Nursing diagnoses in elderly people admitted in surgical unit

Diagnósticos de enfermagem em idosos internados em unidade cirúrgica

Nidia Farias Fernandes Martins; Bárbara Tarouco da Silva; Daiane Porto Gautério Abreu; Bibiane Moura da Rosa; Juliana Piveta de Lima; Eliel de Oliveira Bandeira

How to quote this article:

ABSTRACT

Objective: The study's goal has been to identify nursing diagnoses for elderly patients in surgical units, determine the prevalence of these diagnoses, and verify the association between the most prevalent diagnoses and the defining characteristics/risk factors. Methods: It is a descriptive-exploratory and cross-sectional study with a quantitative approach, which was carried out with 38 elderly patients admitted to a university hospital in the Southern region of Brazil. Data collection was performed by the application of the nursing history. The North American Nursing Diagnosis Classification and the SPSS software version 21.0 were used for analysis. Results: The elderly patients hospitalized in the surgical clinic showed an average of 3.4 (±1.9) nursing diagnoses and the most important were: Risk of Infection (44.7%); Poor Knowledge (42.1%); Pain (36.8%) and, Risk of Fall (26.3%). Conclusion: Nursing diagnoses make it possible to help the planning and implementation of nursing actions, taking into account the specificities of elderly patients.

Descriptors:

RESUMO

Objetivo: identificar os diagnósticos de enfermagem em idosos internados em unidade cirúrgica, determinar a prevalência desses diagnósticos, verificar associação entre os diagnósticos mais prevalentes e as características definidoras/fatores de risco. Métodos: Estudo exploratório-descritivo, transversal, quantitativo, realizado com 38 idosos internados em um hospital universitário do sul do Brasil. A coleta de dados ocorreu por meio da aplicação do histórico de enfermagem. Para análise, utilizou-se a Taxonomia II North American Nursing Diagnosis Classification e o software SPSS versão 21.0. Resultados: Os idosos internados na clínica cirúrgica apresentaram uma média de 3.4 (±1.9) diagnósticos de enfermagem, e os mais prevalentes foram: Risco de Infecção (44,7%); Conhecimento Deficiente (42,1%); Dolor (36,8%) e, Risco de queda (26,3%). Conclusão: Os diagnósticos de enfermagem podem auxiliar no planejamento e implementação de ações de enfermagem, considerando as especificidades de idosos. 

Descriptors:
(42,1%); Dor (36,8%); e Risco de Quedas (26,3%). Conclusão: Os diagnósticos de enfermagem possibilitam subsidiar o planejamento e a implementação das ações de enfermagem, levando em consideração as especificidades da pessoa idosa. Descritores: Idoso, Diagnóstico de enfermagem, Enfermagem perioperatoria, Enfermagem.

RESUMEN

Objetivo: identificar los diagnósticos de enfermería en ancianos ingresados en una unidad quirúrgica, determinar la prevalencia de estos diagnósticos de enfermería y verificar la asociación entre los diagnósticos más prevalentes y las que características definitorias/factores de riesgo. Métodos: Estudio exploratorio-descriptivo, transversal, cuantitativo, efectuado con 38 ancianos ingresados en un hospital universitario del Sur de Brasil. La colecta de los datos ocurrió mediante la aplicación del histórico de enfermería. Para análisis, se utilizó la Taxonomía II North American Nursing Diagnosis Classification y el programa informático SPSS, versión 21.0. Resultados: Los ancianos ingresados en la clínica quirúrgica presentaron un promedio de 3,4 (±1,9) diagnósticos de enfermería, y los más prevalentes fueron: Riesgo de infección (44,7%); Conocimiento Defectuoso (42,1%); Dor (36,8%) y Riesgo de Caídas (26,3%). Conclusión: Los diagnósticos de enfermería permiten apuntalar la planificación y la implementación de acciones de enfermería, tomando en consideración las peculiaridades de la persona de avanzada edad. Descritores: Ancianos, Diagnóstico de Enfermería, Enfermería perioperatoria, Enfermería.

