

Evaluation and Characteristics of Falls of Patients during Hospitalization

Avaliação e características das quedas de pacientes durante a internação hospitalar

Evaluación y características de caídas de pacientes durante la hospitalización

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Abstract: Objective: Evaluate and characterize the patients falls in a hospital in Southern Brazil. Method: Descriptive and retrospective study of 73 reports of falls in a hospital in Southern Brazil, from January 2016 to December 2019. Secondary data obtained by the institution's Patient Safety Center and the Morse Fall Scale were used, in a descriptive statistical analysis. Results: Most of the patients who suffered falls were male (60.3%), >61 years old (50.6%), clinical treatment (89.0%), patients with neoplasms (43.8%) in continuous medication use (91.8%). The falls occurred from their own same height (67.1%), in the bathroom (56.2%) and in the night shift (50.0%). In 50.7% of the falls there was damage to the patient, mild damage (62.2%), moderate damage (32.4%) and severe damage (5.4%). Conclusion: Improving the understanding of falls and their consequences can help health professionals in assessing risks and establishing preventive measures.

Keywords: accidental falls; inpatients; patient safety; patient harm; hospital.

Resumo: Objetivo: Avaliar e caracterizar as quedas de pacientes em um hospital no sul do Brasil. Método: Estudo descritivo e retrospectivo de 73 notificações de quedas em um hospital no sul do Brasil, de janeiro 2016 a dezembro de 2019. Utilizou-se dados secundários obtidos pelo Núcleo de Segurança do Paciente da instituição e da Morse Fall Scale, sendo a análise estatística descritiva. Resultados: A maioria dos pacientes que sofreram quedas foi do sexo masculino (60,3%), >61 anos (50,6%), tratamento clínico (89,0%), portadores de neoplasias (43,8%) em uso contínuo de medicações (91,8%). As quedas ocorreram da própria altura (67,1%), no banheiro (56,2%) e no turno da noite (50,0%). Em 50,7% das quedas houve danos ao paciente, sendo os danos considerados como: leve (62,2%),

moderado (32,4%) e grave (5,4%). Conclusão: Melhorar a compreensão das quedas e as suas consequências pode auxiliar os profissionais na avaliação dos riscos e no estabelecimento de medidas preventivas.

Palavras-chave: acidentes por quedas; pacientes internados; segurança do paciente; dano ao paciente; hospital.

Resumen: Objetivo: Evaluar y caracterizar las caídas de pacientes en un hospital del sur de Brasil. Método: Estudio descriptivo y retrospectivo de 73 notificaciones de caídas en un hospital del sur de Brasil, de enero de 2016 a diciembre de 2019. Se utilizaron datos secundarios obtenidos por el Núcleo de Seguridad del Paciente de la institución y la Escala de Caídas Morse, con análisis estadístico descriptivo. Resultados: La mayoría de los pacientes que sufrieron caídas fueron hombres (60,3%), >61 años (50,6%), tratamiento clínico (89,0%), portadores de neoplasias (43,8%) en uso de medicación continua (91,8%). Las caídas ocurrieron desde la misma altura (67,1%), en el baño (56,2%) y en el turno de la noche (50,0%). En el 50,7% de las caídas hubo daño al paciente, considerados como: ligero (62,2%), moderado (32,4%) y grave (5,4%). Conclusión: Mejorar la comprensión de las caídas y sus consecuencias puede ayudar a los profesionales de la salud en la evaluación de los riesgos y en el establecimiento de medidas preventivas.

Palabras claves: accidentes por caídas; pacientes internados; seguridad del paciente; daño del paciente; hospital.

