

Student Name: Lucy Siranides
 Medical Diagnosis/Disease: Crohn's Disease

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology
Normal Structures
 - Included in the GI tract are the mouth, esophagus, stomach, small intestine, large intestine, rectum, and anus.
 - The main function of the GI system is to supply nutrients to body cells; accomplished through the process of (1) ingestion, (2) digestion, and (3) absorption.
 - Elimination is the process of excreting waste products of digestion.
 [MORE ON BACK →]

Pathophysiology of Disease
 - Crohn's disease is a type of inflammatory bowel disease (IBD)
 - IBD → chronic inflammation of the GI tract characterized by periods of remission interspersed with periods of exacerbation
 - Genetic link (IBD occurs more often in family members of people w/ IBD)
 - IBD is an autoimmune disease involving an immune reaction to a person's own intestinal tract.
 - Results in inflammation → widespread tissue destruction
 [MORE ON BACK →]

NCLEX IV (7): Reduction of Risk

Anticipated Diagnostics
Labs
 - CBC/Chem
 - Stool examined for blood, pus, mucus, and organisms leading to infection
Additional Diagnostics
 - Double contrast barium swallow/enema
 - CT/MRI
 - Colonoscopy
 - Capsule endoscopy

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors
 - diet (high intake of refined sugars, total fats, polyunsaturated fatty acid (PUFA), omega-6 fatty acids, raw fruits/vegetables, omega-3-rich foods, dietary fiber)
 - smoking
 - stress
 - Use of NSAIDs, antibiotics, oral contraceptives

Signs and Symptoms
 - diarrhea
 - weight loss (w/ small intestine involved)
 - cramping abdominal pain
 - fever
 - fatigue
 - rectal bleeding

NCLEX IV (7): Reduction of Risk

Possible Therapeutic Procedures
Non-surgical
 - Hospitalization for severe exacerbations or complications
 - Medication
Surgical
 *Not curative, will come back in other patches
 - Strictureplasty
 - Reanastomosis

Prevention of Complications
 (What are some potential complications associated with this disease process)
 - hemorrhage
 - strictures
 - perforation (w/ possible peritonitis)
 - abscesses
 - fistulas
 - CDI

NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management
 - "Step up" or "step down" therapy
 - Aminosalicylates
 - Antimicrobials
 - Corticosteroids
 - Immunomodulators
 - Biologic therapies

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures
 - Bowel rest
 - Control inflammation
 - Correct malnutrition
 - Combat infection

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?
 - Pain/discomfort
 - Irritability → not being able to eat certain foods
 - Financial concerns (medical bills)
 - Loss of role in family/life/work

Client/Family Education

List 3 potential teaching topics/areas
 • Avoid alcohol, milk, and caffeine
 • Keep a food diary to help identify individual problem foods
 • Adequate nutrition/fluid/electrolyte intake

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)
 - Gastroenterologist
 - Case management
 - Nutritionist/dietician
 - Primary care physician
 - General surgery

Anatomy and Physiology Normal Structures (cont.):

Mouth: food enters the mouth where mastication occurs with the teeth; the tongue aids in mastication and moving food to the back of the throat for swallowing

- **Pharynx:** the oropharynx routes the food from the mouth to the esophagus (swallowing reflex)
- **Esophagus:** after swallowed, the food enters the esophagus (a hollow muscular tube, 18-25cm long and 2cm in diameter); peristaltic waves move food towards the stomach where the lower esophageal sphincter controls movement of food into the stomach
- **Stomach:** the stomach stores food, mixes food w/ gastric secretions, and empties small boluses into the small intestine
- **Small Intestine:** the small intestine (coiled tube, 7m in length and 2.5-2.8cm in diameter) is responsible for digestion and absorption; it is composed of the duodenum, jejunum, and ileum; villi and microvilli enable digestion and absorption
- **Large Intestine:** the large intestine is hollow, muscular tube around 1.5-1.8m long and 5cm in diameter; absorption of water and electrolytes occurs here; feces is formed and stored here until defecation; propulsive peristalsis occurs; feces in the rectum stimulate sensory nerve endings that produce the desire to defecate, the parasympathetic nerve fibers produce contraction of the rectum and internal anal sphincter, voluntarily relaxation of the external anal sphincter may then occur

