-care practices (10.9%). Moreover, most have difficulties in IADL (84.8%), for 1 or 2 activities (52.3%) and require assistance (53.9%). A small number of them compensate for the difficulties in these activities (8.6%). With respect to BADL, locomotion and physical difficulties predominate and when the older adults adopt self-care practices, they change their mode of locomotion and use assistive devices. Difficulties in IADL are present especially in domestic tasks and are physical in nature. Older people typically exhibit behavioral changes, but frequently require assistance.

With respect to BADL, Table 4 shows that more men experienced difficulties ( $p=0.016$ ) and have a larger number of them ( $p=0.013$ ). Presence of chronic conditions, diabetes, stroke, depression and chronic pain influenced all the difficulty parameters ( $p < 0.05$ ), negative self-perceived health influenced the presence of difficulty and Parkinson's disease and dementia, the number of difficulties.

In regard to IADL, women exhibited more difficulties ( $p=0.036$ ), individuals aged 80 years or older that required assistance predominated ( $p=0.038$ ) and there was a trend to a difference ( $p=0.051$ ) regarding the degree of difficulty among older adults who did not have someone to depend on if they needed help. A higher proportion of illiterate older people or with low schooling experienced difficulties ( $p=0.036$ ) and tended to

have a larger number ( $p=0.063$ ). Negative self-perceived health, chronic conditions and osteoarthritis influenced all the IADL parameters ( $p < 0.05$ ), depression influenced the degree, anemia the number and no paid employment influenced the presence of difficulties. Frailty level influenced all the BADL and IADL parameters.

**Table 1.** Distribution of older adults according to their sociodemographic and economic variables.

Variable	Frequency	%
<b>Sex</b>		
Female	93	72.7
Male	35	27.3
<b>Age</b>		
60 to 69	71	55.5
70 to 79	49	38.3
80 +	8	6.3
<b>Lives alone</b>		
Yes	26	20.3
No	102	79.7
<b>Marital Status</b>		
Single	10	7.8
Married	75	58.6
Divorced	15	11.7
Widowed	27	21.1
<b>Schooling</b>		
Illiterate	19	14.9
Up to 4 years	71	55.4
5 to 8 years	16	12.5
9 years or +	22	17.2
<b>Financial Resources</b>		
Retired	68	53.1
Receives assistance	46	35.9
Informal employment	23	18
Salaried	17	13.3
Pension	15	11.7
Rent income	10	7.8
Receives assistance benefit	6	4.7
<b>Children</b>		
No	19	14.8
Yes	109	85.2
<b>Has someone they can depend on</b>		
No	15	11.7
Yes	113	88.3
<b>Satisfied with basic needs (food, housing, health, etc.)</b>		
Very satisfied	17	13.3
Satisfied	37	28.9
Somewhat satisfied	58	45.3
Dissatisfied	11	8.6
Very dissatisfied	5	3.9

**Table 2.** Data on the health, functional conditions and frailty of the participants.

Variable	Frequency	%
<b>Self-perceived health</b>		
Very Good/Good	59	46.1
Fair/Poor/Very Poor	69	53.9
<b>Chronic Conditions</b>		
None	7	5.5
1 or 2	41	32
3 or more	80	62.5
<b>Medications</b>		
1 to 4	80	62.5
5 or +	48	37.5
<b>Hospitalizations in the last 12 months</b>		
None	119	93
1	8	6.3
2	1	0.8
<b>Falls in the last 12 months</b>		
None	90	70.3
1	25	19.5
2	13	10.2
<b>Vision problems</b>		
No	68	53.1
Yes	60	46.9
<b>Hearing problems</b>		
No	77	60.2
Yes	51	39.8
<b>Physical Limitations</b>		
No	101	78.9
Yes	27	21.1
<b>Cognitive Disorders</b>		
No	68	53.1
Yes	60	46.9
<b>Mood Swings</b>		
No	48	37.5
Yes	80	62.5
<b>Needs help in BADL</b>		
No	123	96.1
Yes	5	3.9
<b>Needs help in IADL</b>		
No	88	68.8
Yes	40	31.3
<b>Incontinence</b>		
No	85	66.4
Yes	43	33.6
<b>Unintentional weight loss</b>		
No	103	80.5
Yes	25	19.5
<b>Changes in oral health</b>		
No	72	56.3
Yes	56	43.8
<b>AMPI Classification</b>		
Healthy – 0 to 5	50	39.1
Pre-frail – 6 to 10	61	47.7
Frail > 11	17	13.3

Legend: BADL: basic activities of daily living, IADL: instrumental activities of daily living.

