ATI Real Life Student Packet
N202 Advanced Concepts of Nursing
2025

Student Name: Nicholas Vitella

ATI Scenario: CKD

## To Be Completed Before the Simulation

*****Blue boxes should be completed using textbook information. What do you expect to find? This information should be collected before you start the ATI simulation*

Medical Diagnosis: Chronic Kidney Disease

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

Anatomy and Physiology

Normal Structures

-kidneys main fx: regulation of volume and composition of extracellular fluid and excretion of waste products.
- additional fxs: control BP, make erythropoietin, activate vitamin D, and regulate acid-base balance.
-nephron is the functional unit w/ each kidney containing approximately 1million nephrons
- blood flow to kidneys, around 1200ml/min, accounts for 20-25% of cardiac output
- glomerulus – selective filtration
- proximal tubule – reabsorption of 80% of water, glucose, amino acids, and bicarb
- loop of Henle – concentrates filtrate. Reabsorption of Na and Cl in ascending and water in descending limb
- distal tubule: reabsorption of water, regulated by ADH, and bicarb. Regulation of calcium and phosphorus. Regulation of Na and K by aldosterone. Secretion of K, H, and ammonia.
- collecting duct: reabsorption of water (requires ADH)

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

Pathophysiology of Disease

Chronic Kidney Disease is progressive irreversible loss of kidney function. Risk factors include advanced age, obesity, diabetes, and hypertension. CKD can often be asymptomatic resulting in it being undiagnostic and no treatment. When the kidney function deteriorates all body systems are affected resulting in retained urea, creatinine, phenols, hormones, electrolytes, and water. Uremia is when these symptoms develop in multiple body systems often when the GFR is 15 mL/min or less. In the early stage of CKD patients will have increasing difficulty with fluid retention and need diuretic therapy. As GFR decreases, BUN and Creatinine increase. This can cause nausea, vomiting, lethargy, fatigue, and headaches. Defective carbohydrate metabolism also occurs which can result in moderate hyperglycemia and hyperinsulinemia. Hyperkalemia can occur causing fatal dysrhythmias from the decreased excretion of potassium by the kidneys. Sodium may vary but if dilutional hyponatremia occurs, it can contribute to edema, hypertension, and heart failure. Hypermagnesemia can occur causing dysrhythmias, decreased mental status, hypotension, and respiratory failure. Metabolic acidosis results from the kidneys impaired ability to excrete acid. Anemia can occur from decreased production of erythropoietin by the kidneys. These patients have increased risk for infection and bleeding. Cardiovascular death is the most common cause of death with these patients. The GI system can be affected causing stomatitis, gastroparesis, uremic fever, and so on. Neurological changes are also expected from increased nitrogenous waste products. CKD mineral and bone disorder can occur from progressive deterioration of the kidney function.

**To Be Completed Before the Simulation**

Anticipated Patient Problem: Fluid Volume Excess

Goal 1: A.S. will maintain optimal fluid balance as evidenced by ≤ 1 kg in weight gain per day

| **Relevant Assessments**<br><br>(Prework) What assessments pertain to your patient's problem? Include timeframes | **Multidisciplinary Team Intervention**<br><br>(Prework) What will you do if your assessment is abnormal? |
|---|---|
| Weigh Daily | Document and notify provider PRN |
| Assess for Edema Daily | Elevate edematous extremities above hear level/reposition q 2 hr |
| Auscultate lung sounds q 4 hr | Reposition to semi-folwers position q 4 hr |
| Assess/Record Intake and Output q 4 hr | Implement prescribed fluid restriction PRN |
| Assess vital signs q 4 hr | Administer diuretics as ordered |
| Assess laboratory values (Sodium, Potassium, Creatnine, BUN) daily | Notify provider PRN |

Goal 2: A.S. will maintain normal BP (≤ 140/90 mmHg) during my care

**To Be Completed Before the Simulation**

Anticipated Patient Problem: Risk for Electrolyte Imbalance

Goal 1: A.S. will maintain serum Potassium WNL (3.5-5.0 mEq/L) during my care

| **Relevant Assessments**<br><br>(Prework) What assessments pertain to your patient's problem? Include timeframes | **Multidisciplinary Team Intervention**<br><br>(Prework) What will you do if your assessment is abnormal? |
|---|---|
| Assess Serum Potassium Level Daily | Notify provider and administer prescribed medication PRN |
| Monitor ECG Continuously/PRN | Notify provider/rapid response team PRN |
| Assess Arterial Blood Gas PRN | Administer Sodium Bicarbonate per provider order |
| Assess Urine Output Hourly | Administer Loop diuretics as ordered |
| Assess for Dialysis adjustments PRN | Collaborate with nephrology with dialysis settings PRN |
| Assess Neuromuscular status q 2 hr | Implement fall/safety precautions, assist with mobility q 2 hr |

Goal 2: A.S. will exhibit no ECG changes related to hyperkalemia during my care

**To Be Completed During the Simulation:**

**Actual Patient Problem:** Fluid Volume Excess **#1**

Clinical Reasoning: CKD, edema, hypertension

Goal: A.S. will maintain optimal fluid balance as evidenced by ≤ 1 kg in weight gain per day Met: ☐ Unmet:☐

