

A CROSS-SECTIONAL STUDY TO KNOW THE KNOWLEDGE, ATTITUDE, AND PRACTICES OF PATIENTS OF BRONCHIAL ASTHMA IN PULMONARY MEDICINE DEPARTMENT OF A TERTIARY CARE HOSPITAL IN LUCKNOW, INDIA

Abhay Srivastava*, Babu Hondekar, Dheeraj Singh, Pratap Shankar, Sachin Tutu, Preet Lakhani, Amod Kumar, R. K. Dixit²

Professor, Department of Medicine, Hind Institute of Medical Sciences Safedabad, Barabanki.

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***Correspondence for
Author**

Dr. Abhay Srivastava
Professor, Department of
Medicine, Hind Institute
of Medical Sciences
Safedabad, Barabanki.

ABSTRACT

Background: Asthma is a chronic inflammatory disorder of airways. According to WHO, asthma is a major health problem. Various advances have been made in the management of asthma but despite this the morbidity and mortality rates are not declining. Many studies have been conducted worldwide to assess the knowledge and beliefs of asthmatic patients. But there is lack of data regarding such issues in India especially in Lucknow. **Aim and objectives:** To evaluate the knowledge, attitude and practices of asthmatic patients about asthma. **Material and methods:** A descriptive, cross sectional study was conducted among 170 confirmed cases of asthma in pulmonary

medicine department of tertiary care hospital of Lucknow, India. **Result:** The mean age of patients was 26.1 ± 3.5 years while the mean duration of illness of patients was 12.2 ± 3.3 years. The ratio of urban to rural population was 2.6: 1. Majority of patients 100 (58.8%) belonged to middle class. 70 % patients were unaware about the etiology of asthma. About 71.2 % patients believed that the disease is fatal. 25.8 % discontinued inhaled therapy due to various reasons. 58.3 % patients have tried some alternative mode of treatment. **Conclusion:** Despite its wide prevalence there is quite ignorance and misconceptions regarding the asthma. Sincere efforts are required to provide health education to the patients so as to help them in understanding the disease and its management and thus reducing the disease burden.

KEYWORDS: Asthma, allergen, inhalational therapy, metered dose inhaler, knowledge.

INTRODUCTION

Asthma is a chronic inflammatory disorder of airways and is associated with hyper-responsiveness of airway which leads to recurrent episodes of wheezing, breathlessness, tightness of chest, and coughing (especially during early morning or night).^[1,2] Asthma is one of the most common chronic respiratory disorders among all age groups.^[3] According to WHO, asthma is a major health problem.^[4] It is estimated that asthma accounts for about one in every 250 deaths worldwide. It can occur at any age but children and young adults are the commonly affected age groups.^[5] Both sexes are affected almost equally.^[6] Various advances have been made in the management of asthma but despite this the morbidity and mortality rates are not declining.^[9] Although asthma cannot be cured completely but clinical episodes can be prevented and controlled by proper management and knowledge. Proper management may relieve the symptoms of asthma and can help the patient to carry a normal social and professional life, while inadequate management can lead to a significant consequences leading to social and professional dependence and can lead to death due to respiratory failure.^[10]

Patient education is an important method for proper asthma management. An educated patient can help himself in self-management and is more likely to adhere with treatment protocols. Patient should be educated about the types of treatment available, the rationale for the inhaled drugs, different inhaler devices, and techniques.^[11] Awareness should be created about the available preventive measures including avoidance of allergen exposure and air pollution.^[12]

Many studies have been conducted worldwide to assess the knowledge and beliefs of asthmatic patients about cause, precipitating factors, pathophysiology and management of asthma.^[13] The information obtained can be used as a guide for implementation of asthma education. But there is lack of data regarding such issues in India especially in Lucknow.

The objectives of this study is to evaluate knowledge of asthmatic patients about aetiology, precipitating factors, pathogenesis and management of asthma; and to assess their attitude and behaviour towards use of inhalers, compliance with therapy.

MATERIAL AND METHODS

This is a descriptive, cross sectional study. Patients of bronchial asthma attending out and in-patient services of Department of Pulmonary Medicine, in a tertiary care hospital Lucknow, India, were included in the study. Before conducting the study the ethical approval obtained from the Institutional Ethical Committee.

