Invited Paper: Teaching Nursing Diagnosis to Increase Utilization After Graduation

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BACKGROUND. *The majority of nursing programs identify the nursing process and diagnosis as critical elements in their curricula, yet it is often absent in classroom and clinical discussions. The failure of faculty to integrate the nursing process and diagnoses into learning experiences creates students spending endless hours creating a care plan document that requires little critical thinking, a document that does not improve the student's likelihood of utilizing nursing diagnosis after graduation.*

PURPOSE. *This paper would outline the educational barriers for integration of these concepts into practice.*

DISCUSSION. *Classroom and clinical strategies that guide the student to focused learning on nursing diagnoses and utilize standardized predicted care plans can produce desired curriculum outcomes, and ultimately, practice utilization will be presented.*

Search terms: *Care plans, nursing diagnosis, nursing process*

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Introduction

The use of the nursing process and nursing diagnosis has been identified as critical to nursing practice in the United States by the American Nursing Association, National League of Nursing, and most state boards of nursing and in other countries by their national nursing professional associations and ministries of health. It is beyond the scope of this article to defend the importance of nursing diagnosis to the profession of nursing, knowledge development, and patient, family, and community well-being. Without a common nursing language, nurses use medical diagnoses to describe patients' problems. This language will always be useful for nurses to utilize; however, it is incomplete to describe all the client problems and responses that need assessment and interventions by a professional nurse.

Many practicing nurses think NANDA nursing diagnoses are not relevant to their clinical practice. Often, the opposition to nursing diagnosis by clinical nurses surrounds the documentation burden that results when it is used. All nursing diagnoses will not be applicable in some clinical settings, but there are many that apply. For example, *risk for caregiver role strain* is a critical nursing diagnosis that nurses need to address with the family of an ill infant, child, or of an adult who will require continuous family care. Families unprepared for this responsibility may experience anger, guilt, and exhaustion.

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Clinical Purpose of Care Plans

In healthcare facilities, the purpose of documentation of the nursing process and nursing diagnoses is the following:

- To document the nursing standards of care that have been determined to be professionally and clinically indicated for individuals in selected clinical situations. These are predictive standards that are derived from actual and risk responses that usually occur in the designated clinical situation as abdominal surgery, postpartum patients, patients with pneumonia, and child with thermal injuries. These are usually standardized on an article or in an electronic format.
- In addition to the standardized, predicted care plan for an individual patient, other nursing diagnoses and collaborative problems may be indicated based on other medical comorbidities or assessments of the patient by the nurse caring for them.

These additions must be recorded for the next staff to intervene on. For example, a medical comorbidity for a surgical patient may be diabetes mellitus, thus the collaborative problem of *Risk for Complications of Hypo/Hyperglycemia* should be added to that patient's problem list. A patient who has experienced an acute coronary syndrome and recently suddenly lost his or her brother from the same condition would probably have the nursing diagnosis of *Grieving*. This diagnosis should be added to his or her problem list.

"Realistically, a nurse cannot hope to address all, or even most of the nursing diagnoses and collaborative problems that can apply to an individual, family or community. By identifying a priority set—a group of nursing diagnoses and collaborative problems that take precedence over others—the nurse can best direct resources toward goal achievement. Differentiating priority diagnoses from non-priority diagnoses is critical:"(Carpenito-Moyet, 2010, p. 34). Priority diagnoses are those nursing diagnoses or collaborative problems that, if not managed now, will deter progress to achieve outcomes or will negatively affect functional status. Non-priority diagnoses are those nursing diagnoses and collaborative problems for which treatment can be delayed without compromising present functional status. Patients/families can be instructed where to seek assistance in the community for these problems.

