Application of Education Principles

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#### **Application of Education Principles**

The teaching plan and lecture "Postop Proficiency" was presented to second-semester juniors as part of the Foundations of Clinical Nursing course. The course is part of the nursing program curriculum that places an emphasis on the physiologic, psychologic, and pathophysiologic concepts to provide the foundation of professional nursing care. This meets the purpose of North Dakota State University's (NDSU) nursing program, which is to provide a foundation of nursing knowledge that allows students to grow into the role of a professional registered nurse (NDSUb, 2019).

The lecture given was on the post-operative care of a patient, and it followed a lecture from the previous week on nursing care in the preoperative and intraoperative phases. It was delivered during week two of the course. The outcomes of the postoperative lecture were to outline the components of postoperative nursing and identify possible complications or concerns for these patients.

#### **Accreditation Criteria**

The Baccalaureate Degree in Nursing program at NDSU is currently accredited by the Commission on Collegiate Nursing Education (CCNE) through September 2025 (NDSU, 2019a). The accreditation standards from which the CCNE adopts and formulates the standards for nursing programs are from the *Standards for Accreditation of Baccalaureate and Graduate Nursing Programs* (CCNE, 2019). CCNE accreditation is achieved by nursing programs when the program is able to demonstrate compliance with the CCNE standards and key elements.

For this lecture, a key element of the CCNE *Standards for Accreditation of Baccalaureate and Graduate Nursing Programs* that was met was "The mission, goals, and expected program outcomes are consistent with relevant professional nursing standards and guidelines for the preparation of nursing professionals" (CCNE, 2018, p. 6). Under this key element, the CCNE requires the professional nursing standards and guidelines of *The Essentials of Baccalaureate Education for Professional Nursing Practice*. This is comprised of nine essentials, and the following were addressed as part of the lecture on postoperative care:

- Essential II: Basic Organizational and Systems Leadership for Quality Care and Patient Safety. This essential requires students to have the knowledge and skills in regards to patient safety in order to provide high quality healthcare.
- Essential VI: Interprofessional Communication and Collaboration for Improving Patient Health Outcomes. Communication and collaboration must occur between healthcare professionals in order to deliver safe, high quality care to patients.
- 3. Essential IX: Baccalaureate Generalist Nursing Practice

(AACN, 2008, p. 3-4)

#### Outcomes

Per NDSU's School of Nursing, the course work within the curriculum provided to nursing students is designed to provide a foundation of knowledge to students that will allow them to grow into the role of a registered nurse (NDSU, 2019c). The lecture on postoperative care contributed to the foundation of knowledge by providing education on the initial assessments a nurse needs to carry out when a patient arrives to a postoperative unit and then possibly to a postoperative surgical floor as well as possible complications and concerns for postoperative patients. This also met two of the course outcomes, which were to examine nursing care of the surgical patient and apply course concepts in order to design nursing interventions that would help provide safe patient care.

#### **Major Learning Theory**

The brain-based learning theory was the major learning theory that guided the preparation of this teaching experience. While lecture typically belongs within the behaviorism learning theory, additional strategies were used in the lecture for this teaching plan as a teaching method (Oermann et al., 2018). Brain-based learning involves the active engagement of learners through the use of strategies that are purposeful and based on principles of understanding the brain (Oermann et al., 2018).

Strategies used included pre-exposing the learners to the content before the lecture as they were assigned required readings prior to the lecture, and the learners were engaged with the content as it was delivered (Oermann et al., 2018). Ways that the students were engaged in this teaching session included a brain drain activity, an unfolding case study during the lecture, and a Jeopardy! review game. During the lecture, the learners were educated in-depth on important concepts, which was a focus during the development of the teaching plan, and learners were further engaged by being asked questions by the lecturer during the teaching session, which is a part of brain-based learning (Oermann et al., 2018).

