Health records of the nursing diagnosis fatigue in cancer patients*

Registro do diagnóstico de enfermagem fadiga em prontuários de pacientes oncológico

Registro del diagnóstico de enfermería fatiga en fichas de pacientes oncológicos

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ABSTRACT
Objective: To identify the health records of the diagnosis of fatigue (FD) registered by nurses, to define the characteristics of this FD and, to verify the nursing interventions, in the health records of patients with cancer, admitted into hospitals. Methods: Is a retrospective cross-sectional study. The data collection was performed in 107 health records of patients with medical diagnosis of cancer, from August to December 2007. Results: It was found that the diagnosis of fatigue represented 0.9%, despite that in the daily developments recorded by the nurses, it was found the defining characteristics of fatigue in 15.9% of the patients. Conclusion: Despite identifying the defining characteristics (signs and symptoms), the nurses did not establish the fatigue diagnosis. For this reason, doubts appeared about the adequacy of the defining characteristics of this diagnosis. Further studies, on this subject, should be made to improve the nursing care of cancer patients.

Keywords: Nursing diagnosis; Fatigue; Neoplasms; Signs and symptoms

RESUMO
Objetivo: Identificar o registro de diagnóstico de enfermagem (DE) fadiga, as características definidoras e as intervenções de enfermagem em prontuários de pacientes oncológicos internados em hospital. Métodos: Trata-se de um estudo transversal retrospectivo. A coleta de dados foi realizada em 107 prontuários de pacientes com diagnóstico médico de câncer, nos meses de agosto a dezembro de 2007. Resultados: Foi encontrado um DE fadiga representando 0,9%, entretanto, foram encontradas, nas evoluções diárias registradas pelo enfermeiro, as características definidoras do DE fadiga em 15,9% dos prontuários. Conclusão: Apesar de identificar as características definidoras (sinais e sintomas), os enfermeiros não estabelecem o DE fadiga. Por esta razão, surgem dúvidas quanto à adequação das características definidoras deste diagnóstico. Outros estudos sobre esta temática devem ser feitos para aprimorar a assistência de enfermagem ao paciente oncológico.

Descritores: Diagnóstico de enfermagem; Fadiga; Neoplasias; Sinais e sintomas

RESUMEN
Objetivo: Identificar el registro de diagnóstico de enfermería (DE) fatiga, también las características definidoras y las intervenciones de enfermería, en fichas de pacientes oncológicos internados en el hospital. Metodos: Se trata de un estudio transversal retrospectivo. La recolección de datos fue realizada en 107 fichas de pacientes con diagnóstico médico de cáncer, en los meses de agosto a diciembre de 2007. Resultados: Fue encontrado un DE de fatiga representando 0,9%, entretanto, fueron encontradas, en las evoluciones diarias registradas por el enfermero, las características definidoras del DE de fatiga en 15,9% de las fichas. Conclusión: A pesar de identificar las características definidoras (señales y síntomas), los enfermeros no establecieron el DE fatiga. Por esta razón, surgen dudas sobre la adecuación de las características definidoras de este diagnóstico. Otros estudios sobre esta temática deben ser realizados para perfeccionar la asistencia de enfermería al paciente oncológico.

Descriptores: Diagnóstico de enfermería; Fatiga; Neoplasias; Signos y síntomas

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INTRODUCTION

Cancer is the second cause of death in Brazil after cardiovascular diseases. This pathological process compromises the quality of life of individuals of both sexes, reaching all age groups and several body organs and tissues, with high mortality rates. In Brazil, the estimate for 2008, according to the Instituto Nacional de Câncer (INCA – National Cancer Institute), was 466,730 new cases of cancer, of which 231,860 were males and 234,870 were females. In the state of Rio Grande do Sul, the estimate for 2008 was 47,930 new cases(3).

Advances in technology have enabled early and accurate diagnosis, allowing for appropriate interventions in a short period of time. However, treatments currently used in an attempt to control and cure cancer still cause several side effects, requiring other interventions to reduce them. For approximately one decade, health professionals have been concerned about caring for patients with a set of symptoms known as fatigue(2).

Fatigue is a symptom prevalent in advanced cancer, affecting between 75% and 85% of those with this condition. It is debilitating because it affects the performance of daily activities and harms quality of life. Thus, it is necessary to raise patients’, professionals’ and caregivers’ awareness of the fact that fatigue can certainly be intervened(3).

Experts agree that fatigue is “subjective, multi-factorial and comprising the patient’s physical, emotional and cognitive spheres”(3-4), having a strong impact on their quality of life and affecting their treatment and pain(5).

Several studies seek to identify the cause or causal factors of this symptom and their results show that fatigue occurs due to innumerable interrelated factors, including biological, psychological, social and occupational ones, the disease itself, the treatment and the presence of other symptoms(6-7).

Sooner or later, certain individuals with cancer show signs and symptoms associated with fatigue, which can be caused by both the disease and treatment. This is more frequent among those with advanced cancer and, in this case, can be considered a sign of progression of the disease. It is often inaccurately assessed due to lack of knowledge or perception of its importance in the quality of life and patients’ functional development(8).

