5.4: Nursing Process Considerations

Nursing Process Related to Respiratory Medications

Now that we have reviewed the respiratory system and common respiratory disorders, let's apply the nursing process to the administration of respiratory medications.

Nursing Process: Assessment

Although there are numerous details to consider when administering medications, it is always important to first think about what you are giving and why?

First, let's think of why?

Respiratory medications are often given to alleviate allergies, cold symptoms, or to decrease/eliminate shortness of breath (SOB). An important piece of your nursing assessment should be to assess the patient's respiratory status. The respiratory assessment includes observing the respiratory rate and quality of respirations (shallow, deep), obtaining a pulse oximetry reading, and auscultating lung sounds. Other pieces of the assessment include inspecting skin color, such as observing for pallor, or cyanosis, and determining if there is a cough or sputum present. If sputum is present, it should be assessed for color, odor, consistency, and amount (COCA).

Additional baseline information to collect prior to the administration of any respiratory medication includes any history of allergy or previous adverse drug response.
Nursing Process: Implementation of Interventions

Respiratory medications are available in many different formulations, such as nasal spray, inhalations, oral tablets or liquids, injections, or intravenous route, so it is always important to verify the correct route and anticipate the associated side effects. For example, inhalations deliver the required medicine or medicines directly to the lungs, which means the medicine(s) can act directly on the lung tissues, minimizing systemic side effects. On the other hand, intravenous medications are administered to act quickly, but can cause systemic side effects. Additionally, some products contain more than one medicine with different dosages (for example, inhalers that combine a long-acting bronchodilator with a glucocorticoid).

During the administration of respiratory medications, it is important to anticipate the expected outcome of the medication and any common side effects. For example, albuterol is a short acting Beta-2 agonist that is given for bronchodilation. The nurse should plan to perform a respiratory assessment before and after administration of albuterol to document the effectiveness of the medication, as well as monitor for tachycardia, a common side effect.

Additionally, the nurse should also ensure the proper use of the inhalers by the patient. Observe the patient self-administering the medication, and further instruct the patient in proper use.  

Nursing Process: Evaluation

Finally, it is important to always evaluate the patient’s response to a medication. With respiratory medications, the nurse should assess decrease in allergy symptoms (cough, runny nose, tearing eyes) and any decrease in shortness of breath. The nurse should complete a respiratory assessment (respirations, pulse oximetry, and lung auscultation) before and after the medications have been administered and compare the results. If the symptoms are not improving or the clinical assessment is worsening, prompt intervention is required (such as notification of the health care provider for further orders) to prevent further clinical deterioration.