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Nursing diagnoses and interventions in frail elderly according to henderson's conceptual model

Diagnósticos e intervenções de enfermagem em idosos frágeis segundo o modelo conceitual de henderson

Diagnósticos e intervenciones de enfermería en ancianos frágiles según el modelo conceptual de henderson

ABSTRACT

Objective: To identify the main Nursing Diagnoses (ND) in frail elderly, proposing interventions according to Henderson's conceptual model. **Method:** This is a cross-sectional, descriptive study with a quantitative and qualitative approach, conducted with 25 elderly people from a long-term institution. A sociodemographic and economic questionnaire, the Mini Mental State Examination and the Edmonton Frailty Scale were applied. To elaborate the statements of nursing diagnoses and interventions, the ICNP® was used, version 2017. The data were processed in the SPSS, version 20 and analyzed through descriptive statistics. **Results:** The most frequent ND were: Impaired gait (94.4%), Risk of falling (94.4%), Impaired memory (94.4%), Lack of appetite (66.7%) and Depressed mood (50%). **Conclusion:** The execution of the study showed that 72% of the participants presented frailty, where it was possible to identify 8 ND among the frail elderly, enabling the formulation of interventions in view of care needs.

DESCRIPTORS: Nursing Diagnosis; Elderly; Fragility.

RESUMEN

Objetivo: Identificar los principales Diagnósticos de Enfermería (DE) en ancianos frágiles, proponiendo intervenciones de acuerdo con el modelo conceptual de Henderson. **Método:** Se trata de un estudio transversal y descriptivo con un enfoque cuantitativo y cualitativo, realizado con 25 personas mayores de una institución a largo plazo. Se aplicó un cuestionario sociodemográfico y económico, el Mini Examen del Estado Mental y la Escala de Fragilidad de Edmonton. Para elaborar las declaraciones de diagnósticos e intervenciones de enfermería, se utilizó el CIPE®, versión 2017. Los datos se procesaron en la versión 20 de SPSS y se analizaron mediante estadísticas descriptivas. **Resultados:** Los DE más frecuentes fueron: Dificultad para la marcha (94,4%), Riesgo de caída (94,4%), Deterioro de la memoria (94,4%), Falta de apetito (66,7%) y estado de ánimo deprimido (50%). **Conclusión:** La ejecución del estudio mostró que el 72% de los participantes presentaban fragilidad, donde era posible identificar 8 DE entre los ancianos frágiles, permitiendo la formulación de intervenciones en vista de las necesidades de atención.

DESCRIPTORES: Diagnóstico de Enfermería; Ancianos; Fragilidad.

RESUMO

Objetivo: Identificar os principais Diagnósticos de Enfermagem (DE) em idosos frágeis, propondo intervenções segundo o modelo conceitual de Henderson. **Método:** Trata-se de um estudo transversal, descritivo com abordagem quantitativa e qualitativa, realizado com 25 idosos de uma Instituição de Longa Permanência. Foram aplicados um questionário sociodemográfico e econômico, o Mini Exame do Estado Mental e a escala de fragilidade de Edmonton. Para elaboração dos enunciados de diagnósticos e intervenções de enfermagem, empregou-se a CIPE®, versão 2017. Os dados foram processados no SPSS, versão 20 e analisados através da estatística descritiva. **Resultados:** Os DE mais frequentes foram: Marcha prejudicada (94,4%), Risco de queda (94,4%), Memória prejudicada (94,4%), Falta de apetite (66,7%) e Humor deprimido (50%). **Conclusão:** A execução do estudo evidenciou que 72% dos participantes apresentaram fragilidade, onde foi possível identificar 8 DE dentre os idosos frágeis, possibilitando a formulação de intervenções frente às necessidades de cuidados.

DESCRITORES: Diagnóstico de Enfermagem; Idoso; Fragilidade.

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INTRODUCTION

The Brazilian population is experiencing a demographic transition process, resulting from the reduction in mortality and birth rates. This scenario has contributed to a significant number of elderly people. ⁽¹⁾ According to projections, Brazil will be the sixth country in the world with the largest number of elderly people and by 2050 they will represent 18% of the total population. ⁽²⁾

Aging brings with it changes that directly interfere with health, causing impairment of physical and mental capacity. This reality makes the elderly dependent on carrying out activities of daily living. In these cases, the absence of home caregivers and family conflicts favor the demand for Long Term Care Institutions for the Elderly (LTCIEs), destined to the collective housing of individuals aged 60 years or over, who have or not family support and under conditions of freedom, dignity and citizenship. ⁽³⁾

The LTCIEs pose a challenge to the adherence of frailty syndrome among residents, since changes in aging itself and pre-existing diseases tend to worsen due to the conditions imposed in these environments. ⁽⁴⁾

Frailty is characterized as a non-optimal condition of the elderly, with a multifactorial and dynamic cause, resulting from the relationship of biological, psychological and social aspects throughout the life cycle. ⁽⁵⁾ It provides functional impairments and adverse health events and is considered a major cause of early mortality and morbidity in the elderly. ⁽⁶⁾ However, it can be reversible or delayed, through comprehensive multidisciplinary assessment and with the help of treatment

adapted to individual needs. ⁽⁷⁾ Its investigation enables the identification of frail elderly people and has been the focus of geriatrics and gerontology. ⁽⁸⁾

