Student Name: Madison Tuttle
Medical Diagnosis/Disease: COPD (Chronic Obstructive Pulmonary disease)

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

Anatomy and Physiology
Normal Structures

Right lung 3 lobes, Left lung 2 lobes

Bronchioles/ bronchi carry air into the lungs and become clogged with mucus
Alveoli responsible for oxygenation throughout the body, the walls are destroyed, filled with mucus and pus.
Fewer alveoli
Trachea conducts air between the larynx and the lungs
Diaphragm separates the thoracic and abdominal cavity
Pleura lubricates the surrounding lungs and membranes

Pathophysiology of Disease

Chronic inflammation of the airways (bronchioles and alveoli) and pulmonary blood vessels
Airflow limitation is caused by loss of elastic recoil and airflow obstruction, mucus secretion builds up, mucosal edema and bronchospasms
Impaired or destroyed lung tissue
Air trapping and gas exchange worsens
Inflammatory process magnified by oxidants like smoking cigarettes
Functional residual capacity increased
Cilia dysfunction

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

Anticipated Diagnostics
Labs
Spirometry
ABGS

Additional Diagnostics

Chest Xray
Sputum culture
Pulse oximetry
Bicarbonate

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

Contributing Risk Factors

Cigarette smoking
(secondary hand also)
Asthma
Air pollution
Infection
Aging
Chemical/dust
Autosomal recessive disorder (AATD)

Signs and Symptoms

Develop slowly
Sputum production
Dyspnea on exertion or at rest
History of tobacco smoke and occupational dust
Intermittent cough
Wheezing
chest tightness

Advanced- fatigue, weight loss, anorexia

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

Possible Therapeutic Procedures
Non-surgical
O2 therapy
Nebulization
Bronchodilators
Chest physiotherapy

Surgical

Lung volume reduction (LVRS)

Bronchoscopic lung volume reduction
Lung transplant

Prevention of Complications
(What are some potential complications associated with this disease process)

Pulmonary hypertension
Cor pulmonale
Acute exacerbations
Acute respiratory failure

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

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

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

Parenteral Therapies

Anticipated Medication Management

Bronchodilators
Albuterol
DuoNeb
Combivent Respimat
Advair
Roflumilast

Non-Pharmacologic Care Measures

Coughing and deep breathing
High fowlers
Pursed lip breathing
Postural drainage
Incentive spirometer

Care Needs

What stressors might a patient with this diagnosis be Experiencing?

Anxiety
Helplessness
Depression
Stress

Client/Family Education

List 3 potential teaching topics/areas

☐
Ambulation helps lung expansion
☐
Smoking cessation

Recognition of signs and symptoms of respiratory infection
☐

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)

Respiratory therapy
Pharmacy
Surgeon
Radiology
PT/OT
Nutrition
Social worker

Potential Patient Problems (Nursing Diagnoses) based on Research

List two potential patient problems 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.

Problem # 1: Impaired Gas exchange
Clinical Reasoning: Airway obstruction r/t COPD inflammation in the airway

Goal/EO: Maintains a patent airway, respirations 12-20 breaths per min, and ABGs within normal range compared to baseline

Ongoing Assessments: Assess respirations, quality, rate, rhythm, and depth q 4 hours, monitor ABGs q shift. Auscultate lung sounds q 4 hours, monitor chest x-ray reports q shift, assess skin, color of nails, and mucous membranes q shift. Assess ability to clear secretions and cough q 4 hours

NI: 1. Position in Fowlers q shift

2. Administer medications as prescribed q shift

3. Maintain oxygen administration as ordered q shift

4. Encourage coughing and deep breathing q shift

5. Change positions q 2 hours

6. Educate on side effects of prescribed medication to report q shift

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Problem # 2 Decreased activity tolerance
Clinical Reasoning: Dyspnea during physical activity

Goal/EO: patient reports ability to perform ADLS without shortness of breath

Ongoing Assessments: assess level of physical activity and mobility q shift. Asses the need for ambulating aids (canes, walkers) q shirt. Assess Nutrional Staus q shirt. Assess response to activity (HR, RR, fatigue) q ambulation. Assess perception of activity intolerance q shift. Assess oxygen saturation during activity q ambulation.

