

Nursing Care For A Patient Suffered With A Hemorrhagic Cerebral Affect: An Experience Report

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Abstract:

Background: According to the World Health Organization (WHO), cerebrovascular accident (CVA) involves the sudden development of clinical signs of focal and/or global disorders of brain function, with symptoms lasting at least 24 hours, of vascular origin, resulting in cognitive and sensorimotor changes. Hemiparesis is the most common manifestation, but other symptoms include aphasia, visual changes, ataxia, vertigo, seizures and altered state of consciousness. In Brazil, stroke is the main cause of death and disability, generating a major economic and social impact, with an annual incidence of 108 cases per 100 thousand inhabitants. The study aims to report the experience of nursing care provided to an elderly woman suffering from a hemorrhagic cerebrovascular accident (CVA).

Materials and Methods: This is an experience report that occurred in October 2016, during the curricular internship of nursing students. The care was based on Wanda de Aguiar Horta's Theory of Basic Human Needs, which proposes an integral methodology for the nursing process, focusing on biopsychosocial-spiritual balance.

Results: Nursing care planning began with a detailed assessment of the patient's health status. Based on nursing diagnoses from Taxonomy II of the North American Nursing Diagnoses Association (NANDA), interventions were developed using the Nursing Interventions Classification (NIC) and the expected results were structured according to the Nursing Outcomes Classification (NOC).

Conclusion: The study highlights the relevance of nurses' role in caring for patients with hemorrhagic stroke, reinforcing the need for a holistic and systematic approach. The experience emphasizes the importance of considering the patient-family binomial, offering emotional support and guidance to caregivers. Multidisciplinary action and the quality of care provided are crucial to minimize damage, promote health and contribute to the clinical recovery of patients.

Key Word: Nursing Assistance; Nursing Processes; Stroke.

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I. Introduction

According to the World Health Organization (WHO), cerebrovascular accident (CVA) is associated with the accelerated development of clinical signs of focal and/or global disorders of brain activity, with symptoms lasting at least 24 hours, of vascular origin., causing changes at a cognitive and sensorimotor level, depending on the area and extent of the lesion^[1]. Hemiparesis is the most common symptomatological presentation. However, other neurological symptoms may be present, such as: aphasia, visual changes, ataxia, vertigo, seizures, and altered state of consciousness^[2].

Pathologies of cerebrovascular origin occupy the second place among the diseases that most affect victims with deaths in the world, behind only diseases that attack the cardiovascular system^[3]. In Brazil, stroke represents the first cause of death and disability, even with the decline in mortality rates, which generates great economic and social impact. Data from a national prospective study indicate an annual incidence of 108 cases per 100 thousand inhabitants^[1].

Stroke has a higher incidence in the elderly, when it correlates with cardiovascular and metabolic changes associated with age. However, risk factors such as cardiac, hematological disorders, vasculopathies, metabolic,

infectious, traumatic and neoplastic diseases, in addition to drug use; may lead to the early onset of cerebrovascular disorders [4].

There are two main types of strokes: ischemic and hemorrhagic. Ischemic stroke is caused by a blood clot that blocks the blood supply. Hemorrhagic stroke is caused by the rupture of the blood vessels that supply blood to the heart, causing brain damage. The main cause for this type of stroke is high blood pressure, which can weaken arteries in the brain and make them likely to rupture. High blood pressure can be caused by obesity, high alcohol consumption, smoking, lack of exercise, stress. Hemorrhagic stroke can also sometimes occur as a result of head trauma [5].

Wanda Horta was focused on a way of seeing nursing not as a service, but rather a more human way of treating, caring for and observing results based on the methods that were applied, in which the nursing process is the dynamic of systematized and interrelated actions, aimed at assisting human beings.

Given this scenario, the study aims to report the experience of nursing care to an elderly woman suffering from a hemorrhagic stroke.

II. Material And Methods

This is an experience report about nursing care for an elderly woman suffering from a hemorrhagic stroke. The care experience took place in October 2016, carried out by nursing students during a curricular internship in the Intensive Care Unit.

To carry out nursing care planning, notes were initially made on the patient's general health status. Afterwards, a search for Nursing Diagnoses was carried out, based on Taxonomy II of the North American Nursing Diagnoses Association (NANDA) [6]. Based on the diagnoses, health promotion actions were developed using the Nursing Interventions Classification (NIC) [7] and to construct the results, the Nursing Outcomes Classification (NOC) [8] was used.

The research was aligned based on the principles governed by Resolution nº 466/12 - National Health Council, in which the fundamental ethical and scientific requirements for working with human beings were met [9].

III. Result And Discussion

The actions developed were implemented based on the nursing diagnoses listed. Nine nursing diagnoses were listed, concerning the patient's psychobiological and psychosocial needs, shown in table 1.

Chart 1- Basic Human Needs, according to Wanda Horta, 1979 and Nursing Diagnoses, according to NANDA Taxonomy II, 2012-2014.