Nursing care is essential to provide quality of life to this population segment. For this, the Nursing Process, a methodological instrument that guides professional care, is seen as a fundamental tool to support the care provided by nurses to frail elderly people. It consists of five stages: Data collection, Nursing Diagnosis (DE), Planning, Implementation and Evaluation. The second stage, related to ND provides the individual's clinical judgment in the face of health problems and guides the development of Nursing Interventions (NIC) ⁽⁹⁾, whose terminologies can be found in the International Classification for Nursing Practice (ICNP[®]), which allows the development of a universal, precise and objective language, guaranteeing the continuity of care provided by the nursing team. ⁽¹⁰⁾

In the meantime, nursing care must be based on the theoretical and philosophical knowledge of the profession, involving, in addition to the use of terminology, nursing theories. The applicability of the Basic Human Needs Theory, proposed by Virginia Henderson, favors the search for autonomy and independence among frail elderly people, being of great relevance to the clinical practice of nurses. This theoretical model encompasses fourteen fundamental human needs, distributed into four components of care: Biological / Physiological, Psychological, Social and Spiritual / Moral. ⁽¹¹⁾

The knowledge of this public's needs, enables the improvement of comprehensive care and prevents the occurrence of

complications that aggravate the health condition ⁽¹²⁾. Thus, the objective was to identify the main nursing diagnoses (ND) in frail elderly, proposing interventions according to Henderson's conceptual model.

METHOD

This is a cross-sectional, descriptive study, with a quantitative and qualitative approach, carried out at an LTCIE, in the city of João Pessoa-PB, Brazil.

For the composition of the sample, the inclusion criteria were: being 60 years old or older and residing in the referred LTCIE. The elderly who had a diagnosis suggestive of dementia were excluded from the study, according to the results obtained in the Mini Mental State Examination (MMSE) ⁽¹³⁾, restricted to bed or chair and have verbal, visual and auditory impairment. Thus, the sample totaled 25 participants.

The survey was conducted in August 2019 and was supported by the following instruments: a sociodemographic and economic questionnaire, the MMSE to assess cognitive function and the Edmonton Frail Scale (EFS), to assess frailty. This scale was translated and cross-culturally adapted to the Portuguese language. The elderly with a score \geq seven were considered fragile. ⁽¹⁴⁾

After identifying the elderly with frailty and according to the clinical conditions observed according to fundamental human needs, according to Henderson's conceptual model, nursing diagnoses and interventions were prepared using the ICNP[®], 2017's version. ⁽¹⁵⁾

The data were organized in a spreadsheet in Microsoft Office Excel 2016 and processed using SPSS software,

version 20.0. For the analysis, descriptive statistics were used, with absolute and relative frequencies, means and standard deviation.

The ethical and legal precepts followed in investigations involving human beings were respected, in accordance with the guidelines established by Resolution 466/12 of the National Health Council.⁽¹⁶⁾ The study was approved by the Ethics and Research Committee of the Lauro Wanderley University Hospital of the Federal University of Paraíba, under opinion No. 3.449.338 and CAAE No. 13458419.6.0000.5183.

RESULTS

Of the 25 elderly people included in the sample, women (56%) stood out, the average age was 81.44 years (± 8.12), with regard to marital status (44%), they were single, (52%) illiterate and (84%) had an income of up to one minimum wage, with an average of R \$ 1,237.52 (\pm R \$ 583.97).

Frailty predominated in 72% of the participants, being possible to elaborate 8 DE and 12 NIC, which were categorized according to the components of nursing care, as shown in Chart 1.

DISCUSSION

It was observed that of the fundamental human needs, only 6 were impaired in the elderly, favoring the development of nursing diagnoses and interventions. Furthermore, the Spiritual / Moral Component has been preserved.

The "Lack of appetite" was an important ND, capable of supporting the development of nursing interventions aimed at preventing negative outcomes among the elderly.

The data obtained are similar to another national survey, in which the loss of appetite was shown to be accentuated among frail elderly people.⁽¹⁷⁾ Thus, weight monitoring and nutritional management among this population segment is essential.

Inadequate food consumption can favor malnutrition and increase the risk of mortality in old age. In Brazil, the risk of death in the elderly from this cause has been shown to increase, awakening the need for nurses to act in the face of reducing this problem in the elderly with frailty.⁽¹⁸⁾

The ND "Urinary incontinence" was found in 44.4% of frail elderly.

