NURSING DIAGNOSES FOR INSTITUTIONALIZED FRAIL ELDERLY

DIAGNÓSTICOS DE ENFERMEIRA PARA IDOSOS FRÁGEIS INSTITUCIONALIZADOS

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ABSTRACT

Objective: to elaborate nursing diagnoses for institutionalized frail elderly. Method: this is a quantitative, descriptive, cross-sectional study with 53 elderly people in a Long-Term Care Institution for the Elderly. The Edmonton Frailty Scale and a Henderson-based data collection instrument were used. The diagnoses were based on CIPE®, version 2015. Data was analyzed in the SPSS and Stata software and presented in a table. Results: 178 Nursing diagnoses were elaborated, of which 15 were prevalent in more than 20% of the sample. ‘Impaired vision’ (49.9%), ‘Impaired vision’ (37.7%), ‘Insomnia’ (28.3%), ‘Impaired sleep’ (26.4%), ‘Depressed mood’ (24.5%) and ‘Dry skin’ (24.5%). Statistical significance was obtained between ‘Risk for falls’ (p = 0.008) and ‘Dry skin’ (p = 0.021) and the level of frailty. There was also a significant difference between the number of diagnoses and the level of frailty (p < 0.001), so that the higher the level of frailty, the more diagnoses. Conclusion: 178 Nursing diagnoses were elaborated, of which 15 prevailed, being the ‘Risk for falling’ the most prevalent. It will contribute to this study to disseminate the diagnostic language ICNP® and to make nurses aware of the importance of its use. Descriptors: Nursing; Terminology; Nursing diagnosis; Old man; Long-term institution for the elderly; Frailty.

RESUMO

Objetivo: elaborar diagnósticos de enfermería para ancianos frágiles institucionalizados. Método: trata-se de um estudo quantitativo, descritivo, transversal, com 53 idosos em uma Instituição de Longa Permanência para Idosos. Utilizaram-se a escala de fragilidade de EDMONTON e um instrumento de coleta de dados baseado em HENDERSON. Fundamentaram-se os diagnósticos na CIPE®, versão 2015. Analisaram-se os dados nos softwares SPSS e Stata apresentando-os em tabela. Resultados: elaboraram-se 178 diagnósticos de Enfermagem dos quais prevaleceram 15 em mais de 20% da amostra. Destacaram-se o “Risco de Queda” (84.9%), “Visão prejudicada” (49.1%), “Marcha prejudicada” (37.7%), “Insônia” (28.3%), “Sono prejudicado” (26.4%), “Humor deprimido” (24.5%) e “Pele seca” (24.5%). Obteve-se significância estatística entre “Risco de queda” (p = 0.008) e “Pele seca” (p= 0.021) e o nível de fragilidade. Houve, ainda, significância entre o número de diagnósticos e o nível de fragilidade (p<0.001) de modo que, quanto maior o nível de fragilidade, mais diagnósticos. Conclusão: elaboraram-se 178 diagnósticos de Enfermagem, dos quais prevaleceram 15, sendo o “Risco de queda” o mais prevalente. Contribuir-se-á com este estudo para divulgar a linguagem diagnóstica CIPE® e sensibilizar os enfermeiros acerca da importância de seu uso. Descriptors: Enfermagem; Terminologia; Diagnóstico de Enfermagem; Idoso; Instituição de longa permanência para idosos; Fragilidade.

