







Health status of older men and women: longitudinal study

Condições de saúde de mulheres e homens idosos com idade avançada: estudo longitudinal

Condiciones de salud de mujeres y hombres de edad avanzada: un estudio longitudinal

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ABSTRACT

Objective: to describe the sociodemographic and health characteristics of women and men aged 75 or over, at baseline and after four years of follow-up, and to ascertain changes in their health status. **Methods:** in this longitudinal study of 109 elderly people aged 75 or over from a city in the Triângulo Mineiro, data were collected at two points (2014 and 2018), at home, by applying instruments validated for use in Brazil. Descriptive analysis and paired t-tests were performed ($p < 0.05$). The projects were approved by the human research ethics committee. **Results:** in both genders, the number of morbidities increased and the total score for instrumental activities of daily living decreased. Among women, the number of falls and frailty score also increased. **Conclusion:** the older people's health status worsened over the course of follow-up, more so among the women. **Descriptors:** Longitudinal Studies; Geriatric Nursing; Aged; Aged, 80 and over; Health Status.

RESUMO

Objetivo: descrever as características sociodemográficas e de saúde de mulheres e homens com 75 anos ou mais de idade, no baseline e *follow-up* de quatro anos e verificar para mulheres e homens as mudanças nas condições de saúde. **Métodos:** estudo longitudinal com 109 idosos de 75 anos ou mais de idade de um município no Triângulo Mineiro. A coleta dos dados, realizada em dois momentos (2014-2018), ocorreu no domicílio com a aplicação de instrumentos validados no Brasil. Procederam-se às análises descritiva e teste *t* pareado ($p < 0,05$). Os projetos foram aprovados pelo Comitê de Ética e Pesquisa com Seres Humanos. **Resultados:** verificaram-se, em ambos os sexos, aumento do número de morbidades e diminuição do escore total das atividades instrumentais da vida diária. Entre as mulheres observou-se, ainda, aumento do número de quedas e do escore de fragilidade. **Conclusão:** ao longo do seguimento houve piora nas condições de saúde dos idosos, sendo mais expressiva entre as mulheres. **Descritores:** Estudos longitudinais; Enfermagem Geriátrica; Idoso; Idoso de 80 Anos ou mais; Nível de Saúde.

RESUMEN

Objetivo: describir las características sociodemográficas y de salud de mujeres y hombres de 75 años o más, en la base de referencia y el seguimiento durante cuatro años, y verificar los cambios en las condiciones de salud de mujeres y hombres. **Métodos:** estudio longitudinal con 109 personas mayores, de 75 años o más, de un municipio del *Triângulo Mineiro*. La recolección de datos, realizada en dos momentos (2014-2018), se realizó en sus domicilios aplicando instrumentos validados en Brasil. Se realizaron análisis descriptivos y prueba *t* pareada ($p < 0.05$). Los proyectos fueron aprobados por el Comité de Ética en Investigación con Humanos. **Resultados:** en ambos os sexos, hubo un aumento en el número de morbilidades y una disminución en la puntuación total de las actividades instrumentales de la vida diaria. Entre las mujeres, se observó asimismo un aumento en el número de caídas y la puntuación de fragilidad. **Conclusión:** a lo largo del seguimiento, las condiciones de salud de las personas mayores empeoraron, más expresivamente entre las mujeres. **Descritores:** Estudios Longitudinales; Enfermería Geriátrica; Anciano; Anciano de 80 o más Años; Estado de Salud.

INTRODUCTION

Population aging is a global trend, with greater growth among the oldest age groups. In Brazil, the older adults aged 75 years old or more represent 3.8% of the population and it is estimated that, in 2060, that percentage will be 13.4%. Since 2000, the life expectancy of Brazilians has increased significantly, contributing to an increase in the number of aged individuals in the population. In 2000, life expectancy was 69.8 years old; in 2010, 73.9; and, currently, it is 76.7 years old, being higher for women (80.2 years old) in relation to men (73.2 years old)¹.

As observed in life expectancy, population aging has occurred along with feminization, that is, there is a higher proportion of females in the aged population, especially at older ages. However, among women, the greater likelihood of working in the informal sector, as well as lower schooling and income levels, and the greater number of morbidities and functional disabilities, are among the main factors contributing to lower protection, safety, and well-being in old

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age. Regarding men, one of the concerns is the need to promote self-care, in addition to the limitation of the social support network due to retirement, making them more vulnerable, both socially and in health care².