The study was conducted on 170 confirmed cases of bronchial asthma. Cases were confirmed after taking proper history, performing examination and tests like spirometry. Consent was taken before enrolling the patients for the study. Patients were assessed on the basis of Questionnaire which was designed based on the parameters to be evaluated and previously available questionnaires in the literatures.

RESULT

Variables	Values
Mean age (in years)	26.1 ± 3.5 years
Male : Female	90:80 (1.12: 1)
Mean duration of illness (in years)	12.2 ± 3.3 years
Urban : Rural	123:47 (2.6 : 1)
Socio-economic status	
Upper	18 (10.6 %)
Upper middle	45 (26.8 %)
Lower middle	55 (32.4 %)
Upper lower	38 (22.4 %)
Lower	14 (8.2 %)
*According to modified Kuppaswamy Scale	

The mean age of patients was 26.1 ± 3.5 years with slight male preponderance (1.12:1, M: F ratio). Mean duration of illness of patients was 12.2 ± 3.3 years. The ratio of urban to rural population was 2.6: 1.

Majority of patients 100 (58.8%) belonged to middle class, 52 (30.6%) patients to lower class and 18 (10.6 %) patients to upper class.

Knowledge about etiology

Cause of the disease	Values (%)
Allergic	24 (14.1 %)
Hereditary	27 (15.9 %)
Don't know	119 (70 %)

Out of total patients, 14.1 % (24) patients had the knowledge about the asthma being an allergic condition, while 15.9 % (27) considered it a hereditary disease. 70 % (119) patients were unaware about the etiology of asthma. 64 % patients accepted the diagnosis of asthma while 29% refused the diagnosis.

Knowledge about the management of asthma

Out of 170 patients, 31 (18.2 %) were not prescribed any inhaled therapy while 44 (25.8 %) discontinued the inhaled therapy. The most common reasons associated with discontinuing of inhalers were cost of medications (15.6%), lack of compliance (14.8 %), dislike of medications (9.2 %), misunderstanding/lack of instruction (7.1%), and cultural issues (5.5%). Oral medication was the preferred mode of drug administration in 64.8 % patients followed by inhalational route 33.5 %. Among inhaled therapy, 61.2 % patients preferred dry powder inhalers and 38.8 % patients preferred metered dose inhalers (MDI). But around 68.3 % patients were using inhalers incorrectly.

Most of the patients (86.6 %) were of the view that they cannot live a normal life.

Myths among patients regarding asthma

Various myths	Values (%)
Disease is fatal	121 (71.2 %)
Associated with tuberculosis	11 (6.5 %)
Infectious nature of disease	93 (54.7 %)
Due to smoking	28 (16.4 %)
Due to curse of god	21 (12.4 %)

About 121 (71.2 %) patients believed that the disease is fatal. 93 (54.7 %) considered disease to be infectious while 6.5 % associated disease with tuberculosis. Some (12.4 %) patients thought it to be a curse of god.

Use of various alternative modes of treatment

Alternative modes of treatment	Values (%)
Homeopathy	43 (25.3 %)
Ayurvedic	21 (12.4 %)
Fish treatment	32 (18.8 %)
Naturopathy	3 (1.8 %)

Homeopathy was the most common (25.3 %) mode of alternative method tried by the patients followed by fish treatment (18.8 %).

DISCUSSION

The present study shows that there is a general ignorance about the disease in the asthmatic patient. Besides this there are various misconceptions associated with the disease. Around 70 % patients were unaware about the cause of the disease. About 94.3% patients were not having any knowledge about the available treatment for asthma. Disease is found to be more common in urban population with almost equal male: female distribution. About 86.6 % patients were of the view that they cannot live a normal life while 71.2 % thought it to be fatal. In our study 58.3 % patients have tried some alternative mode of treatment. 18.2 % were not prescribed with any inhaled therapy while 25.8 % discontinued inhaled therapy due to various reasons. This reflects lack of awareness among patients about the benefits of inhaled therapy. All the above findings suggests ignorance or distorted information/knowledge of patients about their disease. It also reflects the poor level of health education in our country.

CONCLUSION

Despite its wide prevalence there is quite ignorance and misconceptions regarding the asthma among the patients. Education is an essential part of treatment for all asthma patients. Health care works, government as well as patients needs to work together to develop a comprehensive programme so that patients can live a healthy and fruitful life.

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