Pathophysiology of Disease (cont.):

- Crohn's disease can involve any segment of the GI tract from the mouth to the anus.
- Crohn's disease most often involves the distal ileum and proximal colon.
- Segments of normal bowel can occur between diseased portions, so-called "skip" lesions.
- The inflammation in Crohn's disease involves all layers of the bowel wall.
- Typically, ulcerations are deep, longitudinal, and penetrate between islands of inflamed edematous mucosa, causing the classic cobblestone appearance.
- Strictures at the areas of inflammation can cause bowel obstruction.
- Since the inflammation goes through the entire wall, microscopic leaks can allow bowel contents to enter the peritoneal cavity and form abscesses or produce peritonitis.
- In active Crohn's disease, fistulas are common.

Potential Patient Problems (Nursing Diagnoses)

List two potential patient problems you will be addressing along with clinical reasoning, goals/expected outcomes, assessments, and priority nursing interventions. The patient problems must be in priority order.

Problem # 1: Acute Pain: Abdomen; Anal Region

Clinical Reasoning: Crohn's disease exacerbation, cramping abdominal pain, restlessness, guarding behavior, facial grimacing, perianal skin irritation, diarrhea, elevated BP and RR, fistulas

Goal/EO: ATI will report a pain score of $\leq 4/10$ on the standardized numerical pain scale during my time of care.

Ongoing Assessments: PQRST of pain q4hr PRN; assess RR, HR, and BP q4hr PRN; assess pain score q4hr PRN; assess expectation for pain/pain goal q4hr PRN; monitor analgesic effectiveness q4hr PRN; monitor nonverbal pain cues (facial grimacing, restlessness, etc.) PRN

- NI:
1. Administer Morphine (IV) as ordered.
 2. Administer Infliximab (IV) as ordered.
 3. Assist in repositioning to positions of comfort q2hr.
 4. Educate on dietary modifications to reduce exacerbations of Crohn's disease prior to discharge.
 5. Provide a restful environment (i.e., dimmed lights, closed door, cluster nursing care) during my time of care.
 6. Encourage deep breathing and diversional activities q4hr PRN.

Problem # 2: Risk for Deficient Fluid Volume

Clinical Reasoning: vomiting, diarrhea, hypermetabolic state (inflammation, fever), weakness, dizziness

Goal/EO: ATI will maintain adequate fluid volume as evidenced by moist mucous membranes, skin turgor recoils immediately, capillary refill ≤ 3 seconds, and balanced intake and output during my time of care.

Ongoing Assessments: assess BP, HR, temperature, skin turgor, capillary refill q4hr PRN; monitor I&O continuously; assess weight qshift; determine preferred fluids on admission; monitor for blood in stool PRN; monitor laboratory values (i.e., hemoglobin, hematocrit, potassium, magnesium, sodium, etc.) PRN

- NI:
1. Administer IV fluids as ordered.
 2. Administered blood transfusions as ordered.
 3. Encourage consumption of preferred fluids (if not NPO) q4hr PRN.
 4. Provide or encourage oral hygiene/care qshift PRN.
 5. Educate on how to accurately track/record I&O prior to discharge.
 6. Maintain NPO status and bedrest (if ordered) to promote bowel healing and prevent loss of intestinal fluids qshift.

