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Original Article

PLANNED NURSING CARE - A MAIN ELEMENT OF HEALTH CARE MANAGEMENT FOR ISCHEMIC STROKE PATIENTS

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Summary

Morbidity and mortality rate for stroke and ischemic stroke (IS), in particular, have ranked Bulgaria at a top place in the European Union. In the acute recovery stage of the disease, patients need continuous and personalized health care. The assessment of individual needs and adequate planning for nursing interventions, known as nursing process stages, are the basis of effective care management for patients, surviving ischemic stroke (PSIS). Therefore, the study and application of the nursing process in practice have proved to be an objective prerequisite for improving the quality and development of nursing care for PSIS. The objective of the study was to analyze the opinion of nurses working in clinics/departments of Neurology and Physiotherapy and Rehabilitation in three towns in Northern Bulgaria, on health care (HC) planning for PSIS and the required documentation. A direct anonymous inquiry was carried out, using specially designed questions to investigate the opinion of the respondents on the problems studied. Of the 81 individuals approached, 75 (93%) responded. Of these, 52 (69%) were familiar with the main points of the nursing plan concept, and 34 (65%) had heard about the concept during their basic training in the speciality. According to 67 (89%) of the respondents, a care plan was necessary to increase the health care (HC) efficiency in IS patients. Our results showed that healthcare professionals considered care planning an important tool to ensure continuity, evaluation and control of the care provided. According to the respondents, documenting health care and evaluating the activities performed will contribute to improve the quality of nursing care and promote research into nursing care.

Keywords: stroke, nursing care plan, nursing process, nurse

Introduction

The incidence of cerebrovascular diseases (CVD) is increasing, and they are one of the leading causes of morbidity, mortality and disability. Strokes, including ischemic strokes rank first among socially significant diseases because of their very high morbidity, mortality, and severe disability in some of the survivors [1; 2].

In view of the leading place of strokes and especially ischemic strokes among the socially significant diseases in Bulgaria, it is of great importance to focusing on the

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care for these partially or completely dependent people. According to the National Center for Public Health and Analysis data for 2019, ischemic strokes (IS) accounted for 91% (52 891) of all strokes (58 128). They were the most common acute cerebrovascular disorders, with a mortality rate of about 12%.

In general, stroke is the leading cause of long-term incapacity for work in Europe. The demographic changes will undoubtedly contribute to an increase of both morbidity and mortality rates. Stroke often causes dementia, depression and is the most common cause of epilepsy in adults [3; 4; 5].

Over 120 000 people, disabled people as a result of stroke have been certified by Territorial Expert Medical Committees and have retired from work due to the condition. Most of them need a caregiver round the clock. Approximately 10% of the ischemic stroke patients have severe motor and speech deficits and need professional care.

It should be emphasized that in Bulgaria such patients spend a small part of the recovery and rehabilitation period in a specialized ward, due to the new requirements of the health insurance fund [6; 7]. According to the health legislation of the Republic of Bulgaria, the National Framework Agreement, 2018, Annex 17A; Clinical Pathway No. 254, the duration of hospital stay is limited to 20 days per year.

The short stay in a specialized ward/clinic during the recovery period has led to deterioration in life quality of PSIS, as well as that of their relatives. The statistical data and the trends related to cerebrovascular diseases are a serious prerequisite for expanding research on PSIS care. Quality control and healthcare assessment are the main goals of the health reform in the country. They could be implemented only through planning in advance and documenting the provided health care and the results achieved.

Proper planning of the nursing care and its competent implementation in inpatient and outpatient care would reduce the risk of complications and increase the chance for a favorable outcome of the cerebrovascular incident. Healthcare professionals (HCP) should be trained to provide care for IS patients and have specific competencies.

Nursing plans have proved their worthiness. A care plan integrates medical treatment, patients'

expectations and wishes, as well as a nurse's recommendations [8]. Care plans make nurses active participants in the functional recovery of patients, who have survived a stroke.

This study was carried out because of the social significance of the problem, the increasing needs of PSISs with varying degrees of dependence, the lack of health care standards with specific behavior algorithms related to standard and individual care plans.

The objective of the study was to analyze the opinion of nurses working in clinics/departments of Neurology and Physical and Rehabilitation Medicine in three cities in Northern Bulgaria, on health care (HC) planning for patients who survived an ischemic stroke.

Material and Methods

The study included 75 nurses from four clinics and six wards located in three cities in Northern Bulgaria. Sociological and statistical methods were used:

Sociological Method – A direct anonymous inquiry was conducted with specially designed questionnaires, including open-ended, semi-open and closed-ended questions. The respondents were from the Clinic of Neurology and the Department of In-Hospital Rehabilitation of the University Hospital in Pleven, the Department of Neurology of the Military Hospital in Pleven, affiliated with the Military Medical Academy, the Department of Neurology of the St. Pantaleimon Hospital – Pleven, the Department of Neurology of Avis Medica Hospital – Pleven, the Department of General and Vascular Neurology, Department of Physical and Rehabilitation Medicine – Regional Hospital – Rousse, and First and Second Clinic of Nervous Diseases, and the Clinic of Physical and Rehabilitation Medicine of St. Marina University Hospital – Varna.

