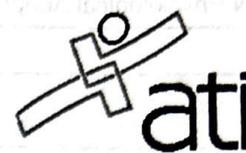


Module Report

Tutorial: Real Life RN Medical Surgical 4.0

Module: Urinary Tract Infection



Individual Name: Logan Clark

Institution: Margaret H Rollins SON at Beebe Medical Center

Program Type: Diploma

Standard Use Time and Score

| | Date/Time | Time Use | Score |
|-------------------------|-----------------------|--------------|--------|
| Urinary Tract Infection | 2/14/2023 10:27:21 AM | 14 hr 29 min | Strong |

Reasoning Scenario Details

Urinary Tract Infection - Use on 2/14/2023 9:58:08 AM

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% | | |
| Immunity | 100% | | |
| Integument | 100% | | |
| Mobility | 100% | | |
| Oxygenation | 100% | | |
| Regulation and Metabolism | 100% | | |

| NCLEX RN | Strong | Satisfactory | Needs Improvement |
|---------------------------------------------|--------|--------------|-------------------|
| RN Management of Care | 100% | | |
| RN Safety and Infection Control | 100% | | |
| RN Psychosocial Integrity | 100% | | |
| RN Pharmacological and Parenteral Therapies | 100% | | |

| | | | |
|-----------------------------|------|--|--|
| RN Physiological Adaptation | 100% | | |
|-----------------------------|------|--|--|

| QSEN | Strong | Satisfactory | Needs Improvement |
|----------------------------|--------|--------------|-------------------|
| Safety | 100% | | |
| Patient-Centered Care | 100% | | |
| Evidence Based Practice | 100% | | |
| Teamwork and Collaboration | 100% | | |

Decision Log:

| | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Question Fill In the Blank Essay (Not Scored) |
| Question | What additional information would assist Nurse Craig in preparing to care for Mrs. Jordan? List 5 additional pieces of information that should have been included in the report. |
| Selected Option | - Most recent vital signs, I&O's over last 24hrs, Last time Mrs. Jordan voided and how much, Foley catheter, Abnormal labs, Next time that the antibiotic is due, Pain score, Allergies if any, Blood sugar value and next time it needs to be taken. |
| Rationale | 1. Levofloxacin (Levaquin) – How much was given and when is the next dose? 2. Agitation – The client's baseline level of orientation. Is this agitation new or getting worse? How do you know she is tired? Did she tell you that or is she sleeping on and off? 3. Probable discharge in next 24 hr – Is there a discharge order or plan? 4. Output – Amount, color and characteristic of urine. 5. IV – The type and amount of IV solution given since arrival in the emergency department. The type and rate of IV solution that is currently infusing. Location of IV site and size of catheter. 6. Vital signs – Range of vital signs, including O2 saturation. Current vital signs. 7. Blood glucose – Results of blood glucose and time obtained. 8. Social status – Any significant others that are with her. Individuals who should be contacted about hospitalization. 9. Medical history – Pre-existing conditions, allergies, and home medications and adherence. 10. Other – Normal level of activity, history of falls, and diet at home. |

| Optimal Decision | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Craig just entered Mrs. Jordan's room to do his assessment. |
| Question | Nurse Craig is assessing Mrs. Jordan. Which of the following actions should the nurse take next? |
| Selected Option | Apply oxygen per nasal cannula at 2 L/min. |
| Rationale | According to the airway, breathing, and circulation (ABC) priority-setting framework, this is the first intervention the nurse should take to address the client's difficulty breathing. |

| Optimal Decision |
|------------------|
|------------------|

| | |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Craig finds Mrs. Jordan restless and having increased difficulty breathing. |
| Question | Nurse Craig observes that Mrs. Jordan is restless and having increased difficulty breathing. Which of the following assessments is appropriate for Mrs. Jordan's needs at this time? |
| Selected Option | Rapid focused assessment |
| Rationale | The client is experiencing an acute episode of dyspnea. A rapid focused assessment will allow the nurse to determine the underlying cause of the dyspnea and to intervene quickly. Therefore, this is the correct assessment at this time. |

