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Safety of hospitalized older adult patients: an analysis of the risk of falls

Segurança do paciente idoso hospitalizado: uma análise do risco de quedas

Seguridad de los pacientes ancianos hospitalizados: un análisis del riesgo de caídas

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ABSTRACT

Objective: To identify the risk of falls of older adults in a hospital in the Trairi region in Rio Grande do Norte, Brazil, and to describe the relationship between risk of falls and the sociodemographic characteristics of the participants. **Method:** A descriptive, transversal, and quantitative study conducted in a regional hospital, respecting the ethical principles in force. The Morse Scale was adopted for data collection, which took place in July and August 2018, and adapted with sociodemographic questions. A descriptive and inferential statistical analysis was performed. **Results:** There were 46 participants in the study, most of whom were women with low education, and the most frequent reasons for hospitalization were surgical treatment and lung disease. More than half had a high risk of falling (54.35%), followed by moderate (32.61%) and low (13.04%). There was an association between high risk of falls, having lung disease as a reason for hospitalization and diabetes as a comorbidity. The high risk of falls was less frequent among older adult patients hospitalized for surgical treatment. **Conclusion:** The high risk of falls was found in more than half of the older adults, which varied according to the reason for hospitalization and comorbidities, being more frequent in those hospitalized for lung disease and in those who had Diabetes.

DESCRIPTORS

Aged; Hospitalization; Accidental Falls; Patient Safety; Geriatric Nursing.

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INTRODUCTION

According to the World Health Organization (WHO), the concept of Patient Safety refers to reducing the risk of unnecessary harm associated with healthcare to an acceptable minimum[1]. This issue is important in preventing injuries to patients by encouraging basic measures such as correct patient identification, hand hygiene, and the use of institutional protocols, among others.

The World Alliance for Patient Safety, launched in 2004 by WHO, aims to facilitate the development of policies and practices for patient safety. Brazil has taken an important step in this direction by instituting the National Patient Safety Program through the Ministry of Health[2].

The Brazilian Network of Nursing and Patient Safety (*REBRAENSP - Rede Brasileira de Enfermagem e Segurança do Paciente*) prepared a manual in 2013 with 12 strategies based on the global challenges formulated by the World Alliance for Patient Safety, aimed at preventing damage and promoting health. Thus, the strategy which addresses falls prevention is highlighted in this study[2].

Ordinance No. 2.095, of September 24, 2013, approved the basic patient safety protocols in Brazil, with the Fall Prevention Protocol among them, and determines the need to assess all patients regarding the risk of this event, followed by an elaboration and prescription of preventive measures according to the risk of each individual[3].

Falling is defined as involuntary displacement of the body to a level lower than the initial position, being caused by multiple factors, and resulting or not in harm to the patient. The fall can occur from the height itself, from a stretcher/bed or from seats such as wheelchairs, armchairs, chairs, bathtub, or toilet seat[3-4].

The occurrence of falls for older adults in a hospital environment may be associated with factors such as continuous use of medications, sensory deficits (visual, auditory, tactile), the use of glasses and mobility aids such as a cane, wheelchair or walker[5].

A falls event can have more serious repercussions on the health of the older adult, since the natural process of human aging causes a reduction in bone density, muscle mass and physical strength. These parameters impact posture, walking, balance and factors which increase the risk of falls[6].

Fall accidents are the main cause of non-fatal injuries and death in older adults, and therefore constitute a serious public health problem[7] whose impacts not only deserve greater attention in the scope of research, but also in healthcare and public policies. Other authors have found that some health professionals reduce attention to the occurrence of falls, considering them only as inevitable consequences of aging[8].

In this sense, surveillance to prevent the occurrence of falls should also be one of the priorities of nursing care when the patient is admitted to a health institution. Identifying the risk of falls provides fundamental information for formulating care plans which are more adequate to the individual needs of each patient, providing support for implementing the Systematization of Nursing Care[9].

There were 941,923 hospitalizations with secondary diagnosis associated with falls among older adults in Brazil in the period from 1996 to 2012. In addition, hospitalization rates in this age group remain high, and therefore not only the physical repercussions, but also the biopsychosocial consequences caused by falls must be noted[10], which include suffering, hospitalization, and isolation, thus raising questions which may lead to elaborating proposals to prevent this event in this population. Furthermore, falls are one of the most important indicators for patient safety, therefore the Ministry of Health and the National Patient Safety Program include assessing the risk of falls as one of the most effective interventions in preventing this adverse event.

