Nursing Care of the Client after a Cerebrovascular Accident Learning Activity: Week 1 & 2

Overview:

A stroke is an acute, neurological injury that results from either an ischemic event or haemorrhagic event (Caplan, 2017). Ischemic stroke, accounting for 80% of all cerebrovascular accidents, involves an inadequate amount of blood flow to the brain to meet the tissue's necessary demand for oxygen and nutrients (Caplan, 2017). A haemorrhagic stroke occurs in approximately 20% of cases of cerebrovascular accidents and results in too much blood within the cranial cavity (Caplan, 2017). The outcome of both is cell death, which can look different in each client in the acute and chronic phases of illness.

Stroke is considered the third leading cause of death in Canada; each year, 62,000 Canadians experience a stroke and from this total, 13,000 will die (Heart and Stroke Foundation of Canada, 2016). For those who survive, it is estimated that there is approximately 405,000 Canadians living with the lasting effects from their stroke and almost half of the Canadian population has been impacted by stroke either directly or indirectly through a family member or loved one (Heart and Stroke Foundation of Canada, 2016). Stroke care has changed considerably in the last decade, with care of the client beginning before they arrive to the hospital doors. With recent improvements in early identification and prompt care, mortality rates have decreased as well as improvements in functional abilities. However, despite advances in stroke care, it is known that 9 in every 10 Canadians have one risk factor increasing their risk for stroke and heart disease (Heart and Stroke Foundation of Canada, 2016).

Nurses have an important role in the care of the stroke patient in both the acute phases and in long term management. In the early stages, nurses have a critical role in early detection of stroke symptoms. After a stroke, nurses need astute skills for on-going assessment, monitoring and management of the patient to improve long-term outcomes.

Concepts:

- Loss
- Grief
- Loneliness
- Isolation
- Collaboration
- Providing a safe environment

Learning Outcomes:

- Identify the related concepts of loss, isolation, and grief with stroke management
- Demonstrate the acute management for a client with stroke
- Explain the rehabilitation nursing management for a client with stroke
- Summarize the psychosocial impact of a stroke on the client and family

In Preparation:

Week 1:

1. READING CHAPTER

Read the chapter 'Nursing Management: Stroke', chapter 60 in Lewis, S. M., Heitkemper, M. M., Dirksen, S. R., O'Brien, P. G., & Bucher, L. (Eds.). (2014). *Medicalsurgical nursing in Canada: Assessment and management of clinical problems* (3rd ed.). Toronto, ON: Elsevier Canada. Pages 1678 – 1693 (Start at "Clinical Manifestations of Stroke" and stop at "Ambulatory and Home Care".

2. EVIDEBNCE BASED SYSTEMATIC REVIEW

Korpershoek, C., van der Bijl, J., & Hafsteinsdóttir, T. B. (2011). Self-efficacy and its influence on recovery of patients with stroke: a systematic review. *Journal of Advanced Nursing*, *67*(9), 1876-1894.

- a. Clearly identify the issue or problems of stroke based on accurate analysis of current nursing knowledge and practice
- b. Search the literature article for relevant research resources on stroke
- c. Evaluate the research evidence on stroke based on scientific merit
- d. Choose interventions for stroke and justify the selection with the most valid evidence
- e. After reviewing the evidence-based nursing literature on stroke, summarise the evidence-based article addressing the problem, and make your recommendations for change in nursing practice.

- 3. CASE BASED QUIZ
- A. Which is the most important risk factor for a stroke?
 - A. Smoking
 - B. Weight
 - C. Diet
 - D. HTN
 - E. Stress
 - F. Substance Abuse
- B. What is the number one cause of CVA in a younger patient?
 - A. Smoking
 - B. Weight
 - C. Diet
 - D. HTN
 - E. Stress
 - F. Substance Abuse
- C. A client who had a CVA is admitted to the intensive care unit after transfer from the emergency unit. Frequent assessments reveal that the client's intracranial pressure is increasing. The nurse should first:
 - A. Notify the surgeon
 - B. Elevate the head of the bed
 - C. Reduce the flow rate of IV fluid
 - D. Administer the next dose of osmotic diuretic early
- D. The nurse uses the Glasgow Coma Scale to assess a client with a CVA that resulted from a fall. The nurse identifies that the client is in a coma when the Glasgow Coma Scale score is:
 - A. 6
 - B. 9
 - C. 12
 - D. 15
- E. A nurse uses a dull object to stroke the lateral side of the underside of a client's left foot and moves upward to the great toe. What reflex is the nurse testing?
 - A. Moro
 - B. Babinski
 - C. Stepping