Optimal Decision

| | |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Craig completes a rapid focused assessment. |
| Question | Based on the findings from the rapid focused assessment, which of the following actions should Nurse Craig perform first? |
| Selected Option | Increase oxygen to 4 L/min. |
| Rationale | The client is demonstrating clinical manifestations of heart failure and hypoxemia. Using the priority-setting framework of ABCs, increasing the rate of oxygen administration is the priority action because this promotes improved oxygenation. |

Optimal Decision

| | |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Craig has received a bag of medications from Mrs. Jordan's home. |
| Question | Nurse Craig has received a bag of medications from Mrs. Jordan's home. He reviews each of the medications. Which of the following is the best action for Nurse Craig to take at this time? |
| Selected Option | Request medication reconciliation with pharmacy. |
| Rationale | The client's preadmission medications should be compared to the current medications prescribed by the provider upon admission. |

Optimal Decision

| | |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Craig is discussing Mrs. Jordan's medications with the pharmacist. |
| Question | Nurse Craig has reviewed Mrs. Jordan's medications received from her home. Nurse Craig labels the medication bag and locks the medications in a cabinet. Based on events so far, which of the following best describes Mrs. Jordan's priority underlying medical condition? |
| Selected Option | Cardiac |
| Rationale | Based on the client's home medications and the events that have occurred, the client's cardiac condition is the priority at this time. Digoxin (Lanoxin), furosemide (Lasix), potassium chloride, and isosorbide (Imdur) are medications prescribed for heart failure. The client is experiencing shortness of breath and difficulty breathing related to fluid overload. |

Optimal Decision

| | |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Mrs. Jordan is demonstrating exacerbation of heart failure. |
| Question | Mrs. Jordan has experienced increased respiratory distress during the past 2 hr. Since admission, she has received 2,550 mL IV and 100 mL orally. Her urinary output since admission to the medical-surgical unit has been 100 mL. Which of the following clinical manifestations indicates exacerbation of heart failure and should be reported to the provider? (Select all that apply.) |
| Selected Ordering | Dependant pitting edema Crackles in the lungs |
| Rationale | Pitting edema is a clinical manifestation of heart failure. Weak peripheral pulses is a clinical manifestation of heart failure. Dark amber urine is typically seen in a client who has fluid volume deficit. Therefore, this finding does not indicate heart failure. Neck vein distension is a typical clinical manifestation for a client who has heart failure. Crackles in the lungs is a clinical manifestation of heart failure. |

| Optimal Decision | |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | The provider just explained to Mrs. Jordan that she is not a candidate for surgery and needs to be placed in Buck's traction. Mrs. Jordan is tearful and has a frightened look on face. |
| Question | The provider has just informed Mrs. Jordan that due to her cardiac condition she is not a candidate for surgery. Mrs. Jordan is tearful and has a frightened look on her face. Which of the following is an appropriate statement by Nurse Craig? |
| Selected Option | "Tell me about the concerns you have." |
| Rationale | This is a therapeutic statement by the nurse to the client. |

| Optimal Decision | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Mrs. Jordan is in Buck's traction and needs a bed bath. |
| Question | Nurse Debbie is preparing to provide a bed bath for Mrs. Jordan, who is in Buck's traction. Which of the following is the appropriate action for Nurse Debbie to take? |
| Selected Option | Leave the traction in place. |
| Rationale | Buck's traction is to remain in place to keep the extremity immobilized to decrease muscle spasms until surgery is performed on the fractured hip. |

| Optimal Decision | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Stephanie has inspected Mrs. Jordan's back for skin breakdown. |
| Question | Image RN_AMS_UTI_22_stem_800px.png Mrs. Jordan is at risk for skin breakdown due to her age, her cardiac condition and her mobility that is restricted due to the placement of Buck's traction. Nurse Stephanie assesses the client for skin breakdown. Based on the photograph, Nurse Stephanie should classify the skin breakdown as which of the following? |
| Selected Option | Stage 2 |
| Rationale | In stage 2, there is partial thickness skin loss involving the dermis with a shallow pink ulcer that has a red pink bed without sloughing. It also can appear as an intact blister. |

| | |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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| Selected Option | Rapid focused assessment |
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Optimal Decision

| | |
|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Craig completes a rapid focused assessment. |
| Question | Based on the findings from the rapid focused assessment, which of the following actions should Nurse Craig perform first? |
| Selected Option | Increase oxygen to 4 L/min. |
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Optimal Decision

| | |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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Optimal Decision

