Student Name: Katelyn Milligan
Medical Diagnosis/Disease: Crohn's Disease

NCLEX IV *(8)*: **Physiological Integrity/Physiological Adaptation**

Anatomy and Physiology
Normal Structures

Anatomy: Mouth & salivary glands: Oral cavity for mechanical digestion (chewing) and chemical digestion (saliva-amylase)
Pharynx & Esophagus: Pharynx is a passageway for food from the mouth to the esophagus, esophagus is a tube that moves food to the stomach due to peristalsis, and the LES prevents acid reflux from the stomach.
Stomach: A sac that provides mechanical and chemical digestion through parietal cells (HCl-breakdown) and intrinsic factor (B-12 absorption), also has chief cells (Pepsinogen to Pepsin), and mucous cells (protect stomach lining), stomach turns food into chyme that goes into the smaller intestine.
Small intestine: Primary site of digestion and absorption. Has three parts – Duodenum (receives bile from liver/gallbladder) and pancreatic enzymes for digestion, Jejunum-absorbs nutrients like proteins and fats, Ileum-absorbs bile salts, B12. Stomach lined with villi and microvilli for nutrient absorption.
Large intestine (Colon): Includes the cecum, ascending, transverse, descending, and sigmoid colon. It absorbs water and electrolytes, forms and stores feces, houses gut microbiota.

The GI has accessory organs:
Liver: Produces bile important for fat digestion, metabolizes nutrients like drugs, vitamins and minerals, and helps regulate blood glucose levels.
Gallbladder: Stores and releases bile into the duodenum to help digest fats.
Pancreas: Has exocrine and endocrine functions like secrete digestive enzymes (Amylase, lipase, and proteases) to neutralize stomach acid,

Pathophysiology of Disease

An inflammatory bowel disease.
Crohn's is an autoimmune disorder where the immune system attacks the GI causing inflammation leading to tissue damage. This mainly affects the small intestine (ileum) and the colon but it can occur from the mouth down to the anus. The inflammation occurs in all of the layers of the bowels.
Occurs as skip lesions where there is areas of healthy tissue and then inflamed throughout. Overtime the inflammation can lead to ulcerations, fissures, thickened intestinal walls.
Can lead to strictures and obstruction, fistula formation, nutritional deficiencies like B-12 that leads to weight loss, anemia, abscesses and perforation.
Crohn's is linked to genetic predisposition like NOD2 gene and also environmental triggers like smoking and diet.

NCLEX IV *(7)*: **Reduction of Risk**

Anticipated Diagnostics

Labs
CRP, ESR, WBC, Electrolytes (potassium, sodium, chloride)
Hemoglobin, hematocrit
ASCA, p-ANCA
LFT's
Albumin & protein
B-12, folate, iron

Additional Diagnostics
Fecal Occult blood test, stool cultures, barium swallow, CT abdomen/ultrasound, colonoscopy, EGD, rectal exam, hydrogen breath test

and releases insulin and glucagon for blood sugar.

Physiology: Ingestion: Taking in food, Propulsion: Moving food through the tract through swallowing and peristalsis. Digestion. Absorption. Elimination.

NCLEX II *(3)*: **Health Promotion and Maintenance**

NCLEX IV *(7)*: **Reduction of Risk**

Contributing Risk Factors	Signs and Symptoms	Possible Therapeutic Procedures	Prevention of Complications
Family history, ethnicity, Autoimmune disorders, High fat diet, smoking, stress, NSAIDS, prior GI infections, age, alcohol	Diarrhea (non bloody), abdominal pain/cramping, weight loss, fatigue, fever, abdominal distention, N/V blood in stool, steatorrhea, ulcers	Non-surgical Enteral Nutrition, Parenteral nutrition, specialized diets Surgical Bowel resection, strictureplasty, colectomy, proctocolectomy, ileostomy/colostomy	(What are some potential complications associated with this disease process) Strictures and bowel obstruction, fistulas, abscesses, perforation, massive GI bleed, colon cancer, nutritional deficiencies (weight loss, b12 deficiency, iron deficiency, gallstones, kidney stones, thromboembolism)

NCLEX IV *(6)*: **Pharmacological and Psychosocial/Holistic Parenteral Therapies**

