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# Home assignment

Sogn og Fjordane University College. Faculty of Health studies.

Topic: SK108 Medical and Surgical Nursing in a

**Norwegian Context** 

Title: HOW BENEFICIAL IS THE UTILIZATION OF THE NURSING PROCESS IN THE MANAGEMENT OF PATIENTS WITH STROKE.

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# INTRODUCTION

The neurological ward provides treatment and starts the rehabilitation process for patients with various neurological diseases. In this paper, the author wants to show how beneficial the utilisation of the nursing process is in the management of patients who have suffered a stroke, and how the Zambian nurses can also help these patients recover in any way possible especially that most of the patients there are usually young, despite the many challenges they are facing.

This is so because Stroke or Cerebral Vascular Accident (CVA), which is a term used to describe neurological changes caused by interruption in the blood supply to a part of the brain (Bowman 2009), is a common condition seen in the neurological ward here in Norway and is also becoming a common condition in the Zambian hospitals. According to Birbeck 2001, stroke accounted for 9 % of admissions, but used 14% of intensive care days at a rural hospital in Zambia. The mortality following stroke was 50%, far higher than in wealthy countries; reflecting the lack of resources for early recognition and access to treatment.

Therefore, acquiring knowledge and skills on nursing of patients with stroke was very beneficial to the author especially that due to lack of resources, the focus of the health care system in Zambia is directed more on the management and treatment of communicable diseases which are most prevalent in the community. This may mean that most nurses in the country may not have adequate knowledge and skills in the nursing management of conditions like stroke and many other neurological conditions as the curriculum designed taking into account the key elements of the national health policies and strategies (GNC, 2005).

The Nursing Process, which is a problem-solving framework that enables the nurse to care for a client on an individual basis (Hogston 2002), was developed as a specific method for applying a scientific approach to nursing practice. If utilised appropriately, it can be beneficial to stroke patients especially that they are faced with a unique complex of physical, psychological, and social problems. This can be attributed to the onset of stroke which is usually sudden,

with maximum deficit at the outset, so the shock to the patients and their families may be devastating.

In this write up, the author will use as an example a female patient who suffered a stroke who he took part in nursing while in practice.

#### DESCRIPTION

During the time the author was allocated on practical placement in a neurological ward, he had a privilege of nursing a 39 years old female patient who had a stroke due to Intracerebral Haemorrhage.

# **Brief pathophysiology**

Non traumatic Intracerebral Haemorrhage most commonly results from hypertensive damages to blood vessel walls (e.g. Hypertension, eclampsia, drug abuse), rupture of an aneurysm or Arteriovenous Malformation (AVM) (as was the case with the patient in reference), arteriopathy, altered haemostasis (thrombolysis, anticoagulation), haemorrhagic necrosis(e.g. tumour infection).

Irrespective of the aetiology of intracerebral haemorrhage, once a haematoma has formed within the brain, a number of pathophysiological events occur. Most haematomas result from rupture of an artery or arteriole and therefore the haematoma is formed at or near to arterial pressure. In this context, the effects of disruption of the cerebral tissue by the haematoma vary depending on the anatomical location of the haematoma. The formed haematoma displaces or compresses the adjacent cerebral tissue and ischaemic cellular responses occur resulting in abrupt rise in intra cranial pressure (Hickey 1997, Baer & Durward 2004).

Symptoms typically begin with a headache often during activity however; loss of consciousness is common often within seconds or minutes. Nausea, vomiting, delirium and focal generalised seizures are also common.

Neurological deficits are usually sudden and progressive. Large haemorrhages when located in the hemispheres cause hemiparesis; when located in the

posterior fossa, they cause cerebella or brain stem deficits (e.g. Stertorous breathing, conjugate eye deviation or opthalmoplegia, pinpoint pupils, coma).

Large haemorrhages are fatal within a few days in about half of patients. In survivors, like the patient in reference, consciousness returns and neurologic deficits gradually diminish to various degrees as the extravasated blood is reabsorbed (The Merck Manual for Health care Professionals 2007, Mackenzie 1996).

# **Nursing care**

The patient in reference was in a semi-conscious state the first time the author met her, she was receiving oxygen through a tracheostomy and had her nutrition through a Percutaneous Endoscopic Gastrostomy (PEG). She needed total nursing care in collaboration with other health care professions. Her condition gradually changed from semi-conscious to consciousness after many weeks of treatment and care.