Accordingly, this study sought to answer the following research question: What is the risk of accidents due to falls in older adult patients admitted to a hospital in the Trairi region in the State of Rio Grande do Norte in Brazil?

Given the above, the study had the following objectives: to identify the risk of falls in older adults in a hospital in the Trairi region in Rio Grande do Norte, and to describe the relationship between risk of falls and the sociodemographic characteristics of the participants.

METHOD

Study design

A descriptive study with a cross-sectional design using quantitative approach.

Scenario

The study was conducted in a hospital in the Trairi region, located in the municipality of Santa Cruz, in the state of Rio Grande do Norte, Brazil.

This hospital has 40 beds, being considered small, and serves patients from 11 municipalities in the Trairi region. The location was chosen due to its importance in general and emergency clinical care in the region for all clientele, especially for older adult patients, in addition to being located in a city which has the presence of Universidade Federal do Rio Grande do Norte campus with four undergraduate courses in the health area, namely nursing, physiotherapy, nutrition and psychology.

The hospital serves as a field for practical activities in the discipline of semiology and semiotechnics and supervised internship for the nursing course, providing opportunities for developing important skills and competencies for training nursing professionals. The hospital currently does not have a patient safety center, which is an extremely important service to promote the prevention, control and mitigation of incidents, in addition to integrating sectors, promoting the articulation of work processes and information which impact risks to the patient.

Selection criteria

Inclusion criteria for this study were: being 60 years of age or older; being admitted to the medical or surgical clinic sectors of the abovementioned hospital during the collection period; and being able to understand the instrument questions. Those with communication difficulties which prevented them from responding to the instruments or those whose health status was severe and/or unstable were excluded to avoid discomfort during collection.

The number of hospitalizations of the older adults occurring in the months of July and August 2017 was taken into account for the sample definition, considering that it corresponded to the same period in which data collection would be conducted in 2018. Thus, the sample calculation considered a population of 52 older adults, a 95% confidence interval and an estimated frequency of 52%, which was the percentage of older adults at high risk of falls in a study conducted with older adults in Belém/Pará state[11]. Thus, the sample calculated for this study was 46 older adults.

Data collection

The data collection technique was a structured interview using the Morse Scale as the instrument, which contains closed questions which address the history of falls, secondary diagnoses, aid in walking, use of intravenous therapy/saline or heparinized intravenous device, gait and mental state. The version of the instrument translated and validated by other authors[12] was used, in which the scale score can vary from 0 to 125 points, with 0 to 24 points being considered Low Risk, from 25 to 44 points as Moderate Risk, and ≥ 45 points is considered High Risk.

Some questions were inserted in the header of this instrument regarding the participants' sociodemographic data such as gender, age group, education (in years), reason for hospitalization, length of stay (in days) and self-reported diseases. These sociodemographic questions were obtained from consulting the individual medical records of the older adults. Information was also taken from the medical record to complete items 1 and 2 of the Morse Scale; the other items of the scale were evaluated with the participant in the ward where they were hospitalized and registered in the research form.

Data analysis and processing

The database was built in an EXCEL spreadsheet, version 2017; the Statistical Package for the Social Sciences (SPSS®) version 25.0 software was used to perform the descriptive tables and apply statistical tests.

Descriptive statistics of trend and data dispersion measures were analyzed for the quantitative variables evaluated in the study, such as: minimum, maximum, mean and standard deviation. A descriptive analysis was performed for qualitative variables by distributions of absolute and relative frequencies (%), with a value of $p \leq 0.05$.

The Chi-squared statistical test was applied when comparing the risk of falling classification from Morse regarding the general profile of the patient with the categorized variables. A significance level of 5% was considered when performing all statistical tests, adopting a p-value ≤ 0.05.

Ethical aspects

The research respected all the ethical principles of Resolution No. 466/2012 of the National Health Council. The research protocol was evaluated and approved by the Research Ethics Committee of the Faculty of Health Sciences of Trairi/ Universidade Federal do Rio Grande do Norte, through Opinion No. 2.715.284/2018. All had access to the Informed Consent Form (ICF) and those who agreed to participate in the study signed the form before starting the data collection procedures.

RESULTS

The average age of the participants was 75.02 years, with a standard deviation of 10.08 years, ranging from 60 to 104 years of age. Half of the participants were illiterate and the majority of respondents were female. The main reasons for hospitalization of these older adults were surgical treatment and lung disease. Additional information on the characterization of the participants can be found in Table 1.