Educational Purpose of Care Plans

- Care planning is the educational strategy utilized in nursing education that requires the student to apply the five steps of the nursing process. This activity directs the student to learn critical thinking with analysis of assessment data (baseline, focused).
- Validation of nursing diagnoses (with defining characteristics and/or contributing factors) and collaborative problems (associated with medical conditions and treatments).
- Establishing realistic goals from assessment data.
- Generating realistic interventions for nursing diagnoses/collaborative problems.
- Evaluating the effectiveness of the plan after giving care.
- Determining priority and non-priority nursing diagnoses/collaborative problems (Carpenito-Moyet, 2007).

Educational Barriers to Clinical Utilization of Nursing Diagnosis

The nursing process and nursing diagnoses are often a visible element in each course syllabus, but in actuality, classroom lectures and discussions are focused predominantly on medical diagnoses, diagnostic studies, treatments, medication therapy and complications. Medical diagnoses should be addressed with the emphasis on the complementary nursing diagnoses, collaborative problems, assessments, and interventions. Students should be expected to come to class after reading about the medical diagnoses, tests,

ands treatments. Prepared students can then actively participate in discussions of nursing diagnoses that are associated with the medical condition.

For example, during a class on the care of an individual experiencing abdominal surgery, the nursing diagnoses of risk for infection, acute pain and the collaborative problems of risk for complications of hypovolemia and risk for complications of renal insufficiency would be focused on.

Some classroom discussions should focus on a select group of nursing concepts unrelated to any medical condition. Some examples are acute pain, grieving, impaired skin integrity, ineffective self-health management, risk-prone health behavior (e.g., obesity, tobacco use, multiple partners), altered nutrition, disturbed sleep patterns, elimination problems, risk for infection, and family dynamics. Since classroom lectures and discussions emphasize medical conditions, students are guided by faculty to learn medical nursing diagnoses and are left on their own to learn nursing diagnosis. Thus, in the end, medical diagnoses guide their practices, leaving nursing diagnoses as only an unpleasant memory.

Too many students spend hours creating care plans by copying from books. Over and over, they write the expected care associated with the medical condition or treatments. In the end, they fail to learn the critical thinking skills needed for the analysis of data from their assigned patients. Nursing diagnoses have no relevance for them and therefore are irrelevant after graduation. Often, faculty does not understand nursing diagnosis and therefore do not embrace, value, or teach it. Perhaps they experienced the same mindless care planning assignments as students themselves. Regularly, staff members tell students that nursing diagnoses are irrelevant and are only used in student care plans. Too many families, friends, and significant others of patients are disappointed and demoralized at the nursing care that they witness. In the end, is the care that is missing related to the nurses' lack of knowledge or interest in the medical diagnosis or nursing diagnosis?

Faculty Responses

Overall, nursing faculties are not satisfied with the traditional student care planning assignments. In an attempt to reduce this mindless activity of repetitive copying, they do the following:

- Require only three care plans for each clinical course
- Require only two or three nursing diagnoses on one assigned patient weekly
- Create an alternative to "care plans" with index cards or concept mapping
- Eliminate care plans completely

None of these solutions teach students the care that is predicted to be needed (standard of care) or when additional priority nursing diagnoses/collaborative problems are indicated in a patient. Students focus their preparation for a few of their assigned patients. What kind of care does the student provide to their other assigned patients? These strategies do not assist the student to transition the use of nursing diagnosis after graduation.

Curriculum Integration

Faculty Forum

The first step in integration of the nursing process and nursing diagnoses into the curriculum is to have a faculty forum to discuss the nursing process, nursing diagnoses/collaborative problems, and care planning. The program goal should be to transition students to graduates who value and can utilize nursing diagnoses in their practices even if the system they practice in does not have the same values.

Faculty members who understand and value nursing diagnosis should lead the discussion. If no one can assume this role, consider engaging a consultant. The purpose of this forum is to formulate a plan to integrate the teaching and learning of the nursing process, nursing diagnoses/collaborative problems,

and care planning into classroom and clinical practicum. Prior to this meeting, faculty can search the literature for examples of strategies that are utilized in other programs of nursing.