In view of the differences between aged men and women in their roles and opportunities throughout life^{1,2}, a gendered approach is essential in the planning of public policies. In addition to that, health care for longer-lived older adults is urgent considering their growth in numbers in Brazil. In this perspective, the need is reinforced for the development of longitudinal studies, designed in such a way as to allow causal inferences, as well as to monitor the evolution of the health status according to the gender of older adults aged 75 years or more.

However, despite their relevance, the scarcity of longitudinal research studies analyzing the changes in health conditions according to the gender of the longer-lived older adults stands out. The scientific production focuses on cross-sectional studies²⁻⁶, which are important for the clinical practice but do not allow for causality analysis. As for the longitudinal surveys, most of them were developed among older adults aged 60 years old or more⁷⁻¹³; and addressed specific health conditions, such as frailty^{7,8}, falls^{12,13}, functional capacity and physical performance¹¹, as well as those conducted with longer-lived older adults¹⁴⁻¹⁷. In addition to this, the data were not analyzed and described according to gender.

Thus, considering the increase in the longer-lived aged population¹, the relevance of the approach according to gender for the development of health actions^{1,2} and the scarcity of longitudinal studies with this theme, the objective of this study was to describe the sociodemographic and health characteristics of men and women aged 75 years old or more at baseline and at follow-up after four years, as well as to verify the changes in the health conditions for men and women.

METHOD

A longitudinal study with a quantitative approach and of the home survey type, developed in the urban area of a municipality of Triângulo Mineiro, Minas Gerais (MG).

The data were collected by means of direct interviews in the older adults' homes, at two moments: baseline – from March to July 2014; and follow-up after four years – from March to July 2018.

The sample consisted of older adults aged 75 years old or more, interviewed in the research entitled “*Dependence for the activities of daily living, frailty and use of health services among aged individuals from Triângulo Mineiro*”. This study used multiple-stage cluster sampling and excluded institutionalized older adults, as well as those with communication problems such as deafness, not corrected by devices, severe speech disorders, and cognitive decline.

In the current research, the older adults included were those aged 75 years old or more, living in the urban area of a municipality in Triângulo Mineiro (MG) and interviewed in 2014 and 2018. In the database, it was verified that 109 aged individuals met the inclusion criteria: 79 women and 30 men.

At both moments, the selected interviewers with previous experience received training on how to fill out the data collection instruments, on how to approach the older adult, and on ethical issues in conducting the research.

Cognitive decline, one of the exclusion criteria, was assessed by means of the Mini-Mental State Exam. The following cutoff points are considered: ≤ 13 for illiteracy, ≤ 18 for mid-level schooling (1–12 years) and ≤ 26 high schooling (≥ 12 years)¹⁸.

The sociodemographic data, morbidities, occurrence of falls and health self-assessment were obtained by applying the structured questionnaire elaborated by the members of the Collective Health Research Group.

Functional capacity in the Instrumental Activities of Daily Living (IADLs) was assessed by means of the Scale of Instrumental Activities of Daily Living, adapted for Brazil. The IADL classification varies from 7 (highest dependence level) to 21 (complete independence) points, and the aged individual is classified as: totally dependent (7 points), partially dependent (from 8 to 20 points) and independent (21 points)¹⁹.

Frailty syndrome was identified using the five components of the frailty phenotype⁽²⁰⁾: (1) unintentional weight loss; (2) decreased muscle strength; (3) slow gait; (4) low level of physical activity; and (5) self-reported exhaustion and/or fatigue, as described in a previous study²¹. Based on this assessment, the aged individuals with impairment in three or more of these items were classified as frail; while those with impairment in one or two items were categorized as pre-frail. Older adults with no impairment in the five components were considered as not frail²⁰.

To measure weight, a portable, digital and electronic scale was used, of the platform type, with 150 kg capacity and 100 g precision, with the aged individual barefoot and wearing light clothes. Height (m) was measured using a flexible and inelastic tape measure, 1.5 meters long, divided into centimeters and subdivided into millimeters, fixed to the wall on a flat and smooth plane without a baseboard. It was measured with the older adult barefoot, in an orthostatic position with the feet together and the back pointing to the marker, looking at the horizon. Body Mass Index (BMI) was

calculated in kg/m² and the following cutoff points were used for its classification: low weight (≤ 22 kg/m²), eutrophy (from 22 to 27 kg/m²) and overweight (≥ 27 kg/m²)²².