NI: 1. Establish goals of activity with patient and caregiver q shift

2. Encourage physical activity 3 times a week at home q shirt

3. Perform active range of motion q shift

4. Teach ROM and strengthening exercises q shift

5. Assist with ADLS q shift

6. Provide community resources q shift prior to discharge

Use this page to complete your *two* assigned CADSCANS:

Ceftriaxone
C – Antibiotic
A- binds to bacterial cell membranes. Bactericidal
D- May dilute with 50-100 0.9% NaCl, D5w IVPB 1-2g q 12-24hrs, severe infection 100mg q12-24hrs MAX- 4g/day
S- mild diarrhea, thrush, mild abdominal cramping, nausea
C- hepatic impairment, GI disease, penicillin allergy
A- absorbed in the bloodstream, metalized in the liver, excreted in urine
N-monitor bowel activity, asses oral cavity, monitor I&Os, be alert for superinfection, fever, vomiting

Acetaminophen (Tylenol)

BLACK BOX ALERT –potential for severe liver injury

C- Analgesic
A- results in antipyresis. Produces analgesic effect
D- 325-650mg q4-6h. Max-3250mg/day. Extra strength 1000mg/day
S- Hypersensitive. Toxicity – nausea, anorexia, fatigue
C- severe renal impairment. Alcohol dependency
A- absorbed GI, metabolized in the liver, excreted urine
N- assess pain, fever. Therapeutic level 10-30mcg/ml, toxic serum level- greater than 200mcg/ml

ATI Virtual Clinical Questions and Reflection:

1) Identify two members of the healthcare team collaborating in the care of this patient:
    a. **___NURSE ALLYSON________________**
    b. **_______DAN RT__________**
2) Did your patient have any abnormal blood work (lab)? If so, *select a priority finding* and discuss why that value is concerning.
    a. **________________SaO2 88% not enough oxygen in the blood____**
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. **________________ABGs the levels of co2 and o2 in the blood is low ____**
4) What were some of the teaching topics covered in the scenario? Why were they important to the care of this patient?
    a. **______stop smoking and drinking to lessen the affects it has on his breathing ____**
    b. **________if He is allergic to a certain medication, he is most likely allergic to one like it ____**
    c. **_________meter dosed inhaler and how to use it once he is home ____**
5) What were some steps the nursing team demonstrated that promoted patient safety?
    a. **__two patient idenifiers____**
    b. **________educating of possible allergy to medication ____**
    c. **_______responding immediately to a possible infection or allergic reaction____**
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 medical team was attentive, used therapeutic communication_, and encouraged learning/ educating on side effects and possible causes of infection and signs of an allergic reaction____

    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: _yes, this patient had difficulty breathing evidenced by low ABG levels and respiration rate was below the normal 12-20 breaths per min____
    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: _____frequent position changes and being high fowlers could have been included ____
        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? ____________________
    a. How did that impact the nursing care delivered? ___risk factors make Mr. Gomez bled more, the amount of oxygen he was on was altering his mental status. _He also ended up getting another CT to asses for fluid in the lungs and needed a thoracostomy ____
    b. Did it create a new priority nursing problem (diagnosis)? (Refer to your NANDA list)
        i. Write it here: ______n/a__________________________________
5) What was your biggest "take-away" from participating in the care of this patient? How did this impact your nursing practice. _____this affected my nursing practice by showing me that being throughout, and double checking can save or help someone better, ensuring they get the best care possible. _In Mr. Gomez case without that second CT scan the fluid in the lung wouldn't have been discovered and cause him more difficulty or even damage his lung. ____

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