She had a primary nurse who happened to be the author's mentor.

She had a day care plan which was carefully structured considering her condition by nurses, doctors, speech therapist, occupational therapist, dietician and physiotherapist. This was frequently reviewed according to the patient's condition. All these health personnel would come at appointed times to attend to the patient.

The patient had a diary in which the nurses and specific relatives were allowed to write how the patient was fairing each day and any special changes that would be noted.

The family was not forgotten, they were constantly updated on the patient's condition and plan of management, as decisions in certain occasions were to be made by a close family member. The health care team held frequent meetings that included a family representative who was usually the husband.

The family were allowed to visit the patient, at some point the husband come with their ten year old son. It was so difficult for the son to comprehend the state of the mother; he could not hold his tears and eventually went out of the room. This was a challenging situation to the author as he needed to show empathy and not sympathy despite the environment being full of emotions. The situation in itself was an indication that the family especially the child needed a clinical psychologist to talk to him and the family about the patient's condition and to inform them about the physical and psychosocial impart the condition has on the patient and how it involves them too.

The patient is now in the rehabilitation ward where she is slowly but progressively gaining back her neurological abilities.

# **EVALUATION**

The nursing process provides nurses with a tool by which client's outcomes are regularly monitored, and can be seen as a vehicle of improving the quality of nursing care and ultimately benefiting the client.

# **Purpose and Benefits of the Nursing Process**

The purpose of the nursing process is to identify patient's health status, actual or potential health care problems or needs, to establish plans to meet the identified needs and to deliver specific nursing interventions to meet those needs. It also helps nurses at arriving at decisions and in predicting and evaluating consequences. It also allows the nurse to prioritise patient/client needs and to decide which person or health personnel can best meet certain client needs. These referrals and collaboration among nurses and other health personnel contribute to optimal achievement of client goals (Hogston 2002, White 2005). This kind of collaboration was seen to be very important in the management of stroke patient's as they are faced with many neurological disabilities that need specialised attention and care.

Some benefits of the nursing process include; it enhances nursing efficiency by standardising nursing practice, as in the case of patients with stroke, disabilities

are reduced because the nursing process promotes collaboration among health personnel concerned. This therefore preserves life and improves the quality of life for the patient. This is also achieved because the process is a dynamic and on-going cyclical process (Hogston 2002)

Assessment of the patient was the first thing the nurses would do; it included collection of information from a variety of sources such as the patient herself, relatives (they were a good source as they knew the patient better especially that she could not fully express herself), current and previous nursing records, and the records from other health professionals such as doctors, occupational, speech and physio-therapists. Then the data collected is validated and continuously updated.

The second stage is the **nursing diagnosis**; it would usually be a clear statement of the patient's problem derived from the nursing assessment. The statement described actual or potential health problems of the patient based on the holistic assessment.

In the **planning stage** of the Nursing process, the nurses would make a written design of action based on the nursing diagnosis. Priorities would be set and appropriate nursing actions or interventions proposed, then goals or expected outcomes would be identified, and then the plan communicated to the patient.

In the **implementation stage**, the nurses would put into action the nursing care according to each of the diagnoses and their goals. Usually some diagnoses would require the involvement of other health professionals like physiotherapists, speech therapists, occupational therapists, dietician to be implemented. This is also supported by Bowman 2009, who says that an interdisciplinary approach facilitates the recovery of a client following stroke and that it is the coordinated efforts of the entire team that serves best the client and the family. The nurses would continue the data collection process and modify the plan of care as needed.

Since a nurse is an autonomous practitioner, whose responsibilities are governed by nursing and midwifery council code of conduct, it makes or requires nurses to be accountable for the care that they prescribe and deliver with the nursing process, enabling them to document their actions in a logical and rational manner (Hogston 2002).

Documentation was usually an important part of the implementation step and the entire nursing process, the nurses would document the periodic assessments and interventions in the nursing notes. This is also in line with what Hood and Dincher 1992 that say that the nursing notes are an important part of the patient's permanent record and are considered to be legal documents. Therefore, it is important that nursing documentation be complete and accurate.