## **Types of Learners**

In assessing the types of learners the students in this teaching session were, the majority included kinesthetic and read/write learners from an overall impression of the students per the VARK model. However, all types of learners were identified within the class. Based on information shared from faculty prior and assessing the learning styles of the students during the lecture, the students preferred to write down notes from the lecture. Some students took notes on their laptops, while others choose to handwrite notes on a printout of the slides. The students also preferred additional sources of information to learn materials from the lecture, which also

supports those identified as read/write learners (Bastable, 2019). The learners also were very responsive to the unfolding case study during the lecture, which showed they were kinesthetic learners as they enjoyed the role-playing of the case study (Bastable, 2019).

When the learners were broken into teams, several of the learners were identified as being aural learners. These students were identified as such because some of them formed small groups to discuss the content of the lecture to properly answer questions within the Jeopardy! game (Bastable, 2019). Some learners also were assessed to be visual learners, as when graphics were shown or tables from the text within the lecture, those learners were intent on noting which page the content was on within the text if it was taken from the text.

In preparing the lecture and teaching plan with strategies, all learner types were considered and strategies were used to ensure engagement and learning by all. Creating a learning environment that addresses all learner types and multiple methods makes it easier to learn (Oermann et al., 2018). When it was identified that the learners were responsive to being able to discuss within a group and liked stories and questions intertwined into the lecture, adjustments were made to include more real-life experiences to help students make connections and suggesting that the students discuss together before answering a question. This promoted a sense of a safe learning environment for the students in addition to appealing to their learning styles.

## **Teaching Strategies**

As discussed, multiple teaching strategies were used for this teaching session. A majority of the content was delivered using a PowerPoint presentation during the lecture to allow for learning and development within the cognitive domain. An activity referred to as brain drain began the lecture and the students recalled the main concepts from the assigned readings. These ten concepts were written on a whiteboard. Throughout the lecture, the concepts were discussed, referring back to this activity, and crossed off after each was discussed. This strategy was selected to evaluate what the learners recalled from the readings and to help identify which concepts they had a better understanding of or wanted to learn more about. The brain drain activity was beneficial in helping the learners recall what they had learned from the readings, however, they did not seem as engaged with it and preferred the case study and Jeopardy! game more.

During the presentation, the lecturer also asked questions of the class relating to the content of the lecture, working from general concepts to more direct questions about the ideas the learners have as this is beneficial to learning (Oermann, et al., 2018). The lecturer also shared personal stories about postoperative care that were pertinent to the material. This strategy was used to provide the students with real-life examples they could connect the material with during the lecture, and per faculty who had already been interacting with the students stating that the students really enjoyed stories from the nursing world as they felt they could relate better to the context of the lecture. Stories also help support learning within the affective domain (Oermann et al., 2018). This strategy was well received by the students as they became engaged with the stories, and it led to them asking more questions to further expand on their understanding of concepts.

An unfolding case study was also used during the lecture and required the students to answer questions and think through the scenario based on what they were learning. This strategy was chosen as case studies are beneficial to learning in a lecture setting as they focus on the affective learning domain (Bastable, 2019). Case studies allow for active and engaged learners as they are able to apply the concepts being learned to a scenario that they could see in the

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clinical setting (Oermann et al., 2018). Additionally, case studies allow for the development of higher level thinking abilities, which include analysis, synthesis, and evaluation (Oermann et al., 2018). The students in this teaching session were actively engaged with the case study presented, and worked together to figure out what decisions to make.

Two different sessions of Jeopardy! using NCLEX style questions also occurred to review the material with a focus on the objectives of the lecture. A Jeopardy! board was created using an online template. This strategy was chosen as faculty had identified that the students in the class always requested NCLEX style questions as a way to learn the content. Educational games are also an effective method of reinforcing knowledge, which is why providing the questions to the class in a game setting was selected (Oermann et al., 2018). Games also address both the cognitive and affective learning domains and encourage active learning (Bastable, 2019). The class was split into two different teams to help create a more relaxed atmosphere as that can facilitate better comprehension of content (Oermann et al., 2018). One round of Jeopardy! occurred after learning about the PACU, and round two occurred after the second part of the lecture which covered care on the surgical floor for inpatients. Each team earned points for the questions correctly answered. While a winning team was identified, all of the students "won" candy for participation. This strategy was very well received by the students as a majority of the students were engaged, and they worked together to identify the answer, rationalizing with their teams on which answer to select. Of the 18 questions, the students correctly answered 17 on the first attempt, helping evaluate that the lecture material delivered was understood and the objectives of the teaching session were met.

