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Nursing care for a patient after an ischemic stroke

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ABSTRACT

Introduction and aim of the study. More than half of ischemic strokes occur above the age of 65, so a stroke is above all a disease of an old age. The problem of a stroke is crucial, because apart from a high mortality rate it also entails a disability. The aim of the study was to determine the scope of nursing care for the patient after an ischemic stroke.

Methods and materials. The study was based on the case study method with the use of the following research techniques: documentation analysis, an interview, measurement and observation. Moreover, the study tools applied comprised: an individualized nursing care plan, Barthel Scale, Glasgow Scale, Dutch Scale, the authors' own test examining the patient's knowledge.

Criteria for the care categories.

Findings. After the interview, the biopsychosocial status of the patient was assessed. Nursing diagnoses were made using the empirical data for this purpose.

Conclusions. The sudden occurrence of the disease, hospitalization and lack of support from relatives is a difficult and critical situation for the patient, and it disturbs normal functioning in all spheres: biological, psychological and a social one.

Key Words: nursing care, patient, ischemic stroke

INTRODUCTION

According to the WHO definition of 1976, an ischemic stroke is a clinical syndrome characterized by a sudden occurrence of focal and sometimes also generalized brain disorder, the symptoms of which persist - if they do not lead to death - longer than 24 hours and have no other cause than a vascular one [1].

The cause of stroke is a blood flow disorder (in the form of reduced blood flow – an ischemic stroke, or in the form of a cerebral hemorrhage – a hemorrhagic stroke). More frequently (in almost 80% of cases), an ischemic stroke – cerebral infarction occurs, whereas hemorrhagic stroke - a hematoma of the brain - is much more severe in the course and in further predicting [2].

More than half of strokes occur over the age of 65, so stroke is a disease of mostly an old age, among young people its incidence is much less common [3, 4]. The problem of a stroke is vitally important, because apart from a high mortality rate it involves disability. In developed countries disability affects 50% of patients, whereas in Poland it affects 70% of patients [2, 4 – 6].

AIM OF THE STUDY

The aim of the study was to determine the scope of nursing care for a patient after an ischemic stroke.

METHODS AND MATERIALS

The study involved an individual case method, using such research techniques as: records analysis, interview, measurement and observation. In addition, the study also used such research tools as the individualized nursing care card, the Barthel scale, the Glasgow Coma Scale, the Dutch Fatigue Scale, the author's own test examining the patient's knowledge and the criteria for the care category.

The study was carried out during two appointments with the patient, on 1/05/2018 and 2/05/2018 in Lublin, at the Independent Public Central Teaching Hospital No. 4. The person examined was a 60-year-old man after having suffered an ischemic stroke. The patient was informed about the purpose of the examination, its anonymity and he agreed to participate in it.

RESULTS

The study included a 60-year-old patient, a childless bachelor. The man graduated from elementary school, then he took several upskilling courses. He has been living and working at their employers' place on a farm in Piaseczno for about 18 years. He has his own room there. It was possible for the patient to count on help from the residents when he needed it. He assessed the accommodation conditions as good ones.

The patient observed the first symptoms of his malaise the day before he was hospitalized. He had a headache and a nosebleed. The patient did not complain to anyone of the symptoms and after having controlled the nosebleed he went to work and performed his duties till late in the evening. The next day, despite his malaise, he went to work in the field.

During the performance of his duties, he felt a sudden weakness and lost consciousness. After regaining consciousness, he was taken home and an ambulance was called for. On 19/04/2018 the patient was sent to the Hospital Emergency and Accident Department, at the Independent Public Central Teaching Hospital No. 4 in Lublin, where he was seen with a lopsided left corner of the mouth and slurred speech as well as confusion. He was transferred from the Hospital Emergency and Accident Department to Neurologic Clinics at the Independent Public Central Teaching Hospital No. 4 in Lublin. After the CT scan of the

head, he was found to have an ischemic stroke of the right hemisphere. After extensive diagnostics, the patient was ordered pharmacological treatment.

During the first appointment on 1/05/2018, measurements of basic vital parameters and assessment of individual systems were made using a questionnaire.

The functioning of the cardiovascular system in the norm except for recurrent left upper limb edema due to an injury that took place about 6 years ago. The pulse was regular with pressure in the norm and constituted 78 beats per minute. Blood pressure amounted to 130/80 mmHg. The patient did not suffer from fainting or cyanosis.

The functioning of the respiratory system was in the norm. The patient was breathing abdominally. The number of breaths per minute was 15. Dyspnea, rhinitis, retention of sputum and coughing did not occur.

