Repercussions of hospitalization due to fall of the elderly: health care and prevention

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ABSTRACT
Objectives: To know the repercussions of the fall reported by the elderly and their caregiver during hospitalization in a public hospital in Florianópolis city from October to December 2014. Method: Exploratory research with a qualitative approach, conducted by depth interviews with 16 participants, the eight elderly were hospitalized for falls and eight elderly caregivers. Data analysis were performed through the Thematic Content Analysis. Results: It was evidenced the thematic axis: Faller Elderly supported by four thematic categories: Changes caused by Falls, I am a faller, I take care of me and Prevention of the Fall. The repercussions of the fall were evidenced in the impairment of the health condition, self-care and functional capacity. We observed the naturalization of the phenomenon and the passivity with the harmful consequences of the event. Final Considerations: The fall is valued the more negative its repercussion, such as the need for hospitalization and surgery. Managing the vulnerability of the elderly, especially in primary care, evaluating their comorbidities and their internal and external environment, will minimize unfavorable consequences and the social and financial cost of hospitalizations.

Descriptors: Health of the Elderly; Vulnerability in Health; Accidents by Falls; Accident Prevention; Caregivers.

RESUMO
Objetivo: Conhecer as repercussões da queda relatadas pelo idoso e seu cuidador, durante internação em um hospital público de Florianópolis, no período de outubro a dezembro de 2014. Método: Pesquisa exploratória com abordagem qualitativa, realizada por entrevistas em profundidade com 16 participantes, os quais oito foram idosos internados por quedas e oito cuidadores de idosos. A análise dos dados foi realizada por meio da Análise de Conteúdo Temática. Resultados: Foi evidenciado o eixo temático: Idoso Caidor sustentado por quatro categorias temáticas: Mudanças Provocadas pela Queda, Eu sou caideira, Eu me cuido e Prevenção da Queda. As repercussões da queda foram evidenciadas no prejuízo à condição de saúde, ao autocuidado e à capacidade funcional. Observou-se a naturalização do fenômeno e a passividade com as consequências danosas do evento. Considerações Finais: A queda passa a ser valorizada quanto mais negativa for sua repercussão, a exemplo da necessidade de internação e cirurgia. Gerenciar a vulnerabilidade do idoso, em especial na atenção primária, avaliando suas comorbidades e seu ambiente interno e externo, minimizará consequências desfavoráveis e o custo social e financeiro das hospitalizações. Descritores: Saúde do Idoso; Vulnerabilidade em Saúde; Acidentes por Queda; Prevenção de Acidentes; Cuidadores.

RESUMEN
Objetivo: Conocer las repercusiones de caídas relatadas por el anciano y su cuidador, durante hospitalización en un hospital público de la ciudad de Florianópolis, en el período de octubre a diciembre de 2014. Método: Investigación exploratoria con abordaje cualitativo, realizada por entrevistas en profundidad con 16 participantes, de los cuales ocho fueron ancianos hospitalizados por caídas y ocho cuidadores de ancianos. El análisis de los datos fue realizado por medio del Análisis de Contenido Temático. Resultados: Se evidenció el eje temático: Anciano Caidor sostenido por cuatro categorías temáticas: Cambios Provocados por la Caida, Yo soy la caideira, Eu me cuido y Prevenção da Queda. Las repercusiones de la caída se evidenciaron en el perjuicio a la condición de salud, al autocuidado...
INTRODUCTION

Population aging is a reality in the world and in developing countries such as Brazil, where the growth of the elderly population has been accelerating. The multiplicity of chronic diseases is a frequent feature in old age and has an influence on functional capacity and quality of life.

Increasing the longevity of the population raises biological, socioeconomic, socio-cultural and psychosocial risks and vulnerabilities. In situations of vulnerability in which the elderly are exposed falls as an important health problem for the elderly and threatens to maintain their functional capacity, as it is associated with restriction in mobility, fractures, hospitalization, depression, loss of autonomy, institutionalization, decline in health and death. Thus, the presence of elements of vulnerability strongly influences the quality of life, especially when more than one of these elements are present, reaching the different areas of the life of the elderly.

In this sense, the risk of falling increases with the number of risk factors and in one year the risk of falling folds for each additional vulnerability factor. According to the study by the American Geriatrics Society and the British Geriatrics Society, the percentage of community-dwelling elderly experiencing falls has increased by 27% for those with up to one vulnerability factor and to 78% among the elderly with four or more factors.

It is shown that undesirable unfolding affects morbidity and mortality. The high family and individual costs due to the injuries caused by the fall event are subject to intervention, which is why preventive actions must be implemented to minimize the impacts caused by the event.

