

SAM ROBERTS

Student Name:  
Clinical Instructor:

**ATI Real Life Virtual Clinical Reflection Questions:**

- 1) Identify two members of the healthcare team collaborating in the care of this patient:
  - a. ALLYSON - RN
  - b. DAN - RESPIRATORY THERAPIST
- 2) Did your patient have any abnormal blood work (lab)? If so, select a priority finding and discuss why that value is concerning.
  - a. WBC count is a little high, could indicate a infection  
WBC = 13,000/mm<sup>3</sup>
- 3) Did your patient have any abnormal clinical diagnostic tests? If so, what were they and what was the abnormal finding? What can that indicate?
  - a. YES, NOTABLE hyperinflation of bilateral lung fields and flattened diaphragm. could possibly have be atelectasis that has or will turn into pneumonia.
- 4) What were some of the teaching topics covered in the scenario? Why were they important to the care of this patient?
  - a. The nurse taught the patient about why he was on the antibiotic
  - b. Encouraging coughing and deep breathing, and IS use.
  - c. Teaching of the MDI-metered dose inhalers
- 5) What were some steps the nursing team demonstrated that promoted patient safety?
  - a. Identifying name and DOB when needed
  - b. When daughter mentioned him itching, the nurse stopped the IV fluids
  - c. Doctor performed thoracentesis to drain fluid from lungs
- 6) 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:  
The nurse, especially allyson was always willing to listen and teach both patient and daughter with what was happening or with what will need to happen when discharged.
  - 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 virtual patient.
- 2) Review your Nursing Process Form: Did you select a correct priority nursing problem?
  - a. If yes, write it here: Impaired gas exchange

Student Name: Sam Roberts

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b. If **no**, write what you now understand the priority nursing problem to be:

3) Review your Nursing Process Form: Did you see many of your anticipated nursing assessments and interventions used?

- a. Indicate (circle, star, highlight) the ones you saw utilized during the scenario.
- b. Were there interventions you included that *were not* used in the scenario that could help this patient?

i. If **yes**, describe:

Teaching importance of quitting smoking - and yes this could help since his daughter voiced he is still smoking.

ii. If **no**, describe:

4) Often patient care will take a different direction than we anticipated at the beginning of our shift. Did that happen here? yes a little

a. How did that impact the nursing care delivered?

I didn't realize at first acute pain could be a nursing diagnosis due to the fact he ended up having a thoracentesis due to a pleural effusion. So I would have focused a little more on keeping him comfortable due to his pain.

b. What new, additional priority nursing problem (diagnosis) did you identify? (Refer to your NANDA list)

i. Write it here: Acute pain

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

The first biggest take-away was, personally I would have never started him on the antibiotics. Right away I noticed that he could have a allergic reaction to them. I would have called the provider and asked him to change the antibiotic. Another take-away would be, I would have encouraged more usage of the incentive spirometer to try and help encourage more coughing. This impacted my nursing practice by certainly having me pay more attention to allergies and encouraging deep breathing and coughing exercises really could help with preventing serious infections.

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## Patient Problems (Nursing Diagnoses)

List two potential patient problems based on research you will be addressing as part of your nurse's notes, along with clinical reasoning, goals/expected outcomes, assessments, and priority nursing interventions. The patient problems must be in priority order. For Clinical Day 1 only three interventions are needed out of the five. For Clinical Day 2 all five interventions must be completed.

Problem # 1: impaired gas exchange  
Clinical Reasoning: COPD

Goal/EO: patient will maintain optimal gas exchange within normal range for them during my time of care

Ongoing Assessments:

- Assess pulse OX Q4HRS
- Assess for changes in BP and HR qshift
- Assess skin, nail's beds, and mucous membranes for cyanosis q4hr
- Assess for restlessness and changes in LOC for signs of hypoxia q4hr

NI: 1. Administer oxygen therapy, low amounts of O<sub>2</sub> PRN

2. Assist with coughing or suctioning PRN

3. Teach ways of effective coughing <sup>and use of IS (incentive spirometer)</sup> for adequate air exchange and to help clear secretions qshift

4. (Day 2) Administer prescribed medications, bronchodilators AS ordered

5. (Day 2) Teach about importance of ~~not~~ <sup>quitting</sup> smoking if smoker once per shift

Problem # 2 Impaired nutritional status/intake  
Clinical Reasoning: COPD

Goal/EO: patient will ~~not~~ have adequate nutritional intake during my time of care

Ongoing Assessments:

- Assess for signs and symptoms of dehydration q4hr
- Monitor lab values, serum albumin, and electrolytes PRN
- Assess nutritional history and nutritional intake per shift
- Assess patient's calories and fats in meals they are receiving qshift

NI: 1. Administer parenteral nutrition if needed PRN

2. Consult with nutritionist/dietician PRN

3. Encourage intake of higher fats and protein meals qshift

4. (Day 2) Teach about avoiding any exercise or treatments at least 30 minutes before a meal qshift

5. (Day 2) Encourage doing activities during the day to stimulate an appetite.