#### **Classroom Assessment Methods**

The assessment methods used to conduct a formative assessment of the students during the presentation included discussions prompted by questions asked by the lecturer, an unfolding case study, and a quiz delivered in the format of a game as a group activity. Using multiple assessment methods is necessary as it helps provide data that is needed to determine if the objectives were met (Oermann et al., 2018). Multiple methods of assessment also help provide a true measure of the learning that has occurred (Oermann et al., 2018).

During the unfolding case study during the lecture, the assessment of the learners indicated that they had met the learning objectives of being able to specify which initial assessments of a patient were necessary and to judge which interventions should take priority within the case study. The learners were able to identify which findings from the patient in the case study were concerning and why they were concerning as well as being able to identify which interventions they should carry out if they were the nurse caring for the patient. In the second portion of the case study, the learners were not able to initially identify what was causing a symptom in their patient, however, after further questioning by the lecturer and discussion among the learners as a group, they were able to do so. They were then able to identify which interventions for the patient took priority. The students were able to quickly identify in the next part what was a priority for the patient and were also able to recall what education should be given to the patient. They were also able to identify what priority assessments were necessary before administering narcotic pain medication. In the final portion of the case study, the students were again able to identify what education needed to be provided to the patient who was asking to eat and what should be assessed before allowing the patient ice chips. Overall, through

assessing learning through this case study, the learners identified an understanding of the material as well as the ability to apply what they had learned.

During the first round of Jeopardy! the learners were all quickly able to answer a majority of the questions given to them. While the class was split into two teams, the lecturer could identify that a majority of each of the students in the group knew the answer by walking around the room and listening to their very quiet answers. Two questions made the groups pause and discuss before answering, and they were able to give the correct answer, showing that the majority of them knew it as they selected that answer based on the majority.

In the second round of Jeopardy! the students again were able to answer questions relatively quickly, and of the 18 total questions given throughout the two rounds of Jeopardy!, only one question posed a roadblock for the students. Through discussion with the students, they then indicated an understanding of which answer was correct and the rationale supporting it. The questions used in both rounds of the Jeopardy! game were based on the learning objectives of the teaching session when written, so this identified that all four learning objectives of the teaching session were met, with the fourth being met as the students participated in all three activities during the class session.

### **Test Questions**

## *Question #1 (multiple choice question)*

On admission of a client to the postanesthesia care unit (PACU), the nurse obtains a blood pressure of 124/70 mmHg. Thirty minutes after admission, the blood pressure reading is 112/60 mmHG with a pulse of 78, and warm, dry skin. Which action by the nurse is most appropriate?

a. Increase the rate of IV fluids

- b. Continue to take vital signs every 15 minutes
- c. Notify the anesthesia care provider immediately
- d. Increase the oxygen flow rate

The most correct option is B. Continue to take vital signs every 15 minutes

*Rationale:* Option B is the most correct answer because the patient's vital signs are stable, and he is not showing any signs of distress. The skin is dry and warm. The nurse should continue to take vital signs every 15 minutes as ordered in the PACU. Option A is incorrect as, while the blood pressure slightly decreased, it is still stable, indicating no need for fluid resuscitation. Option C is incorrect as none of the vital signs or the patient's presentation indicates a need to alert the provider. Option D is incorrect as there is no indication from the information given that oxygen is needed for this patient as his blood pressure and pulse are within acceptable limits for a post-operative patient (Lewis et al., 2017).