NCLEX IV *(5)*: **Basic Care and Comfort**

NCLEX III *(4)*: **Care Needs**

Anticipated Medication Management	Non-Pharmacologic Care Measures	What stressors might a patient with this diagnosis be experiencing?
Amino salicylates, corticosteroids, anti TNF agents, integrin inhibitors, antibiotics, antidiarrheals, bile acid sequestrants, pain meds, iron supplements/b12, vitamin and calcium D	Low residue diet, high calorie high protein diet, lactose free diet, small frequent meals, hydration, avoid spicy/dairy foods, omega 3 fatty acids, reduce stress, exercise, maintain healthy weight, limit alcohol, probiotics	Discomfort constantly, frequent diarrhea, weight loss, med side effects, surgical procedures, fear of disease progression, body image, dietary restrictions

Client/Family Education

NCLEX I *(1)*: Safe and Effective Care Environment

List 3 potential teaching topics/areas

- Understanding triggers like stress, diet, infections, smoking
- Knowing dietary modifications
- Medication adherence

Multidisciplinary Team Involvement

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

Gastroenterologist, colorectal surgeon, dietitian, pharmacist, psychologist, social worker, ostomy nurse, PT/OT, PCP

Potential Patient Problems (Nursing Diagnoses)

To Be Completed Before the Simulation

Anticipated Patient Problem: Deficient Fluid Volume

Clinical Reasoning: Excessive loss of fluids through diarrhea, malabsorption, inflammation of GI tract.

Goal 1: Will have a urine output of 30mL/hr during my time of care

Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include timeframes.	**Multidisciplinary Team Intervention** (Prework) What will you do if your assessment is abnormal?
I & O Q4 hours (frequency & consistency of stools)	Encourage the intake of small frequent meals high in fiber and bland foods Q4
Vital signs Q4 hours (hypotension, tachycardia)	Reposition patient to comfortable position supine PRN
Physical assessment of skin turgor, edema, cap refill, mucous membranes Q8 hrs	Encourage fluid intake Q2
LOC Q2	Elevate HOB and alert nurse/instructor PRN and provide safety measures like bed in lowest position, call bell in reach, non skid socks on, bed alarm on
Electrolyte levels (potassium, sodium, chloride) Q8	Provide electrolyte rich foods like bananas, electrolyte drinks, whole grains Q4
Weight assessment during my time of care	Notify dietician and discuss plan for weight assessment PRN

Goal 2: Will maintain a stable wight during my time of care

To Be Completed Before the Simulation

Anticipated Patient Problem: Acute Pain

Clinical Reasoning: Inflammation of the bowel, increased Diarrhea & cramping, gas build up.

Goal 1: Will have a pain of less than or equal to a 3 during my time of care

Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include timeframes.	**Multidisciplinary Team Intervention** (Prework) What will you do if your assessment is abnormal?
Pain score and characteristics Q2 hours	Administer an PRN analgesic if prescribed
Positioning in bed/OOB during hourly rounds	Reposition to position of comfort (side lying to reduce abdominal pressure) Q2 hours
Participation in ADL's during my time of care	Assist with ADL's with periods of relaxation to provide a tolerable balance Q2
Signs of discomfort like guarding, facial grimacing, etc during hourly rounds	Provide distractions like TV, magazines, communicative discussion Q2
Vital signs Q4 hours	Raise the HOB and provide breathing techniques to relax Q4
GI distress symptoms that could cause pain like N/V, abdomen tenderness, diarrhea Q3 hours	Ambulate to promote peristalsis of GI tract to decrease pain and promote bowel movement PRN

Goal 2: Will preform ADL's without signs of pain (abnormal vitals, facial grimacing, high pain score) during my time of care

To Be Completed During the Simulation:

Actual Patient Problem: Deficient Fluid Volume

Clinical Reasoning: Dizzy, serosanguineous fluid in ostomy, HR:114, RR:22, BP:100/60 Goal: Will demonstrate understanding of dietary changes to promote adequate fluid volume Met: ☐ Unmet:☐

Goal: Will demonstrate understanding of stress modifications and relaxation techniques during my time of care Met: ☐ Unmet:☐

Actual Patient Problem: Acute Pain

Clinical Reasoning: Pain score 6/10, described as crampy Goal: Will have a pain score of less than 4/10 during my time of care Met: ☐ Unmet:☐

Goal: Will have an understanding of med administration of NSAIDS and affects on GI tract during my time of care Met: ☐ Unmet:☐

Additional Patient Problems:

Below will be your notes, add more lines as needed. **Relevant Assessments:** Indicate pertinent assessment findings. **Multidisciplinary Team Intervention:** What interventions were done in response to your abnormal assessments? **Reassessment/Evaluation:** What was your patient's response to the intervention?