D. Cremasteric

- F. A client having a brain attack (CVA) is brought to the emergency department. The vital signs are P, 78; R, 16; and BP, 120/80. The change in this client's vital signs that indicates increasing intracranial pressure (ICP) requiring notification of the practitioner is:
 - A. P, 120; R, 16; BP, 80/60
 - B. P, 50; R, 22; BP, 140/60
 - C. P, 60; R, 18; BP, 126/96
 - D. P, 56; R, 20; BP, 130/110

4. CASE STUDY SCENARIO

A 72-year-old woman is admitted to the acute care facility after her family finds her in an unconscious state early this morning. The assessment reveals no history of hypertension or other health problems. She complained of a headache on the day prior to admission. VS-BP150/96, P-56,R-16,T-101degrees, Glasgow Coma Scale -5. DX- CVA

- a. Prioritize the following nsg interventions:
 - Monitor Temp
 - Assess neurological status
 - Assess respiratory status
 - Elevate HOB to 45 degrees(High Fowlers)
- b. The client begins to seize as her condition worsens. ID 3 nursing interventions essential at this time.
- c. What signs, other than seizures, should alert the nurse the client is developing increased intracranial pressure (ICP)?
- d. After determining the client has suffered extensive cerebral damage, the health care provider writes a DNR order per family request. List 3 appropriate nursing interventions at this time.

Week 2:

1. RESEARCH ARTICLE

Read the following article posted to moodle: Gallagher, P. (2011). Becoming normal: A grounded theory study on the emotional process of stroke recovery. *Canadian Journal of Neuroscience Nursing*, 33(3), 24-32. Based on this article, please answer the following questions and bring them completed to class for discussion during lecture this week.

- a. Reflect on your clinical experience and the clients you have worked with facing immense physical challenges from acute or chronic illness. Why is it important for nurses to understand the psychosocial impact stroke can have on individuals? Please provide an example with client confidentiality in mind.
- b. Find an online resource to use to identify "The Transtheoretical Model of Change". List the 6 stages within this model with a short definition beside each.
- c. How are the feelings and thoughts expressed by the clients within the study similar to the Stages of Change?
- d. How can a registered nurse use the Stages of Change in practice with clients who have experienced a stroke?
- e. Why is this particular study not necessarily applicable to all clients recovering from stroke?
- f. Within the article, clients reflected on the nursing role and states "At times, nurses were viewed as being domineering, restrictive and detrimental to recovery" (p.30). As you finish the rest of this paragraph, please explain WHY you think nurses may appear this way?
- 2. PATIENT EDUCATION

From the stroke reference list below, use the link for "Let's talk about stroke patient information sheets" from the American Heart Association (2017). http://www.strokeassociation.org/STROKEORG/AboutStroke/Lets-Talk-About-Stroke-Patient-Information-Sheets_UCM_310731_Article.jsp# Choose one information sheet from either "Stroke Prevention" or "Life After Stroke" and identify 1 teaching topic a nurse could use in either an acute or chronic setting to bring to class (may use online or paper copy). Be prepared to share this topic with the class and why it is relevant to the care of stroke clients

3. RESEARCH ARTICLE

Saban, K. L., & Hogan, N. S. (2012). Female caregivers of stroke survivors: coping and adapting to a life that once was. *Journal of Neuroscience Nursing*, 44(1), 2-14.

- a. Identify the related concepts of loss, isolation, and grief with stroke management for caregivers
- b. Summarize the psychosocial impact of a client with stroke on her caregivers
- 4. RESEARCH ARTICLE

Western, H. (2007). Altered living: coping, hope and quality of life after stroke. *British Journal of Nursing*, *16*(20), 1266-1270.

Betty is an 86-year-old woman who was admitted to the rehabilitation ward after having a front-parietal intra- cerebral haemorrhage. This left Betty with right-sided hemiplegia and dysphasia (Table 1). The event was very traumatic for Betty as she was alone in a bus station and had her purse stolen as she lay on the ground, initially, it was thought that Betty would not make a very good recovery and that she may even die in the weeks following her stroke. Despite the poor outlook and the disabilities that Betty has faced since her stroke, she has impressed the hospital staff in her rehabilitation. This cannot only be attributed to good expert care, but sheer determination and a positive attitude on her part. Betty has continued to make great progress and the professional team has delayed her discharge to a residential care home because it is evident that she Is still improving. From the Initial prognosis of dependency, Betty has actively gained many skills and re-educated her body so that she can cope with as little help as possible when she is discharged.

