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Evaluation of the knowledge of nurses on the prevention of falls in the elderly in the hospital environment

falls

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RESUMO | Objetivo: avaliar o conhecimento de enfermeiros sobre a prevenção de quedas em idosos no ambiente hospitalar. Método: estudo descritivo-exploratório, de abordagem qualitativa, realizado junto a 10 enfermeiros no período de agosto de 2021, no hospital regional da cidade de Parnamirim/Rio Grande do Norte. Utilizou-se um roteiro de entrevista semiestruturada e análise de conteúdo de acordo com a proposta de Bardin. Sendo aprovado pelo comitê de ética da LIGA Norte Riograndese Contra o Câncer, sob o CAAE: 48345621.3.0000.5293. Resultados: identificou-se que as maiores causas de quedas em idosos estão relacionadas a estrutura física e reações medicamentosas, a não implementação de um protocolo de prevenção de quedas, falta de investimento e recentemente as consequências da pandemia do sars-cov-2. Conclusão: evidenciou-se que o enfermeiro conhece seu papel na prevenção de quedas em idosos, entretanto, algumas barreiras limitam sua atuação nesse cenário, como sobrecarga de trabalho, estrutura física e falta de insumos.
Descritores: Idoso; Saúde do Idoso; Envelhecimento; Acidentes por Quedas; Enfermagem.

ABSTRACT | Objective: to evaluate the knowledge of nurses about the prevention of falls in the elderly in the hospital environment. Method: descriptive-exploratory study, with a qualitative approach, conducted with 10 nurses in august 2021, in the regional hospital of the city of Parnamirim/Rio Grande do Norte. A semi-structured interview script and content analysis were used according to Bardin's proposal. Being approved by the ethics committee of LIGA Norte Riograndese Against Cancer, under the CAAE: 48345621.3.0000.5293. Results: it was identified that the major causes of falls in the elderly are related to physical structure and drug reactions, the non-implementation of a protocol to prevent falls, lack of investment and recently the consequences of the pandemic of sars-cov-2. Conclusion: it was evidenced that nurses know their role in the prevention of falls in the elderly, however, some barriers limit their performance in this scenario, such as work overload, physical structure and lack of insum.
Keywords: Elderly; Elderly Health; Aging; Accidents by Falls; Nursing

RESUMEN | Objetivo: evaluar el conocimiento de las enfermeras sobre la prevención de caídas en ancianos en el ámbito hospitalario. Método: estudio descriptivo-exploratorio, con enfoque cualitativo, realizado con 10 enfermeras en agosto de 2021, en el hospital regional de la ciudad de Parnamirim/Rio Grande do Norte. Se utilizó un guión de entrevista semiestructurado y un análisis de contenido de acuerdo con la propuesta de Bardin. Aprobado por el comité de ética de LIGA Norte Riograndese Contra el Cáncer, bajo el CAAE: 48345621.3.0000.5293. Resultados: se identificó que las principales causas de caídas en los ancianos están relacionadas con la estructura física y las reacciones a los medicamentos, la no implementación de un protocolo para prevenir caídas, la falta de inversión y recientemente las consecuencias de la pandemia de sars-cov-2. Conclusión: se evidenció que las enfermeras conocen su rol en la prevención de caídas en los ancianos, sin embargo, algunas barreras limitan su desempeño en este escenario, como la sobrecarga de trabajo, la estructura física y la falta de insume.
Palabras claves: Ancianos; Salud de las Personas Mayores; Envejecimiento; Accidentes por Caídas; Enfermería.

Cleisla Daniel Siqueira

Nurse. Graduation in Nursing, Centro Universitário Maurício de Nassau, Natal/RN, Brazil. Member of the Extension Project Care Safe Work Group/UFRN. She served as administrative director of the Academic League of Collective Health at the Federal University of Rio de Janeiro (LASC-UFRJ).
ORCID: 0000-0002-8610-9538

Flávia Danielli Martins Lima

Nurse. PhD in Nursing from the University of Lisbon/Portugal. Specialist in Data Analysis in Social Sciences by the University Institute of Lisbon-ISCTE/Portugal. Specialist in Urgency and Emergency at Faculdade

Integral (FACID). Master in Management and Economics of Health Services from the University of Porto/Portugal. Professor of the Nursing course at the Maurício de Nassau University Center, Natal/RN, Brazil. Nurse at the Family Health Strategy in the city of Natal/RN.
ORCID: 0000-0003-1630-0952