Student Name: Sam Roberts  
 Medical Diagnosis/Disease: COPD - Chronic Obstructive Pulmonary Disease

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

**Anatomy and Physiology**  
**Normal Structures**  
 Lungs: pair of spongy air filled organs located on each side of the chest.  
 Trachea conducts inhaled air into the lungs through bronchi, then divides into smaller branches called bronchioles where gas exchange occurs.  
 The right lung consists of 3 lobes and the left two.  
 The bronchioles eventually end in clusters of microscopic air sacs called alveoli. In the alveoli, oxygen from the air is absorbed into the blood. CO<sub>2</sub> waste product of metabolism travels from blood → alveoli to be expired.

**Pathophysiology of Disease**  
 characterized by chronic inflammation in the airways (lung parenchymal (respiratory bronchioles and alveoli) and pulmonary blood vessels. The defining feature of COPD is air flow limitation not fully reversible during forced expiration. This is caused primarily by loss of elastic recoil and air flow obstruction, attributable to mucus hypersecretion, mucosal edema, and bronchospasm. As the disease progresses abnormalities in air flow limitation, air trapping, and gas exchange worsen. Severely impaired or destroyed areas of lung tissue exist alongside relatively normal lung tissue.

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

**Anticipated Diagnostics**  
**Labs**  
 chest X-ray  
 Serum α<sub>1</sub>-antitrypsin level (measures alpha antitrypsin, a protein that protects lungs)  
 ABG's  
 Spirometry  
**Additional Diagnostics**  
 history and physical exam  
 6 minute walk test  
 COPD assessment test

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

**Contributing Risk Factors**  
 Cigarette smoking  
 Infection  
 Asthma  
 Air pollution  
 occupational chemicals and dust  
 Aging  
 Genetics  
 Alpha-1 Antitrypsin deficiency

**Signs and Symptoms**  
 Chronic cough or sputum production  
 Dyspnea  
 Hx to exposure to risk factors (tobacco, occupational dusts)  
 Chest chest heaviness  
 Fatigue  
 Weight loss  
 Anorexia  
 Late signs

**Possible Therapeutic Procedures**  
**Non-surgical**  
 O<sub>2</sub> therapy  
 Stop smoking  
 Drug therapy  
**Surgical**  
 Lung vol. reduction surgery  
 Bronchoscopic lung vol. reduction surgery

**Prevention of Complications**  
 (What are some potential complications associated with this disease process)  
 Refrain from any kind of tobacco use or second hand smoke

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

**Anticipated Medication Management**  
 • Oxygen  
 inhaled bronchodilators:  
 anticholinergics  
 • Nebulizers  
 • Corticosteroids  
 • Antibiotics if bacterial infection occurs

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

**Non-Pharmacologic Care Measures**  
 Chest physiotherapy (CPT)  
 Effective coughing  
 Airway clearance devices  
 pursed-lip breathing  
 Nutritional therapy  
 Vest airway  
 Elevate HOB

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

**What stressors might a patient with this diagnosis be experiencing?**  
 Fear of death  
 Shortness of breath  
 Fatigue  
 Anxiety  
 Depression

**Client/Family Education**

**List 3 potential teaching topics/areas**  
 • Importance of keeping O<sub>2</sub> on  
 • Pursed lip breathing to help give PT more control over breathing  
 • How to correctly use inhalers and nebulizers

**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)  
 Pulmonologist  
 Respiratory therapy  
 Family members  
 Pharmacy  
 Nutritionist  
 Occupational therapist  
 therapist  
 physical therapy

path cont.

Abnormal inflammatory process most often starts with inhalation of noxious particles and gases. Inability to expire air is a main characteristic of COPD. The main site of airflow limitation is in smaller airways. As peripheral airway becomes obstructed, air is progressively trapped during expiration. As air trapping increases, walls of alveoli are destroyed. Bullae (large air spaces in the parenchyma) and blebs (air spaces next to pleurae) can form.

# ACTIVE LEARNING TEMPLATE: Medication

STUDENT NAME Scam Roberts

MEDICATION Ceftriaxone

REVIEW MODULE CHAPTER \_\_\_\_\_

CATEGORY CLASS Antibiotic

## PURPOSE OF MEDICATION

### Expected Pharmacological Action

Binds to bacterial cell membranes and inhibits cell wall synthesis.