Thus, the objective of this study was to know the repercussions of the fall for the elderly and their caregiver, reported during hospitalization, in a public hospital in Florianópolis city, from October to December 2014.

OBJECTIVE

To know the repercussions of the fall reported by the elderly and their caregiver during hospitalization in a public hospital in Florianópolis city, from October to December 2014.

METHOD

Ethical aspects

The study was approved by the Human Research Ethics Committee of the Universidade Federal de Santa Catarina (CEPSH/UFSC) and by the Research Ethics Committee of the Governador Celso Ramos Hospital (CEP/HGCR), which followed the standards of Resolution 466/2012 from the National Health Council for research on human beings.

In order to preserve the anonymity of the participants, codes consisting of letters and numbers were used, identifying the elderly with the letter “I” and numbers 1 to 8 (I1, I2, I3 ... I8), as in the same way “C” for caregiver, following the same numbering (C1, C2, C3 ... C8).

Type of study
This is a descriptive study with a qualitative approach.

Methodological procedures

Study scenario
The chosen scenario was the Governador Celso Ramos Hospital, in Florianópolis/SC and the data collection period was from October to December 2014.

Data source
The study population consisted of the elderly and their caregivers. The choice of sample was intentional, by convenience method. Thirty-two patients aged 60 years and over were hospitalized due to a fall in the collection period at the medical and surgical clinics. Inclusion criteria for the caregiver involved the situations in which the elderly person was not a good respondent, considering their cognitive ability through routine evaluations of the medical staff of the service described in the medical records. In addition, the caregiver should declare himself as the primary caregiver of the elderly for at least six months. Thus, they accepted to be part of the research, signing the Free and Clarified Consent Term (FCCT), eight elderly and eight caregivers.

Data collection and organization
In all, 16 interviews were conducted with semi-structured script. The interviews were recorded and transcribed in full to compose the analysis corpus.

The Consolidated Criteria for Reporting Qualitative Research (COREQ) was used as a criterion for data organization.

Data analysis
After the data collection was completed, the organization of the transcribed material was followed to begin the analysis, which observed the three chronological poles of the Thematic Content Analysis process proposed by Bardin, namely: 1) pre-analysis; 2) material exploration; and 3) treatment of results, inference and interpretation.
RESULTS

Eight elderly and eight caregivers were interviewed. The elderly respondents presented ages ranging from 60 to 84 years. The majority of the elderly participants were female (six). Half of the elderly group was married and the other half was widowed. Six elderly people were retired, two due to disability, one of whom was wheelchair-bound. One of the old women was from home and the other worked at home as a carpenter. The group of caregivers was all made up of women and only one was single. Caregivers were between the ages of 28 and 65 years. Most caregivers maintained occupations related to nursing home and care activity. Two caregivers maintained out-of-home activities with employment, one as an auditor, and the other was a caregiver for the elderly in a Long-Stay Institutions for the Elderly.

From the contents manifested by the elderly and caregivers of the elderly the Elderly theme Faller appeared that added four categories, which are: a) Changes caused by falls; b) I am a faller; c) I take care of me and d) Fall Prevention.

Changes caused by falls

The category Changes caused by falls emerged from the testimonies when they related to the activities that the elderly could accomplish before the fall in perspective to the changes perceived after the event:

[...] I used to walk around the yard, water the plants ... sweep the house, clean the floor ... [...] I used to go out every morning to walk ... I walked more on the edge of the beach. (I3)

He used to help me at home, in the kitchen. [...] he won’t do anymore. His dependence increased. He had the autonomy of eating by himself, doing the dishes [...] that made him very happy. (C5)

She used to do the dishes, bath, do all her things by herself, hygiene, she used to change clothes ... She never asked me to do anything for her! Even though she’s not good. [...] she made the bed ... she didn’t complain. [...] only if she was in a lot of pain did she ask for help ... She was always a very active person. (C2)

The perceived changes after the fall were reflected in the finding of serious damages to the health condition and functional capacity of the elderly, provoking reflection about the future, as can be evidenced in the following reports:

[...] I only hope I have the strength to raise him and put him at least to walk! Walk, stammer something. I know it’s no longer the man who left home on the 14th, but it doesn’t hurt because it’s my husband who’s there, he’s the father of my children. He’s the one over there ... (C1)

For all that has happened ... in the same thing she is not going to stay, things are already changing ... I notice that her memory is much worse since the fall, she used to forget some things, but I notice she is even slower. (C3)

With this fall, I see that his situation has totally changed. I see the consequences of this. As he has Alzheimer’s disease, he became much disoriented ... I think that is why all these complications arose. (C5)