To assess physical performance, the Brazilian version of the Short Physical Performance Battery (SPPB) was used, consisting in the sum of the scores acquired in the balance, gait speed, and getting up from a chair five consecutive times tests, with a total score ranging from 0 (disability) to 12 (best performance) points. The older adults who scored 0 to 3 points were classified as having a disability; from 4 to 6 points, as low performance; from 7 to 9 points, as moderate performance; and 10 to 12 points, as good performance²³.

The variables studied were sociodemographic: gender (female and male); housing arrangement (lives alone; lives with someone) and individual monthly income, in minimum wages (no income; ≤ 1 ; >1); and the health conditions: morbidities (none; 1|-5; 5 or more); number of morbidities (mean number of morbidities); health self-assessment (negative; positive); functional capacity in the IADLs (totally/partially dependent and independent); IADL score (mean IADL score); frailty syndrome (not frail; pre-frail; frail); frailty score (mean number of impaired components of the frailty phenotype); BMI (low weight; eutrophic; overweight); occurrence of falls (yes and no); number of falls (mean number of falls); physical performance (very bad/low; moderate/good); and physical performance score (mean physical performance score in the SPPB).

An electronic database was built using the *Excel*[®] program, with double typing. After verifying the inconsistencies between the two databases and correcting them, the database was imported for analysis into the Statistical Package for Social Sciences (SPSS[®]) program, version 22.0.

The data were subjected to absolute and relative frequency analyses. To verify the changes in the health conditions of men and women aged 75 years old or more, at baseline and follow-up after four years, the paired *t* test was used ($p < 0.05$). For such analysis, the following variables were used quantitatively: morbidities, functional capacity in the IADLs; physical performance; falls; and frailty.

The projects were approved by the Committee of Ethics and Research in Human Beings. The interviews were conducted after the participants' consent and signing of the free and informed consent form.

RESULTS

The sociodemographic and health characteristics at baseline and follow-up after four years are described in Table 1.

TABLE 1: Sociodemographic and health characteristics according to the gender of the community-dwelling older adults aged 75 years old or more, at baseline and follow-up after four years, in a municipality of Triângulo Mineiro, Minas Gerais, Brazil, 2020.

Variables		Female gender				Male gender			
		Baseline		Follow-up		Baseline		Follow-up	
		n	%	n	%	n	%	n	%
Household Arrangement	Lives with someone	57	72.2	65	82.3	22	73.3	24	80.0
	Lives alone	22	27.8	14	17.7	8	26.7	6	20.0
Individual Income	No income	6	7.6	4	5.1	1	3.3	0	0.0
	≤ 1	46	58.2	45	57.0	15	50.0	12	40.0
	> 1	27	34.2	30	38.0	14	46.7	18	60.0
Instrumental Activities of Daily Living	Independent	18	22.8	5	6.3	9	30.0	4	13.3
	Dependent	61	77.2	74	93.7	21	70.0	26	86.7
Number of Morbidities	None	3	3.8	0	0.0	3	10.0	0	0.0
	1 -5	27	34.2	27	34.2	13	43.3	13	43.3
	5+	49	62.0	52	65.8	14	46.7	17	56.7
Health Self-Assessment	Positive	28	35.4	31	39.2	17	56.7	12	40.0
	Negative	51	64.6	48	60.8	13	43.3	18	60.0
Frailty Syndrome	Not frail	12	15.2	7	8.9	1	3.3	5	16.7
	Pre-frail	47	59.5	32	40.5	20	66.7	17	56.7
	Frail	20	25.3	40	50.6	9	30.0	8	26.7
Body Mass Index	Eutrophic	30	38.0	34	43.0	16	53.3	17	56.7
	Low weight	14	17.7	20	25.3	3	10.0	6	20.0
	Overweight	35	44.3	25	31.6	11	36.7	7	23.3
Occurrence of Falls	No	51	64.6	53	66.7	20	66.7	19	63.4
	Yes	28	35.4	26	33.3	10	33.3	11	36.6
Physical Performance	Moderate/Good	46	58.2	42	53.2	27	90.0	22	73.3
	Disability/Low	33	41.8	37	46.8	3	10.0	8	26.7

Notes: Baseline: 2014; Follow-up: Follow-up after four years (2018).