INTRODUCTION

Aging can be understood as a natural process of progressive decrease of the functional reserve of individuals. Under normal conditions, it does not cause problems, however, under overload conditions, such as illness, accidents and emotional stress, can cause a pathological condition that requires assistance.1

The elderly population, which has been growing significantly in Brazil, is increasingly facing Chronic Non-Transmissible Diseases (CNTDs) that have been the main cause of the hospitalization and death of these people, following a worldwide trend. Cardiovascular diseases and neoplasm, for example, are in the first place in the mortality index of the elderly. These complications can affect the functionality, which causes a dependence on the accomplishment of the Daily Life Activities (DLAs), causing loss of autonomy and independence and, consequently, affecting their quality of life. Therefore, they require constant monitoring.1,2

Considering the high rates of CNTDs, morbidity rates and the existence of pluripathogenic infections, surgical interventions have become increasingly frequent in the elderly, and both morbidity and mortality in the surgical event is more frequent in the elderly patients.3

In this context, the perioperative nursing care to elderly patients is increasingly being planned according to their peculiarities, with a multidisciplinary approach and global evaluation, to become effective, reducing the risks arising from the surgical intervention, which are higher in the elderly, and preventing iatrogenic infections.4 Thus, it is the responsibility of the nurse, considering the specificity of each surgery, to plan the nursing care for surgical patients, as well as the establishment and development of nursing actions that meet the needs arising from surgical treatment.4

One of the ways which nurses are inserted in this context is through the implementation of the Nursing Process (NP): a private activity that assemble the method and strategy of the scientific work for the identification of health/illness situations, supporting nursing actions that can contribute to the promotion, recovery and rehabilitation of the health of an individual, family and community, being its implementation in health services a means of improving the quality of the care provided.5,6

From this perspective, the needs of perioperative patients, specially the elderly ones, can be identified by the NP, constituting an appropriate work process practice to be developed by the nurse, which will allow to achieve integral attention through the systematization of the Assistance, stimulating the functionality and contributing to a greater independence and autonomy of the elderly.7

This study is based on the following questions: “Which Nursing Diagnoses (NDs) are the most prevalent in elderly patients hospitalized in surgical units?”; “Which defining features and/or risk factors of the most prevalent diagnoses are most frequently identified in this population?”, and “Is there an association between the most prevalent diagnoses and the defining characteristics/risk factors?”

In this context, this study aims to identify the NDs present in elderly patients in surgical units; determine the prevalence of these NDs; and verify the association between the most prevalent diagnoses and their defining characteristics/risk factors.

METHODS

It is a descriptive-exploratory and cross-sectional study with a quantitative approach, which was carried out in a surgical unit of a university hospital in the Southern region of Brazil. The inclusion criteria were: elderly patients having age equal to or greater than 60 years hospitalized in the Surgical Clinic Unit (SCU) without exceeding 48 hours from the date of collection, regardless of the reason of the hospitalization. This criterion was used because there is no application of the NP in the SCU. Therefore, some patients may be hospitalized for a long period without any record of the nursing history. The limitation of 48 hours from the date of the hospitalization is an attempt to reduce biases and make the application of the nursing history an activity that is closer to the recommended by the nursing legislation. Elderly patients who failed to communicate with the researchers were excluded from the study. The sample consisted of 38 elderly individuals selected for convenience.

Data were collected from September to December 2013 through the application of the nursing history model. This history contains questions related to the medical diagnosis, reason for hospitalization, history of the current and previous illness, life habits and is organized according to basic human needs. NDs were identified through clinical reasoning based on the defining characteristics present in the patients. The Taxonomy II of NANDA-I was used.8
An authorization to carry out the study was requested from the headship of the university hospital. The research project was approved by the Research Ethics Committee, under the Legal Opinion No. 133/2013. The application of the data collection instruments was carried out following the guidelines of the Resolution No. 466/2012 from the National Health Council, which states the guidelines about research with human beings.