... I hope for a much greater dependence. She’s going to have to be fed, she’s not going to be able to take a bath herself, get dressed, she’s going to stay in bed longer, she’ll need a lot of physical therapy ... all the care not to create those “bedsores” ... She’ll need to be cared, a device that you didn’t need before. (C6)

After the evidences defined by the repercussions of the falls, expectations arise that the elderly will return to do what he used to do before the fall, thought expressed in several manifestations, as participants I8 and C7, for example:

My expectation is to continue to do the things I’ve always done. ... improve the leg ... improving I can walk with the Canadian [crutch]. ... to fix my arm too ... that is out of place ... Then I’ll be able to drive again ... (I8)

I expect her to do the crafts again, to see her walking; because otherwise it will be very difficult ... otherwise she would be very dependent. (C7)

In the speeches of participants C2, I6 and C1 the expectations were expressed sometimes with a sense of doubt, sometimes as alert and learning and sometimes as resignation before the consequence of the fall:

... after this fall and the surgery ... it will be worse, I will have to pay more attention, I cannot leave her alone anymore ... I don’t know if she will recover ... if she can walk again! ... I have expectations but at the same time doubt whether she will be able to walk, to do her personal hygiene. (C2)

This fall ... is serving as a warning to me ... so I can stop and take better care of myself and my life! It’s like those “STOP” signs of traffic ... it’s as if life were coming ... and saying: now stop and take care of yourself! (I6)

My husband will come completely vegetative. I’m going to take a baby home. (C1)

A space of reflection was created so that the participants had the freedom to externalize their beliefs about the fall event. It was possible to show in the testimonies of I6 and C1 that the fall represented a fact that generated changes in people’s lives.

I am a faller

Supported by the free expression of the participants appeared the category I am a faller as a self-definition of the elderly in relation to the action of falling being incorporated as an adjective. The category I am a faller brings the idea that the fall event seems to be something natural, as if it were part of people’s lives or even as if kept hereditary determination, like the speech of the elderly I5:
I’ve fallen several times, but I’ve never been hurt like this! I am a “faller”. Just like my mother … she was like that. Since I was a kid, I fall … I am like this! (I5)

I’ve fallen other times, i used to stumble and fall, but no serious, just scratches or small bruises … but now … I even had surgery. (I4)

There are many falls. The feeling is terrible! I had another fall … 4 months ago … in the home service area. […] I fall on my back. It didn’t have a more serious consequence … but I got my whole body aching … Six months ago … I had another fall … between the gate and the car door. It was the same thing, I went to close the door … and fell. […] I already know that, more or less, every 2 months I fall… (I2)

It was evidenced in this group that the fall gains more attention from the elderly and their relatives when more complex consequences arise, such as the need for hospitalization and surgery. Otherwise, the elderly will coexist with pain, excoriations, bruising, exposure to the risk of further falls and not realizing their vulnerability will be exposed to increasingly severe outcomes.

The fall gains more visibility, often, by the marks it leaves. The message: “I am a faller”, or “I am like this”, refers to the self-identification of the faller elderly and to the acceptance of the circumstances surrounding the event.

I take care of me

Despite the context of determination and naturalization present in the idea of “being a faller”, the study also revealed manifestations of the elderly about self-care, which was evidenced by the category I take care of me.

This category demonstrated that participants’ self-care was related to the well-being that comes from eating and healthy living habits. The health here was related to balanced, natural and vegetarian food, as well as to the use of medicinal plants. The recovery of the health status after the fall appears to be associated with food, appearing as a central and important element for the elderly I3 and I6:

I will continue with my natural food with whole products … […] this food helps in the recovery of the person… (I3)

[…] I have been a vegetarian for 40 years … I drink natural juice, I make wonderful salads. I eat various kinds of vegetables, fruits and vegetables. I know how to do wonderful things in the kitchen. I believe this all gives health to us, even to recover bones. (I6)

It is noticed in the statements of the participants of the present study that the natural feeding is recognized as something healthy, being a pleasant habit. This group identified subjective aspects of the daily life lived from the practices and knowledge of the elderly about their self-care. It is understood that the context of the fall must be embedded in the practices and knowledge to be incorporated by the elderly and their families.

The speeches in this category allowed us to understand that self-care favors and is favored by empowerment, insofar as the elderly person appropriates knowledge that they believe are beneficial to their health. Thus, such knowledge can be strengthened to work on fall prevention aspects.

Fall prevention

The Fall Prevention category emerged from the testimonies, when the informants identified elements of prevention that could have helped to prevent the illness, evidenced in the statements of caregivers C6, C7 and the elderly I2, I6, I7 and I8.

