

Adult/Geriatric Critical Thinking Worksheet

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Unit: SIM

Pt. Initials: N/A

Date: 3/22/2022

1. Disease Process & Brief Pathophysiology

Chronic obstructive pulmonary disease (COPD) is characterised by poorly reversible airflow obstruction and an abnormal inflammatory response in the lungs. The inflammatory response represents the innate and adaptive immune responses to long term exposure to noxious particles and gases, particularly cigarette smoke.

As the inflammatory response begins, mast cells degranulate and release multiple inflammatory mediators. IgE antibodies are linked to the mast cells, and the allergen crosslinks the IgE. Then inflammatory mediators are released, having potential effects on the blood vessels, nerve cells, smooth muscle cells, and goblet cells.

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

Cigarette smoking (P), exposure to irritants (P), genetic predisposition, exposure to organic or inorganic dust, exposures to noxious gases, respiratory tract infection, gastroesophageal reflux disease (GERD).

3. Signs and Symptoms

Shortness of breath - especially during physical activities, wheezing (P), chest tightness, a chronic cough that may produce mucous (P) - may be clear, white, yellow or greenish, frequent respiratory infections (P), lack of energy (P), unintended weight loss or weight gain, swelling in ankles, feet or legs.

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4. Diagnostic Tests pertinent or confirming of diagnosis

Chest X-Ray (CXR), pulmonary function tests (PFTs), arterial blood gas (ABGs), sputum culture, EKG.

5. Lab Values that may be affected

CBC, ABG, pH, PaO₂, PaCO₂ (P), HCO₃, HCT, BUN (P), Creatinine.

6. Current Treatment

Avoidance of smoke and air pollution, bronchodilators (P), antibiotics (P), flu vaccine, pneumonia vaccine, adequate hydration (P), oxygen therapy (P) for hypoxia, mucolytics, corticosteroids (P), lung transplant, diuretics for edema.

7. Focused Nursing Diagnosis:

Ineffective airway clearance.

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

1 .Elevate head of the bed.

12. Patient Teaching:

1. Educate patient to stay away from large crowds to avoid infection.

8. Related to (r/t):

Increased production of secretions.

Evidenced Based Practice:

E/B: Elevating the head of the bed can help reduce muscle fatigue and can aid chest expansion.

2. Educate on how to properly take meds and ensure the patient knows to take the full dose of their antibiotics when perscribed.

2. Assist the patient to turn every 2 hours. If ambulatory, allow patient to ambulate as tolerated.

3. Educate the patient on safe oxygen use and set up.

9. As evidenced by (aeb):

Difficulty breathing.

Evidenced Based Practice:

13. Discharge Planning/Community Resources:

1. Consult case management to organize getting oxygen if the patient is sent home on it. As well as

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E/B: Movement aids in mobilizing secretions to facilitate clearing of airways.

any other assistive devices.

3. Encourage/ensure patient is getting adequate fluid intake.

2. Ensure the patient attends their follow-up appointments, especially with a pulmonologist.

10. Desired patient outcome:

Demonstrate behaviors to improve airway clearance, e.g., cough effectively and expectorate secretions by 1500 on 3/23/2022.

Evidenced Based Practice:

Drinking plenty of fluids thins secretions and prevents dehydration. Instruct patient to drink 2L of water a day if not contraindicated.

3. Provide the patient with pamphlets for support groups to help cope with the disease they're dealing with.