For data analysis, a descriptive and inferential statistics were used with the aid of the SPSS software (version 21.0) for Windows. For the descriptive analysis, we considered the absolute and percentage frequencies for categorical variables and measures of central tendency and dispersion for the numerical variables. Pearson’s Chi-Square Test was used to analyze the association between the categorical variables. Fisher’s Exact Test was applied when the expected frequencies of the categorical variables were less than five. A level of 5% was adopted for the statistical significance.

The association present in the defining characteristics or risk factors was verified only for the NDs present in more than 20% of the sample. The Prevalence Ratio (PR) values and their 95% Confidence Interval (CI) were calculated only for the defining characteristics that showed association with the NDs.

RESULTS AND DISCUSSION

The majority of the elderly patients in the surgical clinic unit were men (55.3%), with incomplete Elementary Education (50.0%), aged between 60 and 69 years (65.8%), and in the preoperative period (68.4%), according to Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>17 (44.7)</td>
</tr>
<tr>
<td>Male</td>
<td>21 (55.3)</td>
</tr>
<tr>
<td>Education degree</td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>7 (18.4)</td>
</tr>
<tr>
<td>Incomplete Elementary</td>
<td>19 (50.0)</td>
</tr>
<tr>
<td>Elementary</td>
<td>5 (13.2)</td>
</tr>
<tr>
<td>Incomplete High School</td>
<td>2 (5.3)</td>
</tr>
<tr>
<td>High School</td>
<td>3 (7.9)</td>
</tr>
<tr>
<td>College</td>
<td>2 (5.3)</td>
</tr>
</tbody>
</table>

In this study, males were the majority, representing 55.3% of the sample, being a fact also observed in a research performed in elderly patients in Fortaleza city, Ceará State, Brazil. More than half (68.4%) of the patients do not have Elementary Education degree, and only 5.3% of them have College Education degree. This fact shows a low level of education when compared with the elderly population in Brazil. This is a factor that may, for example, make it difficult to understand the guidelines received regarding perioperative care, thus compromising the recovery. In this sense, it is necessary to adapt the guidelines and have a continuous evaluation, especially for elderly patients, regarding the understanding of these guidelines, in the planning of the perioperative nursing care.

The elderly patients in the surgical clinic showed an average of 3.4 (±1.9) NDs, and the most predominant were: Risk of Infection (44.7%); Poor Knowledge, (42.1%); Pain (36.8%); and Risk of Fall (26.3%). Only the ND of risk of infection showed a significant association with the surgical period (p=0.000), according to Table 2.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n* (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>60-69 years old</td>
<td>25 (65.8)</td>
</tr>
<tr>
<td>70-79 years old</td>
<td>8 (21.1)</td>
</tr>
<tr>
<td>80 years old or more</td>
<td>5 (13.2)</td>
</tr>
<tr>
<td>Surgical Period</td>
<td></td>
</tr>
<tr>
<td>Preoperative period</td>
<td>26 (68.4)</td>
</tr>
<tr>
<td>Postoperative period</td>
<td>12 (31.6)</td>
</tr>
<tr>
<td>Total</td>
<td>38 (100.0)</td>
</tr>
</tbody>
</table>

The average of 3.4 ND per elderly person is below the average found in recent studies in Brazil, which show between 5 and 12 ND per elderly person. These differences may be related to differences in the identification of NDs and in the implementation of the NP, from institution to institution. The nursing process is not implemented in the study location. Nonetheless, some steps are performed by nursing students during practical activities and extension projects. This situation can be considered a fragility of the study, making the identification of the patients’ needs and the care planning difficult, from patient’s admission until his discharge.
Table 2 - NDs identified in elderly patients in a surgical clinic unit, according to the surgical period.