[…] as she has Alzheimer’s all care of falling is important … could have a preventive action in the hospital room, as some restraint system […] could solve her not get out of bed. […] create an atmosphere of peace and tranquility … I closed the curtains, but now I think that curtain should have been open … maybe she wouldn’t have fallen. (C6)

[…] safety bars in the bathroom, type of footwear, removal of carpets, careful step, floor, stairs, this all I consider basic and had already arranged well before she fell. […] I think that chair in her case is something important. […] it has to be a steady chair, because my mother is heavy. I had these basic cares as she began to show more fragility. (C7)

“Ando devagar porque já tive pressa...” [freely translated as “I’m slow because I’ve been in a hurry..."], this song says a lot about my life. Now is to walk slowly and look at the landscape … and not to hurry. (I2)

I fell because I was anxious and hurried […] I am a carpenter. I make dollhouses and I got a very large order […] and to take care of the request I walked inside the house, going up and down some steps that have from the kitchen to the area … (I6)

I could have prevented if I’d done things more calmly. The day I fell I went very fast […] because I wanted to give the medicine to my husband he has to take at 8:00 in the morning. (I7)

[…] as prevention of this fall on the street I should have left the car with the help of someone …. In the house … shouldn’t have facilitated … the wife has helped me, but said … “femme to try doing alone.” (I8)

Caregiver C6 linked her idea of fall prevention to the specific condition of her mother with Alzheimer’s disease who fell during hospitalization, ending the coma and death. The caregiver, somehow, expected the institution to have fall prevention strategies for people with dementia, demonstrating the presence of institutional vulnerability to which the elderly woman was exposed.

For the caretaker C7 to prevent is to “provide what is necessary” as a way to control the environmental risk factors, demonstrating having knowledge of how to organize the domestic structure in order to avoid falling.

The elderly I2 mentioned that prevention is “not being in a hurry” and that hurry was a factor associated with the causes of the various falls that had been in the last 2 years, reflecting their current sense of preservation and self-care, but that did not prevent the various falls occurred.

In the same way, it is also worth mentioning the speech of the elderly woman, who fell between the kitchen and the
The accident by falls represents a negative impact on the lives of older people and caregivers by causing increasing injuries, disabilities, treatment costs and death. Fall hospitalization can be considered a factor for change. After the event, its negative consequences provoked in the elderly and caregivers' visibility in relation to risk factors and reflection about care and prevention.

In this context, the repercussions of injuries experienced at a later age are more severe than among younger people, requiring a long period of hospitalization, rehabilitation treatment and a greater risk of dependence. Such a condition has a direct impact on the family, especially on the next of kin, leaving those who take on new routines due to the necessary rehabilitation of the elderly person and often carry extraordinary expenses to meet the need for special care. The occurrence of immobility and dependence also represent a loss for the family and the caregiver. The occurrence of falls can lead to physical and psychological consequences that significantly compromise the autonomy, independence and functionality of the elderly person, representing a decrease in the quality of life. Its occurrence can generate from small bruises, fractures, reduction of physical capacity, greater dependence, decline in health and reason for hospitalization or institutionalization to psychological and social problems such as depression, isolation, alteration in body image, low self-esteem, besides the risk of developing the fear of falls syndrome. In the study by Celich, it was possible to identify risk factors for falls in 104 elderly people living in the community in the southern region of the country. The results revealed that 63.46% of the elderly reported having fallen and 36.53% had suffered fractures. The elderly showed that the fractures brought limitations to the daily life, among which were related to walking injury, difficulty in carrying out personal hygiene and difficulty in carrying out domestic activities.

Faced with the magnitude of the event, individuals' lives, the changes and reflections caused by them, it is necessary to keep updated of the discussion about disabling events and the need to preserve the autonomy and independence of the elderly, in the sense that he retakes the control over the accomplishment of the basic activities of the daily life and the instrumental ones, being independent in its functional capacity. Functional capacity refers to the evaluation of the potential that an elderly person has to perform daily activities, as well as the need for assistance in the execution of these activities. These activities are related to basic activities and instrumental activities of daily living. The fall causes changes both for the elderly and the caregiver, marking a new moment in the path of health and sickness of each one. The post-fall can still arise as a restrictive or propositional event of new experiences. The emergence of fear of new falls, fear of dependency, negative self-perception of health, adoption of a more preventive stance and participation in the construction of support networks are part of the scenario of outcomes and prevention.