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|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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Optimal Decision

| Optimal Decision | |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Debbie is planning care for Mrs. Jordan |
| Question | Which of the following should Nurse Debbie include in the plan of care for Mrs. Jordan, who has a fractured hip and is in Buck's traction? |
| Selected Option | Monitor Mrs. Jordan's ability to move her toes on the affected leg. |
| Rationale | The nurse should monitor the client's ability to move her toes on the affected extremity to assess for circulatory compromise. |

| Optimal Decision | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Mrs. Jordan tells Nurse Debbie that she is short of breath. Mrs. Jordan's SaO ₂ saturation is 85%. Nurse Debbie increased the oxygen flow rate to 6 L/min. |
| Question | Mrs. Jordan reports that she is short of breath. Her SaO ₂ is 85%, and the oxygen flow rate has been increased to 6 L/min. Nurse Debbie reassesses the client. Which of the following clinical findings is an early indicator of shock? |
| Selected Option | Restlessness |
| Rationale | Restlessness is due to decreased cerebral perfusion and can be a clinical finding in the early stages of shock. |

| Optimal Decision | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Debbie completes an assessment of Mrs. Jordan. |
| Question | Nurse Debbie assessed Mrs. Jordan and determined that Mrs. Jordan is at risk for shock. Which of the following types of shock is Mrs. Jordan at risk for? |
| Selected Option | Distributive shock |
| Rationale | The client is becoming septic. Sepsis is a widespread infection that triggers a whole-body inflammatory response. It leads to distributive shock when infectious micro-organisms are present in the blood. |

| Optimal Decision | |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario | Nurse Debbie has received the laboratory reports. |
| Question | Nurse Debbie is reviewing the laboratory report. Which of the following arterial blood gases (ABGs) indicate that Mrs. Jordan is experiencing metabolic acidosis? |
| Selected Option | pH 7.28, PaCO ₂ 35, HCO ₃ 20 |
| Rationale | The client is at risk for metabolic acidosis. In the presence of metabolic acidosis, the pH is less than 7.35, the HCO ₃ is less than 22, and the PaCO ₂ is within the expected reference range. |

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.

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Logan Clark

MEDICATION Lorazepam (PO) (Ativan)

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Benzodiazepine/Anti-anxiety agent

PURPOSE OF MEDICATION

Expected Pharmacological Action

Binds on the benzodiazepine receptors in the post synaptic GABA chloride channel neuron in different sites of the central nervous system. Can bind to amygdala to help with anxiety and cerebral cortex issues. Enhances inhibitory effects of GABA.

Therapeutic Use

Calms and sedates patient. It can treat anxiety, restlessness, confusion, agitation. It slows down the nervous system. It can also be used to treat serious seizures that do not stop by themselves.

Complications

Sedation, muscle weakness, drowsy, dizziness, acute confusion, CNS depression, diarrhea, slurred speech, respiratory depression, mood changes, amnesia, changes in appetite

Medication Administration

First dose: 0.5-3mg daily depending on severity 2-3 times a day

Maintenance dose: 1-2mg PO 2-3 times a day

Daily dose can vary to 1-10mg a day.

Contraindications/Precautions

Hypersensitivity to medication or other benzodiazepines. Use precaution when giving to patients who have respiratory problems. Do not give to patients who have been through a drug addiction. Withdrawal symptoms can occur if do not taper dosage. Can cause suicidal thoughts. Elderly patients may be more susceptible to sedative effects, use precaution when giving to hepatic or renal impairment pts

Nursing Interventions

Monitor respiratory status as needed, monitor for withdrawal symptoms, monitor HR, RR, BP, LOC

Interactions

Drug interactions: theophylline, aminophylline may decrease effects of benzos. Narcotics can affect the effect of lorazepam. Alcohol can also affect lorazepam if taking this medication at home. Antihistamines, anticonvulsants, antipsychotics

Client Education

Take drug exactly as it is prescribed. Do not abruptly stop taking the medication without doctor's consent. Report any abnormal feelings that can be some side effects. Use caution while operating any machinery. In addition to med instructions, encourage client to use other methods to help with anxiety if that is the reason they are taking it. It is not first line treatment for anxiety.