<table>
<thead>
<tr>
<th>Nursing Diagnosis</th>
<th>Preoperative</th>
<th>Postoperative</th>
<th>p-value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of Infection</td>
<td>5 (13.2)</td>
<td>12 (41.5)</td>
<td>0.000</td>
</tr>
<tr>
<td>Poor Knowledge</td>
<td>13 (34.2)</td>
<td>3 (7.9)</td>
<td>0.178</td>
</tr>
<tr>
<td>Acute Pain</td>
<td>10 (26.3)</td>
<td>4 (10.5)</td>
<td>1.000</td>
</tr>
<tr>
<td>Risk of Fall</td>
<td>5 (13.2)</td>
<td>5 (13.2)</td>
<td>0.235</td>
</tr>
<tr>
<td>Damaged Sleep Pattern</td>
<td>6 (15.8)</td>
<td>1 (2.6)</td>
<td>0.395</td>
</tr>
<tr>
<td>Anxiety</td>
<td>4 (10.5)</td>
<td>1 (2.6)</td>
<td>1.000</td>
</tr>
<tr>
<td>Constipation</td>
<td>3 (7.9)</td>
<td>2 (5.3)</td>
<td>0.643</td>
</tr>
<tr>
<td>Risk of Poor Liquid Volume</td>
<td>5 (13.2)</td>
<td>-</td>
<td>0.158</td>
</tr>
<tr>
<td>Poor Liquid Volume</td>
<td>3 (7.9)</td>
<td>2 (5.3)</td>
<td>0.643</td>
</tr>
<tr>
<td>Impaired Dentition</td>
<td>5 (13.2)</td>
<td>-</td>
<td>0.158</td>
</tr>
<tr>
<td>Ineffective airway clearance</td>
<td>4 (10.5)</td>
<td>1 (2.6)</td>
<td>1.000</td>
</tr>
<tr>
<td>Nausea</td>
<td>5 (13.2)</td>
<td>-</td>
<td>0.643</td>
</tr>
<tr>
<td>Unbalanced nutrition: less than the body needs</td>
<td>4 (10.5)</td>
<td>1 (2.6)</td>
<td>1.000</td>
</tr>
<tr>
<td>Impaired skin integrity</td>
<td>3 (7.9)</td>
<td>1 (2.6)</td>
<td>1.000</td>
</tr>
<tr>
<td>Deficit in self-care bath</td>
<td>3 (7.9)</td>
<td>-</td>
<td>0.538</td>
</tr>
<tr>
<td>Deficit in self-care dressing</td>
<td>3 (7.9)</td>
<td>-</td>
<td>0.538</td>
</tr>
<tr>
<td>Unbalanced nutrition: more than the body needs</td>
<td>3 (7.9)</td>
<td>-</td>
<td>0.538</td>
</tr>
<tr>
<td>Self-neglect</td>
<td>2 (5.3)</td>
<td>-</td>
<td>1.000</td>
</tr>
<tr>
<td>Ineffective peripheral tissue perfusion</td>
<td>1 (2.6)</td>
<td>1 (2.6)</td>
<td>0.538</td>
</tr>
<tr>
<td>Ineffective protection</td>
<td>2 (5.3)</td>
<td>-</td>
<td>1.000</td>
</tr>
<tr>
<td>Risk of impaired skin integrity</td>
<td>2 (5.3)</td>
<td>-</td>
<td>1.000</td>
</tr>
<tr>
<td>Ineffective Self-Control of Health</td>
<td>1 (2.6)</td>
<td>-</td>
<td>1.000</td>
</tr>
<tr>
<td>Urinary incontinence</td>
<td>1 (2.6)</td>
<td>-</td>
<td>1.000</td>
</tr>
<tr>
<td>Insomnia</td>
<td>1 (2.6)</td>
<td>-</td>
<td>1.000</td>
</tr>
<tr>
<td>Impaired Gas exchange</td>
<td>1 (2.6)</td>
<td>-</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*p*Fischer’s Exact Test

Among the 18 defining features listed in the NANDA-I taxonomy for the ND of Acute Pain, the following were identified: verbal report of pain, sleep disorder, position to avoid pain, change in respiratory rate, change in heart rate and facial expression of pain. The defining characteristics of the verbal report of pain, sleep disorder and position to avoid pain had a significant association with the ND of acute pain, all with *p* < 0.05, according to Table 3.