Statistical method. The obtained results were processed with Microsoft Office Excel 2010 and SPSS v. 24.0 software. Qualitative and quantitative variables were used in the study. The results are presented in absolute numbers and percentage in the form of graphics and tables.

Results

The anonymous questionnaires were filled in by

nurses working in clinics/wards of Neurology and clinics/wards of Physical and Rehabilitation Medicine in the cities of Pleven, Rouse and Varna. Out of a total of 81 participants, 93% (75) responded. Over two thirds of the respondents 84% (63) had not been surveyed so far on issues related to care for PSIS.

Healthcare professionals (HCP) with a professional experience from 11 to 30 years predominated, which was a guarantee for the reliability of the obtained results (Fig. 1).

Nearly half of the respondents Almost half of the respondents 48% (36) had a higher educational-qualification degree – specialist/professional bachelor, 33% (25) had a bachelor's

degree, 9% (7) – a master's degree and only 8% (6) of the respondents indicated another level of education, such as college and high school vocational training.

The data analysis revealed that 69% (52) were familiar with the nature of the nursing plan concept: 65% (34) had studied care planning during their basic training in the speciality, and 19% (10) had learned about the concept during their studies for a higher qualification degree. Despite the high ratio of nurses who had studied care planning 69% (52), a high percentage of the respondents - 55% (41) did not use a health care plan in their daily practice. Identification of the reasons for this result should be the subject of

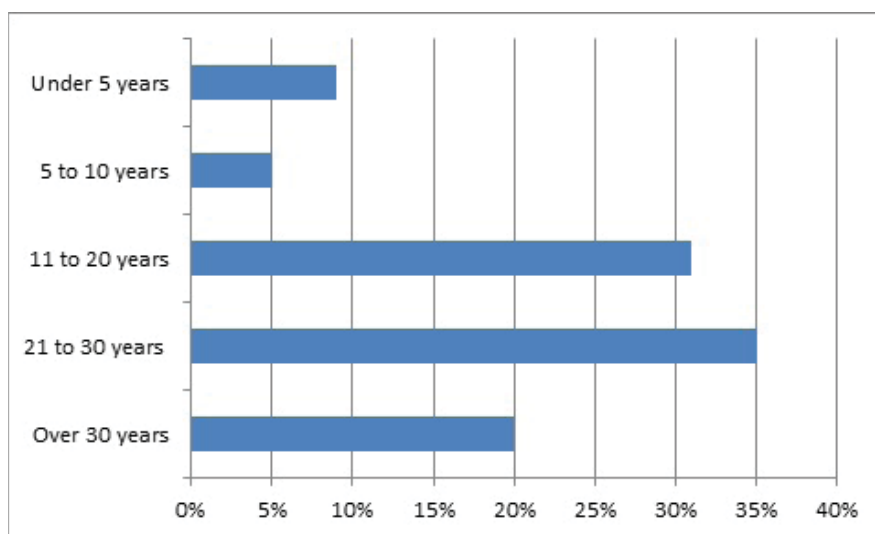


Figure 1. Distribution of respondents by years of working experience.

Table 1. Distribution of responses related to the main points of care plans

Statements	Yes N (%)	No N (%)	Total N (%)
A health care plan is necessary for increasing the efficacy of care for stroke patients	67(89%)	8(11%)	75(100%)
Implementing a health care plan requires specialized documentation	50(67%)	25(33%)	75(100%)
A standard care plan is applicable to all patients with a certain diagnosis	50(67%)	18(24 %)	68 (91%)
A personalized care plan, based on the standard one, is made for each patient.	64(85%)	8(11%)	72(96%)
A personalized care plan is necessary to plan care in the home of the patient after discharge.	53(71%)	13(17%)	66(88%)
A care plan is an additional burden in daily on the daily work of health care professionals.	52(69%)	15(20%)	67(89%)