Geórgina Araújo Diniz

Nurse. Graduation in Nursing, Centro Universitário Maurício de Nassau, Natal/RN, Brazil. Post-Graduate Student in Auditing in the Nursing Sector at the FAVENI University Center.
ORCID: 0000-0001-5668-2889

Annyele Jéssica Toscano da Silva

Nurse. Graduation in Nursing, Centro Universitário Maurício de Nassau, Natal/RN, Brazil. Postgraduate student in Urgency and Emergency at the FAVENI University Center
ORCID: 0000-0003-2987-6762

Jackson de Oliveira Pontes

Nurse. Graduation in Nursing, Centro Universitário Maurício de Nassau, Natal/RN, Brazil. Postgraduate student in Oncology Nursing at Pitágoras Unopar University; Occupational Nursing by the Nossa Senhora de Todos os Povos Trilogic College; and Health Auditing by the Faculty Verbo Educacional.
ORCID: 0000-0001-9988-0068

Cecília Olívia Paraguai de Oliveira Saraiva

Nurse. Doctor and Master in Nursing by the Postgraduate Program in Nursing of the Health Sciences Center of the Federal University of Rio Grande do Norte - PPGENF/UFRN. Specialist in Quality in Health and Patient Safety at Fundação Oswaldo Cruz (FIOCRUZ) Assistant Professor at the Department of Public Health at UFRN. Professor of the Postgraduate Program in Quality Management in Health Services (PPG QualiSaúde/UFRN). Researcher at the Research Group on Quality Improvement in Health Services - QualiSaúde. Safe Care GT Coordinator. Member of the Public Policies GT and the Natal Nucleus of the Brazilian Network of Nursing and Patient Safety (REBRAENSP). Member of the Brazilian Society for the Quality of Care and Patient Safety (SOBRASP).
ORCID: 0000-0003-4225-5194

INTRODUCTION

The physiological aging of an organism causes a series of changes in the organic and mental functions of an individual. [1] Among the consequences resulting from aging are the dysfunctions that occur in the organs and functions of the elderly, such as changes in the visual, vestibular and proprioceptive systems, causing posture and balance disorders. [2]

Imbalances, in turn, have as their greatest consequence the fall, which is defined by the Brazilian Society of Geriatrics and Gerontology (SBGG - Sociedade Brasileira de Geriatria e Gerontologia) as "The unintentional displacement of the body to a level below the initial position with inability to correct it in a timely manner, determined by multifactorial circumstances compromising stability". [3:3]

With regard to prevalence, it is estimated that falls are the second most common cause of death among the elderly in the world. [4] Among the consequences it can cause, bruises and bleeding are the most prevalent. [5] Another relevant problem refers to post-fall rehabilitation,

which can occur slowly, and in the case of prolonged immobility, lead to complications such as venous thromboembolism, pressure ulcers and urinary incontinence. [3]

Thus, it is necessary to have training and education on an ongoing basis for professionals who care for these elderly people. However, the reality faced is still due to mishaps such as failures to fill out the medical records, history of the occurrence of the fall event (shift, location, severity) and recorded data on how the outcome of a given case took place. [6]

Thus, the present research has relevance with regard to the context of public, economic and social health, since it will seek to promote a more accurate knowledge on the subject, which is a subject that still does not receive due priority and necessary interventions. In this way, the study aims to evaluate nurses' knowledge about the prevention of falls in the elderly in the hospital environment.

METHOD

This is a research with a qualitative approach of a descriptive-exploratory nature in order to meet the objectives proposed in this study.

Nurses who worked at the regional hospital located in the city of Parnamirim, metropolitan region of Natal/Rio Grande do Norte and who were performing their work activities during the period of data collection participated. Nurses who did not perform a care function and those who had an employment relationship for less than 2 years were excluded.

Subsequently, contact was made with the participants, who received all the information about the research and, after accepting to participate and signing the Free and Informed Consent Form (FICF), a form was filled out about the sociodemographic data of the interviewees, in addition to a semi-structured interview containing open questions formulated by the researchers. The research took place in August 2021, in the morning and after-

noon shifts, with ten nurses.

The material obtained was through recording the speeches of the participants for later literal transcription of the speeches. After that, an analysis was made through the proposal of Bardin [7] using the content analysis technique, with application of the word association test and soon after, organization of analyzes with decoding of data into categories.