Table 1 – Characterization of participants regarding gender, age group, education (in years), reasons for hospitalization and comorbidities – Santa Cruz, RN, Brazil, 2018.

Variables	Characteristics	N	%
Gender	Female	26	56.52
	Male	20	43.48
		46	**100.00**
Age range	Up to 75 years	27	58.70
	Over 75 years	19	41.30
		46	**100.00**

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Variables	Characteristics	N	%
Education (in years)	Not literate	23	50.00
	1-3 years	15	32.61
	4-7 years	5	10.88
	8-11 years	1	2.17
	Above 11 years	1	2.17
	No response	1	2.17
		46	**100.00**
Reasons for hospitalization	Surgical treatment	15	32.61
	Lung disease	12	26.09
	Infectious disease	7	15.22
	Kidney disease	4	8.70
	Heart disease	4	8.70
	Septicemia	1	2.17
	Circulatory disease	1	2.17
	Pancreatitis	1	2.17
	Acute gastroenteritis	1	2.17
		46	**100.00**

Note: (n=46).

The participants had an average of 1.93 days of hospitalization and had up to three comorbidities per person (Table 2). Regarding comorbidities, 29 participants reported having systemic arterial hypertension (SAH), 13 had diabetes (DM), three cases of stroke, one with chronic obstructive pulmonary disease and six mentioned other diseases; nine participants did not present any comorbidity.

Table 3 shows the frequencies of the items on the Morse Scale which compose the risk assessment for falls.

Table 2 – Description of patient variables regarding age (in years), length of stay and number of comorbidities – Santa Cruz, RN, Brazil, 2018.

Variables	Min.	Max.	25%	Mediana	75%	Mean	SD	CV	p-value*
Age (in years)	60.00	104.00	66.00	74.00	82.00	75.02	10.08	13.43	0.033
Hospitalization time (in days)	1.00	9.00	1.00	1.00	2.00	1.93	1.68	86.76	< 0.001
No. of diseases	0.00	3.00	1.00	1.00	1.00	1.07	0.71	66.83	< 0.001

Note: (n=46).
Legend: SD: Standard deviation; CV: Coefficient of Variation
*p-value ≤ 0.05 (The Shapiro-Wilk test was applied to verify the data normality).

Table 3 – Frequency of responses to items on the Morse Scale – Santa Cruz, RN, Brazil, 2018.

Items	Responses	Frequency	%
History of falls	No	35	76.09
	Yes	11	23.91
Secondary diagnosis	No	19	41.30
	Yes	27	58.70
Assistance in walking	None/Bedridden/Assisted by Health Professional	45	97.83
	Crutches/Walking Stick/Walker	1	2.17

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Items	Responses	Frequency	%
Use of intravenous device	No	1	2.17
	Yes	45	97.83
Gait	Normal/No walking, Bedridden, Wheelchair	23	50.00
	Weak	20	43.48
	Compromised/Staggering	3	6.52
Mental state	Oriented/able as to his/her capacity/limitation	34	73.91
	Overestimate capacity/Forget limitations	12	26.09

Note: (n=46).

There was a predominance of high risk in evaluating the general classification of the risk scale for falls, as shown in Table 4.

Regarding the associations between variables, it was identified that patients who had lung disease as a reason for hospitalization and those who had the comorbidity of Diabetes Mellitus had a higher percentage of high risk of falls. This reinforces the importance of continuous monitoring and care for older adults, since such diseases and their complications are considered sensitive conditions to Primary Healthcare, meaning that if they are treated at this care level they could avoid hospital admissions, and in turn the risk of falls experienced in this healthcare scenario. Although there is no statistical association, it is highlighted that more than 60% of the older adults were hypertensive, and almost 70% of these were at moderate or high risk for falling. In addition, patients whose reason for hospitalization was surgical treatment had a lower percentage of high risk of falls (Table 5).

Table 4 – Risk of falls classification – Santa Cruz, RN, Brazil, 2018.

Classification of risk of falls according to the Morse Scale	n	%
Low risk	6	13.04
Moderate risk	15	32.61
High risk	25	54.35

Note: (n=46).

Table 5 – Association between the risk of falling and the characterization of participants – Santa Cruz, RN, Brazil, 2018.