*The level of cognition for this question is* application because it is asking what action or intervention the nurse should take based on the information given in the question (McDonald, 2018). The nurse should recognize that the vitals and patient indicate a hemodynamically stable patient and no intervention is necessary at this time other than continuing to monitor.

# *Question #2 (multiple choice question)*

A nurse has completed discharge instructions for a patient discharging following an abdominal surgery including instruction on daily dressing changes. The nurse determines that the client has understood the teaching when the client indicates which of the following?

- a. The client will apply lotion to the site daily
- b. The client will practice proper hand hygiene prior to dressing changes
- c. The client can expect the wound to become more painful

d. The client will not change the dressing unless it is saturated

*The most correct option is* B. The client will practice proper hand hygiene prior to dressing changes.

*Rationale:* Option B is most correct as it is important for the client to practice proper hygiene to reduce the risk of infection especially during dressing changes. Option A is incorrect as the application of lotion to the site is discouraged. Option C is incorrect as if the incision becomes more painful, this is a sign of a possible infection, and the client should have the incision assessed by a healthcare provider as soon as possible. Option D is incorrect because the dressing should be changed daily. If daily changes are being done and the dressing is saturated, this is a sign to call the provider as the dressing should not be saturated and is a concern of ineffective healing of the incision (Lewis et al., 2017).

*The level of cognition for this question is application.* This question focuses on material the student has learned about discharge instructions for the client returning home with an incision and dressing changes. The student must apply what they know about discharge instructions and wound care to identify which of the statements by the client would be incorrect (McDonald, 2018).

# Question #3 (multiple choice question)

A nurse is caring for a client who had a laparoscopic cholecystectomy and resumed a regular diet. The client is now complaining of nausea and has vomited several times. Which of the following actions should the nurse take first?

- a. Ask the client to rate her pain
- b. Make the client NPO
- c. Administer an antiemetic

d. Assess bowel sounds

The most correct option is D. Assess bowel sounds.

*Rationale:* This option is most correct as assessment is the priority nursing intervention, and it is necessary to determine the presence of bowel sounds. While options A, B, and C are also correct, those are not the priority action for the nurse to take first as none are an assessment of the current client concern/complication (Lewis et al., 2017).

*The level of cognition for this question is application.* The student must interpret that the nausea and vomiting is a complication for post-operative clients. Once determined, the student must then identify which is the best action to take using the nursing process

(McDonald, 2018).

### *Question #4 (short answer)*

Identify the three most common concerns in regards to the cardiovascular system within the post-anesthesia care unit and two possible causes of each.

*The most correct option is:* The three most common concerns are hypertension, hypotension, and dysrhythmias. Causes of hypertension within the PACU include pain, anxiety, bladder distension, or respiratory distress. A history of hypertension is another common cause. Common causes of hypotension include fluid and blood loss as well as heart dysfunction. Dysrhythmias may occur due to hypoxia, electrolyte or acid-base imbalances, or pre-existing heart disease. Other options that will be accepted include hypothermia, pain, stress from surgery, or anesthetic agents (Lewis et al., 2017).

*Rationale:* Hypertension in the PACU typically is a result of the sympathetic nervous system being stimulated, which postoperatively can result from pain, anxiety, bladder distention, or respiratory distress. Hypotension typically occurs because of fluid or blood loss during the

procedure, and a decrease in circulating volume will cause hypotension. Heart dysfunction is suspected when fluids are administered and hypotension does not improve. Primary concerns of heart dysfunction include myocardial infarction, cardiac tamponade, or pulmonary embolism. Dysthymias in the PACU are often related to an identifiable cause. They can occur due to hypoxia as there is an increased workload placed on the heart. Imbalances with electrolytes such as potassium and calcium can also lead to dysrhythmias. Hypothermia, pain, the stress from surgery, and anesthetic agents used during surgery can also cause dysthymias. If the client has pre-existing heart disease, dysrhythmias may also occur (Lewis et al., 2017).