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Introduction

A fall is defined as an episode in which a person falls to the ground or at a lower level than their initial position, suddenly and unintentionally, without losing consciousness. ⁽¹⁾ It is estimated that every year 646,000 fatal falls occur worldwide, making them the second leading cause of unintentional death, second only to traffic accidents. ⁽²⁾

In 2004, the World Health Organization (WHO) sought to organize the concepts and definitions of patient safety, thus developing the International Classification for Patient Safety (ICPS). Among the key concepts, the following stand out: incident – event or circumstance that could have resulted, or resulted, in unnecessary harm to the patient; adverse event - incident that results in harm to the patient; damage – impairment of the structure or function of the body and/or any effect arising from it, including diseases, injury, suffering, death, disability or dysfunction, which may, therefore, be physical, social or psychological. ⁽³⁾

In the health area, falls are considered adverse events, that is, incidents that result in potential damage to health, although they are preventable. In hospitals, falls account for 70% of reported adverse events. Of these in-hospital events, 30% can result in physical injuries and 4 to 6% in serious injuries. ⁽⁴⁾

In Brazil, falls represent the second most reported adverse event and the second most related to deaths, according to the Notivisa System of the National Health Surveillance Agency, which recorded 36,452 reports of falls between March 2016 and June 2019. ⁽⁵⁾

In the hospital, falls are complex and multifactorial events, with intrinsic and extrinsic origin, which must be carefully contextualized and related to the individual characteristics of each patient. Intrinsic factors can be defined as physiological changes that arise with aging (visual and/or hearing impairment); pathological changes; psychological factors; cognitive deficit and muscle weakness. On the other hand, extrinsic factors are caused by the interaction of the individual with the environment, such as: the quality of the floor, poor lighting, the lack of handrails, the presence of side rails on the beds or the absence of these, the existence of obstacles in the path, absence, or inadequate technical assistance during movement, among others. ⁽⁶⁾

Acting early, assessing the risk that the patient has of falling, can be a possible strategy to act in prevention, and it can be done by scales that measure these risks during hospitalization and that provides subsidies for professionals to carry out a systematic assessment. Thus, it allows actions to prevent, promote and control falls in the hospital environment, individually, according to the pre-established degree of risk. ⁽⁷⁾

Among these instruments/scales, the Morse Fall Scale (MFS), ⁽⁸⁾ translated and adapted to the Portuguese language in 2013, stands out, using the acronym MFS-B. ⁽⁹⁾

Hospitalization considerably increases the risk of falling, as the patient is outside their family environment and their daily lives, allowing them to change their routines. These changes, associated with stress, can worsen previous pathologies, such as dementia, changes related to vision and physical mobility. Acute illnesses and the use of several associated drugs can also influence the risk of falls and the aggravation of the resulting damage, prolonging hospitalization and increasing care costs, in addition to causing anxiety in professionals and loss of confidence in the team and in the hospital. ⁽⁷⁾

It is understood, therefore, that it is extremely important that managers and health professionals know the reality of cases of falls in their workplace, thus obtaining subsidies for the creation of strategies that encourage the prevention/reduction of this event in the hospital institution. ⁽¹⁰⁾

Given this scenario, the guiding question defined for this study was: what are the main characteristics of patients who suffered falls in a hospital in the South of Brazil?

From this question, this article aims to evaluate and characterize the falls of patients in a hospital in the South of Brazil.

Methods

This is a descriptive study, with a quantitative approach, of incident cases, carried out in a hospital in the South of Brazil, which took place from January 2016 to December 2019.

The study is composed of all reported cases of patient falls (n=73 notifications), registered in a computerized system of federal university hospitals, called VIGIHOSP, linked to the institution's Patient Safety Center. The system is publicly accessible to all employees, who can notify the fall at any time by accessing the hospital's digital page on the

Internet. The notification in the system seeks to describe the characteristics of the fall, the patient, the reason, and the actions taken after the incident. Adherence to the notification tool has increased during the hospital's internal training, but it is known that there are still underreporting of falls records, because many professionals think that notification is something punitive. In fact, the work involved has the vision of an educational culture. Incident records of patients over 18 years-old were included in the survey, and patients who did not have the Morse Fall Scale completed by the healthcare team were excluded.