Functioning of the digestive system in the norm except for constipation. Appetite was also in the norm, and despite incomplete dentition, the patient tried to eat everything, he also drank lots of liquids i.e. about 2 liters a day. The man was on a general diet. Vomiting, nausea and heartburn did not occur. Peristaltic bowel movements were present.

The functioning of the genitourinary system was in the norm. There were no difficulties in urinating. The patient used auxiliary equipment that is diaper pants.

The condition of the musculoskeletal system was disordered. The patient had left-sided hemiparesis dominating in the upper limb. He moved the right upper and lower limb to a very small extent. Muscle tension was reduced. The man did not move on his own, he was immobilized in a hospital bed.

The functioning of the nervous system was in the norm. The patient did not report any pain. Convulsions, sensory disturbances and vertigo were absent.

Dysarthria was present in the patient, but it remitted after a few days in hospital. Mental state of the patient was not too good. He was in low spirits. He reacted with anxiety and sadness to the disease and prospect of hospitalization. The man is a lonely person, he does not

have a wife, children or extended family. He felt a grievance with his employers that after so many years of work when he fell ill, they turned their back on him and no one visited him at hospital. He is on the waiting list to be transferred from the hospital to the nursing home. He was on anti – depressants. He also suffered from insomnia, so hypnotics were administered as well. The patient was addicted to intense cigarette smoking.

The functioning of the sensory organs was in the norm except for the sight. The patient used glasses to read.

The hygienic condition of the skin was good. The body temperature was 36.7°C. No discernible dehydration and bed sore signs on the skin. According to the Dutch Consensus Prevention of Bedsores scale - CBO (Appendix 4), there is a risk of developing bedsores, the patient scored 11 points. The category of patient care was classified as category II. The result was obtained based on Annex 1 to the Regulation of the Minister of Health of December 28, 2012. *"Criteria for the category of care in the case of a department with a conservative and surgical profile or another unit or organizational unit with this profile"*.

The patient took a test examining knowledge and skills in the preparation for self-care, obtaining 14/19 points. This testifies to the man's sufficient knowledge.

The patient did not report any concomitant diseases. As he reported, neither his family nor siblings suffered from any serious illness. After his hospital treatment, he was transferred to a nursing home. The man cried a few times during the meetings. He felt very lonely and did not see any point in being treated any further.

Based on the study carried out, the following nursing diagnoses and care plans were developed:

Diagnosis I: Anxiety and fear caused by a sudden disease and hospitalization.

Aim: Reducing anxiety and improving the well-being of the patient.

Care plan:

- interviewing the patient to assess the severity of anxiety and its possible causes,
- aid in adapting to the hospital conditions,
- creating a safe atmosphere due to the patient's age
- describing the patient every activity performed for him, as well as providing him with a current account of his health condition and further planned activities,
- enabling the patient to communicate with the medical team on a regular basis,
- being present with the patient whenever he needs it and providing psychological support for him.

Diagnosis II: Patient's sorrow caused by a lack of support from a relative.

Aim: Improving the patient's mental condition.

Care plan:

- gaining patient's trust,
- providing emotional support,
- allowing the patient to talk to a specialist,
- encouraging the patient to come into contact with other patients,
- constant observation of the patient's behavior and moods,
- organizing the patient's free time so that he thinks about his situation as little as possible.

Diagnosis III: Presence of constipation due to bed immobilization.

Aim: Reducing discomfort and unpleasant ailments.

Care plan:

- recommending the patient to eat meals regularly,
- increasing the amount of fiber consumption in the patient's diet,
- monitoring the frequency and type of excretion,
- performing belly massage with circular movements several times a day for about 2 minutes,
- administering medicines or performing an enema on doctor's order.

Diagnosis IV: Recurrent edema of the upper limb caused by the unremedied injury from the past.

Aim: Removing the edema in the elderly patient.

Care plan:

- assessment and documentation of the edema,
- taking blood pressure,
- limiting the patient's consumption of salt,
- using aids such as rollers for edematous limbs,
- thorough washing and oiling of the skin,
- when necessary, applying a compress on the edematous limb.

Diagnosis V: Increased risk of infection at the peripheral venous catheter insertion site due to the patient's age.

Aim: Reducing the risk of infection.

Care plan:

- taking care that the insertion sites and its surroundings are clean (using antiseptics, changing the catheter adhesives),

- avoiding wetting of the insertion site,
- thorough cleaning and disinfection of hands,
- using disposable gloves,
- careful monitoring and control of the insertion site.

