

Student Name: Courtney David

Medical Diagnosis/Disease: Crohn's Disease

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology

Normal Structures

GI tract is from mouth to anus, 4 layers, mucosa lining, submucosa connective layer (contains glands, blood vessels, and lymph nodes) muscle (oblique, circular, longitudinal) and serosa around soft organs include mouth, esophagus, stomach, small intestines, large intestines, rectum, anus, liver, pancreas, gallbladder. Enteric nervous system (ENS) controls GI motility and secretions, 2 parts: submucosal plexus myenteric plexus, portal vein takes venous blood from GI tract to liver. Celiac (stomach/duodenum) superior mesenteric (distal small intestines to mid large intestine) and inferior mesenteric (distal large intestine to anus) arteries supply blood to GI tract.

Pathophysiology of Disease

Inflammatory bowel disease, chronic, remission and exacerbations
Involves any segment of the GI tract from mouth to anus
Cobblestone of mucosa
No known cause
Ulcers deep, longitudinal, penetrate
Autoimmune disease, overactive, inappropriate or sustained immune response to environmental and bacterial trigger= genetically
Susceptible people=inflammation which causes widespread tissue destruction
Distal ileum/proximal colon usually effected

NCLEX IV (7): Reduction of Risk

Anticipated Diagnostics

Labs

CBC (iron deficiency)

SED rate

Serum chem

WBC

Additional Diagnostics

H&P, endoscopy, stool culture (blood/infection), radiologic studies w/ barium contrast, colonoscopy w/ biopsy, MRI, CT

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors

Race (white/Jewish high risk)
Age (early adulthood/teenage)
Diet (high in sugar)
Smoking
Stress
Use of NSAIDs
ABX use
Oral contraceptives
Genetics (family history= greater risk of getting it)

Signs and Symptoms

Diarrhea
Weight loss
Abdomen pain/cramping
Fever
Fatigue
Rectal bleeding
Vomiting

NCLEX IV (7): Reduction of Risk

Possible Therapeutic Procedures

Non-surgical
blood products
(active bleed)
lactose free diet

Surgical
Bowel resection
Strictureplasty

Prevention of Complications

(What are some potential complications associated with this disease process)

Cancer
C.Diff infection
Perforation
Strictures
SBS
Bleeding

NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management

Aminosalicylates (decrease inflammation)
Antimicrobials (tx infection)
Biologic therapies (inhibit TNF)
Corticosteroids (decrease inflammation)
Immunosuppressants (decrease immune system)
Analgesics

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures

GI Rest promotion
Support groups
Monitor fluids/nutrition
Monitor stools (for occult blood)

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?

Fear of surgery
Anxious of exacerbations
Fear of malnutrition
Fear of death
Fear of unknown disease

Client/Family Education

List 3 potential teaching topics/areas

- Type of diet to prevent Crohn's flare up.
- Medication regimen for Crohn's disease
- Things to avoid preventing exacerbations (stress, NSAIDs, smoking)

NCLEX I (1): Safe and Effective Care Environment

Multidisciplinary Team Involvement

(Which other disciplines do you expect to share in the care of this patient)

Gastrointestinal (GI), MD, nurse, Dietary, surgeon

Patient Problems (Nursing Diagnoses)

Courtney David

List two potential patient problems you will be addressing as part of your nurse's notes, along with clinical reasoning, goals/expected outcomes, assessments, and priority nursing interventions. The patient problems must be in priority order. Six nursing interventions for each priority problem must be completed.

Problem # 1 Deficient Fluid Volume

Clinical Reasoning: low hemoglobin level, low hematocrit level, GI bleed, intake and output, clear liquid diet, diarrhea, vomiting

Goal/EO: Patient will have a fluid intake of 300ml during my time of care.

Ongoing Assessments: assess urine characteristics q4hr, assess intake and output q8hr, assess patients normal voiding patterns qshift, assess hemoglobin level daily, assess hematocrit level daily, assess weight qshift, assess skin turgor daily, assess pulses q4hr, asses LOC/mental status q4hr,

- NI:
1. Encourage patient to drink clear liquids q1hr.
 2. Maintain IV fluids 0.9 Normal Saline during my time of care.
 3. Administer blood products PRN based on H&H levels during my time of care.
 4. Educate patient on signs and symptoms of dehydration, low urine output, dry skin, dry oral mucosal membranes during my time of care.
 5. Encourage a low fiber, low residue diet daily (GI rest, prevent diarrhea)
 6. Encourage oral hygiene after each meal/PRN.

Problem # 2 Acute Pain: abdomen

Clinical Reasoning: guarding, restlessness, muscle tension, pain scale rating,

Goal/EO: Client will report a controlled pain scale rating of 2/10 using pharmacological and non-pharm methods

Ongoing Assessments: assess pain characteristics q4hr, assess pain scale q4hr, assess positioning q2hr, assess BP, HR, Temp q4hr

- NI:
1. Administer analgesics (Aleve, Acetaminophen, or Ibuprofen) q4-6hr PRN during my time of care.
 2. Administer corticosteroids (rapid-acting anti-inflammatory) for Crohn's flare up daily during my time of care.
 3. Apply warm compress to the abdomen q1hr during my time of care.
 4. Encourage the use of focused breathing, guided imagery and diversional activities during my time of care.
 5. Encourage ambulation/positioning as tolerated q2hr during my care. (knees flexed)
 6. Encourage rest periods, dark, quiet environment during my time of care.