The dean or program chairperson must support these curriculum changes and should communicate that this is mandatory for all faculty. Academic freedom is not the right of an individual faculty to ignore or refuse to teach, which has been designated for their course or clinical setting. Resistance may be high. Many experienced faculty have not been educated in nursing diagnosis. Newer faculty may have experienced the excessive copying from books to write care plans as students. Thus, overall, they may have never experienced the clinical value of nursing diagnosis in their own practices.

Classroom integration. In the first nursing course, serious attention should be given to teaching the nursing process. Students should be assigned reading and learning activities prior to the class discussion. Classroom time should be utilized to review the major concepts and to answer questions using clinical examples. Each course can be organized to utilize the classroom to teach students about individual nursing diagnosis/collaborative problems by focusing on either of the following:

1. A specific concept as nutrition, infection, risk for suicide or self-care deficits (nursing diagnoses) or hypovolemia, bleeding, (collaborative problems); or
2. Those nursing diagnoses/collaborative problems that are predicted to be present because of a medical condition as pneumonia, treatment as chemotherapy, abdominal surgery, or clinical situation as postpartum or sexual assault.

For example, in the nursing fundamentals course, a class can be dedicated to nutrition. Basic nutrition needs are discussed. Prior to class, students can conduct a nutritional assessment on a friend, classmate, or family member. Students could also be asked to select adults from different age groups, ethnic groups, or who are overweight or obese. Classroom discussion can include their findings and diagnostic conclusions as *effective nutrition, imbalanced nutrition*, or *risk for imbalanced nutrition*. In a course where a medical condition is taught, the majority of the class should be focused on the related nursing diagnoses/collaborative problem predicted to be present because of the medical condition, clinical situation, or treatment. Pathophysiology can be linked to why *risk for complication of hypovolemia* is a collaborative problem for persons postoperatively. For this same patient, nursing diagnoses of *acute pain and risk for infection* will be addressed.

The accepted NANDA-I list of nursing diagnoses has about 127 nursing concepts represented with over 200 nursing diagnoses (NANDA-I, 2009). These diagnoses represent different levels of complexity. Some are appropriate for beginning students, while others are more appropriate for students in graduate programs. Table 1 represents these levels of complexity. Collaborative problems are associated with medical conditions, surgical interventions, and treatments. They also have levels of complexity. For example, *risk for complications of bleeding* would be appropriate for a nursing student in a fundamentals course, while *risk for complications of increased intracranial pressure* would be more appropriate for a student in an adult health and disease course.

The goal is for faculty to select a group of nursing diagnoses/collaborative problems for each nursing course with a clinical. The faculty in each course will be responsible to focus on all the designated diagnoses for that course. For example, in the fundamental nursing course, nursing diagnoses and collaborative problems will be selected from level one diagnoses. Students will progress from level one to level three diagnoses with each course. Faculty in each course will emphasize application of previously learned nursing diagnoses/collaborative problems and also any new diagnoses as they are learned.