Since the nursing process is an ongoing rather than once-only activity, the final stage of the process is the **evaluation**. This is all about reviewing the effectiveness of the care that was given. At this stage, the nurse is able to ascertain whether the desired outcomes of the patient have been achieved and it is also an opportunity of the nurse to review the entire process and determine whether the assessment was accurate and complete, the diagnosis correct, goals realistic and achievable and the prescribed actions appropriate (Hogston 2002).

Evaluation of the care provided was usually done by;

- -Reviewing the nursing care plan- the nurses evaluated the effectiveness of the care against the set goals and wrote an evaluation statement.
- Nursing hand over- this was usually at the end of each shift, a team of nurses would hand over information about the nursing care of patients to another group of nurses. This is important as it is critical for maintaining continuity of patient care. According to Hogston 2002, the nursing care plan should be the focus, as nurses share the information about the patients and their planned care. He continues to say that this should also serves as a valuable forum for evaluating care through a discussion of its effectiveness. On the contrary, the author noted that mostly at the time of handover, nurses would talk more of the medical management of patients rather than the nursing care offered.

-Patient satisfaction- is another method of evaluating care that is provided. The appreciation patients offer can be immediate, or in form of a letter or card after their discharge. This was also noted during the author's practice.

The author also noted that a number of methods of delivering nursing care were employed in the ward. These however have their advantages and disadvantages. The commonly used were; primary nursing (e.g. the patient in reference had one), team nursing and client allocation.

Primary nursing- this is described as patient centred practice. The primary nurse would have full responsibility and accountability for the patient during his /her stay. However, she works with a team of associate nurses who continue to provide nursing care under her in her presence or absence. Primary nursing promotes job satisfaction and a sense of accomplishment for the nurses, promotes high patient and family satisfaction, increases coordination and continuity of care and also promotes registered nurse responsibility, authority and accountability as power is decentralised to the primary nurse regardless of their position in hierarchy. However, some possible disadvantage may include; it may create conflict between the primary and associate nurses, it creates stress of around the clock responsibility (chitty 2005). Developing countries cannot afford to have the right staffing levels required for its implementation, for example in Zambia in the year 2007, the staff population ratios for nurses and midwives were, 1: 1526 and 1: 1449 respectively (Makasa, 2009). With such poor staffing levels, nurses become overworked especially that doctors are also not enough in the country (staff population ratio of 1: 9660). This makes primary nursing not a possibility in such situations.

Client allocation- total care is undertaken by one nurse, often assisted by a support worker. This is good as it emphasises on total client care being delivered by an individual nurse for specific period of time though continuity of care might be compromised if the same patients are not cared for on a regular basis by the same nurse.

Team nursing-this is where a group of nurses and assistants is assigned to take care of a group of patients. Usually a registered nurse would be a leader in each team (Hood and Dincher 1992). Some of its advantages are; each team member is allowed to contribute his own special expertise or skills in caring for the patient, each team member has an opportunity to learn from and teach his colleagues, it is a cost effective system because nurse assistant and registered nurses are used, student nurses can have more time working alongside a qualified nurse and can also assume the role of the team leader under supervision. Some of its disadvantages are; continuity of care may suffer if the daily team arrangement vary and the patient is confronted with many different care givers, establishing team concept takes time, effort, and constancy of personnel, as merely assigning people to a group does not make them a group or team (Hogston 2002).

All the methods employed were viewed as good and effective in providing nursing care by the author as he compared them with the traditional task allocation (also known as functional nursing) method which is commonly used in most Zambian health institutions, were for example one nurse will be assigned to undertake the observation of temperature, pulse, blood pressure and respirations, while another undertakes all the dressings, and another takes care of the drugs. The emphasis on tasks naturally removes the notion of individualised patient care which makes it incompatible with the nursing process as it focuses on tasks and not the person.

# **ANALYSIS**

For effective and efficient nursing care to be delivered to all patients of any age with any health problem and in whatever health setup, the nursing process has been utilised by nurses for many years now. It was introduced for example in the year 1977 in the United Kingdom and has been proved to be goal directed, client centered, systematic, promotes interpersonal collaboration and is universally applicable (Hogston 2002).