Data collection took place after approval by the ethics committee of LIGA Norte Riograndense Contra o Câncer on August 9, 2021, under opinion number: 4,894,780 and CAAE: 48345621.3.0000.5293.

To ensure confidentiality, nurses were identified with the letter "E" followed by Arabic numerals in the order of the interviews.

RESULTS

Among the research participants, the majority were female (80%). The predominant age group was between 31 and 40 years old (40%), followed by those aged between 41 and 50 years old (30%). With regard to education, there was a greater number of respondents who had completed postgraduate studies (70%). In addition, it was noted that 50% of the participants presented their marital status as single and regarding the time of employment, it was found that 60% of the interviewees had between 2 and 3 years (60%). (Table 1)

After analyzing the interviews, the following thematic categories emerged: Causes of falls in the elderly in the hospital environment; obstacles encountered in the implementation of a protocol aimed at preventing falls and limits and possibilities for nurses to act in the control of falls in the elderly.

Category 1 - Causes of falls in the elderly in the hospital environment

In this category, the nurses' statements show that the factors that can lead

to the fall event are common among most elderly people. Another contributing factor to the risk of falls is due to the work overload on the part of nurses and their staff.

> First, one of the biggest causes is hospital equipment, beds without rails, slippery floor, hypoglycemia that the patient has, dizziness, reaction to some medication, I think these are the biggest causes, you know? Sometimes he gets disoriented, wants to get up alone and ends up falling down. (E2)

> I think the issue of training technicians, who end up overloading themselves with patients and often they don't have this care, it's more that part of the routine, check vital signs, see the medication and that's it, the nursing team itself fails a lot in this sense. Our class is overloaded with work so there isn't all that caution it should be. (E6)

Category 2 - Obstacles encountered in the implementation of a protocol aimed at preventing falls

This category reinforces that most professionals corroborate the importance and need to implement a protocol aimed at preventing falls, however, there are still obstacles to be overcome for the implementation and execution in an effective way.

> They are important not only in preventing falls, but as a whole. I think that everything that is filed is important because you know what is going to follow, you know what is required, and you will have a guideline for what you should do. That becomes an issue in which you can improve, and even if you have doubts about the procedure of something, there will be in that protocol what to

Table 1 - Sociodemographic characterization of the population studied. Rio Grande do Norte (RN), Brazil, 2021.		
Category	n	Porcentage
Gender		
Male	2	(20%)
Female	8	(80%)
Age Group		
18 to 30	2	(20%)
31 to 40	4	(40%)
41 to 50	3	(30%)
Above 50 y/o	1	(10%)
Education		
Complete High School	1	(10%)
Post-graduation	7	(70%)
Master's degree	1	(10%)
PhD	1	(10%)
Marital Status		
Single	5	(50%)
Married/ Stable Union	4	(40%)
Widow(er)	0	(0%)
Divorced	1	(10%)
Employment relationship time		
2 to 3 years	6	(60%)
4 to 6 years	3	(30%)
7 to 10 years	0	(0%)
Above 10 years	1	(10%)
Source: The authors. Parnamirim (RN), Brazil, 2021.		

follow. (E5)

> Protocol is the basis of any type of security, right? Both for the team to protect themselves, which is following a protocol, and for the patient himself. They even tried to implant it, but as I said, the least it should have, which is a safety grid on the stretcher, doesn't exist. They made a checklist so we could always be watching, but it didn't work out because we didn't have the minimum. There is even a lack of sheets, the situation here is very precarious. (E6)

> [...] It's very important, we even started a period, but nothing was advanced because it was at the beginning of the pandemic, so we left this protocol aside, but the ideal would be to go back. (E10)

Category 3 - Limits and possibilities of the nurse's role in controlling falls in the elderly

This category clarifies that nurses act within their possibilities to avoid the occurrence of falls and have knowledge about measures to be adopted to provide

comprehensive care. However, the lack of human resources, inadequate structures and the professional devaluation itself act as obstacles to this process.