Evaluation of Medication Effectiveness

Reduce anxiety, provides sedation

ACTIVE LEARNING TEMPLATE: Medication

STUDENT NAME Logan Clark

MEDICATION Levofloxacin (IVPB)

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Antibiotic (Fluroquinolone)

PURPOSE OF MEDICATION

Expected Pharmacological Action

Interfers with bacterial DNA synthesis. Exerts antimicrobial activity via inhibition of two key bacterial enzymes including DNA gyrase and topoisomerase IV. invades aerobic gram-positive and gram-negative bacteria and may carry some activity against certain species of anaerobic bacteria.

Therapeutic Use

Treat bacterial infections throughout the body

Complications

Nausea, diarrhea, headache, dizziness, insomnia, Hypoglycemia, hunger, sweating, tachycardia, anxious, nerve issues, mood changes, sudden pain, swelling or bruising around any joints known to cause tendinitis/rupture. May cause yeast infections if antibiotic dose is too strong

Medication Administration

25mg/mL
750mg/150mL
250mg/50mL
250mg
500mg
750mg max dose

250mg IV bolus Q12hrs

Contraindications/Precautions

Hypersensitivity to medication or other quinolone antibiotics, hypokalemia, pregnancy
PC: patients >60yrs old, electrolyte imbalances, bradycardia, CHF, hepatic or renal impairments, diabetes mellitus, depression hx or treatment

Nursing Interventions

Assess infection signs and symptoms, obtain all specimens and cultures BEFORE administering medication, observe for any side effects of medications, may increase serum AST, ALT, LDH, bilirubin, alkaline phosphate, may affect serum glucose as well

Interactions

Drug interactions: antacids that contain magnesium or aluminum such as Roloids, theophylline, diuretics, heart rhythm medications, insulin, depression medications, steroids, blood thinners, NSAIDS

Client Education

Avoid exposure to sunlight
Avoid NSAIDS
Wait atleast 4hrs before taking any anacids and 2hrs after taking this med
Finish full course of antibiotic for full effect
Do not double dose, take as prescribed
Drink atleast 1500-2000ml each day
Use sunscreen and protective clothing while in sun
Alert MD if any side effects occur

Evaluation of Medication Effectiveness

Bacterial infection is treated

Student Name: Logan Clark
 Medical Diagnosis/Disease: urinary tract infection

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

Anatomy and Physiology
Normal Structures
 Urinary systems function is to filter blood and create urine as waste by product organs of the kidneys, renal pelvis, ureters, bladder and urethra. The kidneys and urinary system help the body to eliminate liquid waste called urea and to keep chemicals such as K⁺, Na⁺, and water in balance. The kidneys remove urea from blood through tiny filtering units called nephrons.

Pathophysiology of Disease
 During a UTI, bacteria enters urinary tract. The body recognizes pathogen which induces phagocytosis when the body does not respond to provide a defense mechanism then the bacteria multiplies to cause a UTI. There are 2 types lower and upper infections that affect different parts of the system. If not treated it can lead to a kidney infection.

NCLEX IV (7): Reduction of Risk

Anticipated Diagnostics
 Labs urinary sample
 - grow bacteria in lab
 - urine analysis
 - culture
 - CBC
 - emp
Additional Diagnostics
 CT / recurring
 MRI / infections
 cystoscopy

NCLEX II (3): Health Promotion and Maintenance

Contributing Risk Factors
 - women - family hx
 - sexual activity
 - birth control
 - menopause - kidney stones
 - urinary tract problems
 - blockages in urinary tract
 - catheter use
 - urinary procedures
 - diabetes
 - enlarged prostate

Signs and Symptoms
 - strong urge to urinate
 - burning feeling when urinating
 - urinating frequently
 - small amounts of urine
 - cloudy urine
 - bloody urine
 - strong smelling urine
 - pelvic pain (women)
 - different types of UTIS can have various symptoms

Possible Therapeutic Procedures
Non-surgical
 - heating pad
 - OTC AZO
 - cranberry juice
 - ↑ H2O intake
Surgical
 - cystoscopy

Prevention of Complications
 (What are some potential complications associated with this disease process?)
 - yeast infections (antibiotic)
 - frequent UTIS
 - pregnancy complications
 - kidney infections
 - resistance to antibiotics
 - bladder infection