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Lucy Siranides

MEDICATION Infliximab

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Antirheumatic, disease-modifying, GI, immunosuppressant agent

PURPOSE OF MEDICATION

Expected Pharmacological Action

Binds to tumor necrosis factor (TNF), inhibiting functional activity of TNF (induction of proinflammatory cytokines, enhanced leukocytic migration, activation of neutrophils/eosinophils)

Therapeutic Use

Prevents disease and allows diseased joints to heal

Complications

headache; nausea; fatigue; fever; fever/chills during infusion; pharyngitis; vomiting; pain; dizziness; bronchitis; rash; rhinitis; cough; pruritus; sinusitis; myalgia; back pain

Medication Administration

IV
- 5mg/kg followed by additional doses at 2 and 6wks after first infusion, then q8wks thereafter
- For adults who respond then lose response, consideration may be given to treatment w/ 10mg/kg

Contraindications/Precautions

C: hypersensitivity; moderate to severe HF (doses greater than 5mg/kg should be avoided); sensitivity to murine proteins, sepsis, serious active infection
P: hematologic abnormalities; hx of COPD; preexisting or recent-onset CNS demyelinating disorders; seizures; mild HF; hx of recurrent infections; conditions predisposing pt to infections (e.g., diabetes), etc.

Nursing Interventions

- Monitor urinalysis
- Monitor erythrocyte sedimentation rate (ESR)
- Monitor BP
- Monitor for signs of infection
- Monitor C-reactive protein
- Monitor frequency of stools
- Assess for abdominal pain

Interactions

Drug: anakinra; anti-TNF agents; baricitinib; pimecrolimus; tacrolimus (topical); tocilizumab; BCG (intravesical); vaccines (live); belimumab; natalizumab; vedolizumab
Herbal: echinacea
Lab: increase serum alkaline phosphatase, ALT, AST, bilirubin

Client Education

- Report persistent fever, cough, abdominal pain, swelling of ankles/feet
- Treatment may depress your immune system and reduce your ability to fight infection
- Report symptoms of infection
- Avoid those w/ active infection
- Do not receive live vaccines
- Expect frequent tuberculosis screening
- Report travel plans to possible endemic areas

Evaluation of Medication Effectiveness

Reduces signs/symptoms, induces and maintains remission in moderate to severe active Crohn's disease; reduces number of draining enterocutaneous/rectovaginal fistulas, maintains fistula closure in fistulizing Crohn's disease

Infliximab

Compatibility: IV Incompatibilities - do not infuse in same IV line w/ other agents

Amount: 5 mg/kg followed by additional doses at 2 and 6 wks after first infusion, then q8wks thereafter

Rate of Administration: over at least 2 hrs using a low protein-binding filter

Diluent:

- Reconstitute each vial w/ 10 mL sterile water for injection, using 21-gauge or smaller needle. Direct stream of sterile water for injection to glass wall of vial.
- Swirl vial gently to dissolve contents (do not shake).
- Allow solution to stand for 5 min and inject into 250 mL bag 0.9% NaCl; gently mix. Concentration should range between 0.4 and 4 mg/mL.
- Begin infusion within 3 hrs after reconstitution.

Storage:

- Refrigerate vials
- Solution should appear colorless to light yellow and opalescent; do not use if discolored or if particulate forms

ACTIVE LEARNING TEMPLATE: *Medication*

STUDENT NAME Lucy Siranides

MEDICATION Morphine

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Opioid analgesic

PURPOSE OF MEDICATION

Expected Pharmacological Action

Binds w/ 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 experience N/V more frequently than pts in supine position or who have severe pain
- Sedation; decreased BP; diaphoresis; facial flushing; constipation; dizziness; drowsiness; N/V
- Antidote: Naloxone

Medication Administration

IV

- may give undiluted
- always administer very slowly
- for injection, dilute w/ sterile water/NS for concentration of 1-2mg/mL
- for continuous, dilute w/ D5W for concentration of 0.1-1mg/mL

Contraindications/Precautions

C: hypersensitivity; acute or severe asthma; GI obstruction; known or suspected paralytic ileus; concurrent use of MAOIs or use of MAOIs within 14 days; severe respiratory depression
 Extreme Caution: COPD; cor pulmonale; hypoxia; hypercapnia; preexisting respiratory depression; head injury; increased ICP; severe hypotension

Nursing Interventions

- Monitor VS 5-10min after IV administration
- Be alert for decreased respirations, BP
- Check for adequate voiding
- Monitor daily pattern of bowel activity, stool consistency; avoid constipation
- Initiate deep breathing and coughing exercises
- Assess for clinical improvement; record onset of pain relief
- Screen for drug abuse and misuse, drug-seeking behavior