Aged women represented 72.5% of the sample. During follow-up, an increase was verified in the percentage of women who lived with someone, in dependence for the IADLs, in the presence of 5 or more morbidities, and in non-occurrence of falls. Although the percentage of aged women who fell decreased, an increase was observed in the number of recurrent falls (2.03 ± 1.82). In contrast, there was a reduction in the percentage of aged women who earned ≤ 1 minimum wage, who had negative self-perceptions of health, and with moderate/good physical performance. At baseline, a higher percentage of aged women were classified as pre-frail, changing to frail at follow-up. The same was observed with BMI, in which most were initially overweight and moved to eutrophic.

Among the male older adults aged 75 years old or more, over four years an increase was identified in the percentage of those who lived with someone, who were dependent for the IADLs, with 5 or more morbidities, and eutrophic. However, there was a reduction in the percentages of the pre-frailty variables; their increase among the not frail, with moderate/good physical performance, and with non-occurrence of falls standing out, with an increase in recurrent episodes (2.00 ± 1.33). An increase in the individual monthly income was also observed, which rose from ≤ 1 minimum wage at baseline to >1 minimum wage at follow-up, as well as in health self-assessment, being positive in the first round, and changing to negative in the second.

As for the health conditions, Tables 2 and 3 present data comparing the means of the variables at baseline and follow-up for men and women.

TABLE 2: Comparison of the means of the variables related to the health conditions at baseline and at follow-up after four years among community-dwelling female older adults aged 75 years old or more in a municipality of Triângulo Mineiro, Minas Gerais, Brazil, 2020.

Variables	Female Gender		
	Mean	Standard Deviation	<i>p</i> *
Number of Morbidities			
Baseline	6.06	3.69	0.020
Follow-up	7.01	3.56	
IADL Score			
Baseline	18.05	2.83	<0.001
Follow-up	16.08	3.59	
Physical Performance Score			
Baseline	6.78	2.58	0.158
Follow-up	6.27	3.46	
Number of Falls			
Baseline	0.64	1.01	0.003
Follow-up	2.03	1.82	
Frailty Score			
Baseline	1.68	1.13	<0.001
Follow-up	2.43	1.32	

Notes: IADL: Instrumental Activities of Daily Living; Baseline: 2014; Follow-up: Follow-up after four years (2018); Paired *t* test; **p*<0.05.

During follow-up and among the female older adults aged 75 years or more, an increase in the mean number of morbidities was verified ($p=0.020$), as well as in the number of falls ($p=0.003$) and in the frailty score ($p<0.001$). The mean total IADL score ($p<0.001$) was lower in the follow-up period, denoting greater dependence for the IADLs.

During follow-up and among the male older adults aged 75 years old or more, an increase in the mean number of morbidities ($p=0.018$) was observed, as well as a reduction in the IADL score ($p=0.012$).

TABLE 3: Comparison of the means of the variables related to the health conditions at baseline and follow-up after four years among community-dwelling male older adults aged 75 years old or more in a municipality of Triângulo Mineiro, Minas Gerais, Brazil, 2020.

Variables	Male Gender		
	Mean	Standard Deviation	<i>p</i> *
Number of Morbidities			
Baseline	4.53	3.53	0.018
Follow-up	5.83	2.92	
IADL Score			
Baseline	17.73	3.06	0.012
Follow-up	15.76	3.72	
Physical Performance Score			
Baseline	8.60	2.02	0.095
Follow-up	7.70	3.34	
Number of Falls			
Baseline	0.80	1.09	0.066
Follow-up	2.00	1.33	
Frailty Score			
Baseline	2.00	0.98	0.103
Follow-up	1.60	1.22	

Notes: IADL: Instrumental Activities of Daily Living; Baseline: 2014; Follow-up: Follow-up after four years (2018); Paired *t* test; **p*<0.05.

DISCUSSION

The higher percentage of older adults aged 75 years old or more, in both genders, who lived with someone, is in line with national studies developed in the community^{3,6,24}. These findings contribute to reflecting on which factors led the older adults, who used to live in single-person households, to start sharing the house over time. One of the aspects can be related to possible functional limitations, more frequent with advancing age, and the consequent need for help to perform the daily activities and to access the health services. Consequently, social support becomes essential, especially from the family members^{3,6,24}.