Table 1. Levels of Complexity of Nursing Diagnoses and Collaborative Problems

Level one	
Nursing diagnoses	
Risk for falls	Risk for infection
Risk for imbalanced body temperature	Risk for infection transmission
Risk for deficient fluid volume	Risk for imbalanced nutrition
Risk for impaired skin integrity	Constipation
diarrhea	Anxiety (mild)
Risk for disturbed sleep patterns	Risk for aspiration
Risk for impaired communication	Risk for spiritual distress
Self-care deficit	Impaired swallowing
Risk for latex allergy	Risk for altered oral mucous membrane
Collaborative problems	
RC of cardiovascular insufficiency	RC of respiratory hypoxemia
RC of renal insufficiency	RC of hypo/hyperglycemia
RC of bleeding	
level two	
Nursing diagnoses	
Risk for altered health maintenance	Risk for ineffective self health management
Imbalanced nutrition	(Specify type) Incontinence
Activity intolerance	Disuse syndrome
Acute pain	Nausea
Risk for dysreflexia	Acute confusion
Health-seeking behaviors	Ineffective breastfeeding
Impaired skin integrity	Excess/deficient fluid volume
Risk prone health behaviors	Impaired physical mobility
Fear	Impaired communication
Interrupted family processes	Grieving
Risk for impaired parent infant attachment	Risk for situational low self-esteem
Collaborative problems	
All RCs that correlate with course content, e.g., medical diagnoses, treatments, for example, risk for complications of hypo/hyperglycemia when diabetes mellitus is taught.	
Level three	
Nursing diagnoses	
Sedentary lifestyle	Noncompliance
Wandering	Risk for sudden infant death syndrome
Anxiety (moderate)	
Ineffective infant feeding pattern	Bowel incontinence
Reflex incontinence	Risk for disorganized infant behavior
Risk for impaired home maintenance	Deficient diversional activity
Chronic pain	Chronic confusion
Impaired thought processes	Unilateral neglect
Fatigue	Risk for powerlessness
Disturbed self-concept (mild)	Risk for disturbed body image
Risk for situational low self-esteem	
Risk for complicated grieving	Risk for loneliness
Impaired parenting	Situational low self-esteem
Parental role conflict	Impaired social interaction
Risk for altered sexuality patterns	Risk for caregiver role strain

Table 1. *Continued*

Ineffective coping	Compromised family coping
Risk for self-harm	Risk for suicide
Risk for violence to others	Risk for spiritual distress
Risk for compromised human dignity	Stress overload
Collaborative problems	
Same as level two	
Advanced level	
Nursing diagnoses	
Risk for contamination	Contamination
Death anxiety	Hopelessness
Powerlessness	Disturbed body image
Disturbed personal image	Chronic low self-esteem
Dysfunctional family processes	Chronic sorrow
Complicated grieving	Caregiver role strain
Ineffective community coping	Disturbed family coping
Posttraumatic response	Relocation stress syndrome
Self-mutilation	Spiritual distress
Moral distress	Insomnia
Collaborative problems	
RC denotes Risk for Complications of	

In the first adult health course, *acute pain* can be taught in. In subsequent courses, faculty can address acute pain in children, during labor and delivery, or related to fractures. They will not, however, have to approach the nursing diagnosis of *acute pain* as a new topic but will focus on the additional assessments and interventions needed with this patient population. This will prevent valuable classroom time spent on content already discussed as pain assessments, gate theory, or general comfort interventions.

Clinical Integration

Clinical integration of nursing diagnoses/collaborative problems utilizes the following strategies: focused clinical experiences, pre- and post-conferences, nursing diagnoses/collaborative problems checklist, technical skills check list, and care planning using standard and addendum plans.

Focused Clinical Experiences

In Table 1, nursing diagnoses are grouped according to levels of complexity. The fundamental course would focus on level one nursing diagnoses/collaborative problems. In this course, classes can be dedicated to one or two nursing diagnoses, not medical conditions. When a class focuses on a specific nursing diagnosis as *nutrition, risk for infection or risk for impaired skin integrity*, then the clinical practicum will have the same focus. Table 2 illustrates a clinical focused guide for nutrition.

Focused clinical experiences provide direction for the students and ensue that each student will have certain clinical learning experiences. Clinical settings are not easily controlled or managed, thus these focused experiences provide students with clear and specific directions. When students have an observational clinical assignment without direct faculty