Courtney David

ATI Virtual Clinical Questions and Reflection:

- 1) Identify two members of the healthcare team collaborating in the care of this patient:
 - a. RN - Ester
 - b. Dr March - gastroenterologist
- 2) What were some steps the nursing team demonstrated that promoted patient safety?
 - a. matching patients blood bracelet to blood products (#'s)
 - b. Stopping the second unit of blood due to reaction
 - c. Applying oxygen when RR 26 and O2 94% (2L/min)
- 3) Do you feel the nurse and medical team utilized therapeutic communication techniques when interacting with individuals, families, and health team members of all cultural backgrounds?
 - a. If yes, describe:
each person on Ms Lieberman's care was professional, worked as a team and all had patient safety as their goal. They all communicated with each other and helped when they could.
 - b. If no, describe:

Reflection

- 1) Go back to your Preconference Template:
 - a. Indicate (circle, star, highlight, etc.) the components of your preconference template that you saw applied to the care of this patient.
- 2) Review your Nursing Process Form: Did you select a correct priority nursing problem?
 - a. If yes, write it here: Deficient Fluid Volume
 - b. If no, write what you now understand the priority nursing problem to be:

- 3) Review your Patient Problem Form: Did you see many of your anticipated nursing assessments and interventions used?
 - a. Were there interventions you included that were not used in the scenario that could help this patient?
 - i. If yes, describe:
Encourage low fiber diet (GI rest, prevent cramping flare up), encourage patient to drink clear fluids (instead of ETOH, ↑ water intake)
 - ii. If no, describe:

- 4) After completing the scenario, what is your patient at risk for developing?
 - a. Shock
 - b. Why? If the GI bleed is left untreated, there will be a lack of blood flow to the rest of the body, damaging organs, and causing organ failure.

5) What was your biggest "take-away" from participating in the care of this patient? How did this impact your nursing practice?

The biggest take-away from participating in the care of this patient was to ensure you have a detailed patient history to know what your patient may be experiencing and why. I also learned that it is important to stay with the patient during the first 15-20 minutes of any blood transfusion because a reaction can occur at any point, during any bag/unit of blood. I learned that if a reaction is suspected, stop the transfusion, gather vital signs, ensure patient is stable and call the provider right away for the next steps in care. Education is such an important part of a nurses job, ensuring that your patient leave aware of habits that may cause discomfort or sometimes worse is very important. ESTLV tried to give ways to manage stress, limit ETOH, diet changes, and avoid the use of NSAIDs due to flare ups w/ Crohn's disease.

Objective

Plan

Assessment

Implementation

Evaluation

Teaching & Resources

Signature

Date

SOAP Note Based on Priority Problems

Courtney David

Priority Patient Problem #1: Deficient fluid volume : due to possible blood loss from GI bleed

<p>Subjective:</p> <p>This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.</p>	<p>History Present Illness (HPI): GI bleed (active) dizziness, abdominal pain, bloody stools</p> <p>PMH: Crohn's disease, intermittent gastritis, six months ago - ileostomy</p> <p>Allergies: sulfa</p> <p>Current Medications: • started infliximab IV every 8 weeks, last infusion was 7 weeks ago = frequent anti-inflammatory meds OTC • Morphine 4mg IV push for pain - 150ml/hr 0.9 sodium chloride</p>
<p>Objective:</p> <p>This section is your clinical observations. Include pertinent vital signs, pertinent labs and diagnostics related to the priority problem.</p>	<p>Vital Signs: ED arrival = BP 100/60 O2 95% RA, T 98.8 HR 114 RR 22 last taken = T 38.8 HR 110 RR 26 BP 110/70 O2 97% (transfusion)</p> <p>Labs: Hemoglobin 7, hematocrit 21%, prothrombin time 12.2, PT 21 seconds, INR 0.7, MCHC 48 blood type: A</p> <p>Diagnostics: endoscopy - found active bleeding, stopped the bleed during endoscopy.</p> <p>Type + cross for 2 units PRBC</p>
<p>Assessment:</p> <p>Focused assessments on your priority problem.</p> <p>intake = 400ml urine out = 500ml</p>	<p>Her Hemoglobin was 7, hematocrit 21%, IV fluids running at a rate of 150ml/hr of 0.9 sodium chloride, pain in the upper abdomen rated a 6/10 upon arrival to med surg floor, pt stated stress induced, usually takes ibuprofen, 500ml of urine voided in ED, alert and oriented x4, was able to answer questions, cap refill normal (<3sec), breath sounds clear, hyperactive bowel sounds, abdomen tenderness, ileostomy present of 1 RG - semi liquid stool</p>
<p>Plan</p> <p>*Based on priority problem only</p> <p>Include what your plan is for the client. What treatments or medications are needed? You can include procedures, consults, labs/diagnostics, etc. What nursing interventions are being performed?</p>	<p>Plan: infusion of blood products to bring hematocrit and hemoglobin levels up, ensure bag matches patient blood bracelet #'s, continue IV infusion of 0.9 sodium chloride 150ml/hr after blood products, strict I/O's q8hr, encourage oral fluids to prevent dehydration, monitor vital signs q4hr (unless giving blood) supplemental oxygen for O2 less than 92% (call provider) 15min monitor ileostomy output monitor stools for blood PRN/q1hr clear liquid diet</p> <p>Teaching & Resources: Educate on diet = ↑ protein, ↓ fiber avoid NSAIDs stress management - ↓ EtOH, light exercise</p>