RESUMEN

Objetivo: elaborar diagnósticos de enfermería para ancianos frágiles institucionalizados. Método: se trata de un estudio cuantitativo, descriptivo, transversal, realizado con 53 ancianos en una Institución de Larga Permanencia para ancianos. Se utilizaron la escala de fragilidad de EDMONTON y un instrumento de recolección de datos basado en HENDERSON. Se fundamentaron los diagnósticos en la CIPE®, versión 2015. Se analizaron los datos en el software SPSS y Stata presentándolos en tabla. Resultados: se elaboraron 178 diagnósticos de Enfermería de los cuales prevalecieron 15 en más del 20% de la muestra. Se destacaron el “Riesgo de Caída” (84.9%), “Visión perjudicada” (49.1%), “Marcha perjudicada” (37.7%), “Insomnio” (28.3%), “Sueño perjudicado” (26.4%), “Humor deprimido” (24.5%) y “Piel seca” (24.5%). Se obtuvo significancia estadística entre “Riesgo de caída” (p = 0.008) y “Piel seca” (p = 0.021) y el nivel de fragilidad. Se observó una correlación entre el número de diagnósticos y el nivel de fragilidad (p<0.001), de modo que, cuanto mayor sea el nivel de fragilidad, más diagnósticos. Conclusión: se elaboraron 178 diagnósticos de Enfermería, de los cuales prevalecieron 15, siendo el “Riesgo de caída” el más prevalente. Se contribuirá con este estudio para divulgar el lenguaje diagnóstico CIPE® y sensibilizar a los enfermeros acerca de la importancia de su uso. Descriptors: Enfermería; Terminología; Diagnóstico de Enfermería; Anciano; Hogares para Ancianos; Fragilidad.
INTRODUCTION

It is understood that the institutionalization of the elderly is a common event in the last decades. Several factors contribute to the increase in the incidence and prevalence of institutionalized elderly people, among them, the increase in the number of elderly people, the structural change of families, the incapacities that may arise, especially in the longer-lived ones, and the need to hire professionals at home full time. Thus, it can be seen that for many families, costs are high, which makes home care impossible, and they often opt for institutionalization.1

The Long Stay Institution for the Elderly (LSIE) is constituted in a collective residence, which assists independent and dependent elderly people, in financial or family difficulties and who need long-term care.2

There are a number of challenges at this location. One of them arises from the alterations of the aging and aggravation of the preexisting diseases generating different levels of dependence in the elderly. This means that even the independent, when institutionalized, may become dependent because of difficulties in accepting and adapting to the new conditions of life and because of the lack of motivation and encouragement common in this environment.3

On the other hand, some elderly people adapt to the new reality and are able to build a new life since, in the institution, bonds and friendships are formed that remain until the end of their lives.

It should be emphasized that, in any case, the greater degree of physical dependence, the use of continuous medications, the costs of assisting those most dependent, and the fact that they are carriers of comorbidities can make these elderly people more fragile and have a poorer quality of life.4

The fragile elderly is characterized by peculiar clinical manifestations, such as weakness, exhaustion, decreased physical activity, involuntary weight loss, decreased walking speed and balance, whose signs and symptoms are predictors of various complications such as institutionalization, functional decline, hospitalization and death.5

In this scenario, nursing care for the institutionalized frail elderly must be carried out through systematized actions using the Nursing process and directing the care actions to the affected needs with theoretical support and use of nursing care classification systems.6-7 It should be emphasized that the main tool used by the nurse in care is the Nursing process, which is arranged in the resolution of the Federal Nursing Council n. 358/2009.8

Among the stages of the Nursing process, Nursing Diagnoses (ND), which, together with nurses' knowledge, become a great tool in the care of the frail elderly and institutionalized. To classify them, there are several systems. In this study, the International Classification of Nursing Practice (ICNP®), which allows the elaboration of statements of diagnosis, results and nursing interventions. It is perceived that its use favors registration, quality of care and allows the technological and scientific development of the profession.6-7 However, this practice is still incipient in this scenario.

The NDs are the basis for the selection of Nursing interventions in order to seek results for which the nurse is responsible. It is believed that by developing the NDs, the nurse can plan individual and integrated care to provide an aging with autonomy and independence.

OBJECTIVE

- To elaborate nursing diagnoses for institutionalized frail elderly.

METHOD

It is a quantitative, descriptive, cross-sectional study carried out in a LSIE in the city of Fortaleza, Ceará, whose function is to house elderly people in situations of social vulnerability.