In a population-based epidemiological study conducted in the capital of Santa Catarina known as EpiFloripa, it was observed that the majority of the elderly usually fall at home (43.2%), in circumstances of stumbling and slipping and due to hurry, by the hands and irregularities on the floor. Thus, the risks and vulnerability of the fall occur as the elderly experience various levels of exposure to the event, increasingly compounding the result of this vulnerable condition, in the very process of living the elderly person. It should be stressed that preventive strategies are loaded with interventions based on the identification of exposure to risk factors, but it is not a simple task to always be aware of all the possible risks that threaten people's lives. Vulnerability situations are not always recognized by the elderly, because often he himself does not perceive the risks of being elderly and so little is perceived elderly.

It is understood that situations of vulnerability and risks of falling are not evident in the daily lives of the elderly and caregivers, so that they can recognize them constantly. However, it is understood that the elderly, family, health services and community can adopt preventive strategies, which are incorporated into the daily life, through an educational process of empowerment. In this context, knowledge will instrumentalize the various actors to levels of daily management of healthy practices that include the interpretation of the dynamics of the elderly in their home environment and beyond. To prevent is to anticipate something that is known, avoiding the situation of illness and injury. Prevention actions are necessary, from the evaluation of individual and domestic risks by the health services to the actions of health education for the empowerment of the elderly and caregivers. In this way, prevention strategies are related in an interfacing process that goes through professional actions and that adjust to the degree of illness and health. It is essential that the relatives of the elderly be involved in prevention and care actions in order to facilitate the identification of risk factors, the selection of strategies to reduce their occurrence and the follow-up of the injuries related to them. The family acts as a protection factor and in the presence of diseases and disabilities, the change of intrafamily roles occurs, with possible choice of the main caregiver. However, one should not exclude the right of the elderly to care for themselves, it is important to empower and support self-care.

Prevention is also to provide for clinical and interventional measures that focus the problem and aggravate health in an early manner. The model proposed by Leavell and Clark in 1965 analyzed the three different levels of disease prevention, such as: primary, secondary and tertiary prevention. Primary prevention is characterized as an idea of the level of protection...
against a pathological agent and agents of the environment, in which are found the measures to increase health, such as educational actions and counseling at all therapeutic moments between professionals and users. In secondary prevention is the presence of a diagnosis and indication of treatment for a health problem that has already been established. In tertiary prevention, rehabilitation measures regarding illness are identified.

Awareness of falling as a health hazard does not only depend on an event or information. In order to promote prevention actions, it is necessary to consider the complexity of the multiple factors involved, and especially not to devalue the functional independence capacity of the elderly. Financial investments are necessary so that preventive measures are actually taken in the context of the fall, in order to preserve the functional capacity of the elderly in order to allow them to live longer and better. With longevity is meant the adoption of measures of early detection, risk assessment and monitoring of diseases as a focus of attention to health.

**Limitations of study**

Some elderly people were unable to be in the interview due to neuropsychomotor limitations; in this case, the interviewee was the caregiver.

**Contributions to the area of nursing and public health**

It is understood that the adoption of preventive measures, individual and collective, could affect the situations of vulnerability of the elderly population, minimizing hospital costs and unfavorable effects. Among these measures, we highlight the evaluation of comorbidities present in the life of the elderly, which potentiate the harmful consequences of a fall, as well as the analysis of structural characteristics of the environment, both inside and outside the home.

Analyzing these factors, according to the reality of each elderly person, can contribute to full, comprehensive and more determined care at all levels of prevention. These strategies make possible the maintenance of the autonomy of the elderly, the continuity of family and social coexistence, provoking reflections on prevention practices.

In this sense, it is also suggested to health professionals, including nurses, the production of research aimed at the elderly, developing intervention studies to prevent falls that can be applied in clinical practice and that make it possible to manage vulnerability.

**FINAL CONSIDERATIONS**

In this study, it was possible to know the repercussions of the fall, reported by elderly and caregivers, from which the health condition was impaired, self-care due to the vulnerability situation and the functional capacity of the elderly to perform daily life activities. The repercussions of the fall were evidenced also in the naturalization of the phenomenon, as if it were part of the life of the elderly and the passivity of the same with the harmful consequences of the event.

It was noticed that the fall began to be valued by the group studied, after which consequences considered more serious, for example, needing hospitalization and surgery. The study participants, given the degree of importance they attributed, did not value recurrent falls. It is believed, then, that the fall gained visibility in the face of painful repercussions. It was observed that the repercussion of the fall was positive, when it led the participants to reflect on preventive aspects associated to the fact that the elderly had more tranquil behavior to perform daily activities.

Thus, the training and empowerment of the elderly and caregivers and the permanent education of health professionals, mainly Primary Health Care, are crucial so that they can understand the magnitude of the event with a view to recognizing, valuing and intervening in situations of risk with focus on prevention and health care.

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