Module Report

Tutorial: Real Life RN Medical Surgical 4.0

Module: GI Bleed



Individual Name: Courtney David

Institution: Margaret H Rollins SON at Beebe Medical Center

Program Type: Diploma

Standard Use Time and Score

	Date/Time	Time Use	Score
GI Bleed	5/8/2023 4:57:22 PM	41 min	Strong

Reasoning Scenario Details

GI Bleed - Use on 5/8/2023 4:16:34 PM

Reasoning Scenario Performance Related to Outcomes:

*See Score Explanation and Interpretation below for additional details.

Body Function	Strong	Satisfactory	Needs Improvement
Cardiac Output and Tissue Perfusion	100%		
Cognition and Sensation	100%		
Ingestion, Digestion, Absorption & Elimination	100%		
Regulation and Metabolism	100%		

NCLEX RN	Strong	Satisfactory	Needs Improvement
RN Management of Care	100%		
RN Health Promotion and Maintenance	100%		
RN Psychosocial Integrity	100%		
RN Pharmacological and Parenteral Therapies	100%		
RN Reduction of Risk Potential	100%		
RN Physiological Adaptation	100%		

QSEN	Strong	Satisfactory	Needs Improvement
Safety	100%		
Patient-Centered Care	100%		
Evidence Based Practice	100%		

Decision Log:

Optimal Decision	
Scenario	Nurse Esther listens to bowel sounds.
Question	Nurse Esther listens to Ms. Lieberman's abdomen in all four quadrants and determines Ms. Lieberman's bowel sounds are hyperactive. Listen to the four audio clips. Which of the following sounds is an expected finding for Ms. Lieberman?
Selected Option	Option C: Audio clip of bowel sounds occurring 45 times in 1 min.
Rationale	Bowel sounds are clicks and gurgles heard in the abdomen. Bowel sounds within the expected reference range are irregular sounds that occur five to 35 times a minute. This finding indicates hyperactive bowel sounds. Therefore, this is the expected finding for this client.

Optimal Decision	
Scenario	Ms. Lieberman reports she feels lightheaded and dizzy.
Question	Ms. Lieberman states she is feeling lightheaded and dizzy. Her skin color is pale. Which of the following should be Nurse Esther's priority action?
Selected Option	Measure Ms. Lieberman's vital signs.
Rationale	The client is at risk for hypovolemic shock due to the loss of extracellular fluid and blood. Clinical manifestations of hypovolemic shock include hypotension and tachycardia. Therefore, the nurse should assess the client's status by obtaining her vital signs.

Optimal Decision	
Scenario	Nurse Esther obtains Ms. Lieberman's vital signs after she reports feeling faint.
Question	Ms. Lieberman reports feeling worse and her vital signs are: BP 94/56 mm Hg, pulse 110/min, respirations 26/min, and SaO2 94%. Nurse Esther starts oxygen at 2 L/min. Which of the following should be Nurse Esther's priority action?
Selected Option	Lower the head of the bed.
Rationale	Using the ABC priority-setting framework, the priority response is to promote improved circulation by lowering the head of the bed and elevating the client's feet. This action can prevent hypovolemic shock until adequate blood volume is restored.

Optimal Decision	
------------------	--

Scenario	The unit of packed RBCs for Ms. Lieberman arrives on the unit.
Question	Nurse Esther is preparing to administer a unit of packed RBCs to Ms. Lieberman. Which of the following actions should Nurse Esther perform prior to administering the blood?
Selected Option	Ask Ms. Lieberman if she has experienced a reaction with any previous blood transfusions.
Rationale	A transfusion reaction can be caused by the development of antibodies to the donor leukocytes. This reaction is more likely to occur when a client has had blood transfusions before, as well as a history of prior blood transfusion reactions. Therefore, this is the appropriate action for the nurse to take.

Optimal Decision	
Scenario	Nurse Esther is ready to administer the first unit of packed RBCs.
Question	Identify the correct sequence of actions for blood administration after Nurse Esther performs hand hygiene and applies gloves. (Reorder the steps by dragging them into the desired sequence.)
Selected Ordering	Spike and prime the Y-set tubing with the 0.9% sodium chloride solution. Attach the tubing to the IV catheter and begin to infuse the 0.9% sodium chloride solution. Gently rotate the bag of packed RBCs. Attach the packed RBCs bag to the Y-set tubing. Turn off the 0.9% sodium chloride solution. Begin to infuse the packed RBCs.
Rationale	The first action the nurse should do is insert one of the spikes of the Y-set into the 0.9% sodium chloride solution bag, prime the tubing with the 0.9% sodium chloride solution, and start slowly infusing the solution into the client's IV. Next, the nurse should gently rotate the bag to mix the blood cells with the plasma. Then, the nurse should spike the blood bag with the remaining spike on the Y-set tubing and turn off the 0.9% sodium chloride solution by closing the clamp. Lastly, the nurse needs to open the clamp to allow the blood to infuse.