**Table 3.** Distribution of older people in terms of the following functional parameters: presence, number and degree of difficulties in BADL and IADL.

Activities	TOTAL	
	FR	%
<b>BADL</b>		
<b>Difficulties</b>		
Yes	32	25
No	96	75
<b>Number of activities</b>		
None	96	75
1-2	27	21.1
3 +	5	3.9
<b>Degree of difficulty</b>		
ND	96	75
DC	14	10.9
DNC	11	8.6
RA	7	5.5
<b>IADL</b>		
<b>Difficulties</b>		
Yes	106	84.8
No	19	15.2
<b>Number of difficulties</b>		
None	22	17.2
1-2	67	52.3
3 +	39	30.5
<b>Degree of difficulty</b>		
ND	22	17.2
DC	11	8.6
DNC	26	20.3
RA	69	53.9

Legend: ND: No difficulty in any activity; DC: All difficulties compensated with self-care practices; DNC: Difficulty not compensated in one or more activity, but does not require assistance; RA: Requires assistance in one or more activity.

**Table 4.** Results of association tests with p-values between presence, number and degree of difficulties in BADL and IADL, sociodemographic and health variables.

Diffic.	Associated variables (p-values)															
	Sex	AG	Someone to count on	School	Negative self-perc. health	Chronic condition	Diab.	Stroke	Dep.	Chronic pain	Park. D	Dem.	OA	Anemia	No p. empl.	Fra.
<b>ADL</b>																
<b>Pres.</b>	0.016	0.215	>0.999*	0.896#	0.019	0.004#	0.003	0.002*	0.006	0.025						<0.001#
male sex																
<b>No.</b>	0.013	0.250	0.476	0.701		0.009	0.008	0.002	0.018	0.007	0.047	0.033				<0.001
male sex																
<b>Degree</b>	0.101	0.070	0.527	0.377		0.017	0.007	0.021	0.017	0.005						<0.001
<b>ADL</b>																
<b>Pres.</b>	0.297	0.122*	0.465*	0.036#	0.006	0.002#						0.018		0.036	0.002#	
illiteracy /low schooling																
<b>No.</b>	0.036	0.072	0.249	0.063	<0.001	<0.001						0.001	0.004		<0.001	
female sex																
<b>Degree</b>	0.448	0.038	0.051	0.174	0.016	0.007		0.016				0.002			0.022	
≥ 80 years not have someone																

Legend: Diffic: Difficulties; Pres: Present; No: Number of activities; AG: age group; School: schooling; Self-perc. health: Self-perceived health; Diab: Diabetes; Dep: Depression; Park D: Parkinson's disease; Dem: Dementia; OA: Osteoarthritis; No p. empl: no paid employment; Fra: Frail, ADL: activities of daily living. \*: Fisher's exact test, #: likelihoods ratio test.

**Table 5.** Multiple explanatory model of difficulties in BADL and IADL according to sociodemographic, clinical, self-perceived health and frailty level variables.

Variable	OR	CI (95%)		P
		Lower	Higher	
<b>BADL</b>				
<b>Sex</b>				
Female	1.00			
Male	6.06	1.80	20.42	<b>0.004</b>
<b>Frailty level</b>				
Healthy	1.00			
Pre-frail	2.90	0.71	11.95	0.140
Frail	16.59	2.21	124.26	<b>0.006</b>
<b>Self-perceived health</b>				
Very Good	1.00			
Fair-Poor-Very Poor	0.52	0.14	1.91	0.326
<b>Diabetes</b>	4.65	1.47	14.73	<b>0.009</b>
<b>Stroke</b>	2.28	0.46	11.22	0.310
<b>Depression</b>	3.62	1.12	11.71	<b>0.032</b>
<b>Chronic pain</b>	2.95	0.89	9.79	0.077
<b>IADL</b>				
<b>Age group (years)</b>				
60 to 74	1.00			
75 to 89	3.17	0.31	32.80	0.334
<b>Schooling</b>				
Illiterate	1.00			
Up to 4 years	0.51	0.05	4.99	0.566
5 to 8 years	0.51	0.03	8.23	0.638
9 years or +	0.27	0.02	3.01	0.287
<b>Currently employed</b>	0.78	0.20	2.99	0.717
<b>Frailty level</b>				
Healthy	1.00			
Pre-frail	1.88	0.51	6.94	0.342
Frail	&			0.998
<b>Self-perceived health</b>				
Very Good	1.00			
Fair-Poor-Very Poor	1.16	0.29	4.62	0.830
<b>Hypertension</b>	2.61	0.69	9.97	0.160
<b>Osteoarthritis</b>	4.01	1.05	15.31	<b>0.042</b>

