

Student Name: May Htut

Medical Diagnosis/Disease: COPD Exacerbation / COPD
Chronic Obstructive Pulmonary Disease
(Lungs)

NCLEX IV (8): Physiological Integrity/Physiological Adaptation

NCLEX IV (7): Reduction of Risk

Anatomy and Physiology
Normal Structures
 Upper Tract: Nose, Mouth, Pharynx, Epiglottis, larynx, Trachea.
 Lower Tract: Bronchi, bronchioles, Alveolar ducts and Alveoli.
 Lung 3 Lobes, Lung 2 Lobes.
 Lungs are responsible for breathing. Air travels through upper and lower tract. Here CO₂ goes out, O₂ comes in.
 Pleura membrane = covering.
 Diaphragm Expands and Contracts.
 Alveoli are Capillary Vessels.

Pathophysiology of Disease
 COPD caused by chronic abnormal inflammatory response of the lung to noxious particles or gases (Cigarette Smoke).
 Exacerbation are episodes of worsening symptoms "flareups".
 Increase neutrophils/macrophages in airway. Cells release cytokines and proteases which damage airway cell walls, increase mucus production. Viral or Bacterial.
 Narrow airway / Obstruction.

Anticipated Diagnostics
 Labs Chest X-ray *
 COPD Assessment test
 ABG's *
 6min Walk test
 Sputum Cytology
 CBC Alpha-1
Additional Diagnostics
 Spirometry *
 Biopsy

Emphysema, Type of COPD. NR of O₂ 88% to 92%
 alveoli are damaged

NCLEX II (3): Health Promotion and Maintenance

NCLEX IV (7): Reduction of Risk

Contributing Risk Factors
 Smoking Cigarettes
 40 +
 History of Asthma / Resp. Infection *
 Occupational exposure
 Low birth Weight
 Alpha-1 Antitrypsin deficiency.

Signs and Symptoms
 Dyspnea
 Cough
 Regular Sputum Production.
 Wheezing

Possible Therapeutic Procedures
Non-surgical High flow NC
 *O₂ Therapy
 Non-invasive Ventilation
Surgical
 Lung Transplant *
 Lung Volume reduction Surgery, Bullectomy (Air Sac)

Prevention of Complications
 (What are some potential complications associated with this disease process)
 Respiratory failure
 Stop Smoking
 *Consuming healthy diet.
 Death.
 Weakness / Infections

NCLEX IV (6): Pharmacological and Parenteral Therapies

NCLEX IV (5): Basic Care and Comfort

NCLEX III (4): Psychosocial/Holistic Care Needs

Anticipated Medication Management
 Nebulizer
 Bronchodilators
 *Antibiotics
 Allergy, Cold or Cough remedies

Non-Pharmacologic Care Measures
 Exercises
 *Healthy Diet
 Stress management
 education
 *Rehab

What stressors might a patient with this diagnosis be experiencing?
 Financial
 Lack of Support group
 Uneducated about diagnosis
 regrets

Client/Family Education

NCLEX I (1): Safe and Effective Care Environment

List 3 potential teaching topics/areas
 * Recognizing Exacerbation Symptoms.
 * Using medication / Inhalers Correctly
 * Understanding the role of pulmonary rehabilitation and exercise.

Multidisciplinary Team Involvement *
 (Which other disciplines do you expect to share in the care of this patient)
 Pulmonologist, Respiratory Therapist, The Dietary department, Physical Therapist, Surgeons. Case management