General characteristics		Risk			Total %	p-value*
		Low	Moderate	High		
Gender	Female	7.69 (n=2)	30.77 (n=8)	61.54 (n=16)	100.00 (n=26)	0.176
	Male	20.00 (n=4)	35.00 (n=7)	45.00 (n=9)	100.00 (n=20)	
Age	Up to 75 years	14.82 (n=4)	40.74 (n=11)	44.44 (n=12)	100.00 (n=27)	0.188
	Over 75 years	10.53 (n=2)	21.05 (n=4)	68.42 (n=13)	100.00 (n=19)	
Hospitalization time	Up to 2 days	15.38 (n=6)	30.77 (n=12)	53.85 (n=21)	100.00 (n=39)	0.526
	Over 2 days	0.00 (n=0)	42.86 (n=3)	57.14 (n=4)	100.00 (n=7)	
Education time	Yes	15.79 (n=6)	34.21 (n=13)	50.00 (n=19)	100.00 (n=38)	0.209
	No	0.0 (n=0)	28.57 (n=2)	71.43 (n=5)	100.00 (n=7)	
Surgical treatment	Yes	33.33 (n=5)	53.34 (n=8)	13.33 (n=2)	100.00 (n=15)	<0.001
	No	3.23 (n=1)	22.58 (n=7)	74.19 (n=23)	100.00 (n=31)	

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Lung disease	Yes	8.33 (n=1)	8.33 (n=1)	83.34 (n=10)	100.00 (n=12)	0.041
	No	14.70 (n=5)	41.18 (n=14)	44.12 (n=15)	100.00 (n=34)	
SAH	Yes	6.90 (n=2)	34.48 (n=10)	58.62 (n=17)	100.00 (n=29)	0.198
	No	23.53 (n=4)	29.41 (n=5)	47.06 (n=8)	100.00 (n=17)	
DM	Yes	0.00 (n=0)	7.69 (n=1)	92.31 (n=12)	100.00 (n=13)	0.002
	No	18.18 (n=6)	42.43 (n=14)	39.39 (n=13)	100.00 (n=33)	

Note: (n=46)
p-value ≤ 0.05 (The Chi-squared test was applied).

Even without statistical association, the main characteristics of the participants who presented moderate and high risk for falls are highlighted: female gender, age up to 75 years, hospital stay of up to two days and having a diagnosis of SAH.

DISCUSSION

The average age found in this study was consistent with life expectancy at birth for Brazilians, which is currently 76 years[13]. The risk of falling was greater at older ages, which corroborates recent literature[7].

Most participants were female, and having a profile similar to that found in other studies with hospitalized older adults[9,11,14]. This characteristic can be explained by the fact that older adult women are more susceptible to the development of the fragility syndrome in the post-menopausal phase for example, making them more vulnerable to adverse outcomes[15]. Other studies have identified that falls are more frequent in females and are associated with worse physical performance and history of cardiovascular diseases[16-17].

Low educational level prevailed in this sample, constituting a factor which can negatively influence quality of life, and more specifically the ability to understand and acquire information related to healthcare, since other authors have identified that older adults with less education had more reports of the occurrence of falls[18].

Hospitalization for lung disease had a significant association with the high risk of falling for patients in this sample, corroborating data which has already been found in research by other authors[19]. Considering that Chronic Obstructive Pulmonary Disease (COPD) presents dyspnea and fatigue upon exertion as symptoms[20], it is understood that these changes are factors which can contribute to less mobility, causing risks of accidents due to falls. On the other hand, a study which investigated the risk of falls in older adult patients with COPD found only 4.2% of the population at high risk of falls[21].

On the other hand, a low risk of falls was significantly associated with cases in which the reason for hospitalization was the performance of a surgical procedure. The surgeries performed in the studied hospital are small and medium sized, of an elective nature, such as cholecystectomy, herniorrhaphy and hysterectomy, and therefore the routine is that hospital discharge occurs between 24 and 48 hours so that patients usually stay for a short time in the institution.

A retrospective cohort analysis of the Morse Scale scores with more than 8,000 hospitalized patients found an association between longer length of stay and higher frequency in the risk group for falls[17]. In addition, hospitalization has consequences on the physical and mental state of older adults. As an example, delirium stands out as the most frequent neurobehavioral disorder in hospitalized older adults in the association with high fall rates[22].