Multiple logistic regression (Full model), OR=Odds Ratio, CI= Confidence interval

In Table 5, the odds ratio (OR) values showed that men, frail individuals, those with diabetes and depression were 6.06, 16.59, 4.65 and 3.62 more likely to experienced difficulties in BADL, with control of the other variables ( $p < 0.05$ ). With respect to IADL, the OR values demonstrated that only osteoarthritis (OA) caused a four-fold increase in the likelihood of difficulty for these activities, with control of the other variables ( $p = 0.042$ ). Moreover, compensation for the difficulties in these activities due to OA was less frequent ( $p = 0.016$ ).

## Discussion

This study assessed the functional capacity and self-care practices of older primary care users in a region of high social vulnerability and their association with indicators of vulnerability, demographic and socioeconomic aspects, self-perceived health and clinical conditions.

A higher proportion the older individuals were women, aged between 60 and 70 years and 20% lived alone. This last variable is associated with the greater difficulties in the instrumental activities of daily living and falls (Negrini et al., 2018).



Most of participants were married and had 4 years of schooling or less. Low education is a challenge and requires appropriateness in care processes, as that patient education has the potential to improve autonomy and to increase therapeutic partnership (Jotterand et al., 2016).

The subjects largely received pension, salaried or retirement, which proved to be relevant, since it is related to financial autonomy and improved quality of life (Pimentel & Loch, 2020). A significant percentage of participants had children, what can bring comfort to the interviewees, as it is attributed to the family in many cultures the role of primary support in case of disability (Patterson, 2020; Sluzki, 1997).

Many subjects reported partially financial capacity meeting their basic needs. A lack of financial resources is recognized as a risk factor for illness, discomfort and compromised quality of life in older adults (Silveira et al., 2018).

Most of those interviewed had negative self-perceived health, reported three or more chronic conditions and used 1 to 4 drugs. There was an association between the presence of difficulties and using two or more drugs (Matos et al., 2018). Nearly half of the subjects have vision problems. One study associated a decline in visual acuity with difficulties in BADL, specifically hair, nail, face and dental care (Sagari et al., 2021) and another showed that vision problems are related to compromised balance and a 2.8 times greater chance of falling (Araújo et al., 2019). An important portion of older adults report hearing disorders. There is an association between hearing loss and compromised communication, social isolation and cognitive function (Chen & Zhou, 2020).

The data show that the interviewed elderly have social and health demands that result in frailty or potential frailty. In accordance with these results, a total of 47.7% of participants were classified as pre-frail and 13.3% as frail. Physical health hazard leads to frailty with repercussions for quality of life. In the study conducted by (Abu-Bader et al., 2003). Physical frailty has a negative influence on all dimensions of quality of life, the study by Papathanasiou et al. (2021) demonstrated that when levels of physical frailty decrease, quality of life increases, physical health of frail older adults was the main aspect that affects their quality of life, in addition to issues concerning the environment conditions, the social support, and personal characteristics such as self-esteem and income. Early identification and attention to these demands can prevent frailty and its consequences such as hospitalization, institutionalization and death (Brasil, 2006b).

From this perspective, the Brazilian national health policy for the elderly establishes, as one of its primary guidelines, the promotion of integral and intersectoral actions, including interventions in conditions that potentially lead to functional dependence (Brasil, 2006b). In addition, integral care is based on the assumption that the human being is biopsychosocial and requires interventions aimed at attending their unique demands and needs to be addressed by a multidisciplinary team in an intersectoral manner (Scherer et al., 2013).

In regard to difficulties in BADL, locomotion and physical problems predominated in the present study. Behavioral changes were more commonly adopted and few older adults made use of environmental alterations. They also more frequently considered only physical and sensory symptoms to explain their difficulties, neglecting the role of the environment (Almeida et al., 2012). Difficulties in IADL occurred primarily in domestic tasks and were also physical in nature. A significant proportion of the participants performed these activities without compensating for their difficulties or sought assistance.

A study with older adults at home also found few self-care practices in these activities (Almeida et al., 2012). The lack of adoption of self-care practices for these activities results in worsening disabilities. Also it predisposes to difficulties for BADL and institutionalization. Therefore, focusing on functional capacity has the potential to positively affect the elderly and their families. Besides it may reduce public expenditure and contributes to keeping the elderly in their own community (Patterson, 2020).