Optimal Decision	
Scenario	Ms. Lieberman is restless, her face is flushed, and she reports having a headache.
Question	Nurse Esther notes Ms. Lieberman is restless, her face is flushed, and she reports having a headache. Her vital signs include: temperature 38.8° C (101.8° F), pulse 96/min, respirations 22/min, and BP 103/60 mm Hg. Which of the following is an appropriate action for Nurse Esther to take?
Selected Option	Stop the blood transfusion.
Rationale	In the presence of a febrile reaction, the client's blood is sensitive to some component of the donor's blood. To prevent further exposure to the sensitizing component, the transfusion should be stopped immediately.

Scenario	Using an SBAR format, write the information Nurse Esther should give to Ms. Lieberman's provider when calling about her response to the blood. Refer to the EMR documents for needed information.
-----------------	---

Selected Option	A medication is added and symptoms may be administered.
------------------------	---

Question	Using an SBAR format, write the information Nurse Esther should give to Ms. Lieberman's provider when calling about her response to the blood. Refer to the EMR documents for needed information. (Enter your response, then click on the submit button at the bottom of the screen. Compare your response to the one provided.)
Selected Option	Hi doctor, my name is Esther, I'm caring for Ms. Lieberman in room #1, she is a 36 y/o female admitted in the ED for a GI bleed. she was given one unit of blood in the ED and part of the second unit on the floor with me, I stopped the transfusion because I believe she is having a transfusion reaction. Her baseline temp was 98.9 and its now 101.8, she reports a headache, chills, and is restless. No evidence of a rash. Ms. Lieberman has a history of crohn's disease and intermittent gastritis. Six months ago she has an ileostomy and started infliximab IV every 8 weeks. her last infusion was 7 weeks ago. Her hemoglobin was 7 and her hematocrit was 21% in the ED, when she arrive on the floor her vital signs were BP 94/56, HR 110, now her vital signs are reading BP 110/70 and pulse is 110, RR 26,)2 is 97%. I have discontinued the second transfusion of blood and plan to send both bags of blood down to the lab per protocol. I hung a new bag of 0.9% sodium chloride to keep the vein open. Ms. Lieberman is requesting ibuprofen for her headache, which in return would also bring her fever down. Could I have an order for an antipyretic, and do you want me to continue the IV infusion of 0.9% sodium chloride at 150ml/hr?
Rationale	The following information should be shared with Ms. Lieberman's provider when calling about her response to the blood. Situation: Dr. McGuire, this is Esther - RN. I am taking care of Ms. Lieberman in room 5206. She is a 36-year-old client admitted from the ED today for a GI bleed. She's had one unit of packed RBCs and part of the second unit of blood. I stopped the second unit because I believe she is having a transfusion reaction. Her baseline temperature was 98.6 and is now 101.8. Ms. Lieberman reports having a headache, chills, and is restless. She does not have any evidence of a rash at this time. Background: Ms. Lieberman has a history of Crohn's disease and intermittent gastritis. Six months ago she had an ileostomy and started on infliximab IV every 8 weeks. Her last infusion was 7 weeks ago. Assessment: Her hemoglobin was 7 g/dL and her hematocrit was 21% in the ED. When she arrived to the medical surgical unit, her BP was 94/56 and her pulse 110, but now her BP is 110/70 and her pulse is 110. At this time, her respirations are 26, her SaO2 is 97%, and her temperature is 101.8. I have discontinued the second unit of blood and plan to send both the bags of blood to the lab per protocol. I hung a new bag of 0.9% sodium chloride to keep the line open. Recommendations: Ms. Lieberman is requesting ibuprofen for her headache, which would also bring her fever down. Could I have a prescription for an antipyretic, and do you want to continue the IV infusion of 0.9% sodium chloride at 150 mL/hr?

Optimal Decision	
Scenario	Dr. March tells Ms. Lieberman that he recommends an endoscopy. Ms. Lieberman is informed about the procedure. She agrees to the procedure and signs the consent form.
Question	Nurse Esther is reinforcing teaching with Ms. Lieberman, who is scheduled for an endoscopy in the morning. Which of the following should Nurse Esther include in the teaching?
Selected Option	"A medication to reduce oral secretions may be administered."

Rationale	The nurse could administer atropine (Sal-Tropine), a muscarinic antagonist, to inhibit salivary and bronchial secretions.
------------------	---

Optimal Decision	
Scenario	Nurse Esther is calculating the number of milliliters of morphine sulfate to administer.
Question	Nurse Esther is preparing to administer morphine 4 mg IV. Available is morphine 8 mg/mL. How many mL should the nurse administer? (Round the answer to the nearest tenth.)
Selected Option	0.5

The nurse should administer morphine 0.5 mL IV.

Follow these steps for the Desired Over Have method of calculation:

Step 1: What is the unit of measurement the nurse wants calculated? mL

Step 2: What is the dose the nurse wants calculated? Dose to administer = Desired = 4 mg

Step 3: What is the dose available? Dose available = Have = 8 mg

Step 4: Check the nurse can on the units of measurement? No

Step 5: What is the quantity of the dose available? 1 mL

Step 6: Set up an equation and solve for X

$$\text{Desired} = \text{Quantity} \times \frac{\text{Dose Available}}{\text{Dose Available}} = 4 \text{ mg} \times \frac{1 \text{ mL}}{8 \text{ mg}} = 0.5 \text{ mL}$$

Step 7: Round if necessary.