During the follow-up period, a percentage reduction in income ≤ 1 minimum wage was observed in both groups, with the increase in income being greater among males. This fact can be related to the continued participation of the male older adults aged 75 years old or more in the labor market, in addition to the possibility of engaging in self-employment activities to increase income²⁵, which at this stage of life may not be so beneficial. The higher percentage of aged men with higher incomes can be understood by the situation of women, throughout life, who remain in the role of family caregivers, along with performing household chores, devoting less to the formal labor market, when compared to men^{2,26}.

The increased dependence to perform the IADLs corroborates longitudinal studies among aged individuals in general, of both genders^{9,27}. With advancing age, biological changes can occur, among them sarcopenia, decreased muscle strength and gait speed, as well as postural instability²⁴, negatively impacting on the performance of daily activities. In addition, cognitive decline is initiated by the activities that demand more coordination and skills, such as the IADLs²⁷.

As in this survey, in a longitudinal research study conducted with older adults, an increase was verified in chronic diseases at follow-up after four years⁸. With advancing age, chronic diseases become more frequent, due to physiological changes that impact on the physical health of older adults⁴. In the current research, the percentage of aged individuals who presented at least five comorbidities at follow-up was higher among the men. Thus, it becomes necessary to propose actions in health that involve the particularities of male and female older adults aged 75 years old or more, in addition to considering the cultural aspects about the male and female behaviors in self-care².

At both moments, the women reported negative health self-assessments similar to the study conducted with aged individuals in southern Brazil²⁸. Women's longer life expectancy may come with increased chronic diseases and functional decline, which in turn exert negative influences on health self-assessment²⁶. Among the male older adults aged 75 years old or more, after follow-up, there was a change in health self-assessment from positive to negative. In an international study, it was identified that 26.9% of the men in the 80-90-year-old age group reported a negative self-perception of their health²⁹. The greater propensity of cumulative effects, caused by low economic level; by lack of

social support²⁶; and by physical, emotional, and social changes can impact on health self-assessment¹⁴. Consequently, multidimensional factors interfere in health self-assessment, which requires multidisciplinary actions with an emphasis on health promotion and on the prevention of health problems.

An increased percentage of female older adults aged 75 years or more who became frail was observed at follow-up, consistent with longitudinal research studies^{7,14}. The longer life expectancy of women associated with the endocrine changes resulting from menopause, which causes a drop in hormone levels and a reduction in muscle mass and strength, results in greater vulnerability to frailty in this group³. Although cellular oxidation, neuromuscular modifications, dysregulation of the neuroendocrine system, and immune system dysfunction make older adults more vulnerable to frailty³⁰, among men and during follow-up, a percentage reduction in the frail and pre-frail individuals and an increase in the non-frail subjects were observed. Considering the adverse health events related to frailty^{7,14}, it is essential that the family health strategy nurse evaluates this condition to delay its effects.

In a longitudinal study with an eight-year follow-up among Korean older adults aged 65 years old and more, it was identified that 52.9% of the women were obese³¹, diverging from the findings of this research in which, at the end of the follow-up period, the majority was eutrophic. Changes in the physiological mechanisms that regulate satiety, with advancing age, associated with lifestyle, health conditions, social and environmental factors, can directly affect loss of appetite and/or decreased food intake among older adults³². These results are positive, considering that overweight can be related to the onset of chronic diseases³² and that, among the aged women in this study, there was prevalence of polymorbidity. Among the men, at both moments there was predominance of eutrophic individuals, corroborating a research study conducted in the community among older adults³³ and diverging from an international survey, in which 48% of the aged men were overweight and/or obese³¹.

In international longitudinal research studies among older adults aged 60 years old and more, after a two-year follow-up, it was verified that non-occurrence of falls was more frequent among men^{13,34}, in opposition to the findings of the current research. The percentage increase in non-occurrence of falls among women can be related to the fear of falling, which in some situations acts as a protective factor and thus prevents the aged woman from assuming a risky behavior during her activities³⁵. In the current study, it is noteworthy that, despite the lower percentage of women who experienced falls, recurrent episodes were observed among those who fell. However, the fear of new falls can reduce mobility and physical conditioning, as well as balance capacity and, consequently, result in recurrence of falls^{12,35}.

An increased percentage of aged men who fell was also identified during follow-up, a result that can be related to the deterioration in physical performance among men in the current research. In a longitudinal research study, with a two-year follow-up among older adults from a city in the inland of the state of Minas Gerais, it was verified that adequate physical performance was a protective factor against falls and recurrent episodes¹². Therefore, early identification of the changes related to the decline in physical performance and the conduction of adequate interventions are essential for the prevention of this problem³⁵.

