

Ocena jakości opieki pielęgniarskiej w grupie pacjentów neurologicznych

Assessment of nursing care quality in a cohort of neurological patients: cross sectional study

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STRESZCZENIE

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Wstęp. Opieka pielęgniarska jest realizowana na wysokim poziomie, jeśli odnosi się do ustalonych standardów i zasad zawodu pielęgniarki. Jakość opieki pielęgniarskiej może być rozpatrywana z punktu widzenia struktury, procesu i efektów.

Cel. Celem badań była ocena poziomu opieki pielęgniarskiej w grupie pacjentów hospitalizowanych w Klinice Neurologii Centrum Klinicznego w Serbii.

Materiał i metody. Badania przekrojowe przeprowadzono w grudniu 2011 roku. Zbadano 107 pacjentów hospitalizowanych w 6 oddziałach: Oddział Zaburzeń Zachowania, Oddział Chorób Nerwowomięśniowych, Oddział Chorób Neurodegeneracyjnych, Oddział Chorób Demielizacyjnych, Oddział Leczenia Padaczki i Oddział Zaburzeń Snu. Dane zebrano za pomocą ukierunkowanych kwestionariuszy oraz skal: Glasgow, Braden, Morse i Barthel. Oceny dokonano według kategorii pielęgnacji. W analizie danych, obok statystyk opisowych, wykorzystano test Chi-kwadrat, parametryczną i nieparametryczną analizę korelacji.

Wyniki. Zbadano 107 pacjentów, 47 mężczyzn i 60 kobiet; średni wiek badanych to $51,6 \pm 15,7$ lat, bez istotnych statystycznie różnic w zależności od oddziału. Korelacja z rodzajem oddziału wykazała istotną statystycznie różnicę w stosunku do liczby łóżek i liczby pacjentów ($p=0,001$). Średnie wyniki wszystkich wykorzystanych skal są na poziomie istotności statystycznej: skala Glasgow $p=0,001$, Barthel $p=0,001$, Morse $p=0,034$ i Braden $p=0,001$. Biorąc pod uwagę liczbę pielęgniarek uzyskano istotną różnicę w stosunku do rodzaju oddziału i zmiany pracy. Całkowita liczba pielęgniarek była istotnie dodatnio skorelowana ze skalą Barthel ($r=0,238$, $p=0,023$). Nie stwierdzono istotnej korelacji między całkowitą liczbą pielęgniarek, wiekiem i płcią pacjentów. Czas hospitalizacji był istotnie ujemnie skorelowany ze skalą Barthel ($r=0,409$, $p=0,001$), Braden ($r=0,486$, $p=0,001$), obecnością zmian skórnych ($r=0,318$, $p=0,001$), cewnika na stałe ($r=0,657$, $p=0,001$) oraz zakażeniami układu moczowego ($r=0,277$, $p=0,004$).

Wnioski. Badanie pokazało, że opieka oceniana w grupie pacjentów neurologicznych jest realizowana na wysokim poziomie. Jednocześnie, badania pokazują odstępstwa od oczekiwanej liczby pielęgniarek w stosunku do kategorii opieki, jaka powinna być realizowana wobec pacjentów.

Słowa kluczowe: jakość opieki pielęgniarskiej, pacjenci neurologiczni, wystandaryzowane skale

ABSTRACT

Assessment of nursing care quality in a cohort of neurological patients: cross sectional study

Introduction. High-quality nursing care is provided in accordance with the established standards and principles of the nursing profession. The quality of nursing care can be seen from the viewpoint of structure, process quality and quality outcomes.

Aim. To estimate the level of nursing care in a cohort of patients hospitalized at the Neurology Clinic, Clinical Center of Serbia.

Material and methods. The study design (cross sectional study) was conducted during December 2011. All patients ($N=107$), hospitalized at the six clinical departments: Department of Behavioral Disorders, Department of Neuromuscular Diseases, Department of Neurodegenerative Diseases, Department of Demyelinating Diseases, Department of Epilepsy and sleep disorders, were included in the research. Data was collected using targeted questionnaires and standardized scales: Glasgow, Braden, Morse and Barthel index. The assessment was done according to the level of nurturing. In analyzing the data, except for descriptive statistics, we used t-test and χ^2 test, parametric and nonparametric correlation analysis.