Step 8: Determine whether the amount to administer makes sense. If there are 8 mg/mL and the physician orders 4 mg, it makes sense to administer 0.5 mL. The nurse should administer morphine 0.5 mL IV.

Follow these steps for the Dimensional Analysis method of calculation:

Step 1: What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)

$$X \text{ mL} =$$

Step 2: Determine the ratio that specifies the same unit as the unit being calculated. Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)

$$X \text{ mL} = 4 \text{ mg} \times \frac{1 \text{ mL}}{8 \text{ mg}}$$

Step 3: Place any remaining ratios that are relevant to the unit on the right side of the equation, along with any relevant conversion factors, to cancel out unwanted units of measurement.

$$X \text{ mL} = 4 \text{ mg} \times \frac{1 \text{ mL}}{8 \text{ mg}} = 0.5 \text{ mL}$$

Step 4: Solve for X

$$X \text{ mL} = 0.5 \text{ mL}$$

Step 5: Round if necessary.

Step 6: Determine whether the answer to administer makes sense. If there are 8 mg/mL and the physician orders 4 mg, it makes sense to administer 0.5 mL. The nurse should administer morphine 0.5 mL IV.

Scenario	Nursing considerations: nurse Esther takes which orders orally, morphine.
Question	Nurse Esther is preparing to administer 4 mg of morphine IV push to the physician, which of the following orders should Nurse Esther take?

Rationale	<p>Follow these steps for the Ratio and Proportion method of calculation:</p> <p>Step 1: What is the unit of measurement the nurse should calculate? mL</p> <p>Step 2: What is the dose the nurse should administer? Dose to administer = Desired 4 mg</p> <p>Step 3: What is the dose available? Dose available = Have 8 mg</p> <p>Step 4: Should the nurse convert the units of measurement? No</p> <p>Step 5: What is the quantity of the dose available? 1 mL</p> <p>Step 6: Set up an equation and solve for X.</p> $\frac{\text{Have}}{\text{Desired}} = \frac{\text{Quantity}}{X}$ $\frac{8 \text{ mg}}{4 \text{ mg}} = \frac{1 \text{ mL}}{X}$ $X \text{ mL} = 0.5 \text{ mL}$ <p>Step 7: Round if necessary.</p> <p>Step 8: Determine whether the amount to administer makes sense. If there are 8 mg/mL and the prescription reads 4 mg, it makes sense to administer 0.5 mL. The nurse should administer morphine 0.5 mL IV.</p> <p>Follow these steps for the Desired Over Have method of calculation:</p> <p>Step 1: What is the unit of measurement the nurse should calculate? mL</p> <p>Step 2: What is the dose the nurse should administer? Dose to administer = Desired 4 mg</p> <p>Step 3: What is the dose available? Dose available = Have 8 mg</p> <p>Step 4: Should the nurse convert the units of measurement? No</p> <p>Step 5: What is the quantity of the dose available? 1 mL</p> <p>Step 6: Set up an equation and solve for X.</p> $\frac{\text{Desired}}{\text{Have}} \times \text{Quantity} = X$ $\frac{4 \text{ mg}}{8 \text{ mg}} \times 1 \text{ mL} = X$ $X \text{ mL} = 0.5 \text{ mL}$ <p>Step 7: Round if necessary.</p> <p>Step 8: Determine whether the amount to administer makes sense. If there are 8 mg/mL and the prescription reads 4 mg, it makes sense to administer 0.5 mL. The nurse should administer morphine 0.5 mL IV.</p> <p>Follow these steps for the Dimensional Analysis method of calculation:</p> <p>Step 1: What is the unit of measurement the nurse should calculate? (Place the unit of measure being calculated on the left side of the equation.)</p> $X \text{ mL} =$ <p>Step 2: Determine the ratio that contains the same unit as the unit being calculated. (Place the ratio on the right side of the equation, ensuring that the unit in the numerator matches the unit being calculated.)</p> $1 \text{ mL} \times \frac{8 \text{ mg}}{4 \text{ mg}} = X$ <p>Step 3: Place any remaining ratios that are relevant to the item on the right side of the equation, along with any needed conversion factors, to cancel out unwanted units of measurement.</p> $1 \text{ mL} \times \frac{8 \text{ mg}}{4 \text{ mg}} = X$ <p>Step 4: Solve for X.</p> $X \text{ mL} = 0.5 \text{ mL}$ <p>Step 5: Round if necessary.</p> <p>Step 6: Determine whether the amount to administer makes sense. If there are 8 mg/mL and the prescription reads 4 mg, it makes sense to administer 0.5 mL. The nurse should administer morphine 0.5 mL IV.</p>
------------------	--

Optimal Decision	
Scenario	Nursing considerations Nurse Esther takes when administering morphine.
Question	Nurse Esther is preparing to administer 4 mg of morphine IV bolus to Ms. Lieberman. Which of the following actions should Nurse Esther take?

Selected Option	Infuse morphine at a rate of 1 mg/min.
Rationale	To prevent serious adverse reactions, such as respiratory arrest, the nurse should inject the medication at a rate of 1 mg/min.