After the four-year follow-up, a reduction in the percentage of moderate/good physical performance was observed in both genders, being higher among the men. This result is similar to those of longitudinal research studies conducted with North American¹⁵ and Italian³⁶ aged individuals. Due to the accumulation of cellular and molecular damage, which occurs during the human aging process and causes a reduction in the physiological reserves²⁴ and, consequently, decline in physical, mental, and psychosocial abilities³⁷, longer-lived aged individuals generally present worse physical performance^{11,15,36}. These changes can bring about negative consequences to the aged population, such as reduced mobility, social isolation and health problems that require specialized services^{15,37}. Such factors reinforce the need for physical performance to be evaluated during the gerontological Nursing consultation, aiming to work early with the older adults and the multidisciplinary team. The intention is to delay adverse events, considering that adequate physical performance assists in maintaining functional capacity³⁸ and that, with this, the older adult is able to preserve independence and self-care in health.

The significant increase in the mean number of morbidities after follow-up in aged men and women resembles the national¹⁰ and international³⁹ longitudinal studies developed in the community. With advancing age there can be changes in the physical aspects, such as decline in functional capacity and physical performance¹⁴; psychosocial issues, among them low income and schooling, deficient access to the health services, decreased social network and support³⁹; and adoption of unhealthy lifestyle habits, for example: inadequate diet, physical inactivity, smoking and alcoholism⁴⁰. Such factors can increase the older adults' vulnerability to adverse health outcomes, such as a higher number of morbidities^{14,39}. In this context, it is essential to adopt strategies for welcoming and strengthening the health professional/older adult/family bond and the early identification of morbidities, aiming at health promotion and prevention of problems.

During follow-up, there was increased functional decline for performing the IADLs in both groups, as verified in longitudinal studies among older adults in Colombia¹⁶ and individuals aged 60 years old or more in a municipality of Minas Gerais¹¹. With advancing age there is decline in the physiological reserves^{14,24}, considered a predictor of adverse health outcomes in the aged population, functional disability among them²⁴. The older adults with impaired functional conditions, which interfere with the performance of the IADLs, are more vulnerable to the occurrence of falls⁸, frailty syndrome, violence and mistreatment, and institutionalization³⁸.

Among the aged women, the mean number of falls was significantly higher in the follow-up period, which is similar to national¹² and international research studies¹⁷. The occurrence of this event becomes more frequent with advancing age, especially among women, who, in addition to suffering recurrent episodes, are more susceptible to comorbidities, such as osteoporosis and frailty syndrome, considered predictors of falls¹⁷. Thus, through the Nursing consultation, home visits and educational activities, the nurse can identify the risk factors that may cause episodes of falls, enabling the proposal of preventive measures directed to the older adults and their family members.

A significant increase in the number of impaired components of the frailty phenotype at the ten-year follow-up was also verified among Swedish aged women¹⁷. As observed in other studies, some health and social conditions present in most of the women in this research may have contributed to this result, such as the presence of 5 or more morbidities^{3,14}, reduced functional capacity for the IADLs²⁴, recurrent falls¹⁷ and unfavorable economic situation^{2,26}. Thus, nurses must guide their care process based on the specific needs of the older adults, considering the differences between the genders, seeking to prevent functional disability and/or to minimize its consequences.

Study limitations

The current research presents self-reporting of the morbidities as a limitation. However, excluding older adults with cognitive decline minimizes selection bias by preventing those with chronic health conditions from omitting this information. In addition, the results provide subsidies for new research studies, and it is suggested that multicenter studies and national surveys be carried out, with representative samples of the aged population in the various Brazilian states, in order to contribute to improving health care for the older adult.

CONCLUSION

During the follow-up period, the health status of male and female older adults aged 75 years old or more worsened, as evidenced by an increase in the number of morbidities and functional decline for the IADLs. Specifically, among the aged women, occurrence of falls also increased and the frailty condition worsened.

The findings can contribute to the targeting of the Nursing interventions aimed at the prevention of problems and at health promotion in aged men and women. In addition to this, they evidence the differences in the health conditions between the groups, with the aged women standing out, who have longer life expectancy and become more vulnerable to functional limitations and worse quality of life. Thus, the need for specific Nursing intervention strategies is reinforced, since aged men and women can present different patterns of changes in their health conditions.

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