A study which evaluated the risk of falls among adult patients hospitalized for surgical procedures did not find an association between the size of the surgery and the risk of falls, at the same time in which it identified that the more advanced the age, the greater the high risk of falls. Moreover, the presence of comorbidities such as hypertension, diabetes and cancer were also associated[23]. The fact of having diabetes as a comorbidity was associated with the risk of falls in two other studies[23-24].

In this regard, the older adults in this research who had a medical diagnosis of Diabetes Mellitus (DM) had a significant association with the high risk of falls. Research conducted with older adult patients hospitalized for hip fractures due to falls found diabetes mellitus in 23.1% of respondents, second only to hypertension[25]. In this perspective, it is necessary to maintain greater attention to these patients in view of the potential complications arising from the pathophysiology of this disease, such as nephropathy, retinopathy and injuries due to peripheral neuropathy.

Peripheral neuropathy is associated with poor gait performance and balance deficits, sensory limitations and loss of muscle strength, which can interfere with daily tasks and consequently quality of life[24]. The occurrence of falls is also associated with the presence of slippery floors in houses, hearing loss, vertigo, hypertension, use of multiple medications, depression and functional disability[26].

Arterial hypertension presented itself as another important comorbidity linked to moderate and high risk of falling. Hypertensive patients are eight times more likely

to fall than non-hypertensive patients. In addition, both hypertension and the use of antihypertensive drugs are risk factors for falls[23].

Monitoring episodes of falls is of paramount importance as a method to support formulating preventive measures, leading to guide management and care actions focusing on reducing the occurrence of this event. Hospital establishments should encourage the development of work resources which enable and encourage the identification, notification and analysis of this adverse event[3].

Given the characteristics of the studied population and the expressive number of people at high risk of falls, it is understood that the nursing team must adopt practices which are capable of preventing the occurrence of this event, such as: effective communication between health professionals and professional/patient; identification of the high-risk patient by means of a notice at the bedside or a bracelet with a different color; greater attention when moving patients; allocating patients at high risk for falls in beds closer to the nursing station; and support for personal hygiene care[27].

Besides direct care, health education actions carried out by nurses and other health professionals for patients and companions are also important, which should include guidance on bed movement and care when an older adult is using drugs with sedative effects, as these are situations which favor the occurrence of accidents[5,26].

An investment in equipment and utensils such as electric beds, safety bars in the bathrooms and bells in the bedrooms, in addition to adopting awareness and orientation strategies for patients, family members and nursing staff, is able to reduce the occurrence of the fall event in institutions. It is also important to highlight the role of nurses in fall prevention programs, as this professional can assess the risk of patients, plan and implement preventive interventions, and finally evaluate their results[28], being supported by the use of instruments such as the Morse Scale used in the present study.

The nurse must encourage the autonomy, independence and functional capacity of older adults, recognizing their role in health advocacy and aiming to guarantee the quality of care, as the professional is continuously present in the care of hospitalized, institutionalized or domiciled older adults. When developing fall prevention activities, the nurse must also consider an assessment of the patient's knowledge and educational interventions implemented in the hospital environment[29].

In this sense, a recent integrative review described the indicators for quality care, which include: use of appropriate footwear, correct use of assistive devices, ambient lighting, adoption of safe transfer procedures, attention to prescribed (or not) medications, chronic and acute conditions which increase the risk of falls, and changes in blood pressure, among others. Nurses can examine the effectiveness of their interventions by adopting these indicators in evaluating patients with the Nursing Diagnosis "Risk of falls" in a real clinical environment[30].

The Nursing Diagnosis "Risk of falls" has more than 40 interventions described in the Nursing Interventions Classification (NIC), showing the existence of innumerable care actions which nurses can perform supported by a scientific basis and which already have standardized language through a comprehensive international tool[27]. The adoption of this tool can then benefit communication and minimize the occurrence of adverse events, reinforcing the importance of nurses as promoters of patient safety actions.

As nurses, it is important to note that "Risk of falls" is a nursing diagnosis which was approved almost 20 years ago, having been updated in the current taxonomy of the North American Nursing Diagnosis Association (NANDA), in which the populations at risk for such event include an age greater than or equal to 65 years and a history of falls. This classification also addresses the conditions associated with such an event, which include: pharmaceutical agents, alteration in cognitive function, proprioceptive deficit, acute disease, vascular disease, impaired balance, and orthostatic hypotension, among others.

