EVALUATION OF THE RISK OF FALLS IN HOSPITALIZED ELDERLY PEOPLE
AVALIAÇÃO DO RISCO DE QUEDAS EM IDOSOS HOSPITALIZADOS
EVALUACIÓN DEL RIESGO DE CAÍDAS EN ANCIANOS HOSPITALIZADOS

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ABSTRACT

Objective: to evaluate the risk of falls in hospitalized elderly patients in a public teaching hospital. **Method:** a quantitative, descriptive, cross - sectional study that will be developed with elderly patients hospitalized at the Clinical, Surgical and Infectious Diseases Hospitals of a Public Teaching Hospital. For the collection of data, a structured script will be used to obtain personal and social information and the health status of hospitalized elderly people, the Mini Mental State Examination, to evaluate cognitive function, and the Morse Fall Scale, translated and adapted in a cross-cultural to the Portuguese language, for the evaluation of the risk of falls. Data will be analyzed presenting absolute and percentage frequencies, prevalence ratio and their respective confidence interval for study factors that may influence the risk of falls. The research project was approved by the Ethics and Research Committee of the institution under CAAE No. 62128816.0.0000.5183. **Expected results:** it is expected that the results will help the Nursing team to identify elderly patients at risk of falls, prioritizing those with high risk classification, by applying the Morse scale. **Descritores:** Nursing; Elderly; Accidental Falls; Risk Factors; Hospitalization; Inpatients.

RESUMO

Objetivo: avaliar o risco de quedas dos pacientes idosos hospitalizados em um hospital público de ensino. **Método:** estudo quantitativo, descritivo, de corte transversal, que será desenvolvido com idosos hospitalizados nas unidades de internação Clínica, Cirúrgica e de Doenças Infetoparasitárias de um hospital público de ensino. Para a coleta de dados, serão utilizados um roteiro estruturado, para a obtenção das informações pessoais, sociais e o estado de saúde dos idosos hospitalizados, o Mini Exame do Estado Mental, para avaliar a função cognitiva, e a Morse Fall Scale, traduzida e adaptada de forma transcultural para a língua portuguesa, para a avaliação do risco de quedas. Os dados serão analisados apresentando as frequências absolutas e percentuais, razão de prevalência e seu respectivo intervalo de confiança para os fatores de estudo que possam influenciar no risco de quedas. O projeto de pesquisa foi aprovado pelo Comitê de Ética e Pesquisa da instituição sob o CAAE n.º 62128816.0.0000.5183. **Resultados esperados:** espera-se que os resultados venham auxiliar a equipe de Enfermagem a identificar os pacientes idosos com risco de quedas, priorizando aqueles com classificação de alto risco, pela aplicação da escala de Morse. **Descritores:** Enfermagem; Idosos; Acidentes por Quedas; Fatores de Risco; Hospitalização; Pacientes Internados.

RESUMEN

Objetivo: evaluar el riesgo de caídas de los pacientes ancianos hospitalizados en un hospital público de enseñanza. **Método:** el estudio cuantitativo, descriptivo, de corte transversal, que será desarrollado con ancianos hospitalizados en las unidades de internación Clínica, Quirúrgica y de Enfermedades Infetoparasitarias, de un hospital público de enseñanza. Para la recolección de datos, se utilizarán un guión estructurado para la obtención de las informaciones personales, sociales y el estado de salud de los ancianos hospitalizados, el Mine Examen del Estado Mental para evaluar la función cognitiva y la Morse Fall Scale, traducida y adaptada de forma transcultural al portugués, para evaluar el riesgo de caídas. Los datos serán analizados presentando las frecuencias absolutas y porcentuales, razón de prevalencia y su respectivo intervalo de confianza para los factores de estudio que puedan influenciar en el riesgo de caídas. El proyecto de investigación fue aprobado por el Comité de Ética e Investigación de la institución, bajo el CAAE: n. 62128816.0.0000.5183. **Resultados esperados:** se espera que los resultados vengan a auxiliar al equipo de Enfermería en la identificación de los pacientes ancianos con riesgo de caídas, priorizando aquellos con clasificación de alto riesgo, por la aplicación de la escala de Morse. **Descritores:** Enfermería; Anciano; Accidentes por Caídas; Factores de Riesgo; Hospitalización; Pacientes Internos.

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INTRODUCTION

The increasing number of documented cases of adverse health care events has generated discussions on patient safety at the international and national levels. The high complexity that integrates the hospital environment is the target of several events, which exposes the patient to risk, increasing the likelihood of an incident occurring during health care.¹⁻²

In April 2013, the National Patient Safety Program (NPSP), was instituted with the publication of Ministerial Order No. 529 of the Ministry of Health, aiming at reducing adverse events related to the patient which represent a high morbidity and mortality in health systems. Thus, more attention was paid to the issue by professionals and the community, with the importance of addressing and promoting patient safety, aiming to contribute to the qualification of care in all health institutions in the country.³

Among the most common adverse events reported are falls. In the Brazilian hospital universe, it represents the third largest notification by the Notivisa System of the National Agency of Sanitary Surveillance (ANVISA). The system points out that, from March 2014 to March 2017, more than 12 thousand falls were reported and, for the most part, they occur due to lack of balance.⁴