Regarding the reasons for the predominance of the defining features that had a significant association with the ND of acute pain, the odds of elderly patients in the surgical unit to develop this ND in the presence of these features were approximately 2.8 times for sleep disturbance (PR=2.81, CI=1.37-5.75) and 3.4 times for position to avoid pain (PR=3.40, CI=2.02-5.72) when compared to those who did not havethose diagnoses. The defining feature for verbal report of pain was a constant being present in all elderly patients with ND of acute pain, thus the PR and CI were not calculated in this case.

This result is similar to that observed in a study carried out in Florianópolis city, Santa Catarina State, Brazil, with patients in the immediate postoperative period of elective surgeries, in which the diagnosis of acute pain and defining feature was the verbal report of pain in 100% of the patients.15

A study carried out in Ijuí city, Rio Grande de Sul State, Brazil, with the objective of identifying the NDs of patients in the postoperative period of heart surgery, identified acute pain as a frequent ND in surgical patients, stressing that it is an unpleasant sensory and emotional experience, in which complications may occur in the course of treatment of surgical patients (mainly the elderly ones), and should be investigated and evaluated constantly and systematically.16

This assertion demonstrates that pain, although subjective, should be an alert when planning the nursing care.

The ND of pain was related to damaging biological agents in 57.1% of elderly patients who had this diagnosis and to damaging physical agents in 42.9%. Both related factors had a significant association with the ND of pain with *p*=0.000 and *p*=0.001, respectively.
As shown in Table 4, among the risk factors listed in the NANDA-I taxonomy for the ND of risk of infection, six were highlighted: invasive procedure, inadequate primary defenses, chronic disease, malnutrition, tissue destruction, and inadequate secondary defenses. The risk factors of invasive procedure and inadequate primary defenses were significantly associated with the ND of risk of infection, all with p<0.05, according to Table 4.

The risk factor of invasive procedure was a constant, being present in all elderly patients with the ND of risk of infection. Thus, PR and CI values were not calculated in this case. The odds of elderly patients in the surgical unit to develop the ND of risk of infection in the presence of the related factor of inadequate primary defenses was 22 times (PR=22.0, CI=3.24-49.29) when compared to those who did not had this factor.

In a study carried out in a hospital in Caruaru city, Pernambuco State, Brazil, which aimed to identify the frequency of ND in a surgical clinic, the ND of risk of infection was present in 100% of the patients, highlighting the invasive procedures as an important risk factor, corroborating the results of this study.17 The high frequency of this diagnosis can be justified by the fact that hospitalization exposes the patient to invasive procedures and cross infections, as well as immobility favors the stasis of body fluids. Also, elderly patients usually have associated comorbidities, which leads to decreased immunity and, therefore, to infections.18
Table 4 - Risk factors of the ND of risk of infection identified in the elderly patients.