Among the limitations of this study, it is highlighted that data were collected in a single moment during the participants' hospitalization as it is a cross-sectional study. Thus, possible changes in health status which occurred during this period were not evaluated, preventing other potential risk factors from being analyzed.

There is a need for further research to study the influence of such conditions on the falls event as a way of supporting the development of measures which prevent its occurrence among older adults.

CONCLUSION

More than half of the older adults in the present study had a high risk for falls. This situation varied according to the reason for hospitalization and referred comorbidities, being more frequent in those hospitalized for lung disease and who had Diabetes Mellitus as a comorbidity.

The high risk of falls in hospitalized older adults found in the present study using the Morse Scale reinforces the importance of applying this instrument in healthcare practice and the need to develop strategies to prevent the risks and aggravations of falls in the hospital environment. The challenge of adopting this instrument in healthcare practice is the fact that it was only recently introduced in Brazil, and many health professionals possibly do not yet know about it. Continuous education actions can be useful to spread this knowledge and encourage the adoption of the Morse Scale in the routines of health institutions as an important measure for preventing adverse events in the hospital environment, together with the implementation of other institutional safety protocols.

Such strategies should include all health professionals and managers involved in the care of hospitalized older adult patients in carrying out health education actions, as well as in making adjustments for safer beds and wards for patients and companions, preventing the occurrence of the falls event. Furthermore, avoiding all the negative repercussions that this event represents for the health of older adults and also the high costs of prolonged hospitalizations in a health service.

RESUMO

Objetivo: Identificar o risco de quedas em idosos em um hospital da região do Trairi, no Rio Grande do Norte; descrever a relação entre risco de quedas e as características sociodemográficas dos participantes. **Método:** Estudo descritivo, transversal, quantitativo, realizado em um hospital regional, respeitando os princípios éticos vigentes. Para a coleta, ocorrida em julho e agosto de 2018, foi adotada a Escala de Morse, adaptada com questões sociodemográficas. Realizada análise estatística descritiva e inferencial. **Resultados:** O estudo teve 46 participantes, dos quais a maioria era formada por mulheres, com baixa escolaridade e os motivos de internação mais frequentes foram tratamento cirúrgico e doença pulmonar. Mais da metade apresentou risco alto de sofrer quedas (54,35%), seguido de moderado (32,61%) e baixo (13,04%). Houve associação entre risco alto de quedas, ter doença pulmonar como motivo de internação e diabetes como comorbidade. O risco alto de quedas foi menos frequente entre idosos internados para tratamento cirúrgico. **Conclusão:** O risco alto para quedas foi encontrado em mais da metade dos idosos, o que variou de acordo com o motivo de internação e comorbidades, sendo mais frequentes naqueles internados por doença pulmonar e que apresentavam Diabetes.

DESCRITORES

Idoso; Hospitalização; Acidentes por Quedas; Segurança do Paciente; Enfermagem Geriátrica.

RESUMEN

Objetivo: Identificar el riesgo de caídas en ancianos en un hospital de la región del Trairi, en Rio Grande do Norte; describir la relación entre riesgo de caídas y las características sociodemográficas de los participantes. **Método:** Estudio descriptivo, transversal, cuantitativo, realizado en un hospital regional, respetando los principios éticos vigentes. Para la recolección de datos, ocurrida en julio y agosto de 2018, fue adoptada la Escala de Morse, adaptada con cuestiones sociodemográficas. Realizado análisis estadística descriptiva y inferencial. **Resultados:** El estudio tuve 46 participantes, de los cuales la mayoría era formada por mujeres, con baja escolaridad y los motivos de internamiento más frecuentes fueran tratamiento quirúrgico y enfermedad pulmonar. Más de la mitad presento riesgo alto de sufrir caídas (54,35%), seguido de moderado (32,61%) y bajo (13,04%). Hubo asociación entre riesgo alto de caídas, tener enfermedad pulmonar como motivo de internamiento y diabetes como comorbilidad. El riesgo alto de caídas fue menos frecuente entre ancianos internados para tratamiento quirúrgico. **Conclusión:** El riesgo alto para caídas fue encontrado en más de la mitad de los ancianos, lo que varió de acuerdo con el motivo de internamiento y comorbilidades, siendo más frecuentes en los internados por enfermedad pulmonar y que presentaban Diabetes.

DESCRIPTORES

Anciano; Hospitalización; Accidentes por Caídas; Seguridad del Paciente; Enfermería Geriátrica.

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