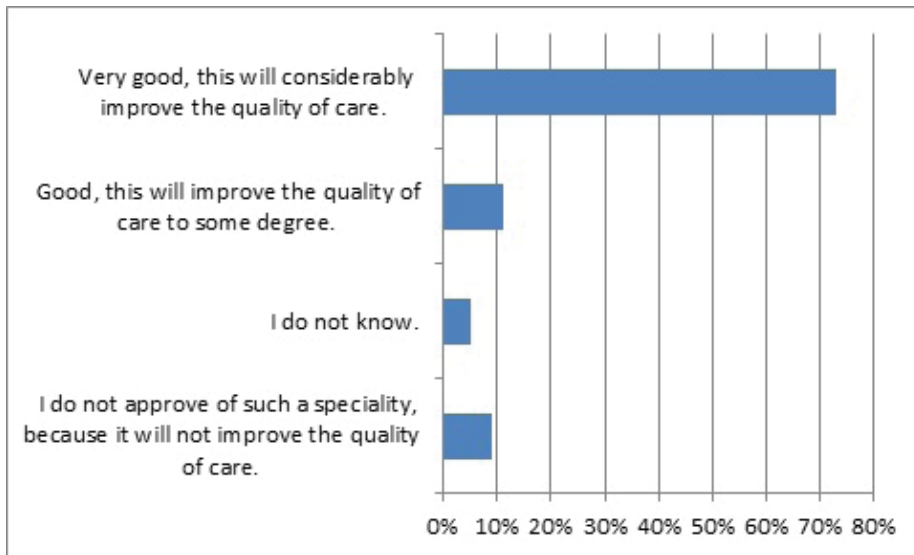


Figure 2. Nurses' opinion on the necessity to include the speciality "Nursing care for neurological patients" in basic training course.

further research.

According to 48% (36) of the nurses surveyed, care planning was necessary to personalize nursing activities, and 37% (28) were convinced that better care for patients would be achieved through care planning. Only 8% (6) of the respondents were negative about planning, claiming that it would create unnecessary burden on nurses.

Part of the questions provided the opportunity to the respondents to share their views on the nature of the care plan (Table. 1).

The health professionals have defined exactly what activities a care plan included. There were two types of plans. One is based on an individual's fundamental needs for a certain condition, applicable for every patient with this condition. The other plan is personalized and designed according to the individual characteristics of each patient – age, emotional state, intellectual and physical abilities, social, cultural and economic status, other pathologies, and the environmental conditions related to the care provided [9;10].

According to 71% (53) of the respondents, postgraduate training of nurses was required in home care for ischemic stroke patients, while 73% (55) considered it was necessary to include nursing care for neurological patients in the basic training program (Fig. 2).

Discussion

The data obtained after processing the results showed that the majority of the interviewed nurses had not participated in surveys on issues related to nursing and care for patients, survivors of ischemic stroke. The largest relative share of 35% (26) was that of nurses with professional experience of 21-30 years, followed by 31% (23) with experience of 11 to 20 years that was a prerequisite for the data reliability. Only 5% (4) were professionals with experience of 5 to 10 years.

The results showed a significant shortage of nurses in the wards/clinics of Neurology and Physical and Rehabilitation Medicine included in the study. The nursing staff did not correspond to the increasing incidence of ischemic strokes. This tendency warrants the assumption that there will be a growing need for professional nursing care in both hospital and home conditions in the future.

The difficulties in planning care for patients surviving IS could be explained not only by the lack of knowledge, as asserted by 24% of the respondents, but also by the lack of experience in developing a care plan, as stated by 55% of the nurses.

Documenting nursing care is an European and global practice. In Bulgaria, the changes in the training of nurses in accordance with the requirements of the European Union started at

the end of the last century. In Bulgaria, there are all the prerequisites for improving the quality of care provided to patients after passing Ordinance No. 1 of 08.02.2011, regulating the professional competencies of nurses. The preparation and organization of planning by healthcare professionals with lower competencies who have not studied in detail the nature of the nursing process and the related documentation was questioned. This survey showed that more than half of the respondents were aware of the nature of a nursing plan, and 17% (9) had heard of care planning from their colleagues.

In some of the questions, the respondents shared their views on the importance of the care plan (Table 1), where over two thirds of them indicated a care plan as necessary to increase the health care efficiency for patients, survivors of an ischemic stroke.

“Care for ischemic stroke patients at home should be ensured through well-trained nurses”, declared two-thirds of the healthcare professionals who responded to the study. The introduction of the speciality “Nursing care for neurological patients” (Fig. 2) was required according to the majority of the respondents.

Healthcare professionals are aware of the importance of care planning to ensure continuity, evaluation and control of care provided. According to the respondents, documenting the care and the evaluation of the activities performed would contribute to providing effective personalized care.

Observations:

- The majority of the respondents - 84% (63) had not been surveyed so far on issues related to the care for patients, survivors of an ischemic stroke.
- Over two thirds of the respondents 69% (52) were familiar with the nature of the “nursing plan concept”.
- The majority of the respondents, 55% (41) did not use a health care plan in the treatment process of patients, survivors of ischemic stroke.
- Only a small part of the respondents 8% (6) were negative about health care planning for ischemic stroke patients.
- Almost all the health professionals surveyed were convinced of the need for continuing training in home care for patients who had survived an ischemic stroke and the need to

introduce the speciality of nursing care for neurologically ill patients.

Conclusion

The health professionals surveyed were convinced of the need for health care planning for patients, survivors of an ischemic stroke, as an indispensable prerequisite for improving the quality of modern care in professional and innovative applied nursing.

Taking into consideration the leading position of ischemic stroke among the socially significant diseases in Bulgaria, it is extremely important to focus on care for IS patients as partially or completely dependent people. Care determines the quality and duration of life, which is one of the priority goals of the health reform in our country [11].

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