The study took place in a hospital in the South of Brazil, which serves 28 municipalities, with 175 beds distributed in the following areas: internal medicine and clinical specialties, gynecology and obstetrics, pediatrics, general surgery, and surgical specialties, in addition to General ICU and ICU Neonatal. To carry out this research, patients from the Neonatal ICU and Pediatrics were not involved, as the study only sought to work with patients over 18 years old.

Data were collected retrospectively, based on secondary data from notifications of adverse events related to falls, received by the Institution's Patient Safety Center (IPSC), in addition to having the Morse Fall Scale completed by the health team, which does assessment of the risk of falling that the hospitalized patient is subject to.

For each registered patient, a form was filled out, containing sociodemographic and clinical data variables of the patients, such as: gender, age, hospital functional unit, disease that led to hospitalization, continuous or non-continuous use of medications, medications prescribed on the day the fall occurred.

As características relacionadas à ocorrência das quedas também foram mencionadas, como: The characteristics related to the occurrence of falls were also mentioned, such as: shift when it happened (considering the period from 7:01 am to 1:00 pm as the morning, the afternoon was considered the period from 1:01 pm to 7:00 pm and the night from 7:01 pm to 7:00 am), location of the occurrence of the fall, detail of the fall (bed, armchair, toilet chair, wheelchair, transport stretcher or self-height, which is characterized as the same height level, not having any high level), if the incident was witnessed or no, who witnessed the fall, there was a relationship with lack of balance, loss of strength or disorientation of the patient and whether or not the fall was related to infrastructure problems in the institution. This form also sought to report the characteristics of the damage caused by falls, relating the following variables: there was or was not damage to the patient and what type of damage was caused.

Finally, preventive measures adopted against the occurrence of falls were related to the following variables: assessment of the risk of falling, identified risk, use of risk identification bracelet, non-compliance with the guidelines by the patient and family members. An attempt was made to list the actions adopted after the fall. In cases where the event was notified by more than one professional, only one event and all professionals who notified it were considered.

The Morse Fall Scale translated and adapted to Portuguese (MFS-B)(9), which contains six assessment items and their respective scores, was used. The sum of the scores for each item generates a score for ranking Low Risk (0-24 points), Moderate Risk (25-44 points), and High Risk (>45 points). The analysis of the internal consistency of the MSF-B revealed a low Cronbach's Alpha ($\alpha = 0.28$) in the correlation between the items. The original scale has six items, independent of each other, and measure different information. This is a necessary feature to verify a multifaceted phenomenon. This aspect was also found in the original ($\alpha=0.16$) and Chinese ($\alpha = 0.26$) versions. ⁽¹¹⁾

The Morse Fall Scale has been standardized in this hospital institution since January 2016, undergoing a training process for all health professionals, since 2015, being daily

applied. Any trained health professional will be able to fill it out and provide the necessary guidance, however, in the practice of the study institution, the scale is filled in by the nurse of the care unit. For the research, the score and risk of falling from the day before the incident reported were considered.

The classification adopted for the types of harm caused to the patient was: ⁽¹²⁾ mild when it presents mild symptoms, with minimal damage, loss of function, but with a short duration and with small interventions when necessary; moderate when the patient is symptomatic, needs intervention, prolonging the hospital stay, with permanent or long-term loss of function, and severe when the patient is symptomatic and needs intervention for life support or clinical/surgical intervention, causing great harm, permanent or long-term loss of function or when there is associated death.

Descriptive statistical analysis was performed using the Statistical Package for Social Sciences (SPSS), version 26.0, using absolute and relative frequencies. The research was approved by the Ethics Committee. As it is the collection of secondary data, it was not necessary to apply the Informed Consent Term and there was no identification of the participants, according to the resolution 466/2012 of the National Health Council.