*The level of cognition for this question is analysis.* This question is asking the student to first identify the three most common cardiovascular concerns within the PACU, and then break them down to recognize what, postoperatively, contributes to these complications (McDonald, 2018).

# Question #5 (multiple choice question)

While completing your shift assessment of your client, the client reports that she has not had a bowel movement or passed gas since surgery. Your assessment findings include a distended abdomen and absent bowel sounds in all four quadrants, and you notify the provider. What nursing invention(s) can you perform without a provider's order?

- a. Insert a nasogastric tube and attach it to intermittent suction
- b. Administer IV fluids
- c. Encourage ambulation, maintain NPO status, monitor intake and output
- d. Encourage at least 3000 mL of fluids and three large meals per day

*The most correct option is* C. Encourage ambulation, maintain NPO status, monitor intake and output

*Rationale:* Option C is the correct answer as these are nursing interventions that do not require an order or are based on an order that is already in place. Option A and B are incorrect as both of those would require a provider's order before initiating if there were no order in place. Option D is incorrect as no peristalsis is occurring based on the findings of absent bowel sounds, not passing gas, and a distended abdomen. Providing this much intake to a client with those assessment findings would further complicate the issue and worsen how the client is feeling (Lewis et al., 2017).

*The level of cognition for this question is application.* The student must apply the assessment findings to work through the nursing process to identify which nursing interventions would be beneficial to this client.

# Question #6 (multiple choice question)

Bronchial obstruction by retained secretions has contributed to a postoperative client's pulse oximetry reading of 86%. Which complication is the client probably experiencing?

- a. Atelectasis
- b. Bronchospasm
- c. Hypoventilation
- d. Pulmonary embolism

The most correct option is A. Atelectasis

*Rationale:* Option A is the most correct as the question identified what is causing the pulse oximetry reading of 86%, which is bronchial obstruction by retained secretions. Option B is not most correct as a bronchospasm occurs when the muscles of the airway tighten, while the bronchial obstruction in this case occurred from secretions. Option C is incorrect as hypoventilation occurs when ventilation is inadequate, typically resulting from a decreased respiratory rate or effort that is needed to ensure proper gas exchange. Option D is incorrect as a pulmonary embolism is a blocked artery in the lungs, which can cause decreased oxygen saturation and shortness of breath (Lewis et al., 2017).

*The level of cognition for this question is application.* This question is asking the students to apply their knowledge about respiratory complications that can occur and what causes each complication.

# Question #7 (essay)

A nursing student is assigned to you for your shift. You receive a post-operative client postmastectomy on the inpatient surgical floor. The student nurse asks you to identify three priority assessments when managing a surgical wound and what is being assessed with each.

*The most correct option is* surgical site, dressing, and drains. The surgical site should be assessed for any drainage, including the type, amount, color, and any odor and appearance of the incision, including what has been used to close the incision, any signs of dehiscing, bruising, redness, and/or swelling. The dressing should be assessed to identify the type of dressing used and whether or not it is saturated or needs to be changed (if ordered). If the dressing has drainage on it, the drainage should also be assessed for the type, amount, color, and any odor present. The type of drains, if present, should be identified, and the site around the drain should also be assessed for appearance, looking for redness, drainage, swelling,

irritation, or bruising. The drains should also be assessed for the type of drainage in them, including type, amount, and color. When emptied, typically every eight hours, the amount from the drains must be recorded (Lewis et al., 2017).

*Rationale:* The three priority assessments for managing a surgical wound include assessing the incision, dressing, and any drains. The drainage must be assessed for all three of these, as this helps identify any possible complications, such as if there is too much drainage, a sign of bleeding, or infection based on the color of the drainage and any odor. It is also important for the nurse to know the size of the incision, what was used to close it, and the type of dressing used to manage caring for the wound. The incision needs to be assessed to monitor for any issues with dehiscing. The appearance of the incision is also important in monitoring for other complications like infection, as well as the insertion sites of drains. The dressing must be assessed in case a dressing change or reinforcement of the dressing is necessary. The amount of output from the drains is needed to monitor for too much drainage or if placement of the drains is correct as well as to help determine when the drains may possibly be removed.