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>ND of risk of infection</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes (n=17)</td>
<td>NO (n=21)</td>
</tr>
<tr>
<td>Invasive procedure</td>
<td>17 (100.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Inadequate primary defenses</td>
<td>16 (94.1%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Chronic disease</td>
<td>6 (35.3%)</td>
<td>6 (28.6%)</td>
</tr>
<tr>
<td>Malnutrition</td>
<td>3 (17.6%)</td>
<td>2 (9.5%)</td>
</tr>
<tr>
<td>Tissue destruction</td>
<td>2 (11.8%)</td>
<td>3 (14.3%)</td>
</tr>
<tr>
<td>Inadequate secondary defenses</td>
<td>1 (5.9%)</td>
<td>1 (4.8%)</td>
</tr>
</tbody>
</table>

Chi-Square Test; **Fisher’s Exact Test

The risk factors of the ND of risk of fall were: medication use, postoperative condition, walking difficulty, foot problems, visual difficulty, lack of sleep, vascular disease, impaired mobility, use of prosthesis, use of an auxiliary device, history of falls, orthostatic hypotension, decreased strength at the extremities, impaired equilibrium, and reduced mental status. Among these factors, the postoperative condition, walking difficulty, presence of foot problems, impaired mobility and use of prosthesis were significantly associated with the ND of risk of falls, all with p<0.05, according to Table 4.

Considering the reasons for the factors that had a significant association with the ND of risk of fall, the odds of the elderly patients in the surgical unit to develop this ND in the presence of these factors were approximately 5.6 times for walking difficulty and foot problems (PR=5.66, CI=2.74-11.71), eight times for postoperative conditions (PR=8.00, CI=3.19-20.00), five times for impaired mobility (PR=5.00, CI=2.57-9.69), and 8.7 times for use of prosthesis (PR=8.75, CI=2.89-26.41), when compared to elderly patients who did not have these characteristics.

The risk factors of the ND of risk of fall were: medication use, postoperative condition, walking difficulty, foot problems, visual difficulty, lack of sleep, vascular disease, impaired mobility, use of prosthesis, use of an auxiliary device, history of falls, orthostatic hypotension, decreased strength at the extremities, impaired equilibrium, and reduced mental status. Among these factors, the postoperative condition, walking difficulty, presence of foot problems, impaired mobility and use of prosthesis were significantly associated with the ND of risk of falls, all with p<0.05, according to Table 5.

In a study carried out in Fortaleza city, Ceará State, Brazil, aiming to identify the presence of the ND of risk of fall in patients with ischemic heart disease, found that all participants had at least two risk factors for falls. Among the most predominant were: antihypertensive use (98.8%), use of ACE inhibitors (81.4%), visual impairment (66.3%), lack of sleep (54.3%), age over 65 years old (45.3%) and history of falls (38.4%).
### Table 5 - Risk factors of the ND of risk of fall identified in the elderly patients.

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>ND of risk of fall</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes n=10</td>
<td>No n=28</td>
</tr>
<tr>
<td>Use of medicines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8 (80.0%)</td>
<td>18 (64.3%)</td>
</tr>
<tr>
<td>No</td>
<td>2 (20.0%)</td>
<td>10 (35.7%)</td>
</tr>
<tr>
<td>Postoperative condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6 (60.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>4 (40.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Walking difficulty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4 (40.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>6 (60.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Foot problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4 (40.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>6 (60.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Visual Difficulty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (10.0%)</td>
<td>3 (10.7%)</td>
</tr>
<tr>
<td>No</td>
<td>9 (90.0%)</td>
<td>25 (89.3%)</td>
</tr>
<tr>
<td>Lack of sleep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3 (30.0%)</td>
<td>7 (25.0%)</td>
</tr>
<tr>
<td>No</td>
<td>7 (70.0%)</td>
<td>21 (75.0%)</td>
</tr>
<tr>
<td>Vascular disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2 (20.0%)</td>
<td>6 (21.4%)</td>
</tr>
<tr>
<td>No</td>
<td>8 (80.0%)</td>
<td>22 (78.6%)</td>
</tr>
<tr>
<td>Impaired mobility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7 (70.0%)</td>
<td>1 (3.6%)</td>
</tr>
<tr>
<td>No</td>
<td>3 (30.0%)</td>
<td>27 (96.4%)</td>
</tr>
<tr>
<td>Prosthesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>3 (30.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>7 (70.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Auxiliary device</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>2 (20.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>8 (80.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Fall history</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (10.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>9 (90.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Orthostatic hypotension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (10.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>9 (90.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Decreased strength at the extremities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (10.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>9 (90.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Impaired equilibrium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (10.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>9 (90.0%)</td>
<td>28 (100.0%)</td>
</tr>
<tr>
<td>Reduced mental state</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1 (10.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>No</td>
<td>9 (90.0%)</td>
<td>28 (100.0%)</td>
</tr>
</tbody>
</table>

