APPLICATION OF NURSING INTERVENTIONS CLASSIFICATION (NIC)

BHARATI ROY

Abstract

Nursing care is provided in all hospitals, in different states, different countries with different practices. But with that being said, the nursing process using NANDA –I Taxonomy of Nursing diagnoses, the Nursing Outcomes Classification (NOC) and Nursing Intervention Classification (NIC) can provide some standards in care where it is received. Throughout this paper, we will discuss a clinical case that uses these tools in providing care and looking at the patient outcome and discuss the systems that were in place.

Keywords: Nursing, Intervention, NIC, Classification, Application, Hospitals.

Clinical Encounter

This patient was admitted to a medical surgical unit with the diagnosis of pulmonary fibrosis, shortness of breath and pain with inspiration, atrial fibrillation and MRSA in the urine. Patient's other history included chronic kidney disease, oxygen dependent at home and a low ejection fraction. With this being said, this patient had several things happening, but was being treated with antibiotics and Cardizem to control A-Fib. In the middle of the night, the patient was a rapid response for hypotension and moved to the intensive care. Because of a previous echo that revealed the patient's EF was only 12%, large fluid boluses were not really an option to treat hypotension. The hypotension was caused by a few different reasons, the nurse in med surg had given this patient multiple blood pressure medications, and the critical care doctor felt that she was becoming septic due to her presentation. Also, the critical care doctor decided that the patient needed a stat VQ scan to rule out the possibility of a pulmonary embolism. The patient results concluded that there was a high probability of a pulmonary embolism which warranted the patient to be placed on IV heparin, have a venous ultrasound of her legs and an echo. These tests reviewed no clots in her legs or heart.

With heparin, a PT/INR was drawn for baseline and then a hep xa was drawn every 6 hours until the heparin was therapeutic. A BNP and CBC were drawn to monitor blood cell counts and a central line was placed and the patient was placed on Levophed to prevent hypotension for a few hours. After a few hours, the patient was able to keep blood pressure controlled without medications. Antibiotics were continued as patients WBC's were 14000 and the patient was continuously monitored in the ICU for a few days. CVP's were measured at 5 and urine output was monitored closely.

Nursing Diagnosis

This patient had multiple nursing diagnoses' that fit her condition. One of the diagnoses that fit this patient is decreased cardiac output. With the patient being in A-fib and with an EF of only 12% this patient does not have optimal cardiac output. The patient also prevents with hypotension which is believed to may have been caused by medications that effect preload and afterload which will also decrease the cardiac output of this patient. This diagnosis is a part of NANDA- I Taxonomy of Nursing Diagnoses and falls under domain 4 Activity and Rest and class 4 which discusses Cardiovascular/ Pulmonary Responses (NANDA, 2012).

Nursing Interventions Classification Interventions

The following are nursing interventions that were used on this patient using the NIC (Nursing Interventions Classification).

Hemodynamic Regulation (4150)

Definition: "Optimization of heart rate, preload, afterload and contractility" (Bulechek, Butcher, Dochterman, 2008)

Ways to intervene:

- Patient was placed on a presser, i.e Levophed to cause vasoconstriction and promote an increase in blood pressure
- A small 250ml fluid bolus was given prior to coming to the intensive care unit
- The patient was placed on hemodynamic monitoring to check central venous pressures and allowed us to monitor fluid status
- Medication parameters were in place for medications that would effect HR, preload, afterload

Oxygen Therapy (3320):

Definition: "Administration of oxygen and monitoring of its effectiveness" (Bulechek, Butcher, Dochterman, 2008)

Ways to intervene:

- Oxygen provided by nasal cannula was titrated by oxygen saturation, patient was on 3L.
- Continuous oxygen saturation monitoring by a pulse ox on the finger.
- Respirations and patient comfort were also monitored, i.e. no shortness of breath or trouble breathing.

Urinary Catheterization (0580):

Definition: "Insertion of a catheter into the bladder for temporary or permanent drainage of urine" (Bulechek, Butcher, Dochterman, 2008).

Ways to intervene:

- Foley was placed to monitor urine output.
- Output was monitored to check fluid balance because of patient's history of CKD, the MRSA infection and having a low ejection fraction.
- The catheter was temporary and was used for strict input and output.