NCLEX IV (7): Reduction of Risk

NCLEX IV (6): Pharmacological and Parenteral Therapies

Anticipated Medication Management
 - antibiotics (nitrofurantoin, trimethoprim-sulfamethoxazole, ciprofloxacin, levofloxacin, pefloxacin)
 - acetaminophen for any pain
 - levofloxacin

NCLEX IV (5): Basic Care and Comfort

Non-Pharmacologic Care Measures
 - heating pad
 - lots of water
 - OTC pain supplements
 - cranberry juice

NCLEX III (4): Psychosocial/Holistic Care Needs

What stressors might a patient with this diagnosis be experiencing?
 - pain
 - sex frequency
 - normal everyday stress

Client/Family Education

List 3 potential teaching topics/areas
 • Drink lots of water to help flush out system.
 • Take antibiotics as prescribed and take full dose.
 • Encourage pt to void frequently
 - educate to wipe front to back

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?)
 - urologist - nurses
 - PCP -
 - CM
 - general surgery (procedural)

Each nephron consists of a ball formed of small blood capillaries called glomerulus and small tube known as a renal tube, urine moves down nephrons to renal tubules of kidneys. There are 2 ureters that are narrow tubes that carry urine from the kidneys to bladder. muscles in the ureter walls continually tighten and relax to move urine down to the kidneys to excrete the urine. The bladder is located in lower abdomen. The bladder wall relaxes and expands to store urine and eventually contracts to release urine. The urinary tract has sphincter muscles that help keep urine from leaking by closing tightly. The nerves located in bladder allow us to know when we have to urinate. Lastly, the urethra allows urine to pass outside the body. The kidney has renal artery, renal vein and ureter. artery carries blood to the kidney, vein carries blood away from kidney. The urinary system has 5 main functions including filtering, washing, elimination, regulation and regulatory enzymes.

parts of kidney: bean shaped

- Right kidney lower than left
- Adrenal gland - endocrine system regulation
- Fibrous capsule: encloses kidney, glistening appearance
- Fat capsule - cushion
- Renal fascia - outermost capsule / anchors kidney
- Renal cortex - outer region
- Renal medulla
- Renal pyramids
- Renal columns
- Renal pelvis
- artery
- vein

Female urethra = 3 to 4 cm (1 1/2 in)

male urethra = 20cm (8in long)

* female more likely to get UTIs due to shorter urethra

glomerular filtration - water/solutes forced through capillary walls

Tubular reabsorption - water, glucose amino acids transported out

Tubular secretion H⁺, K⁺, creatine removed

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: Impaired urinary elimination

Clinical Reasoning: Urinary tract infection causing frequent urination/retention that is accompanied by pain

Goal/EO: Patient will have a normal urinary elimination pattern without any urinary disorders or pain by discharge

Ongoing Assessments:

- Assess patients' pattern of elimination to their baseline qshift and if there is any change
- Assess bladder q4hrs
- Assess I&O's q4hrs
- Assess color, appearance, and odor of urine after each urination

- NI:
1. Obtain urine analysis before starting antibiotic therapy
 2. Administer antibiotic as ordered by the provider
 3. Encourage patient to void as often as they can. Preferably ever 2-3hrs
 4. Encourage ambulation q1hr
 5. Provide perineal care after each urination
-

Problem # 2: Acute Pain

Clinical Reasoning: Infection/Inflammation of urinary tract

Goal/EO: Pt will have a 3 out of 10 pain score on a numerical pain scale during my time of care

Ongoing Assessments:

- Assess PQRST of pain q4hrs or as needed
- Assess vital signs q4hrs/PRN
- Assess patients' response too pain medication PRN (Iv: 30mins PO: 1hr)
- Evaluate patient expectations of pain qshift
- Assess patients' pain goal qshift

- NI:
1. Administer pain medications as ordered by provider
 2. Encourage to increase fluid intake q1hr during hourly rounding
 3. Apply heating pad to painful area 20 minutes at a time every hour
 4. Provide distraction techniques such as meditations too help with pain management q4hrs
 5. Encourage ambulation q1hr
 6. Encourage patient to void as often as they can preferably ever 2-3hrs

ATI Virtual Clinical Questions and Reflection:

- 1) **Identify two members of the healthcare team collaborating in the care of this patient:**
 - a. Nurse Craig
 - b. Dr. Baxton
- 2) **What were some steps the nursing team demonstrated that promoted patient safety?**
 - a. Nurse Craig repeated the orders that the doctor ordered over the phone to make sure that he had the correct orders
 - b. Nurse Debbie called for the charge nurse when Ms. Jordans O2 sat was 85% too have a second opinion to make sure that she was doing the right thing by turning up her oxygen, and what she should do next because she knew that Ms. Jordan was not doing well
 - c. Nurse craig asked Ms. Jordan for her name and DOB to make sure it was the correct patient
- 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 provided therapeutic communication throughout the entire time of care with Ms. Jordan. For an example, Ms. Jordan was upset about being put in bucks' traction. Nurse Craig emphasized care by saying "tell me about the concerns you have". This allows the patient to explain how she is feeling and shows Ms. Jordan that the nurse cares about her feelings. Another example of therapeutic communication that I seen during the time of care was when the medical doctor came into the room and introduced herself and explained why she wasn't a candidate for surgery and that she would be placed in bucks' traction. The doctor also explained what bucks' traction was. When the two nurses Debbie and Ashely on nigh shift came in to give Ms. Jordan a bed bath, they explained what they were going to do and why. Ms. Jordan was thankful for them coming in.

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 **no**, write what you now understand the priority nursing problem to be:
No, I do not think that I selected the correct priority problem. Impaired urinary elimination is most likely one of her problems but, I do not believe that it is her priority problem. I think that Impaired gas exchange would be her number one priority problem because during the entire scenario she was having breathing and respiratory issues. The nurses had to keep increasing her oxygen and as a nurse its important to use ABCs. Airway and breathing are the most important. If a patient does not have an established airway and cannot breathe, then nothing else matters.
- 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: Yes, some of my assessments were used such as assessing her pain, assessing her intake and output, assessing her color and appearance of urine. Some of my interventions were used such as administering Levofloxacin 250mg through a bolus every 12hrs. The doctor obtained a urine analysis before starting antibiotic therapy which was also one of my interventions. The two-night shift nurses provide a bed bath which provide perineal care which was one of my interventions. Hygiene is very important when having bacteria in urinary tract.

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

After completing the scenario, I think that the Ms. Jordan was most at risk for developing septic shock. Septic shock is caused when the body responds incorrectly to an infection. Ms. Jordan was having a change in her mental status. During the scenario she asked one of the nurses where she was at because she had forgotten. However, in the beginning of the scenario she knew where she was. The change in mental status happened quickly. She also stated that she was very cold and the nurse craig covered her up more. Ms. Jordan had fast and shallow respirations and was restless. She also received an IV bolus in the ED to help with her low blood pressure but, the nurse who gave Nurse Craig report stated that her blood pressure was now fine. All these symptoms are signs of sepsis developing and it is very important to seek the correct treatment right away. One of the biggest causes of this is a UTI which we know she had. She also had a few other risk factors such as age, foley catheter, and antibiotic treatment. This scenario also shows the importance of assessing your own patient thoroughly and do not take anyone's word because a patient's condition can change so quick.

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

I think that the biggest take away from participating in the care of this client is seeing how fast one thing can lead to another. In the beginning of this scenario, Nurse Craig got report from another nurse, and she gave him good information but, I did not find her report very in depth. She didn't state her code status, that she had a foley catheter in, or her intake and output. I feel as if that is all pertinent information for this patient. She did not say that Ms. Jordan was confused, did not say she was having any respiration issues or anything about being on oxygen. She did state that her BP was low in the ED, but it was all fine now after she received an IV bolus. Another thing that I found important was that she did not seem like she was taking her at home medications properly which is one of the reasons why she was not a candidate for hip surgery. I think that if she had her CHF under control then the outcome would have been different. This situation affected my nursing practice because it shows me how one patient's condition can change so quick. It also shows me to assess my own patient thoroughly and do not take anyone's word. It is important to observe what is going on yourself with the patient rather than hearing it from someone else. I think that if the signs and symptoms of Ms. Jordan were figured out sooner in the ED then we could have prevented her going into distributive shock.

SOAP Note Based on Priority Problems

Priority Patient Problem #1: Impaired Gas Exchange

Subjective:

This section explains the client symptoms. Include a narrative of the patient's complaints/concerns and/or information obtained from secondary sources.