ATI: COPD

Nursing Problem Worksheet

Name: Maythwe Htut

Anticipated Patient Problem and Goals	Relevant Assessments <small>(Pework) What assessments pertain to your patient's problem? Include frequencies</small>	Multidisciplinary Team Intervention <small>(Pework) What will you do if your assessment is abnormal?</small>
Problem: Impaired gas exchange Reasoning: SOB, Wheezing, on O2 therapy Goal: Maintain O2 Sat of > 88% by the end of my care Goal: Use/get to 2000 on Incentive Spirometer by the end of my care.	* Assess/Auscultate lung sound every shift/PRN Assess Rate and Pattern of RR < 12, > 20 Every 4 hours * Assess SpO2 levels Every 4 hours Assess Grimacing/Pain in the chest on exertion every time OOB. Assess for exacerbation, Dyspnea or SOB every 4 hours.	* Order Chest X-ray to determine underlying cause of abnormal findings * Provide Incentive Spirometer with a set goal. Q1 hr, 10 each hour * if SpO2 level > 88% provide O2 Continuously 2 L on NC. Direct pt back to bed and call a rapid respond. * Notify MD. * Order an Arterial blood gas (ABG) to get a picture of Oxygen and Carbon dioxide levels. if abnormal results Provide respiratory support (Mechanical Ventilation, bronchodilators)

Anticipated Patient Problem and Goals	Relevant Assessments <small>(Pework) What assessments pertain to your patient's problem? Include frequencies</small>	Multidisciplinary Team Intervention <small>(Pework) What will you do if your assessment is abnormal?</small>
Problem: Risk for Falls. Reasoning: SOB, Secondary diagnoses, IV site, taking Pain medication. Goal: pt will not fall during my time of care. Goal: Demonstrate how to use the call light for help by the end of shift/ Beginning of my care.	Assess and monitor gait throughout shift Assess and maintain a unobstructed walkway every shift Check BP Q4 for Orthostatic hypotension Assess and ask pt if they have to use the Bathroom Assess if the call bell is within reach every time leaving the room and make sure pt knows how to use to call bell system.	* Provide assistance with a walker every time pt get out of the bed. Clear pathway at the beginning of every shift. Help pt change position slowly every time OOB. Provide non-skid socks and hrs. Assitances to Bathroom every 2 hrs. Demonstrate how to use the call bell and allow the pt to teach-back how to call for help. Explain why it is necessary to call before getting up.

Student Name Maythwe Htut
Clinical Instructor

ATI Real Life COPD Virtual Clinical Reflection Questions

1) Identify two members of the healthcare team collaborating in the care of this patient:

- Dan (Respiratory Therapist)
- Allyson (Registered Nurse)

2) Did your patient have any abnormal blood work (lab)? If so, select a priority finding and discuss why that value is concerning.

Hgb: 9.3g/dl
Hct: 29.1%
a. Elevated White blood count (13,000/mm³) possible sign of infection like pneumonia. Hgb and Hct were low, possible risk of bleeding/Blood loss.

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?

Radiology Reports
a. Notable hyperinflation of bilateral lung fields and flattened diaphragm. Characteristic of atelectasis. Abnormal area of density present in the left lung. Might indicate pneumonia.

4) What were some of the teaching topics covered in the scenario? Why were they important to the care of this patient?

- Using Incentive Spirometer, Helps expand lungs and getting in more air.
- Cough and deep breathing exercises to help infection/pneumonia.
- Planning to switch to a healthier diet to help manage chronic diseases.

5) Identify three ways that the nursing team demonstrated the promotion of patient safety?

- Turned off IV medication ASAP when itching/rash occurred and got us.
- Always used 2 patient identification before any care.
- Everyone Worked Only within their Scope of Practice.

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 whole healthcare team taking care of Mr. Gomez knew their role and advocated on the behalf of Mr. Gomez needs like ordering other Chest Xray and helping ease pain.

b. ~~If no, describe:~~ They also brought in family like rose and kept her updated on her fathers health status.

Reflection

1) Go back to your Preconference Form:

a. Indicate (**circle, star, highlight**) the components of your preconference form that you saw applied to the care of this virtual patient.