Table 2. Clinical Focus: Nutrition

Assess your assigned client for:				
Ability to eat, swallow	Yes	No	Specify	
Ability to feed self	Yes	No	Specify	
Ability to open food packages	Yes	No	Specify	
Taste changes	Yes	No	Specify	
Decreased appetite	Yes	No	Specify	
Nausea	Yes	No	Specify	
Usual intake for 24 hr				
Breakfast				
Lunch				
Dinner				
Snacks				
Beverages (nonalcoholic, alcoholic)				
Analyze data (refer to Carpenito textbook p. 416)				
Grains, cereal, pasta, rice	7 servings	servings		
Vegetables	2 1/2 cups	cups		
Fruits	2 cups	cups		
Milk products	3 cups	cups		
Meat, beans	6 oz	oz		
Water, non-caffeinated, alcoholic	8–10 8-oz glasses	glasses		
Are there deficits or excesses? Specify.				
Is the diet high in:				
Sugar	Yes	No		
Salt	Yes	No		
Fat	Yes	No		
CHO	Yes	No		
Height				
Weight				
BMI (refer to textbook, p. 419)				
Condition of hair, skin, nails	Dry	Pallor	Brittle	Within normal limits
Consider the following nursing diagnoses or assessment conclusion:				
Effective nutritional pattern	BMI <27, balanced intake of all 5 groups, limited salt, sugar, fat intake			
Risk for imbalanced nutrition <body requirements	Nutritional habits inconsistent with inadequate and/or excessive intake 1–2 food groups; BMI <27			
Imbalanced nutrition: <body requirements	BMI <19 or >27, inadequate and/or excessive intake of food groups			
Ineffective self-health management	BMI >30, diet high in sugar, fats, simple carbohydrates, skips meals, sedentary life style, erratic eating patterns, stress-related eating			

involvement as the operating room, preadmission testing, and senior center, it is important for the student to have a focused guide. Faculty will determine what learning experiences are desired for that experience. The focused guide would direct the student to certain observations. For example, in the operating room the student will be directed to observe:

- The interactions of the nurse with the patient prior to anesthesia
- Maintenance of sterile field
- Positioning of the patient
- Role of circulating nurse
- Role of the surgical assistant
- Safety measures instituted

Without this focused guide, the student will probably spend the entire session observing the surgeon, overlooking the role and responsibilities of the operating room nurse.

Pre- and Post-Conference

The purposes of the pre-conference are the following: to provide direction for learning for the day, utilizing the clinical focused guide; to identify the limits of the students and when to access the assistance of the staff nurse; to elicit from the students when the faculty is needed for assistance; and to discuss and analyze individual student experiences collectively so that students can learn from each other. It is not the time to criticize a student. Students are asked to share their assessments related to the clinical focus, validation data for a nursing diagnosis, or revisions of a goal or interventions because of the patient's response (evaluation).

Diagnoses/Collaborative Problems Check List

As part of the curriculum integration of nursing diagnoses/collaborative problems, faculty will select all the nursing diagnoses and collaborative problems that each student should experience and document clinically prior to graduation. This list will be organized per course. Each student will receive this list in the first clinical course. In the fundamental course, the list would contain level one nursing diagnoses as *risk for infection, imbalanced nutrition,* and collaborative problems as *risk for complications of hypotension.* When a care plan is completed on a specific nursing diagnosis or collaborative problem, it will be checked off as completed. Certain nursing diagnosis such as *grieving* or *risk for caregiver role strain* may not always be present in an assigned patient during a particular course. This checklist will continue with the student until graduation and can be useful to faculty in selecting assignments.

Technical Skill Checklist

Some faculty has lost sight of the importance of students gaining competence in a select group of technical skills. When students struggle with anxiety and fears of learning technical skills, these emotions interfere with their overall learning. A competent nurse possesses expertise in clinical decision-making, communication, theory application, and technical skills. This checklist will assist the faculty with providing experiences to students so they can achieve mastery.

Student Care Planning System

Standardized generic care plans. A care planning system for students should be designed to eliminate the writing or typing of standards of care (the predicted care). Standards of care are organized with nursing diagnoses and collaborative problems that are expected to be present because of a clinical situation (medical diagnosis, surgery, treatment, or condition). Students do not need to create these standards because they are available in many care planning books or, ideally, in electronic form so students can revise them based on their clinical data.