The elderly are grouped in the levels of dependencies I, II and III to perform their daily life activities, according to the norms of the National Health Surveillance Agency (ANVISA). It is considered that according to this classification, dependent elderly: grade I · that independent, even if using some self-help device; grade II · one with dependence on up to three basic daily activities, such as food, mobility and hygiene, without cognitive impairment or with controlled and grade III dependent cognitive alteration - those with dependence requiring assistance in all self-care activities for the daily life and/or cognitive impairment.9

The population was chosen by 226 elderly people living in ILPI (N = 226). For the constitution of the sample, the following inclusion criteria were adopted: being 60 years or older; living in the ILPI and being fragile (score ≥ seven, according to the Edmonton frailty scale). Elderly people who did not have an identification document to prove their age and those who were absent during the collection period were excluded, resulting in 53 frail elderly individuals who composed
the sample, and the period evaluated was from January 2016 to March 2017.

The frailty scale of the Edmonton Frail Scale (EFS) was adapted, culturally adapted to the Portuguese language, in Brazil, and considered reliable, valid and easy to apply. The EFS evaluates nine domains: cognition, general health, functional independence, social support, medication use, nutrition, humor, continence, and functional performance. It is recalled that cognition is assessed by means of the “Clock Test”. It is known that the domains “general health”, “functional independence” and “social support” are evaluated through multiple choice questions (three or five response items - Likert scale). It should be noted that the domains “drug use”, “nutrition”, “humor” and “continence” are evaluated by means of self-excluding dichotomous responses (“yes” or “no”). It is stated that the domain “functional performance” is measured by the “Stand and Walk”. ¹⁰

After the application of the EFS the data collection was performed through an interview mediated by a data collection instrument, elaborated according to the fundamental human needs, of Virginia Henderson. Sociodemographic data were collected and the physical examination was performed. The charts were consulted for completeness of the data.

It is stated that the elderly patients with a degree of dependence III had a preference in the data collection in relation to the elderly with degrees I and II, since those patients required more time for the clinical examination, requiring a more cautious data collection.

Data was organized into a worksheet in Microsoft Office Excel 2010 by analyzing them in SPSS software, version 20.0, and Stata, version 6.0. Descriptive statistics were performed with absolute and relative frequencies, means and standard deviation. Statistical analyzes were performed based on the Kruskal-Wallis and Chi-Square tests. It is reported that the p value was not presented in the tables, but was described in the results since it had statistical significance at the level of 0.05. It is noteworthy that the diagnoses highlighted in the discussion were those identified in more than 20% of the sample.

Nursing diagnoses were performed using the ICNP®, version 2015, and following the recommendations of ISO 18.104 / 14, which indicates whether to include a clinical finding or a term of the focus axis and a term of the judgment axis and terms additional to the need of the Focus and Judgment axes and the other axes.¹¹

The study was developed in accordance with the guidelines established by Resolution 466/12 of the National Health Council, and the research project was approved by the Research Ethics Committee of the State University of Ceará under the number of opinion 1,532, 812 and CAAE 12390513.8.0000.5534.

### RESULTS

178 Nursing diagnoses were elaborated, of which 15 prevailed in 20% or more of the sample, as shown in table 1.

<table>
<thead>
<tr>
<th>Nursing Diagnoses</th>
<th>Frailty category</th>
<th>Total (F)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Light frailty</td>
<td>Moderate frailty</td>
<td>Severe frailty</td>
</tr>
<tr>
<td>Risk for falls</td>
<td>18</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Low appetite</td>
<td>08</td>
<td>02</td>
<td>02</td>
</tr>
<tr>
<td>Decreased fluid intake</td>
<td>04</td>
<td>03</td>
<td>04</td>
</tr>
<tr>
<td>Impaired gait</td>
<td>10</td>
<td>06</td>
<td>04</td>
</tr>
<tr>
<td>Postural vertigo</td>
<td>06</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>Insomnia</td>
<td>05</td>
<td>05</td>
<td>05</td>
</tr>
<tr>
<td>Impaired vision</td>
<td>09</td>
<td>07</td>
<td>10</td>
</tr>
<tr>
<td>Impaired family process</td>
<td>06</td>
<td>03</td>
<td>03</td>
</tr>
<tr>
<td>Depressed mood</td>
<td>04</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>Impaired Musculoskeletal condition</td>
<td>02</td>
<td>04</td>
<td>05</td>
</tr>
<tr>
<td>Impaired sleep</td>
<td>06</td>
<td>05</td>
<td>03</td>
</tr>
<tr>
<td>Impaired Hearing</td>
<td>05</td>
<td>02</td>
<td>04</td>
</tr>
<tr>
<td>Dry skin</td>
<td>04</td>
<td>01</td>
<td>08</td>
</tr>
<tr>
<td>Musculoskeletal pain</td>
<td>04</td>
<td>04</td>
<td>03</td>
</tr>
<tr>
<td>Edema</td>
<td>07</td>
<td>01</td>
<td>03</td>
</tr>
</tbody>
</table>