Interactions

Drug: alcohol, other CNS depressants; MAOIs
 Herbal: sedative properties (chamomile, kava kava, valerian)
 Lab: increase serum amylase and lipase

Client Education

- Change positions slowly to avoid orthostatic hypotension
- Avoid tasks that require alertness, motor skills until response to drug is established
- Avoid alcohol, CNS depressants
- Tolerance, dependence may occur w/ prolonged use of high doses
- Report ineffective pain control, constipation, urinary retention

Evaluation of Medication Effectiveness

Relief of pain

Morphine

Compatibility: IV Compatibilities - Amiodarone, Atropine, Bumetanide, Bupivacaine, Dexmedetomidine, Diltiazem, Diphenhydramine, Dobutamine, Dopamine, Glycopyrrolate, Heparin, Hydroxyzine, Lidocaine, Lorazepam, Magnesium, Midazolam, Milrinone, Nitroglycerin, Potassium, Propofol

IV Incompatibilities - Amphotericin B Complex, Cefepime, Doxorubicin, Phenytoin

Amount: 2.5-5 mg q3-4 hr PRN
(repeated doses (e.g., 1-2 mg) may be given more frequently (e.g. every hr))
0.8-10 mg/hr Range 20-50 mg/hr

Rate of Administration: Always administer very slowly.
Rapid IV increase risk of severe adverse reactions (apnea, chest wall rigidity, peripheral circulatory collapse, cardiac arrest, anaphylactoid effects)

Diluent: For IV injection → sterile water or 0.9% NaCl
For continuous IV infusion → D5W

Storage: Store at room temperature

Module Report

Tutorial: Real Life RN Medical Surgical 4.0

Module: GI Bleed



Individual Name: Lucy Siranides

Institution: Margaret H Rollins SON at Beebe Medical Center

Program Type: Diploma

Standard Use Time and Score

	Date/Time	Time Use	Score
GI Bleed	2/28/2023 5:15:03 PM	1 hr 2 min	Strong

Reasoning Scenario Details

GI Bleed - Use on 2/28/2023 4:12:50 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.
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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	Introduce yourself with name (Esther) and position (RN). Tell the provider the patient's name, age, and room number that you are inquiring about - Ms. Janet Lieberman, 36 years of age, room #XXXX. Explain when Ms. Lieberman was admitted and why - today for a GI bleed. Tell the provider what care or procedures have been done - transfused one unit of packed RBCs (PRBCs), but the second unit to be transfused was stopped due to a reaction. Inform the provider of Ms. Lieberman's most recent vital signs - 38.8°C, 96bpm, 22 RR, 103/60, 92% on 2L/min NC. Report symptoms of reaction - Ms. Lieberman states she has chills, a headache, and feels restless. Inform the provider of past medical history - Chron's disease, intermittent gastritis, due to severe exacerbation of Chron's disease Ms. Lieberman had an ileostomy performed and was started on Remicade every 8 weeks, last dose was 7 weeks ago. Report assessment of Ms. Lieberman - vital signs were 37.1°C, 114bpm, 22 RR, 100/60, 95% RA in the emergency department, but are now currently 38.8°C, 96bpm, 22 RR, 103/60, 92% on 2L/min NC. Report the discontinuation of the second unit of packed RBCs. Request ibuprofen for Ms. Lieberman's headache as she requested and ask about the infusion.
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 an 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