Results. During the research in the clinics there were hospitalized 107 patients, 47 males and 60 females, average age 51.6 ± 15.7 years, with no statistically significant differences in relation to the type of clinical departments. Correlation with the type of clinical departments showed a statistically significant difference compared to the number of beds and number of patients ($p=0.001$). Mean scores of all used scales are at the level of statistical significance: Glasgow scale $p=0.001$, Bartel scale $p=0.001$, the Morse scale

$p = 0.034$ and Braden Scale $p = 0.001$. In relation to the number of nurses, we obtained a significant difference by type of department and shift-work schedule. The total number of nurses was significantly positively correlated with the Barthel index ($r = 0.238$, $p = 0.023$). There was no significant correlation between the total number of nurses, patient age, and gender. Length of hospitalization was significantly negatively correlated with the Barthel index ($r = 0.409$, $p = 0.001$), Braden scale ($r = 0.486$, $p = 0.001$), skin lesions ($r = 0.318$, $p = 0.001$), permanent catheter ($r = 0.657$, $p = 0.001$) and urinary tract infections ($r = 0.277$, $p = 0.004$).

Conclusions. The evaluation of the level of nursing care in a cohort of neurological patients indicates a high level of care, although the study results support deviation from the expected standard-number of nurses according to the level of care.

Key words: quality of nursing care, neurological patients, standardized scales

INTRODUCTION

High-quality nursing care is provided in accordance with the established standards and principles of the nursing profession. The quality of nursing care can be seen from the viewpoint of structure, process quality and quality of outcomes [1].

The patient and his/her family are the focus for us, achieving their needs through the best available medical practice, caring for safety and work quality which is improved through research and innovations supported with education and continual professional development.

AIM

The aim of this study is to estimate the level of nursing care in a cohort of patients hospitalized at the Neurology Clinic, Clinical Centre of Serbia.

Professional model of nursing

Exchanging information, positive examples of good practice, work determined by ethical norms and management led by head nurses happens in working environment which is defined with systematic solutions which should be led with organized influence of Nursing Chamber, nursing associations and public-users of medical services.

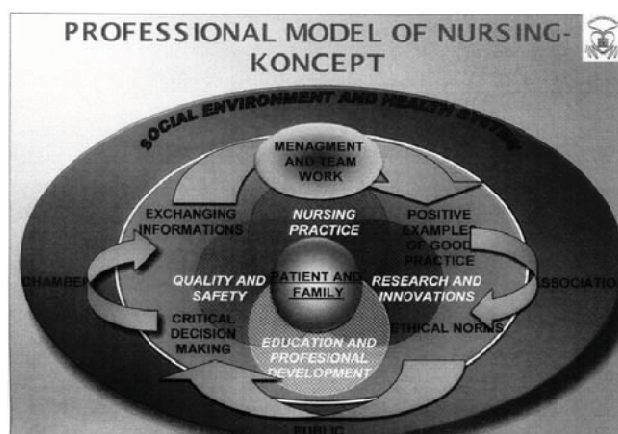


Figure 1. Professional model of nursing

Education

In Serbia the basic level of nurse's education is secondary school level. The reform of higher education (European education strategy and directive 2005/36/ EU) enables nurses to choose between basic vocational or academic studies. There are specializations for some areas and possi-

bilities for acquisition of academic title. Continual professional development is an imperative, because knowledge is the only human resource, which cannot be spent, but it can expire. Therefore, professionals are obligated to become more active in finding the proper way for better development of nursing. The initial and most crucial element for changes in the field of health care and nursing is education [3].