Fall is defined as an event in which the patient involuntarily falls on the ground or on another lower surface. This event translates into a multifactorial event of intrinsic and extrinsic origin that must be carefully contextualized and related to the individual characteristics of each.⁵

Intrinsic factors can be defined as those related to the subject itself, and may present a reduction of the function of the systems that make up the postural control, diseases, cognitive and behavioral disorders, presenting an inability to maintain or to recover the balance, when necessary.⁶ Causes intrinsic: physiological changes that arise with the natural process of aging (eg, visual and/or auditory deficiency); pathological changes; psychological factors; cognitive deficit and muscle weakness. The extrinsic ones are due to the interaction of the individual with the environment, such as the quality of the floor and poor lighting, slippery floors and lack of handrails, inadequate furniture and spaces, obstacles in the way, absence or assistance inadequate technique during locomotion, among others.⁷⁻⁸

The high prevalence of falls can have serious repercussions, especially in elderly

patients, which may result in prolonged hospitalizations, institutionalization, restriction of activities and mobility, changes in balance and postural control, social isolation, anxiety and depression, becoming a problem of enormous relevance to public health, due to their frequency, morbidity and high social and economic cost.⁹⁻¹⁰

There are tools that evaluate the risk that patients have of suffering falls during their hospitalization and that provide the professionals with a systematic evaluation, allowing the choice of the strategy to be developed for prevention, promotion and control, according to the degree of risk that each patient presents. We highlight the Morse Fall Scale, translated and adapted in a cross-cultural way into the Portuguese language by Urbanetto et al (2013), noting its great feasibility of application in the Brazilian reality. This translated instrument allows a more qualified and systematized evaluation of the reality of falls in Brazilian health institutions, allowing the establishment of strategies to reduce this event during hospitalization.¹¹

The use of specific instruments for the evaluation of the risk of falls helps to theorize the prevention and / or reduction of falls in the hospital context, besides valuing the Nursing process, allowing the nurse to plan and direct the care in order to meet the needs of each patient, according to the risk assessment.

OBJECTIVE

- To evaluate the risk of falls in hospitalized elderly patients in a public teaching hospital.

METHOD

This is a project presented to the Graduate Program in Nursing of the Federal University of Paraíba - PPGEnf / UFPB. A quantitative, descriptive, cross-sectional study that will be developed with hospitalized elderly patients in the Clinical (Alas A and B), Surgical and Infectious Diseases Hospital Units of a Public Teaching Hospital located in the city of João Pessoa-PB. The study population will comprise elderly people of both sexes hospitalized in the proposed units and the sample will be selected for accessibility or convenience, considering the inclusion and exclusion criteria, based on the number of visits performed at the institution in the period from January to December 2016.

As inclusion criterion, the elderly will participate in the study from 60 years old, with preserved cognition, according to the

Mini Mental State Examination (MMSE). Patients who are unable to fall, such as quadriplegic, comatose, sedated or non-motorically active patients, will not be excluded and will not apply to the Morse Fall Scale.

The data will be collected by the masters and trained employees through an interview subsidized by structured instruments contemplating questions pertinent to the proposed objective of the study. The instruments used to guide the investigation will be: the structured script, to obtain the personal and social information and the state of health of hospitalized patients; the Mini Mental State Examination, to evaluate cognitive function, and the Morse Fall Scale, translated and adapted in a cross-cultural way into the Portuguese language, for the evaluation of the risk of falls.

The data will be stored in Microsoft Office Excel® 2010 spreadsheet with double typing, containing the coding and a dictionary of all variables. Subsequently, the data will be imported into the Statistical Package for Social Science (SPSS), version 20.0, and analyzed presenting the absolute and percentage frequencies, prevalence ratio and their respective confidence interval for study factors that may influence the risk of falls. The Multivariate Correspondence Analysis technique will be applied to evaluate the association between factors and the risk classification, as well as the risk assessment using the statistical model Multinomial Logistic Regression. To determine which variables will be used in this model, a study of the association between the categorical variables represented by the factors of interest and the dependent risk of categorized falls (low, moderate and high risk) will be performed. This association will be determined by applying the chi-squared test and, when it does not meet the conditions for its application, Fisher's exact test or the Likelihood Ratio test will be used, considering its respective assumptions. In all statistical tests, the level of significance adopted will be $\alpha < 0.05$.

The ethical precepts set forth in Resolution No. 466 of December 12, 2012, regulated by the National Health Council, will be followed strictly following all its recommendations regarding the standardization of research on human beings. 12 Participants will be informed on the objectives of the research, as well as its possible risks, benefits and confidentiality and, if accepted, will sign the Informed Consent Form (TCLE). The project was approved by the Research Ethics Committee

of the institution under CAAE No. 62128816.0.0000.5183, on December 23, 2016.

EXPECTED RESULTS

It is hoped that the results found in this study will help the Nursing team to identify elderly patients at risk of falls, prioritizing those with high risk classification, through the application of the Morse scale, so that interventions can be performed that minimize the risk of falls. occurrence of falls in the hospital environment. The fall is related to several factors, being fundamental the acquisition of this knowledge to establish an efficient prevention program. Such affirmations are due to the dimension of the problem of falls and to the understanding of Nursing actions regarding the need for care required by the elderly.

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