Each nursing course will have a standard of care for the population of focus in that course. For example, the

students in the fundamentals course will have a generic care plan for a hospitalized patient. Each week, in the clinical setting, the students will focus on one diagnosis that is a portion of the generic care plan such as *risk for constipation*, *risk for injury*, and *self-care deficits*. Thus, each week the student will learn an additional new nursing diagnosis. These basic level one nursing diagnoses will always be applicable for patients in subsequent courses but will not be included in subsequent care plans unless assessment data supports its inclusion on the care. In the maternal–child health course, for example, students will utilize a generic plan for a family in labor, delivery, and postpartum settings. In pediatrics, students will utilize a generic plan for hospitalized children and their families. A preoperative and postoperative generic surgical care plan will be utilized during the appropriate course.

Addendum care plans. Addendum care plans are documents that contain additional nursing diagnoses and collaborative problems that need nursing interventions at this time. The student will determine if addendum diagnoses are present based on assessment data. The student is limited by what nursing diagnoses and collaborative problems they have learned. They cannot diagnose something if they do not know "what it looks like." Faculty do not expect a fundamental student to understand more complex medical diagnoses such as diabetes mellitus and thus should not expect them to understand more complex nursing diagnoses as *grieving* or *ineffective coping*.

Each assigned patient will have a problem list to indicate the generic standard care plan that is being utilized. In addition, other nursing diagnoses and collaborative problems may be added depending on the level of the student and the assessment data. All nursing diagnoses/collaborative problems added to the problem list will also have goals and interventions added to the plan. It is important for faculty to understand that a student cannot individualize a care plan before they care for a patient. This process occurs when providing care; thus, additions or deletions to a patient care plan will be made after the clinical day.

Faculty will be needed to assist the student with separating priority and non-priority diagnoses. It is important that students learn that non-physiological nursing diagnoses can be a priority. This guidance will be of great value in assisting students to be more realistic regarding the time available and the best use of it. Faculty can teach students how to seize opportunities to address priority nursing diagnoses.

Conclusion

While faculty members seldom question the effort applied to teaching and learning medical diagnoses, there seems to be less effort applied when it comes to teaching nursing diagnoses. After 40 years, this author continues to witness the nursing profession as misunderstood and devalued by patients, family, and medical colleagues. Nurses are still viewed as the assistants of physicians and not professionals in their own right. When nurses are exclusively focused on clinical problems associated with the medical diagnosis or treatments, they fail to embrace professional nursing. Nursing knowledge is so much greater than our knowledge of pathophysiology and medications. It is easy to understand cerebral vascular accidents but so much more complex to assess and diagnose responses to a stroke that interfere with self-care, human dignity, and family functioning. It is easy to dismiss a patient as noncompliant but so much more complex to assess for reasons as financial, ability to read, or lack of understanding.

As a nurse practitioner, I saw a 28-year-old woman from Peru for the third time in the office. Each time, she presented with a new complaint: constipation, insomnia, fatigue, or weight loss. On the third visit, I asked her what she was looking forward to this year. She responded "nothing." With further questions, I determined that all her three children were in Peru with her mother. She was here illegally and owed thousands of dollars to the person who arranged her travel

here. She sent back money weekly for her family. She does not know when she can return. My nursing diagnosis was *chronic sorrow*. I cannot fix her problem, but I can acknowledge her grief and the difficulty of her situation. I have also referred her to an agency that provides free legal aid. This diagnosis helps me to focus our visits on her *chronic sorrow* and not label her complaints unfounded.

At the end of a clinical day, the moments nurses are most proud of are those spent in managing medical conditions or those spent validating and managing a specific nursing diagnosis with a patient who is suffering. Nursing management of medical problems require clinical expertise, but diagnosing a specific nursing diagnosis that is causing personal suffering for a patient or family elevates that nurse's expertise. When a professional nurse connects with a patient or family with a diagnosis of *anxiety*, *fear*, *grieving*, *disturbed family processes*, *risk-prone behavior*, or *caregiver role strain*, both the nurse and the patient/family benefit. Finally, faculty, without you, students will learn and embrace medical diagnoses, collaborative problems, treatments, and medications; however, without you, they will not learn or embrace nursing diagnoses. Teach your students the art and science of nursing and they will make you proud!

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