Rationale	<p>Follow these steps for the Ratio and Proportion method of calculation: Step 1: What is the unit of measurement the nurse should calculate? mL Step 2: What is the dose the nurse should administer? Dose to administer = Desired 4 mg Step 3: What is the dose available? Dose available = Have 8 mg Step 4: Should the nurse convert 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. $\frac{\text{Have}}{\text{Desired}} = \frac{\text{Quantity}}{X}$ $\frac{8 \text{ mg}}{4 \text{ mg}} = \frac{1 \text{ mL}}{X \text{ mL}}$ $X \text{ mL} = 0.5 \text{ mL}$ Step 7: Round if necessary. Step 8: Determine whether the amount to administer makes sense. If there are 8 mg/mL and the 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: Step 1: What is the unit of measurement the nurse should calculate? mL Step 2: What is the dose the nurse should administer? Dose to administer = Desired 4 mg Step 3: What is the dose available? Dose available = Have 8 mg Step 4: Should the nurse convert 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. $\frac{\text{Desired}}{\text{Have}} \times \text{Quantity} = X$ $\frac{4 \text{ mg}}{8 \text{ mg}} \times 1 \text{ mL} = X \text{ mL}$ $X \text{ mL} = 0.5 \text{ mL}$ Step 7: Round if necessary. Step 8: Determine whether the amount to administer makes sense. If there are 8 mg/mL and the 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: 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 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.) $1 \text{ mL} \times \frac{1 \text{ mL}}{8 \text{ mg}}$ 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. $1 \text{ mL} \times \frac{4 \text{ mg}}{8 \text{ mg}} \times \frac{1 \text{ mL}}{8 \text{ mg}} = X \text{ mL}$ Step 4: Solve for X. $X \text{ mL} = 0.5 \text{ mL}$ Step 5: Round if necessary. 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>
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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	Five stress management strategies Nurse Esther could recommend to Ms. Lieberman to promote a healthier lifestyle include journaling, painting/doing arts and crafts, yoga, socializing, or listening to music.
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?
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.

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.

ATI Virtual Clinical Questions and Reflection:

- 1) Identify two members of the healthcare team collaborating in the care of this patient:
 - a. **_ Esther, RN** _____
 - b. **_ Dr. March, gastroenterologist** _____
- 2) What were some steps the nursing team demonstrated that promoted patient safety?
 - a. **_ Identified name and date of birth (DOB) w/ patient and on blood transfusion bag before beginning RBC transfusion** _____
 - b. **_ Stopped blood transfusion when reaction occurred** _____
 - c. **_ Provided other method to destress instead of using alcohol** _____
- 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: **_ Yes, the nurse and medical team utilized therapeutic communication techniques as they answered all questions asked by Ms. Lieberman, explained any procedures and any reactions to the care she received, and were nonjudgmental about Ms. Lieberman's alcohol intake/mechanisms she uses to cope with stress and instead provided her with healthier alternatives that may alleviate her stress.** _____
 - 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: _____
 - b. If **no**, write what you now understand the priority nursing problem to be: **_ Deficient Fluid Volume is the priority nursing problem as Ms. Lieberman had a GI bleed and could have gone into shock.** _____
- 3) Review your Patient Problem Form: Did you see many of your anticipated nursing assessments and interventions used? **_ Yes** _____
 - a. Were there interventions you included that *were not* used in the scenario that could help this patient?
 - i. If **yes**, describe:

 - ii. If **no**, describe: **_ Most of the interventions I included that were appropriate for Ms. Lieberman's situation were used. For example, administering IV fluids, blood transfusion, morphine, and education on how to prevent future exacerbations of Crohn's disease were all performed in the scenario.** _____
- 4) After completing the scenario, what is your patient at risk for developing?
 - a. **_ Ms. Lieberman is at risk for developing more exacerbations of Crohn's disease as well as another GI bleed.** _____

b. Why? **_Ms. Lieberman tries to cope with her stressful job by drinking alcoholic beverages. She also suggests that she does not have much time to eat well-rounded or balanced healthy meals during the day because of the demand her job presents. Additionally, Ms. Lieberman uses ibuprofen to alleviate her pain which had been irritating her GI tract further.**_____