*The level of cognition for this question is analysis.* The student must identify the top priority assessments of managing a wound and what is being assessed with each of those.

*Question #8 (multiple choice question)* 

A client is admitted to your inpatient unit following a hysterectomy. You are the nurse assigned to care for the client and during your initial assessment, the client's vitals are blood pressure 138/88, heart rate 96, respiratory rate 22, SpO2 94% on room air, and a temperature of 98.9 F. When asking the client to rate her pain on the 0-10 scale, she indicates it is 7/10. Based on these findings, which of the following would you administer first?

a. Oxycodone, 5 mg, oral, every four hours as needed

- b. Acetaminophen, 650 mg, oral, every four hours as needed
- c. Ondansetron, 4 mg, IV push, every six hours as needed
- d. Metoprolol, 5 mg, IV push, every six hours as needed

The most correct option is A. Oxycodone, 5 mg, oral, every four hours as needed

*Rationale:* The most correct option is A as the client is experiencing pain, rating it at a 7/10.

Option B is incorrect as it would not be sufficient enough to help the client's pain, and a

temperature of 98.9 F does not indicate the need for acetaminophen. Option C is incorrect as

this medication is an antiemetic, and the client is not complaining of nausea nor is she

vomiting. Option D is incorrect as while the client's blood pressure and pulse are slightly

elevated, these findings are both related to the client's pain.

*The level of cognition for this question is analysis.* Per McDonald (2018), with this type of question, a student must analyze the situation of the client to identify which of the medications listed should be given based on the assessment findings. The student should analyze that the client is not presenting with nausea, a fever, or high blood pressure but instead pain with a rating of 7/10.

# Question #9 (essay)

You are the nurse caring for a client who has been experiencing uncontrolled pain following a prostatectomy. The provider has ordered a patient-controlled analgesia pump. Upon initiating this for the client, the client asks you what this is for and how it works. You provide the following education to the patient:

*The most correct option is* A patient-controlled analgesia pump allows you to give yourself your own dose of pain medication by pressing a button. The pump is programmed to deliver a set amount of pain medication safely at set intervals through your IV. This helps to achieve

better pain control. Nursing staff will monitor you to ensure pain relief is occurring and for common side effects such as drowsiness, nausea, and itching. You can press the button for the PCA at any time, and it is beneficial to do so when you feel your pain is getting worse or a few minutes before activity that may cause pain. This will not take all of your pain away, but it will help reduce it so you may rest and ambulate. It is important that only you press the button to administer the medication to yourself as nursing staff nor family can press it (Department of Nursing, 2019).

*Rationale:* The client should be educated on what a PCA is, how it works, and stress the importance of safety with using it. It also is imperative that a client is told that only they may press the button to deliver the pain medication. The client should also be made to feel safe to use it by having the nurse explain that the client will be monitored regularly and that if the PCA does not help the client's pain to let the staff know as other options are available.

*The level of cognition for this question is synthesis.* This question requires that the student explains what a PCA is and what important factors are needed in educating a patient on the use of a PCA for controlling pain.

# Question #10 (essay)

Create a discharge teaching plan for a client being discharged five days following abdominal surgery.

# The most correct option is

The discharge plan created by the student needs to address wound care/how to care for the incision, including how to change the dressing and how often, instructions on how to shower, including not taking baths or swimming, avoiding any topicals being placed on the incision unless ordered, and avoiding wearing tight clothing. The discharge teaching plan also needs to