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Table 1. Nursing diagnoses prevalent in institutionalized frail elderly. Fortaleza (CE), Brazil, 2017.
A significant statistical relationship was found at the junction between the diagnosis of "Risk for falling" (p = 0.008) and "Dry skin" (p = 0.021) and the level of frailty (Chi-Square test). It should be emphasized that the statistical significance between the number of diagnoses and the level of frailty (p <0.001) (Kruskal-Wallis test) so that the higher the level of frailty, the more diagnoses.

DISCUSSION

It is indicated that the ND "Risk for falls" prevailed in the elderly with severe frailty evidencing that, the more fragile the elderly, the greater the Risk for falls. It should be noted that falls are considered relevant problems in the elderly, since they reduce functional capacity, increase the chances of mortality and are one of the causes of the institutionalization of the elderly. It is reported that frequently occurring morbid events considered as a geriatric syndrome, a public health problem and one of the most important diseases affecting the elderly population.

The distribution of the causes among elderly people of the community, hospitalized and institutionalized, is different. It is understood that in the elderly living in LSIE, many derive from disturbances of gait and balance, vertigo and mental confusion. One study showed that more than one-third of the elderly who fell fell again for at least the next six months.

It is known that a diagnosis that effectively contributes to the increase of the "Risk for falls" is the ND "impaired vision", which also limits the functionality of the elderly person. Presbyopia, as well as visual problems such as cataracts, glaucoma and diabetic retinopathy, must be identified early to prevent further damage to the health of the elderly. It is evidenced that it is possible to prevent them through periodic ophthalmological consultations and active listening to the demands of the institutionalized elderly.

It is also remembered that the ND "impaired gait" also interferes with the pattern of falls and the appearance of other diseases making the elderly more dependent on the care of others. It was verified in another study with the elderly that 72% had the ND "Impaired gait". It should be emphasized that walking should be a practice stimulated by Nursing, since it guarantees independence, besides being effective, economic and practical. It is noted that the earlier the elderly regain gait capacity, the faster they become independent for other life activities.

In this context, impaired gait and balance, low visual acuity, the use of multiple medications, the presence of multiple comorbidities, besides external factors of inadequacy of infrastructure, such as high beds, without protection grids, environment without adequate lighting, inappropriate footwear and slippery floors, contribute to the increased rate of falls.

It is also added that institutionalized elderly people, due to the loss of family relationships and the development of levels of dependency, perpetuate and aggravate the aging cycle, with less functional capacity and greater sedentary life, by inactivity and social isolation. It is reported that all these associated factors add to the elderly, a greater propensity to fall with an injury due to hip fracture.

It is necessary, therefore, that the nurse, together with the team, identify the elderly with a potential Risk for falling, evaluating the occurrence of falls in the last year and the presence of intrinsic factors such as pathologies, physiological changes inherent to aging and use of medications. Measures are developed that diminish this event and contribute to the quality of life avoiding iatrogenesis, frailty, hospitalization and even death.

It provides the institutional environment of rules, norms and daily routines. The older person often lives with four other roommates, which may detract from the privacy of some because of the collective use of rooms and noise. In this research, many were diagnosed with "Insomnia" and "Impaired Sleep" corroborating other studies in which 49.9% reported one or more insomnia symptoms. It is evidenced that sleep disorders, associated with the aging process, may be present with greater frequency or severity in the residents of LSIEs.