Results

Between January 2016 and December 2019, data from 73 notifications of falls during hospitalization were evaluated. The average number of hospital admissions during these four years was 4,438. Of the patients who suffered falls, 44 (60.3%) were men, aged 60 years-old or more (50.6%), 65 (89.0%) were hospitalized for clinical treatment and 67 (91.8%) were undergoing continuous use of medications (Table 1).

Table 1. Characteristics of patients admitted with the occurrence of falls in a hospital in southern Brazil. Brazil, 2020

Variables	N	%
Gender		
Male	44	60.3
Female	29	39.7
Years		
20 – 40 years	14	19.2
41 – 59 years	21	28.8
60 years or more	37	50.6
Disease that led to hospitalization		
Oncology	32	43.8
Infectology	12	16.4
Respiratory	12	16.4
Gastrointestinal	08	11.0
Endocrine	05	6.8
Gynecological/Obstetric	02	2.8
Others	02	2.8
Medications prescribed on the day of the fall		
Anxiolytics	41	56.2
Antihypertensive	36	49.3
Antidepressant	34	46.6
Antidiabetics	25	34.2
Diuretics	24	32.9
Anticoagulants	21	28.8
Antipsychotics	18	24.7

Source: Own elaboration (2020).

Regarding the characteristics of falls, it was found that 30 (50.0%) of the falls occurred during the night shift and in 51 (69.9%) of the cases the fall was witnessed by a health professional or family member. About the infrastructure problems of the hospital institution, 57 (78.1%) of the falls were not related to this aspect (Table 2).

Table 2. Characteristics related to the occurrence of falls in a hospital in southern Brazil. Brazil, 2020

Variables	N	%
Place of occurrence of the fall		
Bathroom	41	56.2
Hospital bed	15	20.5
Surroundings	10	13.7
Others	07	9.6
Detail of the crash site		
Own height	49	67.1
Bed	11	15.1
Toilet chair	07	9.6
Armchair	02	2.7
Wheelchair	02	2.7
Transport stretcher	02	2.7
Patient's lack of balance		
Yes	52	71.2
No	21	28.8
Patient loss of strength		
No	40	54.8
Yes	33	45.2
patient disorientation		
No	52	71.2
Yes	21	28.8

Source: Own elaboration (2020).

The study found that there was damage to the patient's health in 37 (50.7%) of the falls. The occurrence of mild damage was 23 (62.2%) cases, observed in situations where the patient had skin abrasions, followed by moderate damage 12 (32.4%), characterized by cut-blunt injuries in four patients (33.4 %) and mild traumatic brain injury in eight patients (66.6%). Serious damage corresponded to two (5.4%) of all incidents generated. One patient's fall culminated in a nose fracture and the other in a wrist fracture (Table 3).

Table 3. Characteristics of damage to patients resulting from falls from January 2016 to December 2019. Brazil, 2020

Variables	N	%
Type of damage* (n=37)		
Light	23	62.2
Moderate	12	32.4
Serious	02	5.4

*only patients who have been harmed.

Source: Own elaboration (2020).

Regarding the assessment of the risk of falling, 60 (82.2%) were identified as at risk of falling, with 21 (35.0%) classified as having moderate risk, according to the Morse Fall Scale on the day before the fall occurred. In the daily assessments of the Morse Fall Scale, the nurse, in addition to filling in the corresponding score, guides patients and family members about preventive measures, according to the institution's fall risk protocol, which mentions about keeping the bed rails elevated throughout the period, use of the bedside light at night, that every leaving the bed must be notified to the nursing staff, among other information. The preventive measures adopted against the occurrence of falls in the hospital are characterized in Table 4.

Table 4. Characteristics related to preventive measures against the occurrence of falls. Brazil, 2020.

Variables	N	%
What is the identified risk* (n=60)		
Without risk	09	15.0
Low risk	17	28.3
Moderate risk	21	35.0
High risk	13	21.7
Use of risk identification bracelet		
No	40	54.8
Yes	33	45.2
Non-compliance with the guidelines by the patient/family		
Yes	53	72.6
No	20	27.4

*only patients assessed as at risk of falling
Source: Own elaboration (2020).