Goal: A.S. will maintain normal BP (≤ 140/90 mmHg) during my care Met: ☐ Unmet:☐

**Actual Patient Problem**: Risk for Electrolyte Imbalance #2

Clinical Reasoning: CKD, elevated electrolytes

Goal: A.S. will maintain serum Potassium WNL (3.5-5.0 mEq/L) during my care Met: ☐ Unmet:☐

Goal: A.S. will exhibit no ECG changes related to hyperkalemia during my care Met: ☐ Unmet:☐

Additional Patient Problems: Deficient Knowledge #3, Anxiety #4

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 |
|---|---|---|---|---|---|---|
| #1 and #2 | 1830 | Fatigue, lethargy "my leg just feels so tired" lower extremity edema, AV fistula present | 1850 | Raised HOB 24-45 degrees, placed limb alert bracelet, Applied NC at 2L | 1850 | O2 saturation at 96% |
| #1 and #2 | 1830 | Potassium 6.0 mEq/L | 1910 | Applied Cardiac Monitor and IV insertion into Right Forearm 20 G | 1910 | Peaked T waves present |
| #3 | 1910 | Difficulty understanding hemodialysis | 1910 | Educated on hemodialysis with supplemental illustration | 1910 | "Thank you for explaining it to me" "my blood pressure may decrease during hemodialysis" |
| #1 and #2 | 2000 | Diagnosis of CKD | 2000 | Hemodialysis performed | 2000 | Resting in bed, lethargy |
| #4 | 2000 | "its all so overwhelming" | 2000 | Provided attentive listening and therapeutic communication, | 2000 | "Okay thank you" resting in chair, CM provided transportation |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | | | consulted CM | | services |
| #3 | 2000 | Addressed concerns of peritoneal site | 2000 | Assessed peritoneal site | 2000 | Peritoneal site score 2 |
| #3 | 2000 | Poor nutritional intake not adhering to prescribed diet | 2000 | Educated on diet plan provided by provider | 2000 | |

## To Be Completed After the Simulation

*The orange boxes should be filled out with your simulation patient's actual results, assessments, medications, and recommendations*

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

Actual Labs/ Diagnostics
ECG: NSR/ Sinus Tachy peaked T waves
Potassium 6.0 mEq/L
Sodium 132 mEq/L
BUN 42 mg/dL
Creatinine 8.0 mg/dL
Glucose 166 mg/dL
GFR less than 90mL/min

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

Signs and Symptoms
Hyperkalemia
Hypervolemia
Scattered Rhonchi/tachypnea
Edema
Fatigue
Lethargy
Weakness
Weight gain
Hyperphosphatemia
Hypocalcemia

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

Contributing Risk Factors
Type 2 DM
Hypertension

Therapeutic Procedures
Non-surgical
CT
Hemodialysis

Surgical

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

Prevention of Complications
(Any complications associated with the client's disease process? If not what are some complications you anticipate)
Cardiac Dysrhythmias
Bone/Mineral Disorders
Electrolyte Disorders

**NCLEX IV *(6)*: Pharmacological and Parenteral Therapies**

Medication Management
Sodium Chloride
Glipizide
Furosemide
Losartan
Ferric Citrate
Linagliptin
Docusate Sodium
Gentamicin
Gabapentin
Atorvastatin

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

Non-Pharmacologic Care Measures
Supplemental Oxygen (NC)
Raise HOB
Applying blankets
Education
Therapeutic Communication
Attentive Listening

**NCLEX III *(4)*: Psychosocial/Holistic Care Needs**

Stressors the client experienced?
Fear
Anger
Frustration
Confusion

**Client/Family Education**

Document 3 teaching topics specific for this client.
- Nutritional education
- Dialysis education
- Medication/Insurance/Payment navigation

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

Multidisciplinary Team Involvement
(Which other disciplines were involved in caring for this client?)
Provider, Case Management, RN, Dietician, Home Health Nurse, Pharmacy

Patient Resources
Outpatient hemodialysis, dietary consult, providers office, transportation services

**Reflection Questions**

Directions: Write reflection including the following:

1. What was your biggest “take away” from participating in the care of this client?

My biggest takeaway was how vital it is to blend professional nursing skills with team-based care in the physiological ang emotional needs of a patient. Not only did the interventions to correct the patients CKD but it was also integrating therapeutic communication, interprofessional collaboration, and providing resources so the patient can be successful with their health outpatient as well. Providing this holistic care really represents patient centered care.

2. What was something that surprised you in the care of this patient?

What surprised me was how quickly the patients condition could shift through smaller interventions. By raising the head of bed, applying blankets, providing therapeutic communication, education and attentive listening made such an impact in their condition. While this isn’t addressing a patient with CKD primary needs, it did make a significant difference in the clients general mood and attitude towards her disease.

3. What is something you would do differently with the care of this client?

What I would do differently with the care of this client is prioritize a more structured approach for this patient’s education. While education was provided, it was more reactive than proactive. The patient was anxious, and with the multiple topics of education that needed to be covered, it would have been beneficial to their condition if they were aware before their admission to the hospital.

4. How will this simulation experience impact your nursing practice?

This experience will impact my nursing practice going forward by reinforcing the importance of providing holistic, patient centered care even with patients that are experiencing complex conditions. It demonstrated to me that managing the physical symptoms is only one part of the patient’s care. Addressing the emotional and psychosocial needs are just as important and essential for them to achieve their highest level of health. In the future I would want to make sure I better my therapeutic communication skills, being the role of an educator, and communication/patient advocacy with the interdisciplinary team.