*Chi-Square Test; **Fisher’s Exact Test

Among the defining features listed in the NANDA-I taxonomy for the ND of poor knowledge in the study patients, only the verbal report was identified and presented a significant association with $p=0.000$. Among the 16 patients who had this diagnosis, all had this defining characteristic, and because of this the PR and CI values were not calculated.

A study carried out in Imperatriz city, Maranhão State, Brazil, with the objective of identifying the main ND in elderly patients during the postoperative period of urological surgeries, the main defining features were the inadequate follow-up of instructions and the verbalization of the problem, verifying the results of this study.

The ND of poor knowledge was related to the lack of information exposure in 100% of the patients who had this diagnosis and the lack of the capacity of remembering the given care in 18.7%. The related factor of lack of information...
exposure presented significant association with the ND of poor knowledge with $p=0.000$. The related factor of lack of the capacity of remembering the given care had no significant association with the ND of poor knowledge with $p=0.066$.

Each surgery has its specific and general care, and it is imperative that the nursing team provide guidance to these patients, and that there is also an assessment of the knowledge of the patient. Such procedure needs to be further strengthened for elderly patients, since they may have both physical and cognitive limitations and require special care, while maintaining their independence and autonomy, as well as increasing the elderly's involvement in their self-care.2

This ND may also be related to the educational profile of the sample, which requires the adequacy of the orientation provided by the degree of instruction of the patient. Functional literacy in health, which is the ability to understand or interpret written or spoken information about health, motivates people to adhere to health-related actions. This affirmation requires nurses to use an adequate communication tool in their guidance regarding the perioperative period, saving time and effort, and improving the satisfaction and health outcomes of elderly patients who undergo surgical events.20

One of the limitations of the study was the fact that there was no implementation of any stage of the nursing process in the studied area, which makes it difficult to identify the patients' needs and the care planning, from admission to discharge. The application of the nursing history occurred often in different moments of the elderly patients' hospitalization, which could have had different results if this application occurred at the time of their admission. Therefore, the inclusion criterion for the hospitalization time of until 48 hours for the collection of nursing history decreased the deviation.

Moreover, due to the fact that this research was a graduation project derived from a larger one, the time for data collection was short, and related to the low demand of elderly patients in the study unit, due to the reduction of the number of surgeries and hospitalizations during the period of data collection, consequently limiting the sample size.

CONCLUSION

Each elderly patients showed an average of 3.47 NDs, being the most frequent: risk of infection, poor knowledge, acute pain and risk of fall. The study showed the need for more research involving NDs and surgical elderly patients, since there are few specific studies that address this issue. There is still the need to involve this theme in the nursing education in Brazil, so that students and professionals may develop clinical reasoning directed to these patients and improve the knowledge about the nursing process in the perioperative area.

The NDs identified in the study patients describe the peculiarities inherent to aging, and point out the risks imposed by age, especially when it comes to surgical elderly patients. They also allow the planning and implementation of nursing actions, taking into account these specificities. The nurse who works in a surgical unit needs to plan the care for elderly patients in an individualized way, seeking a good quality of life and active aging, preserving the autonomy and maintenance of the functional capacity of the elderly person.

This study made it possible to contribute to the improvement of qualified nursing care for elderly patients in surgical units, which favors the implementation of interventions and care increasingly adapted to their individual needs.

REFERENCES


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