Family Presence Facilitation (7170):

Definition: "Facilitation of the family's presence in support of an individual undergoing resuscitation and or invasive procedures" (Bulechek, Butcher, Dochterman, 2008).

Ways to intervene:

- Family contacted because patient was moved to intensive care and needed a emergent central line placement.
- Patient was extremely anxious and requested that we contact her family to come in for needed support.
- Family came in and educated on what happened and any other information that was needed at that time.

Nursing Outcomes Classification Outcomes

Now that we have defined a nursing diagnosis and provided some interventions that this patient needed, it is time to discuss the patient outcome. These interventions help the patient achieve multiple goals and as a nurse, all of our interventions help us improve patient outcomes. This patient has multiple nursing diagnoses, but because decreased cardiac output was addressed, the outcome will be as follows:

Cardiac Pump Effectiveness (0400)

Definition: "Adequacy of blood volume ejected from the left ventricle to support systemic perfusion pressure" (Moorhead, Johnson, Maas, Swanson, 2008).

- The patient will be able to maintain blood pressure without pressers.
- Patient will have a follow up echo that showed her ejection fraction was 45%.
- Patient will have adequate urine output.
- CVP measurements will be within normal limits.
- Patient will have activity tolerance when getting out of bed and ambulating around room.
- Patient will continue outpatient rehab to rebuild strength over time.

Advantages and Disadvantages

The nursing process allows for a standard of care to be provided anywhere that a nurse cares for a patient. With being able to identify what the patients problems are through a nursing diagnosis, we are able to next focus on the interventions that best fit and will provide the best patient outcome. When looking at a patient, we all have our own outcomes that we want to achiever to better the patient. In the patient above, there are many problems that could results in a long list of nursing diagnoses. With being able to focus on one at a time, a nurse is able to think about

the needed steps to achieve the positive outcome that we all look at. With using the NIC, NOC and NANDA-I, nurses anywhere are able to identify a problem, the steps to improve the problems and the hopefully outcome for this issue. While these tools help standardize care that nurses provide and focus on and to make sure that the needed interventions to improve the outcome are being performed and are being documented. It is important that the nurse can focus on the needs of the patient and to take credit for all the important things we do during our time with a patient. I also think the nursing process is great for other disciplines to look out what nursing is focusing on and also may help guide the rest of the care that is provided. With this documenting process and just using in the clinical setting, newer nursing can use it to help focus the care their patients may need. These tools are a great resource for nurses but they do have some disadvantages.

In day to day care in the nursing realm, these tools are a great resource, but in reality are hard to find time to access and continually document on them. I have seen these types of programs being used in the clinical setting and because nurses are busy, some just copy and paste the same thing over and over day to day. This does not show how we are intervening to meet the outcome. If used right, it is a great tool, but there are a lot of nurses that look at it as just another silly hoop to jump through during patient care and just another thing to document. Some nurses do not take the time to think about what interventions would help our patients. Also, I think that the various lists are good; however, sometimes it is hard to find the exact name of the intervention that we want to use. It takes time to look through the list to find the exact intervention or outcome that best fits out patient needs. Also, it would be hard to get all nurses on board to document with this type of system because some are resistant to change and others just are already overwhelmed with the amount of documentation that is required throughout the day.

Conclusion

The NIC, NOC and NANDA-I Taxonomy of Nursing Diagnoses are a great guide for standard nursing care. Anyone can use these documents to help focus the care their patients need. I believe documenting to nursing process throughout this system will allow for better patient outcomes to continuously reevaluate what the patients' needs are and what is going on with a patient. Other disciplinary team members would be able to look at what the problems nursing are focusing on and see where they can help support that patients care. Overall, the standardized care would support patient outcomes and allow for nurses to focus on what they can do, improving the patients care by identifying problems, inventions and outcomes.

References

1. Bulechek, G.M., Butcher, H. K., & Dochterman, J.C. (Eds.). (2008). Nursing Interventions
2. Classification (NIC) (5th ed.). St. Louis, MO: Mosby Elsevier.
3. Moorhead, S., Johnson, M., Maas, M., & Swanson, E. (Eds.) (2008). Nursing Outcomes
4. Classification (NOC) (4th ed.). St. Louis: Mosby/Elsevier.
5. NANDA International. (2012). NANDA international nursing diagnoses: Definitions &classification 2012-2014. T.H. Herdman, (ED.). Kaukauna, WI: Author.