In terms of compensating for difficulties in BADL, the subjects used these practices more frequently than engaging in activities with difficulty or seeking help. The data of this study only partly corroborate those obtained in another investigation in which a small proportion of the older adults practiced self-care in both BADL and IADL (Pimentel & Loch, 2020). Men ( $p = 0.03$ ) exhibited a 6.06 times greater likelihood of experiencing difficulties in BADL, with control of the other variables. Studies on older people under long-term care also found a correlation between the male sex and difficulties in BADL (Sagari et al., 2021). Cultural issues linked to sex demonstrate that many men seek help in basic activities, in addition to aspects related to functional decline (Aguiar et al., 2019).

Frailty increased the likelihood of difficulties by 16.59 times for BADL, with control of the other variables, which was also observed in another study (Sluzki, 1997). Poor self-perceived health was associated with the difficulty parameters in BADL. Additionally, functional condition was associated with poor self-perceived health community-dwelling primary health care users in Australia (Brennan et al., 2018).

Women were associated with the number of difficulties in IADL, in accordance with a study where a large portion of women reported some type of dependence (Matos et al., 2018). This data also corroborates the research carried out with elderly people who attend a community center, the majority of whom are women, who reported difficulties in the IADL (Andrade & Novelli, 2015). In addition, a greater proportion of subjects aged 80 years or older require assistance in IADL, supporting the statement that one of the most common care demands among older adults is the need for help for performing these activities (Patterson, 2020).

Poor mobility, falls, urinary incontinence, dementia and frailty, including dependence in IADL, increase with age (Noguchi et al., 2016). Frailty level was associated with difficulties in IADL, as in another study (Aguiar et al., 2019).

Poor self-perceived health was also associated with difficulties in IADL (Storeng et al., 2018). In the present study, chronic conditions were related to the degree and number of difficulties in IADL. Their high prevalence and association with disabilities require preventive public health measures (Braz et al., 2019).

Osteoarthritis (OA) increased the likelihood of difficulties in IADL 4.01-fold, with control of the other variables. OA is strongly associated with mobility problems, self-care capacity and daily activities (Clynes et al., 2019).

In the present study, anemia was linked to a higher number of difficulties. One study showed greater prevalence of anemia in individuals with problems related to mastication, swallowing, feeding themselves and shopping (Braz et al., 2019). Depression was associated with the degree, number or presence of difficulties in IADL. In consonance, depressive symptoms may be associated with functional disability, given that over time, they compromise the desire to engage in activities (Matos et al., 2018).

In line with our findings, (Shen et al., 2015) found that limitations in activities of daily living and the need of receiving help were associated with advanced age, with health and functioning problems and with vulnerability indicators. Specifically in Shen et al. (2015) study the social markers were being black and living in poverty areas.

A study limitation is the homogeneous sample, since all the older adults live in the same area. Sample diversity would allow identifying whether there are differences in the association between functional capacity and the social vulnerability indicators of specific areas. Despite the limitations of the study, it was relevant in revealing the association between functional capacity and self-care practices and some social vulnerability indicators of older adults treated at primary care facilities in an area of high vulnerability.

It is important to underscore that the data were obtained using multidimensional instruments conceived for use in primary care, reaffirming their relevance in systematizing comprehensive care for older individuals at this level.

Variables such as chronic diseases, frailty level, negative self-perceived health, low schooling levels and not having anyone to depend on were associated with difficulties in BADL and IADL. Despite exhibiting difficulties in performing daily activities, a small portion of the older adults adopted self-care practices to compensate for them.

These results reaffirm the relevance of studies that address the multiple factors that affect the functional capacity of older people. Besides it shows how important is to provide the primary care that carefully consider the social and health needs of the elderly, synch with their local reality, as well as encourage them do engage in self-care practices.

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### **Authors' Contributions**

Priscila Tavares Franco e Semprebom: Author of the master's thesis that led to this manuscript. She participated in all stages of the dissertation and this manuscript, from its conception to its completion, including its revision and final approval. Marina Picazzio Perez Batista: Participated in the analysis and discussion of the master's thesis and took part in all stages of writing the manuscript, including its final revision and approval. Maria Helena Morgani de Almeida: Professor who supervised the master's thesis that gave rise to this manuscript. She participated in all stages of the master's thesis and this manuscript, from its conception to its completion, including its final review and approval.

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