After the occurrence of falls in the hospital institution in 60 (82.2%) of the injuries, the only action taken was the medical evaluation, not using any imaging exam as an auxiliary resource in the investigation. The institution uses a fall risk protocol, which mentions the conducts performed upon its occurrence, in which it mentions that the health professional who faced the fall must assess the clinical conditions after the fall and position the patient in good conditions safe (sitting or lying down), communicate the team responsible for performing the physical examination and request a medical evaluation. It is noteworthy that it is the care physician's responsibility to provide the imaging exams (x-ray or tomography), according to the initial assessment, carry out the reassessment of the patient, guide the patient and companion about the risk of falling, in addition to notifying the incident in the VIGIHOSP (Table 5).

Table 5. Main conducts adopted after the occurrence of falls in the hospital institution. Brasil, 2020.

Variables	N	%
Conduct adopted after a fall		
Medical evaluation	60	82.2
Medical evaluation + X-ray	10	13.7
Medical evaluation + Tomography	03	4.1

Source: Own elaboration (2020).

Discussion

The aim of this study was to evaluate and characterize the falls of patients in a hospital in southern Brazil. Most of the sample was male (60.3%). Corroborating the literature that presents similar results, it was shown that 53 to 63.7% of men suffered falls, relating these data to cultural factors, such as greater difficulty in asking for and accepting help in carrying out their daily activities. ^(6, 13-14) On the other hand, some authors found a higher prevalence of falls among women and associated them with a higher prevalence of chronic diseases, a higher incidence of osteoporosis and hormonal changes in postmenopausal women, factors that interfere with postural balance, as well as a reduction in muscle mass. ^(7, 15)

Regarding age group, patients who suffered falls were 60 years old or older (50.6%). It is known that advancing age triggers a series of physiological changes, considered risk factors for the occurrence of falls, which are more frequent in this age group. Factors commonly observed are those related to postural instability, gait alteration, decreased cognition, sensory deficits, in addition to chronic-degenerative disorders. ⁽⁶⁻⁷⁾

Epidemiological data indicate that about a third of the elderly suffer at least one fall a year. ⁽¹⁶⁾ Falls affect about 30% of the elderly over 60 years of age and 40 to 50% of the oldest elderly (over 80 to 85 years), consisting of the main cause of injuries, fatal or not, in these groups. ⁽¹⁷⁾ These incidents are considered a public health problem, as they are more frequent in old age and their sequelae can reduce the functional independence of the elderly and increase the risk of early death, ⁽¹⁸⁾ in addition to mentioning that hospitalizations for falls imply survival, as only about 50% of the elderly who fell and were admitted to hospitals will be alive after one year. ⁽¹⁹⁾ The number of elderly people over 60 years old is growing worldwide at an accelerated rate of 3% per year, increasing the number of people at risk of falls, and consequently with sequelae and fatalities. In 2017, the world population was estimated at 7.6 billion people, 13% of them elderly. For the year 2050, it will be 9.8 billion people, of which 21% will be elderly, at the same time that Brazil will be among the 31 most populous countries in the world, which together will concentrate 75% of the population global. ⁽²⁰⁾

The shift with the highest occurrence of registered falls was the night period, which is in line with most published studies. ⁽¹⁴⁻¹⁵⁾ In the daily practice of the hospital environment, there is a tendency for patients not to resort to nurses to help in carrying out activities they deem capable, such as going to the bathroom, which can worsen at night, when the number of professionals in units is smaller, in addition we must consider the physiological sensory changes of old age, since most falls occurred with patients over 60 years of age.