Educational structure of nurses at the Neurology Clinic

The educational structure of nurses in our Clinic is in accordance with the requirements. At the Clinic of neurology there are employed 23 nurses educated in compliance with European education strategy and Directive 2005/36/EU, 10 nurses who are still studying, 7 nurses who completed their education on bridging courses (nurses who completed the old system of education), 2 nurses with university degrees and 78 nurses with basic level of nurse education. The educational structure of nurses at our clinic is far above the average for Serbia. Nursing process as a basic method of work, has limited usage only in few medical institutions so, there is no evidence about practical work [4]. Research work in nursing is limited and is not usually supported by medical or state institutions. To create modern way of nursing, proactive approach is necessary so the practice could be free of bounds and through defined competence manage the process, improve and evaluate outcomes of care for individual, family and community [5].

Nursing documentation

At the Neurology Clinic, nurses have documented their work for more than 20 years. The method of the nursing process is applied in practice with a set of documents made by 5 nurses from the clinic. First of all, they analyse domestic and international nursing documentation after which they make a proposal of our set of documents. An integral part of the documents are our tools- internationally recognized scales. Considering the lack of education of a number of nurses, particularly in the area of documentation, we have organized training for all nurses in the clinic for the period of 50 hours [6].

The hospital units at the clinic are organized by medical discipline and intensity of treatment and nursing care. Standard unit is the basic level of treatment and care, level 1 is a unit of semi-intensive treatment and care, and levels 2 and 3 are units for intensive treatment and care. According to these levels, the needs of department personnel are defined. The number of nurses is insufficient to respond to the needs of patients, which is why nurses do not follow the

nursing process with all patients but only those that are highly dependent on nursing care.

The average number of nurses on nursing care duties per patient bed at the Neurology Clinic is 0.46. According to current standards there should be 0.66 nurses per bed. Every day, on average, more than 8 nurses are lacking. Regardless of that, the nurses keep record of the following statistical indicators:

- The number of patients followed by the process of nursing care;
- The number of nurse discharge letters and number of responses;
- The number of bedsores (the Braden scale);
- The number of patients with urinary catheters in relation to the number of patients with urinary infection;
- Barthel index;
- The number of falls and injuries (the Morse scale).

MATERIAL AND METHODS

The study design (cross sectional study) was conducted during December 2011. All patients (N=107) hospitalized at the six clinical departments: Department of Behavioral Disorders, Department of Neuromuscular Diseases, Department of Neurodegenerative Diseases, Department of Demyelization Diseases, Department of Epilepsy and sleep disorders, were included in the research. The data was collected using targeted questionnaires and standardized scales: Glasgow, Braden, Morse and Barthel index. In analysing the data, except for descriptive statistics, we used t-test and χ^2 test, parametric and nonparametric correlation analysis.

DISCUSSION

At the time of carrying out research there were hospitalized 107 patients at the clinic, 47 males and 60 females, average age 51.6 ± 15.7 years, with no statistically significant differences in relation to the type of clinical departments. Correlation with the type of clinical departments showed a statistically significant difference compared to the number of beds and number of patients ($p = 0.001$).

Mean scores of all used scales are at the level of statistical significance: Glasgow scale $p = 0.001$, Bartel scale $p = 0.001$, the Morse scale $p = 0.034$ and Braden Scale $p = 0.001$. In relation to the number of nurses, we obtained a significant difference by type of department and shift-work schedule. The total number of nurses was significantly positively correlated with the Barthel index ($r = 0.238$, $p = 0.023$). There was no significant correlation between the total number of nurses, patient age and gender. The length of hospitalization was significantly negatively correlated with the Barthel index ($r = 0.409$, $p = 0.001$), Braden scale ($r = 0.486$, $p = 0.001$), skin lesions ($r = 0.318$, $p = 0.001$), permanent catheter ($r = 0.657$, $p = 0.001$) and urinary tract infections ($r = 0.277$, $p = 0.004$).

CONCLUSIONS

Evaluation of the level of nursing care in a cohort of neurological patients is indicating a high level of care, although the study results support deviation from the expected standard- number of nurses according to the level of care.

The team of nurses at the Neurology Clinic make efforts to create evidence of the practice, to measure the quality of work, to evaluate the outcomes of care and to improve everyday practice.

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