2) Review your Nursing Problem Worksheet: Did you select a correct priority nursing problem?

a. If yes, write it here: Impaired gas exchange

- b. If **no**, write what you now understand the priority nursing problem to be
Acute pain would have been a priority to risk for falls.
- 3) Review your Nursing Problem Worksheet. Did you see many of your anticipated nursing assessments and interventions used?
- Indicate (**circle, star, highlight**) the ones you saw utilized during the scenario.
 - Were there interventions you included that *were not* used in the scenario that could help this patient?
 - If **yes**, describe:
Providing assistances with walking and transferring. Walking and sitting in chair could have help breathing and lung expansion. Also pt was bleeding could have been do to lack of guidance / obstructed walking area.
 - If **no**, describe:
Path could have been cleared.
- 4) Often patient care will take a different direction than we anticipated at the beginning of our shift. Did that happen here? Acute pain was consistent
- How did that impact the nursing care delivered?
We had to address and help with pain management prior to any education or activity because Mr. Gomez did not want to be involved with his care due to the fact he was in pain.
 - What new, additional priority nursing problem (diagnosis) did you identify? (Refer to your NANDA list)
 - Write it here:
Acute pain / impaired skin integrity.

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 that it is important to address patients need first before trying to do any client education or nursing necessities. The patient might not want to eat, walk or listen to the healthcare team if their needs are not met first. In this example the patient was in a lot of pain and was having trouble breathing that it was hard for Mr. Gomez to focus until his symptoms were managed.

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Maythwe Htut

MEDICATION Acetaminophen

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Antipyretics, nonopioid analgesics

PURPOSE OF MEDICATION

Expected Pharmacological Action

Inhibits Synthesis of prostaglandins that may serve as mediators of Pain and fever, Primarily in the CNS.

Therapeutic Use

Analgesia, Antipyresis
Pain relief, Reduce Fever.

Complications

Hyper / Hypotension, Rash, Constipation, renal failure, Nausea and Vomiting, Neutropenia, fatigue, dyspnea.

Medication Administration

PO (Adults and Children > 12yr)
• 325-650mg Q6hrs.
• 1g 3-4 times Daily
• 1300 mg Q8hrs.

No more than 3g in 24hrs for someone with renal impairment.

Contraindications/Precautions

Severe hepatic impairment, active liver disease, Alcoholism, malnutrition. Some products contain alcohol, aspartame, Saccharin, sugar and tartrazine. (FDA yellow dye #5)

Nursing Interventions

Assess type, location, and Intensity prior to and 30-60 following administration min
Assess fever / temperature.
Assess renal function.

Interactions

increase risk of bleeding with Warfin.
hepatotoxic substance, Increase risk of liver damage.

Client Education

Take as instructed.
avoid alcohol
discontinue if rash occurs.
report to PCP if fever > is not relieved.
monitor glucose if diabetic

Evaluation of Medication Effectiveness

Relief of mild to moderate pain.
Reduction of fever.

ACTIVE LEARNING TEMPLATE: **Medication**

STUDENT NAME Maythwe Hvt

MEDICATION Ceftriaxone

REVIEW MODULE CHAPTER _____

CATEGORY CLASS Anti-infective, Third-gen Cephalosporins

PURPOSE OF MEDICATION

Expected Pharmacological Action
Decreased incidence of Infection when used for prophylaxis

Therapeutic Use Binds to the Bacterial cell wall membrane, causing cell death.

Complications
Rash, C diff, diarrhea, Pancreatitis, acute renal failure, bleeding, Seizure, Pain at IM site.

Medication Administration
IV (Adults)
Most infection: 1-2g Q12-24
Gonorrhea: 500mg hrs
Meningitis: 2g Q12hrs
Peroperative prophylaxis
1g Q 0.5-2 hrs before Surgery (Single dose)

Contraindications/Precautions
Serious hypersensitivity to Penicillin, Hypersensitivity to Cephalosporin. Severe hepatic and renal impairment History of GI disease.

Nursing Interventions
Assess for Infection at beginning and throughout therapy.
Monitor bowel function.
Obtain Specimens for C/S before starting therapy.
Obtain medication history.

Interactions
Should not be administered concomitantly with any calcium-containing solution. ↑ risk of bleeding with warfin.

Client Education
Report Signs of Superinfection.
report if fever or diarrhea develop, especially if diarrhea contains blood, pus, or mucus.

Evaluation of Medication Effectiveness
Resolution of the Signs and Symptoms of Infection
Decreased incidence of infection when used for prophylaxis.