Week 8 case study

Health & Medicine, Nursing

Case Study due: Diagnosis Given the symptoms presented by the patient and her medical history, the most probable diagnosis is asthma. NHLBI (National Heart, Lung, and Blood Institute) (2014) recommends three stages of diagnosing asthma. First, the physician should investigate the patient's medical and family history of the patient. Asthma is known to be a hereditary disease and individuals from families with a history of asthma are prone of developing asthma. The patient in our case reports a childhood history of asthma, which implies that the current situation may be an asthma attack. The patient also reports a similar instance that happened ten years ago after she played soccer.

Second, the patient will have to undergo a physical examination which will give more information regarding the patient's condition. A physical examination typically involves listening to the breathing of the patient and looking for signs of asthma and allergies. An individual with asthma may produce wheezing sounds while breathing, a running nose or swollen nasal passages. Allergic skin conditions may also be present. In our patient's case, there is the presence of wheezing and dyspnea which are typical symptoms of asthma. Also, her cough is non-productive, meaning bacterial infections such as tuberculosis are ruled out.

Third, the Institute recommends diagnostic tests to assess lung function. A spirometry test is usually done to determine the volume of air that an individual can breathe in and out. The test also measures how fast the patient can exhale (Madsen et al., 2014). However, in our case, the physical examination and patient history provide enough information to make a diagnosis. As a result, she will not be subjected to diagnostic tests.

Nursing care plan

The nursing care plan will include management at the primary, secondary and tertiary levels. At the primary level, the patient will be required to minimize exposure to agents that trigger an asthmatic attack. These include pollen, dust and other respiratory tract irritants such as tobacco (Heederik, Henneberger & Redlich, 2012). In this patient's case, it has been established that strenuous physical activity triggers an attack so she should ensure that she does not engage in such exercise. Moderate physical activity is however recommended. Patient education is also important. The patient will be educated on the various ways that an asthma attack can be prevented and managed. She will also learn about the various medication options, and which ones are most appropriate for her. The patient may also need to alter her diet to include larger quantities of foods rich in vitamins D, E and A and zinc (Nurmatov, Devereux & Sheikh, 2011)

Secondary prevention of asthma will include the use of medication to alleviate symptoms of an asthma attack. These include fast-acting bronchodilators and other medicines prescribed by the physician (Lougheed et al., 2010). At the tertiary level, treatment of asthma involves the use of controller medication for long-term management, including systemic corticosteroids. The patient will have to check regularly with her physician for reassessment of the progress of treatment and also if the condition is being controlled effectively. Any complications that may arise in the course of treatment will require an adjustment of treatment plans.

References

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