To prevent this, we carried out the locomotion of the patient with help, the use of beds with rails, the question of checking how much pressure and when he got up, have time for circulation, because sometimes the patient has been bedridden for many days and when he gets up he has postural hypotension, move away objects that the patient may hit and observe if the floor is wet. (E4)

DISCUSSION

Annually, about 30% to 50% of institutionalized elderly people suffer falls and 40% of them still experience recurrent falls. Falls are among the main causes of trauma among the elderly, being considered the sixth leading cause of death from accidental and non-accidental injuries. [8]

As evidenced in category 1, it is common agreement among nurses that most causes of falls in the elderly are similar within the hospital context. Factors may be associated with the person, such as drug use and ambulation disorders. It is known that it is also essential to identify extrinsic risk factors for falls in the elderly in order to recognize the existing risks early and, immediately, eliminate or reduce them using appropriate measures to prevent the incident. [9]

In addition, hospitalized patients have a high risk of falls due to the unknown environment and the clinical situation in which they find themselves. [10] According to some authors, the nursing professional is limited by the great demand for clinical care, which makes nursing care abundantly difficult. It should be noted that, often, the nursing professional has more than one job, has high turnover due to the low remuneration usually applied or to the working conditions in the institution

and a high level of stress. [11]

Another relevant factor is due to the fact that the nurse does not have only patient care as an attribution, but includes the training and qualification of nursing professionals, management of inputs and materials, guidance of patients and family members, thus promoting multiprofessional management in favor of the patient. [12]

A study shows that caregivers' knowledge is superficial and limited to common sense information, where their attitudes are mostly not favorable to the prevention of falls, thus, there is a need for knowledge to be better in quantity and quality, aiming to guarantee adequate care for the elderly and providing positive effects in the prevention of falls. [13]

Category 2 emphasizes the difficulties encountered in implementing a protocol aimed at preventing falls, as well as its relevance and real need. The elderly do not characterize the hospital environment as a favorable place for the risk of falls and, by disregarding the risk, prevention measures may be neglected. That said, the strategies and approaches developed by a multidisciplinary team are essential. [14]

Despite the relevance of the problem and the existence of hospital institutions that develop protocols for managing falls, the interviewees' statements emphasize that there are still obstacles to be overcome, such as lack of investment, availability of supplies and recently the scenario of a pandemic.

Authors recently evaluated that when dealing with the COVID-19 pandemic, it is noted that health professionals have been undergoing changes in their working hours. With the rapid increase in the number of patients and the low supply of health services, the pandemic generated work overload, physical fatigue and emotional disturbances, factors that are associated with a decrease in the quality of life of nursing professionals and that impact on the quality of care provided. [15]

Category 3 expresses the limits and possibilities of the nurse's role in con-

trolling falls in the elderly. In practice, it is observed that nurses act within their possibilities to prevent the occurrence of falls and have knowledge about measures to be adopted to provide comprehensive care.

Authors agree with this theme and emphasize that surveillance to prevent the occurrence of falls should also be one of the priorities of nursing care from the moment the patient is admitted to the health institution. From the mapping of the risk of falling by the nurse, he will be able to prepare an action plan and, later, evaluate the results of the assistance provided. [16]

In a study carried out at a university hospital in southern Brazil, it was observed that the most prevalent nursing interventions and care prescribed for patients with ND Risk for falls were: keep the bed rails high, guide the patient/caregivers about the risks and prevention measures, keep the bell within reach of the patient and ensure that their belongings are close to them. However, it is noteworthy that implementing effective interventions to reduce falls is a challenge due to the complexity of the event and the need for interdisciplinary collaboration. [17]

In comparison with other studies, it is clear that the obstacles to preventing falls are common in the management of several nurses. Authors state that nurses list the insufficiency of nursing staff, the deficit in support from top management and the lack of adherence of care workers as important obstacles to the implementation of patient safety strategies. [18]

Finally, it is emphasized that nursing professionals in general have a clear conception of their close bond with the patient and their role in the prevention of falls. It is up to them to direct their gaze to the attention, care, encouragement and appreciation of the life history of the elderly. [19] It is also important to make society aware so that the fall event is not treated only after its occurrence, but rather to emphasize prevention methods, promoting a better quality of life for the

elderly. [20]

CONCLUSION

It was evidenced in the research that nurses know their role in preventing falls in the elderly, however, some barriers limit their performance in this scenario, such as work overload, physical structure, lack of supplies and recently the conse-quences caused by the SARS-CoV-2 pandemic.

In addition, it made it possible to understand not only the preventive measures that nurses implement in their work environment, but also their limits of action and their possibilities when referring to the reality of their care routine.

Some limitations were found during the elaboration of the research, such as the number of nurses available to participate in the interviews and the limited availability of bibliographic references related to the specificity of the hospital axis.

In this way, the need to promote continuing education with nursing professionals is reinforced, as well as the realization of future studies with the purpose of deepening the scientific production directed to the theme.

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