Optimal Decision	
Scenario	Nurse Esther talks to Ms. Lieberman about needing several drinks after work to relax.
Question	Ms. Lieberman tells Nurse Esther she has a stressful job working in the city as a stockbroker, and that sometimes at night she has up to five drinks. Which of the following is an appropriate statement made by Nurse Esther?
Selected Option	"Tell me more about the stress you are feeling."
Rationale	Providing an open-ended statement, along with active listening, allows the client to express her thoughts and feelings. It also establishes trust.

Scenario	Identify five stress management strategies Nurse Esther should recommend to Ms. Lieberman to promote a healthier lifestyle.
Question	Identify five stress management strategies Nurse Esther should recommend to Ms. Lieberman to promote a healthier lifestyle. (Enter your response, then click on the submit button at the bottom of the screen. Compare your response to the one provided.)
Selected Option	1. perform light regular exercise 2. consider a pet 3. get adequate sleep 4. journaling 5. guided imagery, massage therapy, yoga, music therapy
Rationale	Identify five stress management strategies Nurse Esther should recommend to Ms. Lieberman to promote a healthier lifestyle. 1. Perform light, regular exercise. 2. Write in a journal. 3. Listen to music. 4. Consider a pet. 5. Get adequate sleep. 6. Promote relaxation through use of progressive muscle relaxation, guided imagery, massage therapy, humor, and/or yoga. 7. Enhance her social support system, such as an ostomy support group, AA, and/or coping support group. 8. Evaluate current job, lifestyle, and home location.

Optimal Decision	
Scenario	Nurse Esther discusses diet with Ms. Lieberman.
Question	Nurse Esther is reinforcing diet teaching with Ms. Lieberman. Which of the following dietary recommendations should she make?
Selected Option	Eat foods that are high protein.
Rationale	Clients who have Crohn's disease are at risk for malnutrition because they may attempt to control symptoms by restricting their diet. Additionally, clients who have Crohn's disease are at risk for malabsorption of nutrients. The client should be instructed to maximize her nutrition by eating foods high in protein.

Optimal Decision	
Scenario	Nurse Esther provides Ms. Lieberman with educational material to take home.
Question	Nurse Esther provides Ms. Lieberman with information about health promotion. Which of the following should she include in the teaching?

Score Explanation and Interpretation Individual Performance Profile

Selected Option	Advise Ms. Lieberman to avoid the use of ibuprofen.
Rationale	Clients who have Crohn's disease should not take nonsteroidal anti-inflammatory drugs (NSAIDs) because they can cause gastrointestinal bleeding.

REASONING SCENARIO PERFORMANCE RANGES

Strong	Results of the reasoning test results in positive outcomes for the client and the nurse.
Satisfactory	Results of the reasoning test results in mildly helpful or neutral outcomes for the client and the nurse.
Needs Improvement	Results of the reasoning test results in harmful or damaging outcomes for the client and the nurse.

REASONING SCENARIO TEST RESULTS RELATED TO NURSING COMPETENCY POINTS

A performance level of 3 indicates that the client is able to perform the task with the minimum supervision. A score of 4 indicates that the client is able to perform the task with no supervision. A score of 5 indicates that the client is able to perform the task with no supervision and is able to teach others. A score of 6 indicates that the client is able to perform the task with no supervision and is able to teach others and is able to evaluate the performance of others. A score of 7 indicates that the client is able to perform the task with no supervision and is able to teach others and is able to evaluate the performance of others and is able to manage the performance of others. A score of 8 indicates that the client is able to perform the task with no supervision and is able to teach others and is able to evaluate the performance of others and is able to manage the performance of others and is able to lead others.

NCLEX CLIENT NEEDS CATEGORIES

Management of Care	Identify, coordinate, and deliver care to clients by the nurse, or supervising and/or assisting in the management of the client's care by the health care team.
Safety and Infection Control	Recognize and prevent potential hazards to the client and the nurse, and the health care team.
Health Promotion and Maintenance	Recognize and respond to health status of clients, prevention, and early detection of health problems.
Psychosocial Integrity	Provide a safe, structured, and positive well-being of clients and significant others through the use of nursing interventions.
Basic Care and Comfort	Provide comfort while caring for clients, perform activities of daily living.
Pharmacological and Parenteral Therapies	Monitor and evaluate administration of medication, including parenteral therapy.
Reasoning of the Individual	Provide nursing care that decreases the risk of clients developing health-related complications.
Physiological Adaptation	Monitor and evaluate nursing care for clients experiencing physical changes.

Score Explanation and Interpretation

Individual Performance Profile

REASONING SCENARIO INFORMATION

Reasoning Scenario Information provides the date, time and amount of time use, along with the score earned for each attempt. The percentage of students earning a Scenario Performance of Strong, Satisfactory, or Needs Improvement is provided. In addition, the Scenario Performance for each student is provided, along with date, time, and time use for each attempt. This information is also provided for the Optimal Decision Mode if it has been enabled.

If a detrimental decision is made during a Real Life scenario, the scenario will diverge from the optimal path and potentially end prematurely, in which case an indicator will appear on the score report.

REASONING SCENARIO PERFORMANCE SCORES

Strong	Exhibits optimal reasoning that results in positive outcomes in the care of clients and resolution of problems.
Satisfactory	Exhibits reasoning that results in mildly helpful or neutral outcomes in the care of clients and resolution of problems.
Needs Improvement	Exhibits reasoning that results in harmful or detrimental outcomes in the care of clients and resolution of problems.