Diagnosis VI: The risk of bed sores due to patient's age and bed immobilization.

Aim: Prevention of bedsores.

Care plan:

- relieving sites that are particularly exposed to pressure using pillows and rollers,
- careful observation of the body while performing toiletry,
- maintaining the skin clean and oiling it,
- changing the body position every 2 hours,
- using an anti-bedsores mattress,
- assessment of the risk of development of bedsores using a selected scale.

Diagnosis VII: Risk of recurrent ischemic stroke due to risk factors such as age, hypertension and smoking.

Aim: Reducing the risk of recurrent stroke by modifying risk factors.

Care plan:

- discussing the risk factors that contribute to the stroke and its complications,
- motivating the patient to change their lifestyle,
- explaining what risk factors can be modified in a given case, i.e. hypertension by reducing salt intake and regular monitoring of blood pressure, increasing physical activity and quitting cigarette smoking,
- raising awareness of regular check-ups at the GP's,
- providing the patient with materials on self-care after stroke.

Diagnosis VIII: Addiction to cigarette smoking.

Aim: Motivating the patient to quit smoking.

Care plan:

- making the patient aware of how harmful cigarette smoking is,
- encouraging the patient to quit smoking gradually,
- providing the necessary materials for further education,
- occupying one's hand to overcome the reflex of reaching for a cigarette,
- as a last resort, undergoing pharmacotherapy on the doctor's order.

Diagnosis IX: Limited independence in performing daily activities due to age and deterioration of health condition.

Aim: Helping the patient to eat, improve and maintain proper personal hygiene.

Care plan:

- performing toiletry of the whole body in the morning and evening,
- maintaining the oral cavity clean,
- thorough drying of the body and skin oiling,
- helping the patient dress and undress,
- changing bed clothes and underwear if necessary,
- changing the patient's body position,
- helping the patient to eat.

Diagnosis X: The problem of falling asleep caused by an old age and a new life situation.

Aim: Helping the patient to fall asleep.

Care plan:

- providing the right microclimate in the patients' room,
- ventilating the room before going to bed,
- ensuring silence in the ward,
- leaving only the necessary lighting,
- providing peace to the patient,
- administering sleeping pills on the doctor's order.

Diagnosis XI: The risk of contractures and muscle atrophy due to hemiparesis and patient's age.

Aim: Reducing the risk of contractures and muscle atrophy.

Care plan:

- enabling the patient to contact a physiotherapist,
- showing the patient simple exercises so that he can perform them in bed at the beginning, e.g. bending and straightening the fingers, bending and straightening the limbs,
- encouraging the patient to perform daily exercises,
- supervising the patient during exercise performance and correcting possible mistakes,
- accompanying the patient, motivating and praising him after each exercise.

DISCUSSION

All diseases, especially those that occur suddenly are a big challenge. They often make life change to a lesser or greater extent, and it depends on a person how they approach and face the challenge. The aim of the study was to determine the scope of nursing care for a patient after ischemic stroke.

During the patient's stay in the hospital, a dozen or so problems related to the state of bio-psycho-social or neurological disorders were observed.

The nurse's tasks resulting from the educational function in the care for an elderly patient after an ischemic stroke include teaching the patient to behave properly during diagnostic tests and procedures, motivating him to follow the recommendations of the entire therapeutic team in the performance of treatment, and teaching him to perform and interpret measurements of vital signs [7].

The nurse's tasks resulting from the health promotion in care for a patient after an ischemic stroke are as follows: encouraging the patient to quit cigarette smoking, motivating him to lead a healthy lifestyle, having regular prophylactic examinations done, and developing adequate teaching materials [8].

The nurse's tasks resulting from the prophylactic function in care for a patient after an ischemic stroke include determining what concomitant diseases and addictions occur in the patient, assessing the risk of occupational diseases, determining the diet and physical activity, developing nursing methods and implementing prophylactic programs, which will be serve the purpose of preventing the further development of the disease [9].

The nurse's therapeutic and rehabilitative function in care for a patient after an ischemic stroke is based on performing basic measurements, evaluating and filing them, taking materials for diagnostic tests and administering medicines ordered by a doctor, as well as providing necessary assistance for a patient in life-threatening situations, participating in therapeutic and bedside rehabilitation, motivating the patient to take action and overcome difficulties in everyday activities [10].

CONCLUSIONS

A sudden occurrence of the disease, hospitalization and lack of support from relatives is a difficult and critical situation for the patient, and it disturbs normal functioning in all spheres: biological, psychological and a social one.

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