include instructions on how to take any prescribed medications including pain medications and antibiotics, stressing the importance of taking all antibiotics if prescribed and how frequently to use pain medications. The discharge teaching plan should also discuss pain management, including to take pain medication at regular intervals, using only as much pain medication as needed, and to taper down in the amount taken. The use of acetaminophen should also be discussed, including the daily limit of acetaminophen to not exceed (3000 mg in 24 hours) and to not drive, work, or consume alcohol if taking narcotic pain medications. If narcotics are prescribed, constipation should also be discussed with the client and what may be used to avoid it such as stool softeners if prescribed or a high fiber diet. Diet should also be part of the teaching plan, including to eat foods rich in protein to aid healing and fiber to help reduce constipation, and if nausea returns, how to adjust the diet to help resolve any issues with nausea. The client should also be instructed to call the provider if severe nausea or vomiting occurs, or does not resolve/worsens. Activity restrictions should also be discussed, including the possibility of weight restrictions on the amount that may be lifted as this was an abdominal surgery. Walking should be encouraged, as tolerated, in the discharge teaching plan. The plan should also include when the follow-up appointment is and where, and if an appointment could not be made, education should be provided on how to do so. Signs and symptoms of when to call a provider should also be included in the plan, temperature above 101 F. increased pain or discomfort, redness, swelling, or drainage from the incision (specifying what is normal), and if the incision begins to open. Other concerns that should be discussed with a provider should be given to the client; nausea, vomiting, chills, excessive sweating, diarrhea, constipation, and the inability to urinate or completely empty the bladder. The teaching plan

should also include how to contact a provider, such as a phone number and hours in which the number may be called and who to contact after hours (Lewis et al., 2017).

**Rationale:** To properly care for and identify any issues with the incision, the client must be educated on how to care for it and what to monitor. Medications are often confusing for clients, especially those who do not commonly take any. Clients need to understand how and why they are taking a medication and for how long. Pain management is important as the pain has been managed in the hospital by nursing staff. The client needs to know what to expect, encouraged to control pain, and to also taper down on pain medications as tolerated. Clients will also oftentimes turn to over-the-counter pain medication, and it is important to discuss the limits these medications have so that the client does not take too much and is aware of what medications may contain duplicate ingredients like acetaminophen. Typically following an abdominal surgery, diet restrictions may be in place or a specific diet may be ordered by the provider. It is also important to discuss which foods are beneficial such as those with high protein and fiber to encourage wound healing and help prevent constipation. Activity must be encouraged to help maintain peristalsis and avoid possible complications such as deep vein thrombosis. Driving restrictions are important to stress to clients, especially those on narcotic pain medications as these can cause impairment. Follow-up care must be discussed so that the client understands the importance of the follow-up appointment and when to go to the appointment. Possible signs of infection should be reviewed to help the client monitor themselves for those as well as other signs and symptoms that are related to complications from this surgery. Clear instructions on who and when to call need to be provided to the client so that they feel they have an option for when they do have concerns.

*The level of cognition for this question is synthesis.* This essay question requires the student to work through what is important for the client who is returning home following an abdominal surgery and what that client should be educated on before discharging: wound care, activity, medications, pain management, diet, and when and how to contact a healthcare provider.

# **Test Item Analysis Blueprint**

Topic of Teaching Presentation: Postop Proficiency									
Broad Outcome for this Teaching Presentation: Outline the components of postoperative									
nursing and identify possible complications or concerns for these patients.									
Learning	#	Туре	Level of	NCLEX Test	NLCEX Test	Total			
<b>Objectives for the</b>			Cognition	Plan of	Plan of				
Teaching				Structure of	Integrated				
Presentation				Client Needs	Processes				
Specify eight	7	Essay	Analysis	Physiological	Nursing process	4			
initial				adaptation	- assessment				
assessments that	1	Multiple	Application	Reduction of risk	Nursing process				
a nurse carries		choice		potential	- assessment				
out when a	6	Multiple	Application	Physiological	Nursing process				
patient arrives to		choice		adaptation	- diagnosis				
the PACU	4	Short	Analysis	Reduction of risk	Nursing process				
		answer		potential	- assessment				
Judge which	8	Multiple	Analysis	Pharmacological	Nursing process	3			
nursing		choice		and parenteral	-				
assessments or				therapies	implementation				
interventions	3	Multiple	Application	Basic comfort	Nursing process				
should take		choice		and care	- assessment				
priority for a	5	Multiple	Application	Basic care and	Nursing process				
patient in an		choice		comfort	- assessment				
unfolding case									
study									
Outline five	2	Multiple	Application	Safety and	Teaching and	2			
important		choice		infection control	learning				
components of a	10	Essay	Synthesis	Management of	Teaching and				
discharge plan				care	learning				
for a post-op									
client									