REASONING SCENARIO PERFORMANCE RELATED TO NURSING COMPETENCY OUTCOMES

A performance indicator is provided for each outcome listed within the nursing competency outcome categories. Percentages are based on the number of questions answered correctly out of the total number of questions that were assigned to the given outcome. Outcomes have varying numbers of questions assigned to them. Also, due to divergent paths within the branching simulation, the outcomes encountered and the number of questions for each outcome can vary. The above factors cause limitations related to comparing scores across students or groups of students.

NCLEX® CLIENT NEED CATEGORIES

Management of Care	Providing integrated, cost-effective care to clients by coordinating, supervising, and/or collaborating with members of the multi-disciplinary health care team.
Safety and Infection Control	Incorporating preventative safety measures in the provision of client care that provides for the health and well-being of clients, significant others, and members of the health care team.
Health Promotion and Maintenance	Providing and directing nursing care that encourages prevention and early detection of illness, as well as the promotion of health.
Psychosocial Integrity	Promoting mental, emotional, and social well-being of clients and significant others through the provision of nursing care.
Basic Care and Comfort	Promoting comfort while helping clients perform activities of daily living.
Pharmacological and Parenteral Therapies	Providing and directing administration of medication, including parenteral therapy.
Reduction of Risk Potential	Providing nursing care that decreases the risk of clients developing health-related complications.
Physiological Adaptation	Providing and directing nursing care for clients experiencing physical illness.

Score Explanation and Interpretation

Individual Performance Profile

QUALITY AND SAFETY EDUCATION FOR NURSES (QSEN)

Safety	The minimization of risk factors that could cause injury or harm while promoting quality care and maintaining a secure environment for clients, self, and others.
Patient-Centered Care	The provision of caring and compassionate, culturally sensitive care that is based on a client's physiological, psychological, sociological, spiritual, and cultural needs, preferences, and values.
Evidence Based Practice	The use of current knowledge from research and other credible sources, upon which clinical judgment and client care are based.
Informatics	The use of information technology as a communication and information gathering tool that supports clinical decision making and scientifically based nursing practice.
Quality Improvement	Care related and organizational processes that involve the development and implementation of a plan to improve health care services and better meet the needs of clients.
Teamwork and Collaboration	The delivery of client care in partnership with multidisciplinary members of the health care team, to achieve continuity of care and positive client outcomes.

BODY FUNCTION

Cardiac Output and Tissue Perfusion	The anatomical structures (heart, blood vessels, and blood) and body functions that support adequate cardiac output and perfusion of body tissues.
Cognition and Sensation	The anatomical structures (brain, central and peripheral nervous systems, eyes and ears) and body functions that support perception, interpretation, and response to internal and external stimuli.
Excretion	The anatomical structures (kidney, ureters, and bladder) and body functions that support filtration and excretion of liquid wastes, regulate fluid and electrolyte and acid-base balance.
Immunity	The anatomic structures (spleen, thymus, bone marrow, and lymphatic system) and body functions related to inflammation, immunity, and cell growth.
Ingestion, Digestion, Absorption, and Elimination	The anatomical structures (mouth, esophagus, stomach, gall bladder, liver, small and large bowel, and rectum) and body functions that support ingestion, digestion, and absorption of food and elimination of solid wastes from the body.
Integument	The anatomical structures (skin, hair, and nails) and body functions related to protecting the inner organs from the external environment and injury.
Mobility	The anatomical structures (bones, joints, and muscles) and body functions that support the body and provide its movement.
Oxygenation	The anatomical structures (nose, pharynx, larynx, trachea, and lungs) and body functions that support adequate oxygenation of tissues and removal of carbon dioxide.
Regulation and Metabolism	The anatomical structures (pituitary, thyroid, parathyroid, pancreas, and adrenal glands) and body functions that regulate the body's internal environment.
Reproduction	The anatomical structures (breasts, ovaries, fallopian tubes, uterus, vagina, vulva, testicles, prostate, scrotum, and penis) and body functions that support reproductive functions.

DECISION LOG

Information related to each question answered in a scenario attempt is listed in the report. A brief description of the scenario, question, selected option and rationale for that option are provided for each question answered. The words "Optimal Decision" appear next to the question when the most optimal option was selected.

The rationale for each selected option may be used to guide remediation. A variety of learning resources may be used in the review process, including related ATI Review Modules.

If a detrimental decision that could result in grave harm to the client is made during a Real Life scenario, the scenario ends immediately and an indicator that a detrimental decision has been made appears in the score report. A detrimental decision indicates the need to remediate the related topic area to prevent detrimental outcomes in the future.

EX_RealLife_Ind

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Courtney David

MEDICATION Infliximab

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Tumor necrosis factor (TNF) blocking agent- Antirheumatic, disease-modifying, GI, immunosuppressant

PURPOSE OF MEDICATION

Expected Pharmacological Action

Binds to tumor necrosis factor, inhibiting functional activity of TNF

TE: prevents disease and allows diseased joints to heal.

Therapeutic Use

In combination with methotrexate, reduces signs/symptoms, inhibits progression of structural damage, improves physical function in moderate to severe active RA. Treatment of psoriatic arthritis. Reduces s/sx induces and maintains wremission in moderate to severe active crohn's disease. maintains fistula closure in fistulizing crohn's disease.