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

_My biggest “take-away” from participating in the care of Ms. Lieberman is to always remain nonjudgmental and listen to the client. Ms. Lieberman, as discussed in the scenario, has a very demanding and stressful career being a stockbroker. With her underlying condition of Crohn’s disease, she is at great risk for exacerbations and GI bleeds as she explains that she feels stressed more often than not and because of that, does not eat a healthy diet, resorts to alcohol to cope, and takes ibuprofen for her headaches. With all of these habits, she experienced an exacerbation of Crohn’s disease and had a GI bleed. Both of these events caused her significant pain and could have lead her into shock if she had not sought out medical care. When Ms. Lieberman was feeling better and was ready to be discharged, the nurse, Esther, asked Ms. Lieberman about her life and coping mechanisms and listened. After this, Esther talked about healthier choices Ms. Lieberman could make to prevent another exacerbation of Crohn’s disease and provided her with what may work best after talking through other options that Ms. Lieberman disliked. Esther also explained how ibuprofen can irritate the GI tract further and Ms. Lieberman agreed not to use the medication. This scenario will impact my nursing practice by serving as a reminder to always take the time to sit down, talk, and listen to the client and thoroughly educate them on how to live a healthier lifestyle based on their situation/condition._____

SOAP Note Based on Priority Problems

Priority Patient Problem #1: Deficient Fluid Volume

<p>Subjective:</p> <p><i>This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.</i></p>	<p>History Present Illness (HPI): Janet Lieberman, 36yo female CC: weakness and dizziness - traces of serosanguineous effluent present in ostomy bag on arrival; blood type A-; started on Infliximab 6 months ago and last dose was 7 weeks ago; skin is pale, warm, dry to the touch</p> <p>“I’m feeling more lightheaded and dizzy”; “I feel like I am going to faint”; “I feel like I am going to faint and throw up”; “I’m just so cold”; “I have a headache and my body aches all over”; “I feel awful”</p> <p>PMH: Crohn’s Disease w/ intermittent gastritis; ileostomy (6 months ago)</p> <p>Allergies: Sulfa</p> <p>Current Medications: Infliximab (IV) q8wks</p>
<p>Objective:</p> <p><i>This section is your clinical observations. Include pertinent vital signs, pertinent labs and diagnostics related to the priority problem.</i></p>	<p>Vital Signs: Admission – T: 37.1°C, HR: 114bpm, RR: 22, BP: 100/60, O2 sat.: 95% RA</p> <p>Pain Score: 6/10, “very sore and crampy” (upper abdomen)</p> <p>Labs: RBC 2.7 ↓; Hgb 7 ↓; Hct 21% ↓; PTT 21sec ↓; INR 0.7 ↓; + blood in stool cx; Blood Type: A-</p> <p>Diagnostics: Endoscopy (active GI bleed)</p>
<p>Assessment:</p> <p><i>Focused assessments on your priority problem.</i></p>	<p>LOC: A&Ox4</p> <p>VS: @1930 - T: 38.8°C, HR: 96bpm, RR: 22, BP: 103/60, O2 sat.: 92% 2L/min NC</p> <p>Pain Score: 8/10, sore and crampy (upper abdomen)</p> <ul style="list-style-type: none">- weakness and dizziness- R sided ileostomy draining semi-liquid stool w/ red streaks- hyperactive bowel sounds- abdominal tenderness- unhealthy/unbalanced diet, ineffective coping mechanisms, no physical activity, no support system- ibuprofen for pain/headaches

Plan

***Based on priority problem only**

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?

Plan:

1. 0.9% Sodium Chloride 1000mL, 150mL/hr
2. 2 units packed RBCs
3. 0.9% Sodium Chloride 1000mL, 30mL/hr
4. Acetaminophen 650mg PO STAT and q4hr PRN
5. Vital Signs q2hr until midnight and then q4hr until 0800
6. Repeat CBC in AM
7. Endoscopy
8. Morphine
9. Education on diet, coping mechanisms, avoid taking ibuprofen
10. Continue Infliximab q8wks
11. Discharge to home

Teaching & Resources:

- Educated on alternatives for coping w/ stress instead of alcohol (i.e., watching television, reading a book, walks in the park)
- Educated on diet (i.e., small frequent meals high in protein and calories)
- Educated on avoiding caffeine and high fiber foods that could obstruct stoma
- Educated on avoiding ibuprofen and other NSAID medications
- Resources: case management, nutritionist, gastroenterologist, pharmacy, printed handouts, support groups