Participate in three activities during the class session to further promote understanding of postop nursing	9	Essay	Synthesis	Pharmacological and parenteral therapies	Teaching and learning	1	
care							
<b>Total Number of Test Items for the Examination:</b> 10							
					(NCSBN,	2019)	

% of Items for This	% of Items for This	
Category on NCLEX Exam	Category in My Exam	
17-23%	10%	
9-15%	10%	
6-12%	0%	
6-12%	0%	
6-12%	20%	
12-18%	20%	
9-15%	20%	
11-17%	20%	
	Category on NCLEX Exam 17-23% 9-15% 6-12% 6-12% 12-18% 9-15%	

(NCSBN, 2019)

Based on the categories for the NCLEX test plan, I did not have any questions addressing the categories of health promotion and maintenance or psychological integrity. Based on that, I would need to adjust my exam to include those questions, however, I feel that the teaching plan itself included physiological integrity while health promotion and maintenance would need to be addressed. I also would need to reduce the focus on physiological adaptation and include more content regarding management of care, which would include prioritizing care of multiple patients based on assessments and interventions needed. The categories of the reduction of risk potential and basic care and comfort also require an adjustment, with again facilitating that content to fit more into the management of care category.

#### **Evaluation of Process**

The aspects of this assignment along with completing the teaching plan made me recognize the many components educators need to consider when planning and teaching content. All types of learners must be considered, and it is important to be cognizant of one's own learning style in order to not impose only one preference onto learners (Oermann et al., 2018). This assignment also made me realize the importance of teaching strategies and how multiple ones should be incorporated. The learners were very receptive to most of the strategies used, while I feel the brain drain activity did not appeal to them. I feel that strategy could be successful if it is one that learners consistently did. For instance, my preceptor has students fill out a "ticket to class" activity before each class session, so certain activities and strategies may be better received if done consistently.

Aspects of this assignment that reinforced my knowledge were reviewing the learning theories and assessment methods. Most large classroom settings require lecture to provide the material to multiple students at one time because of time constraints, and while that fits into one learning theory, creativity and thoughtful planning for a teaching session can help identify better theories to use in the classroom. I also feel I have a better understanding of how to assess learners during a teaching session along with the importance of doing so, including their learning styles. This assignment made me aware of that it is not simply about delivering the content but making adjustments to help learners grasp concepts and material.

Areas that I want to further practice and refine are assessment methods. This is crucial to identifying if learning objectives were met, and if not, what changes can be made to achieve the objectives. I also think I could have more clearly identified how I was going to assess how and if the learning objectives were met during the teaching plan creation. I also feel that I want to work

on finding more creative ways to engage students during lecture, as lecture itself is a passive form of learning. Incorporating more active forms will help me be successful as an educator as well as the learners.

The completion of this assignment made me recognize how difficult it is to remember one's audience. Educators need to really consider all of the levels that students are at, ensuring that those who are at one level understand while those at another are not bored with the content. I feel this assignment also enhanced my performance as a future educator and Master's prepared nurse as I recognized the importance of the QSEN competencies and meeting the criteria necessary by accreditation for the program and institution. It is necessary that those criteria drive the education, including what content is taught.

Completing this assignment also made me recognize how I can incorporate this in my nursing practice as a Master's prepared nurse. I more fully grasp that just like students in a nursing program, those I instruct and educate as a nurse have very similar components that need to be addressed, such as learning styles and what level of learning the individuals are at when education is delivered. It is so important to start at a basic level and assess learners to help identify which path the education should take in order for learning to occur, may it be a future nurse I educate or a patient.

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