Patient Problem	Time	Relevant Assessments	Time	Multidisciplinary Team Intervention	Time	Reassessment/ Evaluation
Deficient Fluid Volume	0800	Serosanguous Fluid in Ostomy bag, Pale, stated "light headed and dizzy I feel like I'm going to faint"	0830	Administered packed RBCs		Had a reaction to packed RBC and was discussed with provider.
Acute Pain	0810	Pain scale 6/10 described as crampy, upper abdomen worsened by stress, stated worsening. BP 94/56, pulse 110, RR:26, SaO2 94%	0810	Raised HOB, applied O2 NC, applied cold cloth to forehead, lowered HOB	0820	Did not complain of further pain, prepared for administration of RBC.
Deficent fluid volume	0845	Shivering and stated "I'm just so cold, I have a headache and my body aches" after administration of RBC T: 101.8, Pulse:96, RR:22, BPL 103/60	0850	Stopped transfusion and notified provider immediately.	0915	Gastroenterologist came in and recommended endoscopy and explained procedure
Acute Pain	0845	"My head hurts and	0850	Asked provider	0900	Prescribed

		my body aches, can I have Ibuprofen”		about Ibuprofen for pain and fever		acetaminophen 650 mg Q4 and PRN
Acute pain	1100	Grimacing and guarding after coming back from endoscopy complains of tenderness and cramping pain 8/10.	1115	Administered Morphine sulfate 4mg IV bolus Q2 and PRN for pain	1130	Stated “I feel so much better” Pain score of 2/10
Deficient fluid volume	1200	Told that she has a stressful job and drinks up to 5 alcohol drinks a night, asked about diet and intake	1215	Gave suggestions for stress management like relaxation techniques and gave dietary recommendations like foods high in protein and provided pamphlet for resources	1230	Stated “thank you I feel so much better after talking with you I want to improve my stress and eating better”, read pamphlet
Acute Pain	1400	Asked about use of ibuprofen and stress management	1405	Educated that Ibuprofen and other NSAIDS can be irritating to GI tract and how to read labels, and dietary education	1410	Taught back that walks in the park are something she could do to promote stress management , making smarter dietary choices, avoiding caffeine and high fiber foods that may affect stoma.

ATI Virtual Clinical Questions and Reflection:

1) Identify two members of the healthcare team collaborating in the care of this patient:
    a. **RN Esther**
    b. **Gastroenterologist**
2) What were three steps the nursing team demonstrated that promoted patient safety?
    a. **Monitoring vital signs every 15 minutes during the infusion of packed RBC**
    b. **The nurse notifying the provider as soon as she noticed signs of RBC toxicity**
    c. **Educated on important at home lifestyle modifications to decrease hospital recurrence**
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, I feel as though the RN did a great professional job at communicating with the patient when she actively listened to how the patient felt and her concerns not only physically but holistically, she also gave a comforting non judgmental environment to the patient. She also communicated professionally with the doctor when asking about the ibuprofen order and telling about the toxicity, she used SBAR in a professional manner.
    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) What was the priority nursing problem? Provide rationale.

The **priority nursing problem was the deficient fluid volume due to her having a GI bleed, abnormal vital signs that showed hypovolemia like the low BP, the high RR, the high pulse, and then her having the reaction to the RBC administration, and how she before coming in was not having adequate nutritional intake and having a lot of stress to her body.**

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: Some of the assessments I used that were not in the scenario was strict I and O's which is important in this scenario since she is losing a lot of blood volume, I also said assess physical signs of deficient fluid volume like poor skin turgor, cap refill, and her mucous membranes which all are signs of fluid deficit and then I also said monitoring weight because an abnormal shift in weight would be a great assessment to determine her fluid balance.

ii. If **no**, describe:

_____

_____

4) After completing the scenario, what is your patient at risk for developing?

    a. Hypovolemic shock

    b. Why? She had a lot of blood loss, her vitals were abnormal, she felt bad and light headed, and her blood transfusion did not work as she was having a reaction to it.

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 is just how dangerous Crohn’s disease can be and what it can lead to if not treated properly and well managed. I also learned about the RBC repletion administration and what side effects of this can look like on a patient. This impacted my nursing practice by allowing me to be more knowledgeable on what signs and symptoms look like of a GI bleed, the knowledge of blood transfusion, and knowing how and what to educate these types of patients on.