

Type: Assignments

Subject: Diversity

Subject area: Nursing

Education Level: Undergraduate/College

Length: 4 pages

Referencing style: APA

Preferred English: US English

Spacing Option: Double

Title: critical analysis

Instructions: you will analyze your issue/event from milestone one through the history and humanities lenses. this will provide you with a chance to practice analyzing your issue/event through these lenses and receive feedback on this practice attempt.

## **Critical Analysis – Milestone 2**

Name

Affiliation

Course Code

Supervisor

Date

### **Lense Analysis- Acute Bronchitis**

Acute Bronchitis is a lower respiratory tract infection that usually occurs after an upper respiratory tract infection. The airways become inflamed and irritated as a result of this viral (most frequent) or bacterial infection, and mucus production increases. In any healthcare setting, acute bronchitis is a common occurrence. Every year, it is estimated that 5% of the general population suffers from acute bronchitis, resulting in more than 10 million visits to the doctor's office. Acute bronchitis, like the majority of viral respiratory diseases, is more common during flu season (K, 2019). Flu season is common in the United States during the autumn and winter months. It can occur after any type of viral upper respiratory infection (URI). Respiratory syncytial virus, influenza viruses A and B, parainfluenza, rhinovirus, and other viruses are common pathogens. Smoking history, living in a polluted environment, crowding, and asthma history are all risk factors for acute bronchitis. Certain allergens, such as pollens, perfumes, and vapors, might cause acute bronchitis in some persons (K, 2019). When a bacterial infection

occurs, the pathogens isolated are usually the same as those that cause community-acquired pneumonia, such as *Streptococcus pneumoniae* and *Staphylococcus aureus*..

A productive cough, lethargy, difficulty breathing, and wheezing are all symptoms of acute bronchitis. The most common complaint is a cough that is clear or yellowish in color, though it can occasionally be purulent. Sputum that is purulent has nothing to do with bacterial infection or antibiotic use. Coughing after acute bronchitis usually lasts 10 to 20 days, but it can sometimes last up to four weeks. After acute bronchitis, the average cough lasts 18 days. Pertussis should be suspected when coughing fits are accompanied by inspiratory whoop or post-tussive emesis. URI symptoms such as runny nose, sore throat, fever, and malaise are common in the prodrome. A low-grade fever may also be present. High-grade fevers in the setting of acute bronchitis are unusual and necessitate additional diagnostic testing. Lung auscultation may be significant for wheezing on physical examination; pneumonia should be suspected when rales, rhonchi, or egophony are noted (Heger, 2012). Tachycardia may be present, indicating fever and dehydration as a result of the viral infection. The rest of the systems are usually operating within normal parameters.

The results of a chest x-ray are not always specific and are usually normal. Occasionally, a chest x-ray will show increased interstitial markings, indicating bronchial wall thickening. When infiltrates are visible on a chest x-ray, pneumonia is distinguished from acute bronchitis. The American College of Chest Physicians (ACCP) recommends getting a CXR only if your heart rate is over 100 beats per minute, your respiratory rate is over 24 breaths per minute, your oral body temperature is over 38 degrees Celsius, and you have egophony or fremitus on your chest exam. As part of a fever workup, a complete blood count and chemistry analysis may be

ordered. In some cases of acute bronchitis, the white blood count may be somewhat raised. Changes in blood chemistry can indicate dehydration. Rapid microbiological testing is not cost-effective and would not alter management except during influenza season and in cases where pertussis or another bacterial infection is suspected (Heger, 2012). Bacteria is rarely the causal agent, thus Gram stain and bacterial sputum cultures are strongly avoided. Pirometry reveals transient bronchial hyperresponsiveness in 40% of patients with acute bronchitis when performed. FEV1 reversibility of greater than 15% is reported in 17% of patients. (5) In most cases, airflow obstruction and bronchial hyperresponsiveness go away after 6 weeks (Heger, 2012).