How was an interdisciplinary approach to nursing patients helpful? Is such an approach used in Zambia too? Because the nursing process helps the nurse to detect both actual and potential problems, it prompts her/him to involve other health personnel like physiotherapist or dieticians if the problems might need specialised attention. This in turn prevents or reduces complications that the patient might have and improves the patient's quality of life (bowman 2009). In Zambia however, there is not so much organised collaboration as the author has observed here. Of course there is an alarming shortage of all disciplines of health personnel but if the available ones can be a little bit more committed to their work then a difference would be made. The author has said so because the health workers are underpaid, overburdened with work, they become frustrated and demotivated such that even what can be done without need for extra resources may not be done, as they develop a negative attitude towards work (USAID 2003).

Are there any disadvantages of the computerised care plans used in the Norwegian set up? The author observed that this kind of technology makes the nurses' work easier as it is quick, provides the ability to go through the patient's previous notes at the push of the button and allows a more rapid search than does a paper based system. However, computer care planning is only as effective as the person who is operating the system and generates the care plan. This means that despite having all the resources nurses may need to care for the patients, they still need to use their nursing skills and critical thinking when caring for patients (Hogston 2002)

The methods of delivering nursing care used in the Norwegian setup have a lot of benefits which are both to the nurse and as well as the patients/clients. Considering the purpose and the benefits, is there anything the Zambian health sector is doing to promote its use?

In Zambia, the General Nursing Council in a step to keep up with the professional standards of nursing wide world introduced the nursing process in the nursing curriculum many years ago; however, the Zambian nurse has found him/herself in a challenging environment which makes its utilisation a problem

such as poor material resources, disease burden, underpayment, and shortage of staff. However, despite the shortage of professional nursing staff, a patient care system has to be developed that reduces the fragmented care accompanied by functional or task allocation nursing that is being practiced (Lusale 2007).

#### **CONCLUSION**

If well utilised, the nursing process is a very beneficial tool that nurses can enjoy using not only in the management of stroke patients but any other patient throughout their lifespan and in any care setting, as it promotes care that is individualised, holistic, effective, and efficient (White 2005). Nurses should also incorporate critical thinking with the nursing process as they provide care. Nurses who are critical thinkers will ask questions, evaluate evidence, identify assumptions, examine alternatives and seek to understand various points of view. They will develop a questioning attitude and delve into situations in order to seek explanations for what is happening to the patient (white 2005).

From the author's observed that, patients recovered quickly, with less disability (who would have otherwise had greater disabilities if not well managed), most patients were satisfied with the nursing care offered as evidenced by "thank you cards and notes" in the ward.

However, for its utilisation, the nursing process in some way is highly dependent on how much resource is being pumped into the health sector. This can be both human and material resource. For example in 1992, Hood and Dincher in their book said that functional or task allocation method of delivering nursing care was being used in institutions throughout the United States, despite the nursing process being developed there in the 1950s and the nation being developed, but maybe because United States has a shortage of health personnel too (Kelly, Angus, Chalfin and Grandall 2004).

# **ACTION PLAN**

The author would love to make the following recommendations;

# To the Norwegian setup

Since nursing hand over are an important forum for evaluating care through a discussion of its effectiveness, let the nurses use the nursing care plan as the focus of the hand over more than the doctor's orders, as much as they are important (Hogston 2002). When the nursing care plan is the focus of the hand over, there is surety of continuity of care, because the information has been passed on. Unlike were nurses have to read the care plans on their own which might not be possible when the wards suddenly gets busy or certain information may be misunderstood.

Nurses should always use critical thinking to plan care for the patient and not take advantage of the already existing draft in the computer system as these would mean offering the same or regular nursing care to patients. This is also supported by Hogston 2002, who says that as much as computerised care planning is an advantage, it is only as effective as the person operating the system, and generating the care plan.

# Zambian setup

The task allocation method of delivering nursing care which is used in most institutions has is no longer used in many developed countries because it lacks the holistic view of the patient but rather focuses on the tasks and not the person (chitty 2005), should gradually be phased out to a better cost effective method like team nursing, as it does not support the utilization of the nursing process which is in the curriculum of nursing education.

The government of the republic of Zambia should consider giving student loans to nurses at entry into college or university which they should later repay after completion of their education just like what the Norwegian government and other developed countries are doing. This would reduce the shortage of nurses

the country is facing as the loans usually take time to repay. This is also in line with Makasa (2009)'s thought.

In the 2006, the World Health Organisation director general called on rich nations to invest in training health workers from developing countries for each health worker they poached. As these countries are already faced with many challenges of which health workers shortages is one (SAMP 2006).

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