History Present Illness (HPI): Urosepsis

PMH: CHF, Diabetes

Allergies: NKA

Current Medications:

- Glyburide (Diabeta) 2.5mg PO daily with breakfast (Next dose 0800)
- Levofloxacin (Levaquin) 250mg IV bolus q12hr (Next dose 2100)
- Acetaminophen (Tylenol) 325mg PO q4hr PRN fever greater than 37.7 Celsius or 100 F
- Lorazepam (Ativan) 2mg PO q6hrs PRN for agitation and restlessness
- 1000mL Lactated Ringer's IV 30mL/hr

Objective:

This section is your clinical observations. Include pertinent vital signs, pertinent labs and diagnostics related to the priority problem.

Vital Signs: Most recent: 0700: T: 37.2, HR: 88, RR: 22, BP: 128/84 O2 sat: 91%

Labs:

- Blood glucose @0600: 88
- RBC 4.8
- **Hgb 11.3**
- **Hct 33%**
- Reticulocyte 078% of RBC
- **WBC 13**
- Platelet count 220
- Sodium 135
- Potassium 4.4
- Chloride 100
- Calcium 8
- Phosphorus 3.7
- **BUN 21**
- Creatine 1.0
- BUN CT ratio 1:20
- **Albumin 3.2**
- Prealbumin 17
- Glucose 92
- ALT 50
- AST 37
- **Cholesterol 225**

Urinalysis

- **Appearance- cloudy**
- **Color- slight amber**
- Odor- normal
- Specific gravity 1.039
- pH 5.6

- Protein 2
- **Leukocyte esterase positive**
- Nitrites positive
- Ketones negative
- Glucose negative
- **WBC 10**
- **RBC 4-6**
- **RBC casts positive**
- Crystals negative

Diagnostics: N/A

Assessment:

Focused assessments on your priority problem.

Objective Assessments:

- Assess respiratory rate, depth, effort, the use of accessory muscles, or abnormal breathing patterns q4hrs
- Assess lung sounds q4hrs
- Monitor mental status changes including restlessness, agitation or confusion q8hrs
- Monitor oxygen saturation, BP, and HR q4hrs
- Monitor for an elevated temperature q4hrs
- Assess ABGS as needed
- Monitor CBC & CMP daily
- Monitor hydration status, overhydrated or dehydrated qshift
- Monitor for dyspnea q4hrs
- Assess mucus membranes q8hrs

Subjective Assessments:

- Have you ever been diagnosed with a respiratory condition such as asthma or COPD?
- Do you use any at home respiratory equipment such as a CPAP or BiPAP?
- Do you ever feel SOB? If so, what do you do to make it better?
- What medications do you take daily/are you supposed to take daily? Preferably respiratory/cardiac related?
- Do you smoke/have you ever smoked? If so, how much?
- Have you noticed a change in your breathing pattern
- Do you have any chest pain?
- What other health conditions have you been diagnosed with?

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:

- My plan would be to keep assessing Ms. Jordan's respirations and oxygen levels every four hours. My plan is to keep Ms. Jordan's oxygen saturation 92% at all times. Ill slowly wean her off the 6L NC that she is currently on and see how she does. If she does not tolerate it then, we will keep it on. For treatment wise, I think that she would benefit from a bronchodilator such as albuterol to open her airway. In addition, I would keep her on a broad-spectrum antibiotic and maybe even increase it or add an additional one to help get rid of her UTI which has caused the respiratory distress due to distributive shock. I will maintain the IV fluids as is. I think that we should order a blood test and culture, CBC, CMP. I would draw another urine culture if needed to see what bacteria is growing and which antibiotic is the best treatment for Ms. Jordan. Finding out the bacteria source would help her respiratory issue as well because we could start intense treatment. I think that an x-ray could be ordered as well to see any infections within the lungs that could also be affecting her breathing. Due to her infection, I think that infectious disease and urology could be consulted to go

more in depth about the infection that Ms. Jordan is suffering from. I will put in a respiratory therapy ordered as well. I will continue to monitor her mental status, any pain or discomfort, other signs of infection and her vital signs.

Teaching & Resources:

- Information on a UTI including pictures
- Distributive shock education
- Medication information and instructions that Ms. Jordan is taking
- CHF/Diabetes education
- Importance on taking medication as prescribe education
- Provide resources when discharged home such as meals on wheels