Viruses are the most common cause of the disease. A history of smoking, occupational exposures, air pollution, impaired lung function, and inheritance are all known risk factors. Children whose parents smoke are more likely to contract lung infections, which can lead to bronchitis. Fever, tachypnea, mild dyspnea, and pleuritic chest discomfort are the most typical symptoms in the patient mentioned (possible). Clear to purulent sputum output, diffuse rhonchi, and crackles are all symptoms of a cough (contrast with localized crackles usually heard with pneumonia). An X-ray of the chest may be used to rule out pneumonia. There are no lung infiltrates or consolidation on bronchitis films.

### **Nursing Diagnosis (Primary)**

Gas exchange problems caused by blocked airways. When it comes to medical treatment, chest physiotherapy to mobilize secretions and hydration to liquefy secretions are two of the most popular interventions. Inhaled bronchodilators to minimize bronchospasm and increase sputum expectoration will be among the pharmacologic interventions. Oral antibiotics, such as

macrolides, may be prescribed, though this is debatable, as is symptom management for fever and cough. Encourage secretion mobilization through ambulation, coughing, and deep breathing, as well as other nursing interventions (Heger, 2012). Ensure that the patient drinks plenty of water to help liquefy secretions and prevent dehydration from fever and tachypnea. To aid healing, encourage relaxation, avoidance of bronchial irritants, and a healthy diet. Remind the patient to finish the entire course of antibiotics and explain how meals affect medicine absorption. Warn the patient about the dangers of over-the-counter cough suppressants, antihistamines, and decongestants, which can cause secretion drying and retention (Heger, 2012). Cough syrups containing the mucolytic guaifenesin, on the other hand, may be appropriate. Inform the patient that, due to airway inflammation, a dry cough may persist following bronchitis. Avoid dry areas and have a humidifier beside your bedside. Encourage people to quit smoking. Teach the patient to detect and report signs and symptoms of acute bronchitis as soon as possible.

### **Guidelines for Documentation**

The patient's respiratory status: respiratory rate, breath sounds, oxygen use, color of nail beds and lips; note any respiratory distress

Medication, oxygen, and breathing treatments responses

Dietary responses and increased calorie intake, as well as daily weights

The patient's response to activity: degree of shortness of breath with any exertion, degree of exhaustion.

Requirement for assistance with daily activities

### **Guidelines for Discharge and Home Health Care**

Medications are prescribed. Ascertain that the patient is aware of all medications, including their dosage, method of administration, mechanism of action, and side effects. Patients on aminophylline should have their blood levels checked as directed by their doctor. The patient should demonstrate proper use of metered-dose inhalers before being discharged from the hospital. There are complications. Instruct individuals to notify their primary healthcare physician if their secretions change color or consistency (Kamin et al., 2012). A respiratory infection may be indicated by green-colored secretions. Patients should also report persistent, long-term dyspnea that does not respond to treatment. Ensure sustained follow-up, with the understanding that patients with severe disease may require support with everyday activities following discharge (Kamin et al., 2012). Any referrals to social services should be noted. Send patients home with a high-calorie diet devised by the dietician and supported by the nurse (K, 2019). If the patient goes outside in the winter, encourage him or her to wear a scarf to conceal his or her face. Provide the name of a smoking cessation program or a support group if the patient continues to smoke. Encourage the patient to stay away from airborne irritants.

### References

- Heger, M. (2012). Efficacy of EPs 7630 compared to placebo in the treatment of acute bronchitis. <http://isrctn.org/>>. <https://doi.org/10.1186/isrctn60790910>
- K, L. (2019). Applying the evidence in treatment of acute uncomplicated bronchitis in emergency medicine. *Nursing & Healthcare International Journal*, 3(6). <https://doi.org/10.23880/nhij-16000207>
- Kamin, W., Ilyenko, L. I., Malek, F. A., & Kieser, M. (2012). Treatment of acute bronchitis with EPs 7630: Randomized, controlled trial in children and adolescents. *Pediatrics International*, 54(2), 219-226. <https://doi.org/10.1111/j.1442-200x.2012.03598.x>