# Adult/Geriatric Critical Thinking Worksheet

**Student Name**: Grace Perreira **Unit:** E7 **Pt. Initials:** DS **Date:** 12/15/2021

**1. Disease Process & Brief Pathophysiology**

My patient came in experiencing an exacerbation of COPD. Chronic obstructive pulmonary disease is a condition where the alveoli in the lungs become inflamed and damaged. They lose surface area, which is needed for gas exchange to take place. This means air can flow into the lungs, but the patient has trouble getting the air out. This can lead to long term complications, such as respiratory acidosis from retaining too much carbon dioxide.

**2. Factors for the Development of the Disease/Acute Illness**

- Cigarette smoking
- Occupational chemicals and dust (P)
- Air pollution (P)
- Infection (P)
- Aging (P)
- Genetic susceptibilities
- Previous diagnosis of asthma (P)

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**3. Signs and Symptoms**

- Tachypnea (P)
- SOB (P)
- Dyspnea on exertion (P)
- Barrell chest (P)
- Prolonged expiration and grunting (P)
- Diminished breath sounds (P)
- Hyper resonance upon chest percussion
- Clubbing of fingers and toes
- Decrease chest expansion
- Chronic cough with or without sputum production
- Accessory muscle use (P)
- Mental status changes
- Hypoxemia/ low perfusion (P)

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**4. Diagnostic Tests pertinent or confirming of diagnosis**

- Spirometry
- Chest X-Ray (P)

**5. Lab Values that may be affected**

- CBC (P)
- ABG's (P)
- Sputum culture gram stain

**6. Current Treatment**

- Avoidance of smoke and air pollution (P)
- Bronchodilators
- Antibiotics

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- Sputum Culture for gram staining
- Pulmonary function test
- ABG's (P)
- CBC (P)
- EKG (P)

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- BMP

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- Flu vaccine (P)
- Pneumonia vaccine
- Adequate hydration (P)
- Oxygen therapy with humidification (P)
- Mucolytics
- Corticosteroids
- Lung transplant
- Diuretics for edema (P)

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**7. Focused Nursing Diagnosis:**

Ineffective gas exchange

**8. Related to (r/t):**

- History of COPD and exacerbation of these symptoms from the dust storm

**11. Nursing Interventions related to the Nursing Diagnosis in #7:**

**1 .**I will keep the patient in semi-fowlers as the lowest bed position, especially to sleep in, and encourage frequent position changes.

**Evidenced Based Practice:**

Keeping the patient upright maximizes chest exxpansion and promotes effective ventilation.

**2.** I will implement relaxation techniques into their routine and encourage diversional activities.

**12. Patient Teaching:**

**1.** Educate the patient on the pneumococcal and flu vaccines to protect from future infection. (This patient is vaccinated with the pneumoccal vaccine.)

**2.** Educate the patient on drinking plenty of fluids. This will help with flushing out the edema they're experiencing along with diuretics.

**3.** Educate the patient on adequate rest. A lot of their effort needs to go to breathing, so it's important to teach the patient to get plenty of rest. My goal is keeping that O2 sat up while they're awake and keeping the patient alert and oriented,

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**9. As evidenced by (aeb)**:

- COPD diagnosis

- Hypoxemia/ low perfusion

- Accessory muscle breathing

- Barrel chest

- SOB

-Tachypnea

- Prolonged exertion with grunting

- Diminished breath sounds

**10. Desired patient outcome:**

Get her O2 sat up to 95 while the patient is awake and keep her alert and oriented.

**Evidenced Based Practice:**

Relaxation techniques help conserve energy, which can be focused on breathing instead. Diversional activities take the patient's mind away from their situation, which can encourage more effective gas exchange by lowering anxiety.

**3**. I will implement pursed lip breathing and practice with the patient at every pulse oximetry check. I could even introduce the incentive spirometer once the patient gains confidence.

**Evidenced Based Practice:**

Pursed lip breathing increases effectiveness of ventilation by forcing air out of the lungs under a controlled count. It can help control shallow, fast breaths, as well. The patient is completely in control of their own breathing, therefore it also helps in engaging the patient in their treatment.

Kamsansuon, Vera, M., Sathya, Videnyi, R., Otieno, F., Anggita, R., Jam, A., Gloria, Arab, M. A., Bethuel, Lea, L., Pura, T., Blessed, Sackey, S., Samuel, Millete, F., Busayo, D., Mumba, W., Helen, O., … Kennedy, M. (2021, August 29). Pneumonia nursing care plans and nursing diagnosis. Nurseslabs. Retrieved December 13, 2021, from

so conserving energy and getting restfufl sleep is very important.

(Dr. Thomas's gas exchange lecture)

**13. Discharge Planning/Community Resources:**

**1.** Pulmonary physiotherpy is recommended. Making program/schedule before discharging is better for adherence.

**2.** Case management for oxygen therapy at home and/or CPAP education if necessary.

**3.** Psychosocial considerations due to missing out on family activities, work, and normal life in general.

(Dr. Thomas's gas exchange lecture)

https://nurseslabs.com/copd-nursing-care-plans.