- a. Brainstorm the potential health risks associated with that system and long term CVA recovery. Example: GI: Dysphagia
- b. For each potential health issue, indicate a nursing intervention to address the issue. Example: For dysphagia, a nursing intervention would be mouth care TID

6

- c. Choose one potential health issue that would be appropriate to teach about to your client and family who has experienced a CVA with individualized deficits
- d. Create a teaching plan with at least one resource to accommodate for the client's deficits regarding the topic you have chosen

In Class:

Week 1

- Listen to lecture on stroke and stroke management (acute)
- Participate in class discussion

Week 2

- Complete in-class quiz
- Listen to lecture on stroke and stroke management (long term)
- In-class discussion from in-prep assignment
- Discuss teaching topics related to online resources from in prep

Blended Learning with Interactive Technology

- We will use the flipped classroom teaching approach using blended learning and interactive teaching technology. Review the MS power point notes, evidence-based reviews and research articles for your class preparation. We will review the evidence-based systematic reviews and peer reviewed research articles, case based multiple choice quizzes, case study scenarios, and learning activities available on the LMS and on the Open Education Access sites in the classroom learning.
- Follow the assessment and evaluation of learning in the course outline, demonstrate your creativity in the assignments and student-centred interactive learning activities. Class room assessment techniques will be used for an end of class feedback and to improve the teaching learning in the course.
- Please bring your digital devices like I-pad, Tablet, Laptop, Smart phone, or any electronic devices with an internet to access the textbooks, library and learning resources.

Moodle NURS2830 Health and Healing Winter Word press Mattermost Hypothes.is Edmodo Email Collaborative documents

Stroke References

Canadian Best Stroke Practices. (2017). Retrieved from http://www.strokebestpractices.ca

Canadian Stroke Network: www.canadianstrokenetwork.ca

Heart and Stroke Foundation (2016): http://www.strokebestpractices.ca/wp-content/uploads/2016/06/HSF_StrokeReport2016_EN-Rev-1.pdf

Let's talk about stroke patient information sheets (2017). Retrieved from

http://www.strokeassociation.org/STROKEORG/AboutStroke/Lets-Talk-About-Stroke-Patient-Information-Sheets_UCM_310731_Article.jsp#

Caplan, L.R. (2017). Overview of the evaluation of stroke. In S. Kasner & J. Dashe (Eds.), UptoDate. Waltham, Mass: UptoDate. Retrieved from <u>www.uptodate.com</u>

Fillho, J.O., & Mullen, M.T. (2017). Initial assessment and management of acute stroke. In S.

Kasner & J. Dashe (Eds.), UptoDate. Waltham, Mass: UptoDate. Retrieved from www.uptodate.com

Government of Canada. (2016). Stroke in Canada. Retrieved from https://www.canada.ca/en/public-health/services/publications/diseases-conditions/stroke-incanada.html

Heart and Stroke Foundation. (2015). Canadian stroke best practice recommendations. Retrieved from http://www.strokebestpractices.ca/wp-content/uploads/2010/10/CSBPR-2014_SoS-Recognition-Module-EN_Feb26-FINAL1.pdf

Interior Health Authority. (2013). Stroke/TIA ED diagnostics.

Interior Health Authority. (2015). Stroke/TIA admission.

Lewis, S. M., Heitkemper, M. M., Dirksen, S. R., O'Brien, P. G., & Bucher, L. (Eds.). (2014). *Medical-surgical nursing in Canada: Assessment and management of clinical problems* (3rd ed.). Toronto, ON: Elsevier Canada.

Gallagher, P. (2011). Becoming normal: a grounded theory study on the emotional process of stroke recovery. *Canadian journal of neuroscience nursing*, *33*(3), 24-32.

Korpershoek, C., van der Bijl, J., & Hafsteinsdóttir, T. B. (2011). Self-efficacy and its influence on recovery of patients with stroke: a systematic review. *Journal of Advanced Nursing*, *67*(9), 1876-1894.

A.Sullivan - revised Winter 2019 by P. MacNeill, C. Walker & M. DSouza

Saban, K. L., & Hogan, N. S. (2012). Female caregivers of stroke survivors: coping and adapting to a life that once was. *Journal of Neuroscience Nursing*, *44*(1), 2-14.

Western, H. (2007). Altered living: coping, hope and quality of life after stroke. *British Journal of Nursing*, *16*(20), 1266-1270.