Regarding the place of fall, there was a greater occurrence in the clinical sectors, which correspond, in the institution, to most available beds, in addition to receiving patients

from different specialties. The high incidence of falls in clinical inpatient units can be associated with the long length of stay of the patient, advanced age and high complexity of care. ^(4,7) The fact that most of the pathologies related to falls in this study are of oncological origin, is justified by the institution where the present research was carried out, which is a reference hospital for the city and other neighboring cities in the treatment of the most diverse diseases oncologic.

In this research, most falls reported were from their own height and occurred in the bathroom. Studies carried out in hospitals in the South of Brazil found that this type of fall was the most frequent and may be associated with the patient's intrinsic factors, such as disorientation, cognitive incapacity, weakness, use of medications and comorbidities. ^(6,7)

It is known that both the bathroom and the bedroom/infirmary are the places most used by patients during the hospital stay and it is common, therefore, that they are identified as the ones with the highest occurrence of this type of adverse event. ^(13,15) Studies show that 50% of falls can be avoided with the improvement of the hospital structure, especially in areas with slippery floors, such as bathrooms, where there is no use of non-slip floors, nor the presence of support bars in the ideal quantity and height. less there is the presence of benches in shower stalls. ⁽²¹⁾ Of the 36,452 notifications of falls that occurred across the country and received by Anvisa, in the period from March 2014 to June 2019, 21,296 (58%) of them occurred in the bedroom and bathroom. ⁽⁵⁾

It is important to emphasize that since a fall is considered an event with multifactorial causes, a single fall may have more than one contributing factor. In our study, there is a predominance of causes related to the patient's lack of balance (71.2%), loss of strength (45.2%) and mental disorientation (28.8%). In this sense, the presence of weak and/or impaired gait was identified in 47% of patients in an American hospital who had a fall; of these, 34% used assistive devices to walk. ⁽²²⁾

Regarding the association of falls with infrastructure problems, the study showed 16 falls (21.9%) directly related to structural problems, such as: poor lighting, damaged beds, slippery floors, lack of auxiliary bars in bathrooms, among other factors. A study conducted in the public hospital of São Paulo in 2015 was found in the literature, which related 50% of the notifications of falls, with a lack of accessible light switch and furniture without wheels and safety locks, in addition to the absence of beds with bars in all the beds. This last item alerts to the fact that 23% of all falls reported occurred from bed or bed. ⁽²³⁾

The continuous use of medications was associated with the occurrence of falls in the hospital environment in our study, with anxiolytics, antihypertensives and antidepressants being the most frequently used. Medicines that act on the central nervous system and the cardiovascular system are identified by the authors as one of the main adjuvants for falls, as they can lead to psychomotor alterations, dizziness, postural hypotension or even a decrease in cerebral blood flow, with loss of consciousness. ^(14, 24)

Falls with damage, in the present study, represented 50.7% of the total number of events, being mostly mild (62.2%), followed by moderate (32.4%) and severe (5.4%). The prevalence of damage resulting from falls found in other Brazilian studies, leads us to rates of 26 to 38.6%. ^(7,22) In a Spanish study carried out with 270 hospitalized patients who suffered falls between 2014 and 2016, it was found that there was some type of damage in 54.2% of the patients. ⁽²⁵⁾ Regarding the degree of severity of damage, it was found that falls with mild damage were the most prevalent, similar to other studies in which abrasions/abrasions were the most reported injuries. ^(7, 22, 25)

Furthermore, in the present study, the presence of moderate damage was observed in 32.4% of the events, with the occurrence of cut-blunt injuries and mild traumatic brain injury. These

injuries can lead to interventions such as suturing and dressings, in addition to prolonging the hospital stay. Falls that caused moderate harm to the patient were identified in 6% of the events that occurred in an American teaching hospital. ⁽²⁶⁾ Falls associated with severe injuries accounted for 5.4% of reported events, which included nose and wrist fractures in two patients. The occurrence of fractures due to a fall ranged from 1 to 1.6% in other Brazilian studies. ^(7, 22) In a cross-sectional study carried out at the Bundang Hospital of the National University of Seoul, in South Korea, with a sample of 428 falls recorded in 2015, 06 (1.4%) falls diagnosed with fractures were reported. ⁽²⁷⁾ The high rate of fractures in the research is highlighted here, even though the sample is lower than the others presented, in which the rate of fractures in the present study was higher than the national average and, in some cases, even higher than the international average.