### Therapeutic Use (Bactericidal)

Treatment of susceptible infections due to gram-negative aerobic organisms, some gram-positive organisms, including respiratory tract, GU tract, skin and skin structure Bone and joint, intra-abdominal, PID.

### Complications

Antibiotic-associated colitis, other superinfections (abdominal cramps, severe watery diarrhea, fever) may result from altered bacterial balance in GI tract. Nephrotoxicity may occur, especially in patients with preexisting renal disease. pts w/ hx of penicillin allergy (severe pruritus, angioedema, bronchospasm, anaphylaxis)

### Medication Administration

IV PB INFUSE OVER 30 mins  
Add a 4 mL sterile water for injection to each 250mg to provide concentration of 100mg/mL. May further dilute with 50-100 mL 0.9% NaCl or D5W.

### Contraindications/Precautions

History of hypersensitivity/anaphylactic reaction to ceftriaxone. Hyperbilirubinemic neonates should not be treated with this drug. Do not administer with calcium containing infusions due to risk of precipitation of ceftriaxone-calcium salt.  
Cautions: hepatic impairment, history of GI disease, (ulcerative colitis, antibiotic-associated colitis, hx of penicillin allergy)

### Nursing Interventions

Assess oral cavity for thrush  
Monitor daily bowel pattern, stool consistency  
Monitor I&O  
Renal function tests for nephrotoxicity  
CBC  
Be alert for superinfection

### Interactions

DRUG: probenecid may increase excretion, calcium salts may increase adverse/toxic effects.  
LAB VALUES: May increase serum BUN, alkaline phosphatase, bilirubin, creatinine, LDH, ALT, AST. May cause a positive/direct/indirect coombs test.

### Client Education

educate on medication and why they are on it  
continue antibiotic therapy for full dose  
Alert physician of any kind of reactions or discomforts

### Evaluation of Medication Effectiveness

Be alert for superinfection, fever, vomiting, diarrhea, anal/genital pruritus, oral mucosal changes (ulceration, pain, erythema)

2.4 mL Sterile water to each 250mg to provide concentration of 100 mg/mL.

May further dilute with 50-100 mL 0.9% NaCl or D5W

Administer over 30 minutes IV PB 1g IV bolus q 12 hrs

Incompatibilities:

Amphotericin B complex, famotidine (pepcid), Fluconazole (diflucan), labetalol (Normodyne), Lactated Ringers Injection, vancomycin

Compatibilities:

Diltiazem (Cardizem), heparin, lidocaine, metronidazole (Flagyl), morphine, propofol (Diprivan).

1g = 1mL

$$\frac{1\text{mL}}{100} \times \frac{100\text{min}}{1\text{hr}}$$

$$\frac{100\text{mL}}{30\text{min}} \times \frac{100\text{min}}{1\text{hr}} = 200\text{mL/hr}$$

STUDENT NAME Sam RobertsMEDICATION AcetaminophenCATEGORY CLASS Non-narcotic analgesic and antipyretic

REVIEW MODULE CHAPTER \_\_\_\_\_

## PURPOSE OF MEDICATION

## Expected Pharmacological Action

Activates descending serotonergic inhibitory pathways in CNS. (Analgesic)

Inhibits hypothalamic heat regulating center (antipyretic)

produces analgesic effects

## Therapeutic Use

Temporary ~~to~~ Relief to mild to moderate pain, headache, or fever

## Complications

Early signs of toxicity: anorexia, nausea, diaphoresis, fatigue w/in the first 12-24 hrs.

Vomiting, R. upper quadrant tenderness, elevated LFTs

## Medication Administration

capsule, 325mg, 500mg, 650mg

Give without regard to food

Tablets may be crushed

Do not crush extended-release caplets

Take w/ full glass of water

Q4-6 hours

Max dose: 3,250mg/day

Children 13yrs and older

## Contraindications/Precautions

Hypersensitivity to acetaminophen, severe hepatic impairment or severe active liver disease.

Cautions: Sensitivity to med, severe renal impairment, alcohol dependency, hepatic impairment, active hepatic disease, chronic malnutrition and hypovolemia

## Interactions

Drug: alcohol (chronic use), hepatotoxic medications (phenytoin)

hepatic enzyme inducers (rifampin) may reduce increase risk of hepatotoxicity w/ prolonged high doses.

Food may decrease rate of absorption

Lab: may increase serum ALT, AST, bilirubin, prothrombin

## Nursing Interventions

Assess for fever

Assess for pain relief

Be aware of therapeutic serum level (10-30 mcg/mL)

Assess for reactions/adverse

## Evaluation of Medication Effectiveness

Assess for clinical improvement and relief of pain, fever. Serum levels and toxic serum level.

## Client Education

Notify physician of any severe recurrent pain or fever

Do not exceed max dose

Avoid alcohol