Nursing Problems	Basic human needs affected	Nursing diagnoses	Domain/class	Related to/ evidenced by
Deficit in oxygenation	Psychobiological (Oxygenation)	Impaired gas exchange: Excess or deficit in oxygenation and/or elimination of carbon dioxide in the alveolar-capillary membrane .	Domain 3: Elimination and exchange Class 4: Respiratory Function	Related to: Imbalance in the ventilation-perfusion relationship. Evidenced by: Decreased Carbon Dioxide; Abnormal arterial pH.
Risk of impairment of musculoskeletal activity	Psychobiological (Locomotion)	Risk of disuse syndrome: Risk of deterioration of body systems as a result of prescribed or unavoidable musculoskeletal inactivity.	Domain 4: Activity/rest Class 2: Activity/exercise	Related to: Altered level of consciousness.
Inability to adjust to decreased levels of ventilatory support	Psychobiological (Oxygenation)	Dysfunctional response to ventilatory weaning: Inability to adjust to decreased levels of mechanical ventilatory support, which interrupts and prolongs the weaning process.	Domain 4: Activity/rest Class 4: Cardiovascular/pulmonary responses	Related to: Improper rhythm in decreasing ventilatory support. Evidenced by: Decreased level of consciousness.
Need for invasive ventilatory support	Psychobiological (Oxygenation)	Impaired spontaneous ventilation: Decreased energy reserves, resulting in an inability of the individual to maintain adequate life-sustaining breathing.	Domain 4: Activity/rest Class 4: Cardiovascular/pulmonary responses	Related to: Respiratory muscle fatigue Evidenced by: Decreased SatO2
Caregiver vulnerability risk	Psychosocial (Security)	Risk of tension in the caregiver role: Risk of vulnerability on the part of the caregiver due to	Domain 7: Roles and relationships	Related to: Unpredictable course of the disease.

		difficulty playing the role of caregiver in the family.	Class 1: Caregiver roles	
Risk of infection	Psychobiological (Skin integrity)	Risk of infection: Risk of being invaded by pathogenic organisms	Domain 11: Safety and security Class 1: Infection	Related to: Inadequate primary defenses; Invasive procedures.
Aspiration risk	Psychobiological (Physical integrity)	Aspiration risk: Risk of gastrointestinal secretions, oropharyngeal secretions, solids or fluids entering the tracheobronchial tract.	Domain 11: Safety/security Class 2: Physical injury	Related to: Tube feeding; Reduced level of consciousness; Presence of intratracheal tube .
Risk of pressure ulcers	Psychobiological (Skin-mucosal integrity)	Risk of impaired skin integrity: Risk of altered epidermis and/or dermis.	Domain 11: Safety/security Class 2: Physical injury	Related to: Physical immobilization.
Elevated body temperature	Psychobiological (Thermal regulation)	Hyperthermia: Body temperature elevated above normal parameters	Domain 11: Safety/security Class 6: Thermoregulation	Related to: disease; Evidenced by: Increase in body temperature above normal parameters.

Based on the identification of nursing diagnoses, care planning was drawn up, considering the individuality and needs of the patient, aiming to minimize the damage caused by the pathology and prevent possible losses resulting from the hospitalization process.

Chart 2- Nursing Diagnoses according to NANDA Taxonomy II (2012-2014), NOC (2010) and NIC (2010).

Nursing diagnoses	Expected results	Nursing interventions
Impaired gas exchange	Electrolyte and acid-base balance Balance of electrolytes and non-electrolytes in the intracellular and extracellular compartments of the body	Acid-base control : respiratory alkalosis - Monitor arterial blood gas levels; -Monitor hyperventilation; -Reduce O2 consumption to minimize hyperventilation.
Risk of disuse syndrome	Consequences of immobility: physiological Severity of impairment of physiological functions due to impairment of physical mobility	Exercise therapy: muscle control - Guide the family regarding the need to adhere to the activity protocol; -Inform the family about the benefits of exercise therapy
Dysfunctional response to ventilatory weaning	Respiratory status: gas exchange Alveolar exchange of CO2 and O2 to maintain arterial blood gas concentrations	Ventilatory assistance -Maintain clear airways; -Monitor respiratory muscle fatigue; -auscultate respiratory sounds, observing areas of reduced or absent ventilation and the presence of adventitious sounds.
Risk of caregiver role strain	Caregiver stressors Severity of biopsychosocial pressure on a caregiver caring for a family member or significant member for an extended period of time	Caregiver support: -Offer encouragement to the caregiver during moments of patient setbacks; -recognize the difficulties of the caregiver's role
Risk of infection	Knowledge: Infection Control Extension of understanding of infection prevention and control.	Protection against infection - Monitor vulnerability to infection; -Monitor systemic and local signs and symptoms of infection; -Monitor the appearance of phlogistic signs in connections and pay attention to changes.
Aspiration risk	Aspiration Prevention Personal actions to prevent the passage of liquids and solid particles into the lungs	Airway aspiration - Suction via oral, nasal and artificial routes; - Auscultate respiratory sounds before and after aspiration.
Risk of impaired skin integrity	Consequences of immobility: physiological Severity of impairment of physiological functions due to impairment of physical mobility	Pressure ulcer prevention -Document the condition of the skin daily; -Monitor red areas; -Provide a change in position.
Hyperthermia	Thermoregulation Balance between heat production, increase and loss	Fever treatment -Monitor abnormalities in electrolytes; -Monitor acid-base imbalance; -Administer prescribed medications.

From the nursing care provided, significant progress was observed in the care process, highlighting the importance of nurses' professional practice with a biopsychosocial vision. This approach contributed substantially

to achieving the desired objectives, demonstrating the effectiveness of comprehensive and humanized care in the patient's recovery and well-being.

IV. Conclusion

In conclusion, this study highlights the relevance of nurses' role in the care of patients with hemorrhagic stroke, emphasizing the need for a holistic and systematic approach. The reported experience reinforces the importance of considering the patient-family binomial, offering emotional support and guidance for caregivers. The performance of the multidisciplinary team and the quality of care provided are essential to minimize damage, promote health and contribute to the clinical recovery of patients.

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