

NURSING CARE IN BRONCHIAL ASTHMA

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Abstract. Bronchial asthma is a chronic inflammatory disorder of the airways characterized by episodic airflow obstruction and bronchial hyperresponsiveness. Effective nursing care is critical in managing asthma, preventing exacerbations, and improving patient quality of life. This article reviews the fundamental principles of nursing care for patients with bronchial asthma, emphasizing patient assessment, medication management, acute attack intervention, education, psychological support, and preventive strategies. Nurses play a vital role in holistic asthma management through continuous patient monitoring, education, and collaboration within multidisciplinary healthcare teams.

Keywords: bronchial asthma, nursing care, patient education, respiratory management, asthma exacerbation.

Introduction. Bronchial asthma is a common chronic respiratory condition marked by inflammation and narrowing of the airways, resulting in wheezing, coughing, chest tightness, and shortness of breath (Global Initiative for Asthma [GINA], 2023). According to the World Health Organization (WHO), approximately 339 million people worldwide suffer from asthma, making it a significant public health concern (WHO, 2023). The episodic nature of asthma, coupled with potential life-threatening exacerbations, necessitates vigilant nursing care to manage symptoms and improve patient outcomes.

Nursing care is essential in asthma management as nurses are often the primary point of contact for patients. They provide critical support through assessment, medication administration, patient education, and psychosocial care (Pfeiffer & Horneff, 2018). This article aims to present comprehensive nursing care strategies for patients with bronchial asthma, highlighting the role of nurses in assessment, treatment, patient education, and prevention of complications.

V Nursing care in bronchial asthma is a comprehensive process that includes assessment, medication management, acute intervention, patient education, psychosocial support, and preventive strategies. Nurses play a crucial role in ensuring effective disease management and improving patients' quality of life through holistic care.

Patient Assessment. Effective nursing care begins with thorough and continuous assessment. Nurses must evaluate both subjective and objective data. Subjective data include the patient's history of asthma symptoms, frequency and severity of exacerbations, known triggers, and medication adherence. Objective assessment involves measuring vital signs, respiratory rate, oxygen saturation (SpO₂), and performing peak expiratory flow rate (PEFR) tests to evaluate airway obstruction severity.

Physical examination includes auscultation of lung sounds to detect wheezing, crackles, or diminished breath sounds, which are indicative of airway obstruction or complications like infection. Nurses should also observe for signs of respiratory distress such as use of accessory muscles, nasal flaring, cyanosis, or changes in mental status, which may indicate severe exacerbations requiring immediate intervention.

Medication Management and Patient Education. Pharmacotherapy is central to asthma management, and nurses must be proficient in administering and educating patients about their medications. Common drugs include:

- **Short-acting beta-agonists (SABA):** for quick relief of acute symptoms.
- **Inhaled corticosteroids (ICS):** for long-term control of inflammation.
- **Long-acting beta-agonists (LABA):** often combined with ICS for persistent asthma.
- **Leukotriene receptor antagonists:** for additional anti-inflammatory effects.
- **Oral corticosteroids:** used during severe exacerbations.

Nurses should ensure patients understand their medication regimen and proper inhaler techniques, which are critical for drug efficacy. Demonstrations and return demonstrations help confirm patient competence. Adherence to medication should be regularly assessed, addressing barriers such as fear of side effects or misunderstanding the chronic nature of asthma.

Management of Acute Asthma Exacerbations. During acute exacerbations, timely nursing interventions can be life-saving. Nurses should provide supplemental oxygen to maintain adequate saturation (usually above 92%) and administer prescribed bronchodilators via nebulization or metered-dose inhalers with spacers.

Monitoring is continuous: respiratory rate, heart rate, SpO₂, and peak flow readings must be recorded frequently. The nurse must watch for signs of deterioration, such as increasing respiratory distress, inability to speak in full sentences, or declining consciousness, which require urgent escalation of care.

Intravenous corticosteroids may be administered as ordered to reduce airway inflammation. Nurses also ensure patient comfort by maintaining a calm environment, assisting with positioning (usually sitting upright to ease breathing), and providing reassurance.

Psychological Support and Counseling. Living with a chronic illness like asthma often leads to anxiety, fear of attacks, and decreased quality of life. Nurses are key in providing emotional support, helping patients develop coping strategies, and encouraging adherence to treatment plans.

Patient counseling also involves educating about recognizing early signs of exacerbation, when to seek medical help, and the importance of regular follow-ups. Support groups or referrals to mental health professionals can be valuable for patients with anxiety or depression related to their asthma.

Lifestyle and Environmental Control. Nurses educate patients on the importance of avoiding triggers that exacerbate asthma symptoms. Common triggers include tobacco smoke, dust mites, pet dander, mold, pollen, strong odors, and respiratory infections. Environmental control measures such as using allergen-proof bedding, maintaining indoor air quality, and avoiding outdoor exercise during high pollen counts are emphasized.

Lifestyle modifications like regular physical activity tailored to the patient's tolerance improve lung function and overall health. Nutritional advice, smoking cessation programs, and vaccination promotion (influenza and pneumococcal vaccines) are part of comprehensive nursing care to prevent complications.

Prevention and Follow-up Care. Preventing asthma exacerbations is a priority in nursing care. Nurses coordinate follow-up appointments, reinforce education, and monitor for complications. They assist patients in developing asthma action plans that outline medication use and steps to take during exacerbations.

Regular lung function tests and adherence assessments guide treatment adjustments. Nurses also promote self-management, empowering patients to control their disease actively.

Conclusion. Nursing care in bronchial asthma is a multifaceted and essential component of comprehensive disease management. Through accurate assessment, timely intervention, medication management, patient education, and emotional support, nurses significantly influence patient outcomes. By equipping patients with the knowledge and tools to manage their condition, nurses help reduce the frequency and severity of asthma attacks, improve adherence to treatment, and enhance overall quality of life. Furthermore, the integration of preventive strategies and environmental control measures into routine care empowers patients to take an active role in managing their asthma. Continued professional development and adherence to evidence-based

practices will ensure that nurses remain at the forefront of effective asthma care in both acute and chronic settings.

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