All diagnoses are prioritized, however, one of them is responsible for the rapid deterioration of the elderly's organ systems and contributes to the increased number of deaths in the LSIE spaces: ND "Depressed mood". It is considered that this diagnosis can be expressed in the daily life of the elderly and it is easy to perceive it in view of the proximity of the patient with the professional in these places. It is noteworthy that, in other studies, almost half of the elderly with this diagnosis.

It is noted that this ND may appear alongside depression, which is the most frequent affective disorder in the elderly and is currently the leading cause of disability worldwide. It is thought that it is more
common in institutionalized older people and, in most cases, it is underdiagnosed and undertreated. It is noteworthy that depressive symptoms among the elderly can often be masked by somatic complaints or physical symptoms and are not adequately treated because they are confused with some type of dementia. It is understood that in the institutions, this ND must be prioritized since, in some moments, these places can favor the isolation of the elderly and the physical and mental inactivity bringing negative consequences to the quality of life.

It is evidenced, with respect to ND “Dry skin”, that there was a significant percentage and a significant association with frailty. These data are consistent with a study that says that xerosis is a frequent occurrence in the skin of the elderly, particularly in the legs, because at that age there is a decrease in the activity of the sebaceous and sweat glands and, consequently, dryness, leading to itching and discomfort. Changes in the skin of the elderly are considered to be the most obvious aging effects. It is pointed out that the effects of aging on oneself, the environment, lifestyles and health practices throughout life strongly influence skin conditions in old age.

Through the detailed skin examination performed by the nurse during the physical examination, mild changes that, with simple care such as hydration, liquid ingestion or a change in personal hygiene, can prevent the dryness of the skin, can be diagnosed.

It is believed that one of the main outcomes of this study is the frailty of a multidimensional syndrome, which involves biological, physical, cognitive, social, economic and environmental factors, not resulting exclusively from the aging process. It is reported that it is an unstable condition, related to functional decline, that can cause limitation in the performance of activities of daily living and, consequently, loss of autonomy.

As people age, they are more vulnerable to diseases, with the possibility of functional, and consequently family, emotional and economic dependence. It is pointed out that the frailty is also related to physiological aging and genetic issues. However, old age should never be confused with disease.

The influence of genetic variables on physiological imbalances is expressed in a vicious cycle of energy reduction, increased dependence and increased susceptibility to aggressors whose clinical manifestations are summarized as slowness, weakness, weight loss, low activity level and fatigue. This means that the generic term frailty denotes a diversity of vulnerabilities, weaknesses, instabilities, and limitations with shared causes.

It was shown in this context, through the data, that the higher the level of frailty, the more nursing diagnoses. It is suggested that physiological, psychological and social alterations of aging and the presence of chronic diseases are possible factors related to the great part of NDs and responsible for the process of institutionalization.

It is added that the nurse, as part of the multiprofessional team, must be attentive to factors that aggravate the performance of the elderly evaluating and re-evaluating their responses to the problems in each one, in an integral and individualized way, with the aim of preventing complications that aggravate the condition of the elderly.

From this perspective, the nurses must develop systematized care through the Nursing process, elaborating Nursing diagnoses with the purpose of enabling a broader analysis of the elderly's health, especially seeking to promote their autonomy and independence and optimizing nursing care.

**CONCLUSION**

The study allowed 178 Nursing diagnoses for institutionalized elderly, of whom 15 ND's were prevalent, with "Risk for falls" being the most prevalent. It was evidenced that, the more fragile the elderly, the more diagnoses he possessed.

It was concluded that nursing care actions should be systematized and the use of the Nursing diagnostic language should be encouraged. It is believed that systematized care, together with nurses' knowledge about the institutionalized elderly, can contribute to the autonomy and independence of the elderly, as well as to the individualized care of their demands. It should be emphasized that the nurse must develop accurate nursing diagnoses in order to intervene in an assertive and directed manner.

It is therefore determined that this study may contribute to disseminate the ICNP® diagnostic language to LSIE nurses, since its use is still incipient in this scenario, and to sensitize them about the importance of using a unified and international diagnostic language. This allows a mapping of care needs of the elderly, thus contributing to support their care practices and strengthen their professional identity.
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