After the fall occurs, the study emphasizes the importance of a safe and complete therapeutic approach, performed by an accurate medical evaluation and with imaging resources, such as: x-ray and tomography. It was observed that only 17.8% of falls were diagnosed with the aid of the imaging resource. In a Korean study, falls were found to be diagnosed with the aid of x-ray images in 84 patients (19.6%), computed tomography images in 45 patients (10.5%), magnetic resonance imaging in one patient (0.2%). ⁽²⁷⁾ Therapeutic approaches for the treatment of falls require safe protocols and all available resources for a complete and safe assessment.

It is extremely important to mention that patients admitted to hospital institutions are generally fragile and with an unfavorable clinical condition and may present a greater risk of aggravation of injuries caused by falls, as is the case of patients with advanced age, various comorbidities, social vulnerability, thrombocytopenic and immunodepressed. In view of this fact, it is essential to carry out a complete risk assessment of patients, with the help of validated predictive scales that are adequate to the institutional reality and to the profile of patients. In this study, 82.2% of patients were identified for risk of falling, most of them classified as moderate risk, according to the Morse Fall Scale, however, the use of risk identification bracelet was observed only in 45.2% of patients and non-compliance with the guidelines by patients and family members occurred in 72.6% of falls. The need to develop more effective actions is highlighted here, to the point of mitigating the event, such as carrying out a complex assessment of the patient, which should include the review of medications and requests for laboratory tests. It is extremely important, at the time of the assessment, to understand the circumstances that led the patient to fall, this helps in understanding potential causes and how to avoid future incidents.

Conclusion

The results of this study allowed us to identify the characteristics of falls with hospitalized patients, an event that had 73 notifications recorded between the years 2016 to 2019. The most prevalent were those of their own height and occurred inside the restrooms, mainly affecting men, with advanced age, balance alteration, in clinical treatment, in addition to the use of continuous medications. Of the falls that occurred, (50.7%) caused harm to the patient, most were classified as mild harm (62.2%), and the high rate of non-compliance with the guidelines of the health team by the patient who suffered the injury is also highlighted.

The retrospective analysis and the number of falls possibly underreported by the hospital are considered as limitations of the study. However, it is important to highlight that the results obtained can bring contributions to health services, since the culture of safety is still an underexplored theme in the Brazilian territory.

Our results suggest the need to improve and even expand existing fall prevention programs in general hospitals, for specific age groups, these programs should cover the multidimensional assessment and intervention of the elderly, including improvement of physical capacity with the performance of exercises that involve strength, balance, and gait training.

In this context, the importance of comprehensive care is highlighted as one of the pillars of the SUS, as it is necessary to strengthen both pre-hospital care and the urgent and emergency care network, as they are important gateways to the health system for the user. Hospital care, with the services of physiotherapy, orthopedics, neurology, and geriatrics, should be optimized to meet the growing demand of elderly victims of falls, minimizing the length of stay and encouraging early walking and functional independence with training in the safe use of assistants for gait, which will certainly reduce complications and damage. At the same time, specialized rehabilitation centers must be prepared to absorb the demand of elderly victims of accidental falls who need physiotherapy, occupational therapy, and other services, that is, the care network for people with disabilities is essential for comprehensive care for victims of falls.

The topic has been addressed in recent years, however, it still lacks holistic and preventive care practices. It is important for nursing professionals to take ownership and position themselves regarding evaluative and educational conducts. The findings collaborated with the advancement of scientific knowledge for teaching, the training of new nurses and their updating, calling attention to care aimed at patient safety and incident prevention, as well as the expansion of new research on the subject.

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