Studies indicate that frailty is strongly linked to urinary incontinence, and the identification of associated factors is crucial for the improvement of public policies aimed at the health of the elderly.⁽¹⁹⁾

The management of urinary incontinence in this public is essential. In the meantime, some conversational methods can be used by nurses in the treatment of such disorder. Among the main strategies, there are the execution of physical exercises, behavioral therapy and changes in lifestyle. In addition, guidance on reducing food intake considered bladder irritants is able to assist in the management of urinary incontinence.⁽²⁰⁾

Elderly people with urinary incontinence stated that they use a geriatric disposable diaper, favoring the development of the ND Risk for Infection. It is important to note that urinary incontinence has been identified as a risk factor for the development of Urinary Tract Infections (UTI) in the elderly population. Among the mechanisms that contribute to its occurrence is the use of absorbent devices similar to diapers, whose function is to absorb the urinary flow.⁽²¹⁾

Chart 1: Distribution of ND identified in the sample elderly. João Pessoa, PB, 2019.

NECESSIDADES HUMANAS FUNDAMENTAIS	DIAGNÓSTICOS DE ENFERMAGEM	INTERVENÇÕES DE ENFERMAGEM
COMPONENTE BIOLÓGICO/FISIOLÓGICO		
Comer e beber	Falta de apetite (66,7%)	Gerenciar condição nutricional; Pesar paciente
Eliminar os resíduos corporais	Incontinência urinária (44,4%)	Gerenciar incontinência urinária; Orientar sobre manejo da incontinência urinária
Mover-se e manter uma boa postura	Marcha prejudicada (94,4%)	Auxiliar na marcha; Monitorar risco de queda; Orientar sobre prevenção de queda
Manter o corpo limpo, cuidado e proteger o tegumento	Risco de queda (94,4%)	Obter dados sobre autocuidado; Prevenir infecção
COMPONENTE PSICOLÓGICO		
Aprender	Memória prejudicada (94,4%)	Promover uso de técnica de memória
COMPONENTE SOCIAL		
Ocupar-se com vistas à autorrealização	Humor deprimido (50%) Falta de apoio social (11,1%)	Gerenciar humor; Promover apoio social

Source: Research data.

The scientific literature addresses that individuals dependent on the use of diapers, must perform the daily change at least every six hours. That is, on average four times during the day, regardless of the presence of elimination, in order to avoid complications. ⁽²²⁾

In this context, it is highlighted that the implementation of preventive measures of infection related to the use of diapers, should be a continuous practice adopted by nurses working in institutionalization services for the elderly.

Within the Biological / Physiological Component, the ND "Impaired walking" and "Risk of falling", presented supremacy and prevailed in 94.4% of the elderly considered fragile.

It was observed that the elderly had changes in gait and slow movements. One of the determining factors for falls in the elderly is the presence of gait deficit. ⁽²³⁾ Researches state that the occurrence of falls in old age is mostly related to the presence of frailty. ⁽²⁴⁾

Corroborating these findings, an investigation carried out with elderly Brazilians, showed a statistically significant relationship between the risk of falls and the frailty syndrome. ⁽²⁵⁾

In view of this reality, with the purpose of reducing the occurrence of falls, the nurse who works in this area can give educational lectures to raise the awareness of the elderly and demonstrate how to avoid this problem, as well as it is necessary to identify groups at risk. ⁽²⁶⁾

In addition, it is important for nurses to help frail elderly people with impaired gait. Recent research has suggested that LTCIEs should offer devices that assist in walking the elderly, when necessary. ⁽²⁷⁾

With regard to the Psychological Component, the ND "Impaired memory" was present in the majority of frail elderly people, but none presented a suggestive diagnosis for dementia during the cognitive assessment.

In the aging process it is common for some cognitive functions, such as memory, to decrease. Therefore, the nurse can make use of memory techniques and

The ND statements elaborated portray situations of vulnerability to the health of institutionalized elderly people, influenced by biological, psychological and social factors. The execution of the study showed that 72% of the participants had fragility, where it was possible to identify 8 ND among the frail elderly, enabling the formulation of interventions in the face of care needs.

always be attentive to complaints of forgetfulness, which can predict the risk of dementia. ⁽²⁸⁾

As for the Social Component, the ND "Depressed mood" was found in 50% of the frail elderly. According to a meta-analysis study, frail elderly people are four times more vulnerable to the development of depression, when compared to those who are not frail. However, although the association between frailty and depression is considered bidirectional, it does not have well-defined causality. ⁽²⁹⁾ Given the above, the management of mood by nurses in these elderly is a relevant factor.

The ND "Lack of social support", was the least accentuated among the frail elderly, representing a percentage of only 11.1%. In institutionalization, the support network is crucial and able to contribute to improving the well-being and quality of life of the elderly. ⁽³⁰⁾ Therefore, it is important that the nurse promotes social support for the elderly with frailty.

CONCLUSION

The ND statements elaborated portray situations of vulnerability to the health of institutionalized elderly people, influenced by biological, psychological and social factors. The execution of the study showed that 72% of the participants had fragility, where it was possible to identify 8 ND among the frail elderly, enabling the formulation of interventions in the face of care needs.

The results found will contribute to the strengthening of professional practice, reinforcing the importance of identifying frail elderly people in institutionalized environments. This fact demonstrates the need to carry out the Nursing Process as a primary part of care for the frail elderly, helping to direct the actions of nursing care in a systematic, individualized and resolute way. ■

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