Treatment of fatigue associated with cancer is multifaceted, making it important to identify its possible causes and, based on this, to use adequate interventions(9).

Interventions for the clinical management of fatigue include specific and general approaches. When there is an etiologic or associated factor, such as anemia or insomnia, for example, this should be treated with specific protocols. However, in many patients, it is not possible to identify a specific causal factor, in addition to the disease itself and its treatment. In such cases, both the pharmacological and non-pharmacological strategies are useful(10).

The nursing diagnosis fatigue was designed by the “North American Nursing Diagnosis Association” (NANDA-I) in 1988, as an integral part of Taxonomy I, based on patterns of human response, after being reviewed and maintained, in 1998, as an item of Taxonomy II(10). Fatigue is described by NANDA-I as an oppressive feeling, sustained by exhaustion and decreased capacity to perform physical and mental work at the usual level(11).

Nursing diagnosis (ND) fatigue has been studied for approximately ten years(2). At times, it has not been accurately identified and, as a result, pharmacological and non-pharmacological interventions are not correctly used in the practice of health care for cancer patients. This could cause harm in situations such as: increase in the period of hospitalization, decrease in quality of life and higher health system costs.

Professionals must recognize fatigue as a relevant and extremely debilitating symptom in situations of advanced-stage chronic disease and prepare themselves to help ill individuals to deal with it. A systematized method should be established to assess fatigue, identify the factors involved with its beginning and manifestation, and propose adequate medication-based, physical, cognitive-behavioral, nutritional and spiritual interventions(12). There are instruments that assess fatigue. Some authors have performed a bibliographical study, identifying more than 20 different instruments to assess fatigue(10). In these instruments, there is a predominance of the multidimensional conception, where physical, emotional and cognitive aspects are assessed, and the magnitude, associated with the observation of professionals, is quantified(9). However, the lack of studies that adapt these instruments to the Portuguese language could be one of the factors that hinder the identification of this symptom in cancer patients.

In view of this situation, some questions were raised, such as: Is fatigue detected and recorded by the nurse? Are there nursing records with the characteristics that define NANDA-I Taxonomy for fatigue? Are there records of nursing interventions to reduce fatigue?

The present study was designed based on these questions and it was considered to be relevant, in view of the current context, where constant development of nursing care is sought to improve the quality of life of cancer patients.

OBJECTIVE

The objective of the present study was to identify the recording of nursing diagnosis fatigue, the defining characteristics and nursing interventions in the medical
charts of cancer patients, hospitalized in a university hospital.

**METHODS**

This was a retrospective cross-sectional study, characterized by the observation of prevalence or frequency of the characteristic to be analyzed at a certain moment\(^{(19)}\).

The calculated sample was comprised of 107 patients' medical charts, which met the following criteria: hospitalization in the university hospital, in 2006; medical diagnosis of cancer, according to the International Classification of Diseases (ICD-10); to be aged more than 18 years; and presence of nursing diagnoses recorded in the medical chart. Margin of error was 5% and the confidence level was 95%. It should be emphasized that the sample was calculated by the Department of Statistics of the Postgraduate and Research Service, and medical charts were randomly selected in the Medical Archive Service, according to the prerequisites.

Data collection was performed in the hospital with an active search for printed and online data in the medical charts. A research instrument was used, designed for this study and containing open-ended and closed-ended questions. Variables selected were as follows: age, sex, type of cancer, treatment performed during hospitalization, nursing diagnosis, nursing intervention for the diagnosis studied and signs of fatigue described in the nursing progress notes.

Data were input into the Statistical Package for the Social Sciences (SPSS) software, Windows, version 12.0, for subsequent analysis. Quantitative variables were based on frequency and percentage.

This research project was approved by the Scientific Committee and Research Ethics Committee of the Postgraduate Research Group of the University Hospital, under number 06-629. As required by the Scientific Committee, authors signed an informed consent form for use of records and confidentiality of data from medical charts.

**RESULTS**

The patients corresponding to the sample of medical charts analyzed showed the following profile: mean age of 58.9 years, with a predominance of males, totaling 68.2% of cases. Types of cancer were grouped according to the region of the body affected. The digestive system was most affected, with 18.7% of cases, followed by the urinary system with 14% and leukemia/lymphoma with 13.1%. Cancer in the head and neck and gynecological cancer were found with lower indices (9.3%). Other types of cancer totaled 35.6% of cases: lungs (8.4%), breasts (6.5%), and others. Types of treatment used during hospitalization were as follows: surgery (47.7%), chemotherapy (13.0%), radiotherapy (4.7%) and combined treatments (chemotherapy and radiotherapy, or surgery and chemotherapy) (5.6%).

Treatments for other diseases, not associated with the patient's cancer, represented 29% of the total. The ND fatigue was found in one medical chart only, equivalent to 0.9%, and the factor associated was hospitalization, without specific interventions for this ND being observed.