Complications

Side Effects: frequent- HA, nausea, fatigue, fever
Occasional- fever/chills during infusion, pharyngitis, vomiting, pain, dizziness, bronchitis, rash, rhinitis, cough, pruritus, sinusitis, myalgia, back pain
Rare- hypotension or hypertension, paresthesia, anxiety, depression, insomnia, diarrhea, UTI.

Medication Administration

IV infusion: Crohn's disease: adults, elderly, children 6yrs and older:
5mg/kg followed by additional doses at 2 and 6 wks after first infusion then q8wks thereafter. For adults who respons the lose response, consideration may be given to treatment with 10mg/kg

Contraindications/Precautions

Contraindications: hypersensitivity to infliximab. moderate to severe HF (doses greater than 5mg/kg should be avoided) sensitivity to munne proteins, sepsis, serious active infection.
Cautions: hematologic abnormalities, history of COPD, preexisting or recent onset of CNS demyelinating disorders, seizures, mild HF, history of recurrent infections, conditions predisposing pt to infections, pts exposed to tuberculosis, elderly pts, chronic hepatitis B virus infection.

Nursing Interventions

Assess hydration status, monitor urinalysis, erythrocyte sedimentation rate (ESR), BP, monitor for signs of infection, monitor daily pattern of bowel activity stool consistency:
Crohn's: monitor C-reactive protein, frequency of stools assess for abdominal pain.

Interactions

Drug: anakinra, anti-TNF agents, baricitinib, pimecrolimus, tacrolimus (topical), tocilizumab may increase adverse effects. may decrease therapeutic effect of BCG, Vaccines (live) may increase levels adverse effects of belimumab, natalizumab, vaccines, vedolizumab
Herbal: Echinacea may decrease effects

Client Education

Report persistent fever, cough, abdominal pain, swelling of ankles/feet.
treatment may depress your immune system and reduce you ability to fight infection.
report symptoms of infection such as body aches, chills, cough, fatigue, fever, avoid those with active infection. do not recieve live vaccines, expect frequent tuberculosis screening report travel plans to possible endemic areas.

Evaluation of Medication Effectiveness

crohn's diease doesnt get worse, less flare ups, reduced s/sx of crohn's diease

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Courtney David

MEDICATION Morphine Sulfate REVIEW MODULE CHAPTER _____

CATEGORY CLASS Opioid Agnoist/Analgesic (Scehdule II)

PURPOSE OF MEDICATION

Expected Pharmacological Action

Binds with opioid receptors within CNS, inhibiting ascending pain pathways

Therapeutic Use

Alters pain perception, emotional response to pain

Complications

Ambulatory pts, pts not in severe pain may experince nausea and vomiting more frequently than pts in supine position or who have severe pain
Sedation, decreased BP (orthostatic hypotension), diaphoresis, facial flushing, constipation, dizziness, drowsiness, nausea, vomiting, allergic reaction, dyspnea, confusion, palpitations, tremors, urinary retention, abd cramps, vision changes, dry mouth, headache, decreased appetite, pain buring at injection site
RARE: paralytic ileus

Medication Administration

PO (immediate release): 10-30mg q4hrs/prn
IV: 2.5mg-5mg q3-4hrs/prn, repated doses
1-2mg may be given more frequently if needed
IV continous infusion: 0.8-10mg/hr, range 20-50mg/hr
PCA: 1mg/ml, demand dose 1mg (range 0.5-2.5mg) lockout interval 5-10mins
Extended release: given 1x daily or divided over 12hrs

Contraindications/Precautions

C: hypersensitivity to morphine, acute/severe asthma, GI obstruction, known or suspected paralytic ileus, concurent use of MAOI's or use of MAOI's in the last 14 days, severe respiratory depression
Extreme caution: COPD, cor pulmonale, hypoxia, hypercapnia, preexsisting respiratory depression, head injury, increased ICP, hypotension
PC: biliary tract disease, pancreatitis, addisons disease, cardiovascular disease, morbid obesity, adrenal insufficeny, elderly, hypothyroidism, urethral stricture, prostatic hyperplasia, CNS depression toxic pyscosis, seizures, drug abuse/misuse

Nursing Interventions

Monitor VS 5-10mins after IV admin, 15-30mins after SQ and IM. Be alert for decreased respirations and BP, check for adequate voiding, monitor daily pattern for bowel activity, avoid constipation, initate deep breathing/cough excersices particualry in pts who have pulmonary issues, assess for clinical improvement, record onset for pain relief, screen for drug abuse/misuse, drug seeking behavior

Interactions

Alcohol, other CNS depressants (Lorazepam, gabpentin, zolpidem) may increase CNS effects, respiratory depression, hypotension.
MAOIs (Phenelzine & Selegiline) may prodcue serotonin syndrome (reduce dosage to 1/4 of usual morphine dose. Herbal medications with sedative properties (Chamomile, Kava Kava, Valerian), Lab values may increase serum amaylase and lipase

Client Education

Change postions slowly to avoid orthostatic hypotension, aviod tasks that require alertness, monior skills until response to drug is established, avoid alcohol, cns depressants, tolerance and dependence may occur with extended use of high doses, report ineffective pain control, constipation, urianry retention

Evaluation of Medication Effectiveness

No longer c/o of any pain or improvement of pain