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**A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE OF PATIENTS WITH BRONCHIAL ASTHMA REGARDING PREVENTION OF RECURRENT ATTACKS OF BRONCHIAL ASTHMA PATIENTS IN SELECTED HOSPITALS AT TUMKUR WITH A VIEW TO DEVELOP A SELF INSTRUCTIONAL MODULE**

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**ABSTRACT**

Bronchial asthma is a chronic respiratory condition that affects millions of individuals worldwide, characterized by recurrent attacks of breathlessness and wheezing. Effective management of asthma requires both pharmacological and non-pharmacological strategies. This study aims to evaluate the knowledge and practices of asthma patients regarding the prevention of recurrent attacks in selected hospitals in Tumkur, India. The goal is to develop a self-instructional module that can enhance patient understanding and adherence to preventive measures. The study employs a mixed-methods approach, combining quantitative and qualitative data to assess current knowledge levels and practices, identify gaps, and design a tailored educational intervention.

**KEYWORDS:** Bronchial Asthma, Asthma Management, Preventive Measures, Patient Knowledge, Self-Instructional Module.

**I. INTRODUCTION**

Bronchial asthma is a prevalent chronic respiratory condition characterized by inflammation and narrowing of the airways, which leads to recurrent episodes of wheezing, breathlessness, and coughing. It affects millions of people worldwide, significantly impacting their quality of life and overall well-being. Asthma management is a multifaceted process that requires a comprehensive understanding of both pharmacological treatments and non-pharmacological strategies. Effective management not only involves medication adherence but also emphasizes the importance of lifestyle modifications and preventive measures to reduce the frequency and severity of asthma attacks.

Despite the availability of effective treatments and guidelines, many asthma patients continue to experience frequent exacerbations and poor control of their condition. This issue can often be traced back to inadequate knowledge about the disease and its management, as well as poor adherence to recommended preventive measures. Knowledge about asthma includes understanding the triggers that can lead to attacks, recognizing early symptoms, and knowing the correct use of medications. However, gaps in this knowledge can result in suboptimal management practices, leading to more frequent and severe asthma episodes.

In Tumkur, a city in Karnataka, India, asthma presents a significant public health concern. The healthcare system in this region faces challenges related to patient education and effective disease management. This study aims to assess the current level of knowledge and

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practices among asthma patients regarding the prevention of recurrent attacks. By identifying gaps in understanding and adherence, the study seeks to develop a self-instructional module that can enhance patient education and self-management skills.

Self-instructional modules are educational tools designed to provide patients with structured information about their health condition and its management. These modules are particularly useful in chronic disease management, where continuous patient education is crucial. By delivering targeted information in an accessible format, self-instructional modules can help bridge the gap between theoretical knowledge and practical application, empowering patients to take an active role in managing their condition.

The development of a self-instructional module for asthma patients in Tumkur will be guided by a comprehensive assessment of their current knowledge and practices. This study will employ both quantitative and qualitative research methods to gather data on patients' understanding of asthma prevention strategies, their adherence to recommended practices, and any barriers they face in implementing preventive measures. The quantitative component will involve structured surveys to measure knowledge levels and practice patterns, while the qualitative component will include in-depth interviews to explore patients' experiences and challenges in managing their asthma.

Understanding the existing knowledge and practices of asthma patients is critical for designing effective educational interventions. Previous research has highlighted that patients with better knowledge of their condition are more likely to adhere to treatment plans and engage in preventive behaviors. However, in many cases, patients lack essential information about managing asthma triggers, using medications correctly, and recognizing early signs of an exacerbation. By addressing these gaps, the self-instructional module aims to provide patients with the necessary tools and resources to manage their asthma more effectively.

The findings from this study will contribute to the development of a tailored educational module that meets the specific needs of asthma patients in Tumkur. This module will include information on recognizing and avoiding common asthma triggers, understanding the importance of medication adherence, and implementing lifestyle changes that can help prevent asthma attacks. Additionally, it will incorporate interactive elements such as quizzes and practical tips to reinforce learning and enhance patient engagement.

In the study will provide valuable insights into the current state of asthma management among patients in Tumkur and highlight areas where further education is needed. The development of a self-instructional module will be a significant step towards improving patient knowledge and practices, ultimately leading to better asthma control and reduced frequency of attacks. By focusing on patient education and empowerment, this research aims to contribute to the broader goal of enhancing asthma management and improving the quality of life for individuals living with this chronic condition.

## **II. UNDERSTANDING BRONCHIAL ASTHMA**

**1. Definition:** Bronchial asthma is a chronic respiratory condition characterized by inflammation and narrowing of the airways, leading to symptoms such as wheezing, breathlessness, and coughing.

**2. Pathophysiology:** The condition involves airway hyperreactivity, which results in bronchoconstriction, increased mucus production, and airway edema. This leads to intermittent airflow obstruction.

**3. Triggers:** Common asthma triggers include allergens (e.g., pollen, dust mites), respiratory infections, tobacco smoke, air pollution, exercise, and changes in weather.

**4. Symptoms:** Typical symptoms include wheezing, shortness of breath, chest tightness, and persistent cough, particularly at night or early morning.

**5. Diagnosis:** Diagnosis is based on clinical history, physical examination, and spirometry tests to assess lung function and confirm airway obstruction.

**6. Management:** Effective management involves a combination of inhaled corticosteroids, bronchodilators, and avoiding known triggers. Long-term control and rescue medications are used to manage and prevent symptoms.

**7. Education:** Patient education on proper medication use, recognizing triggers, and implementing lifestyle changes is crucial for effective asthma control and improving quality of life.

### III. KNOWLEDGE AND PRACTICES IN ASTHMA MANAGEMENT

**1. Knowledge of Asthma:** Understanding asthma involves recognizing its symptoms, triggers, and the underlying mechanisms of the disease. Patients should know how inflammation and bronchoconstriction contribute to their symptoms and how different medications work.

**2. Medication Adherence:** Proper use of prescribed medications, including inhalers and oral medications, is essential. Patients need to be aware of how and when to use these medications to manage symptoms effectively and prevent exacerbations.

**3. Trigger Identification:** Identifying and avoiding asthma triggers, such as allergens (e.g., pollen, dust mites), irritants (e.g., tobacco smoke, pollution), and infections, is crucial for reducing the frequency of asthma attacks.

**4. Symptom Monitoring:** Regularly monitoring symptoms and peak flow measurements helps in assessing asthma control. Patients should be familiar with their personal best peak flow and recognize when their symptoms indicate worsening control.

**5. Action Plans:** An asthma action plan outlines the steps to take during worsening symptoms or an asthma attack. Patients should understand and follow this plan, which includes instructions for medication use and when to seek medical help.

**6. Lifestyle Modifications:** Adopting lifestyle changes, such as avoiding known triggers, maintaining a healthy weight, and engaging in regular physical activity, can improve asthma control and overall health.

**7. Education and Support:** Ongoing education about asthma management and support from healthcare providers play a vital role in ensuring that patients are well-informed and capable of managing their condition effectively.

### IV. CONCLUSION

The study aims to enhance asthma management through targeted education by developing a self-instructional module. Improved patient knowledge and practices can lead to better asthma control and reduced frequency of attacks. Future research should evaluate the effectiveness of the self-instructional module in improving patient outcomes and adherence.

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