In the present study, signs and symptoms suggestive of ND fatigue were identified in 15.9% of the medical charts. Signs and symptoms suggestive of this nursing diagnosis, which could correspond to the defining characteristics proposed by NANDA-I for this diagnosis were the following: weakness (7.4%), prostration (2.8%), tiredness (2.8%), listlessness (1.9%), asthenia (0.5%) and sleepiness (0.5%).

In male patients, 17.8% showed signs and symptoms suggestive of ND fatigue. In females, values were 14.7%. The types of cancer that showed the greatest association with fatigue were those of the digestive system (30% with signs of fatigue) and leukemia/lymphoma (28.6%). The type of treatment most associated with fatigue was chemotherapy, including 50% of patients as a result of this therapy. In contrast, 3.9% of the patients who had undergone surgical treatment exclusively showed signs and symptoms suggestive of ND fatigue. As regards combined treatments, such as chemotherapy and radiotherapy, or surgery and chemotherapy, 16.7% of patients showed signs and symptoms suggestive of ND fatigue.

**DISCUSSION**

Symptoms of fatigue directly affect patients with cancer, and nursing interventions appear as key measures to improve their quality of life.

In the present study, signs and symptoms suggestive of ND fatigue show an association with the defining characteristics described by NANDA-I. Tiredness and sleepiness were identified in the nursing records. In a study performed with laryngectomized patients, 45.5% of them showed tiredness in their entire body and 9.1% mentioned lethargy and the desire to lie down\(^{(14)}\). In contrast, prostration, listlessness and asthenia could be associated with the following defining characteristics: impaired concentration, inattentiveness, reduced performance, lack of interest in one's environment, and lack of energy.

Nursing interventions are very useful to reduce this symptom, such as: energy, mood and nutrition control; exercise promotion; establishment of mutual goals and...
increase in hours of sleep\(^{(15)}\). In this study, specific interventions for ND fatigue were not found.

In view of this situation, professional qualification of nurses, aimed at the correct identification of ND fatigue and the interventions needed to control it, appear as a requirement for nursing care to be provided in the best possible way. Thus, it is possible to direct nursing care towards the needs of each patient, select the necessary interventions and make subsequent nursing care assessments.

In the university hospital, both the diagnosis and nursing prescription are performed online. To define the ND, the nurse must first identify what basic human need has changed, following the theoretical model proposed by Horta in 1979. ND fatigue is found in the subgroup of physical activity, in the group of psycho-biological needs. The associated factors, identified in the system, are as follows: hospital environment, terminal disease and stress. After the definition of ND and etiology applicable to the patient in question, types of care were selected from a list of interventions\(^{(16)}\).

The nursing progress notes, included in the Sistematização da Assistência de Enfermagem (Nursing Care Systematization), in this hospital institution, is daily recorded by the nurse in the patient’s medical chart.

Although ND fatigue is important, the present study shows a lack of records, with only one chart (0.9%) including this diagnosis.

Nurse’ lack of knowledge about fatigue symptoms and the subjectivity to identify this are some of the factors that cause the diagnosis not to be established. In 15.9% of the medical charts, there were symptoms that could suggest the presence of fatigue, revealing the fact that the nurse usually detects the defining characteristic, but cannot associate it with ND fatigue.

This study shows the relationship between fatigue and chemotherapy, including 50% of patients, who used this type of therapy, feeling related symptoms. Data shown in a study performed with women undergoing chemotherapeutic treatment revealed that 59% of them had fatigue\(^{(17)}\). At the moment of diagnosis or after the first cycle of chemotherapy, fatigue is described by approximately 40% of patients. In the most advanced stage of the disease, it can reach 99% of occurrence. In such cases, patients report extreme discomfort\(^{(8)}\).

The condition involving lack of energy, cognitive reduction, sleepiness, mood disorders or muscular weakness, i.e. the defining characteristics of ND fatigue, is common in patients who undergo chemotherapy and it can continue after this treatment ends. Like other side effects of this therapy, fatigue can also have an emotional and social impact, in addition to economic costs for patients and family members. It can be equally understood as the longer and lasting adverse effect of chemotherapy, also caused by long-lasting pain, persistent nausea and depression\(^{(10)}\).

**CONCLUSIONS**

With this study, it could be concluded that ND fatigue has not been established correctly by the nurses of the university hospital selected, once they described the defining characteristics in the nursing progress notes, but not in the system, preventing this diagnosis and the interventions associated with this ND from being implemented. The nurses’ lack of knowledge or even the clinical inadequacy of defining characteristics associated with ND fatigue could be the reasons for this ND to be poorly identified.

Fatigue is usually underreported by nurses, due to the patient’s subjectivity to report symptoms. This hinders the establishment of the ND and its respective interventions.

Understanding this phenomenon becomes a challenge for nursing, both to identify ND fatigue and to implement measures that can be efficient to improve the quality of life of cancer patients.

It is recommended that more studies on this issue be performed, aiming to improve nursing care for cancer patients.

**REFERENCES**