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Clinical and demographic profile of patients diagnosed as bronchial asthma

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Abstract
The overall burden of Asthma in India is estimated at more than 15 million. In different studies gender preponderance was variable. According to an Indian study published by Jindal *et al.*, the prevalence of asthma in India is around 2.05% and advanced age, smoking, family history of asthma and unclean habits contributed to asthma. Asthma is a complex disease identifying and studying the genotypes and correlating with phenotypes can help in the study of epidemiology of asthma. Sputum differential count and exhaled nitric oxide can help in categorizing asthma. Study of Demographic data, history of atopy, family history and season of attack and time of acute episode can help us understand the illness better to give a better relief to the patient.

Keywords: Clinical, demographic, bronchial, asthama, profile

Introduction
The overall burden of Asthma in India is estimated at more than 15 million. In different studies gender preponderance was variable. As per an American study the incidence of asthma is more among boys in child hood. In the 15 to 50 years age group more common among females and reverses again after 50 years of age [1]. A. N. Agarwal study showed a prevalence of asthma of 2.38% in the general population. The figure is lower than the previous studies, but the study suggested that asthma disease burden is very high in India [2]. According to Padmaja *et al.*, prevalence of asthma is variable in different parts of the world because of interaction of genetic and environmental risk factors. According to this study maternal smoking, tobacco exposure, exposure to animals, childhood infections, occupational exposure to allergens play an important role in the development of asthma [3]. According to Maria C study onset of asthma occurs predominantly in below 16 age group [4]. The prevalence of asthma depends on the interaction of genetic and environmental factors [5]. According to an Indian study published by Jindal *et al.*, the prevalence of asthma in India is around 2.05% and advanced age, smoking, family history of asthma and unclean habits contributed to asthma [6]. One European study revealed asthma as a public health problem affecting 5-10% of population of all ages [7]. Selvakumar study in their study in children showed a history of rhinitis in 13.6% and sinusitis in 2% among asthmatic children [8]. Chest pain is an important symptom and it is necessary to exclude chest pain of cardiac aetiology [9]. Study of Demographic data, history of atopy, family history and season of attack and time of acute episode can help us understand the illness better to give a better relief to the patient.

Aims and Objectives
To study the clinical and demographic profile of patients diagnosed as bronchial asthma.

Materials and Methods
This study was done in the Department of Pulmonology, Deccan College of Medical Sciences, Hyderabad.
The study was done from September 2011 to August 2014.
The patients were diagnosed on the basis of history, physical examination and pulmonary function tests.
We have included a total of ninty hundred patients of bronchial asthma and analysed their demographic and clinical symptoms using simple spirometry.

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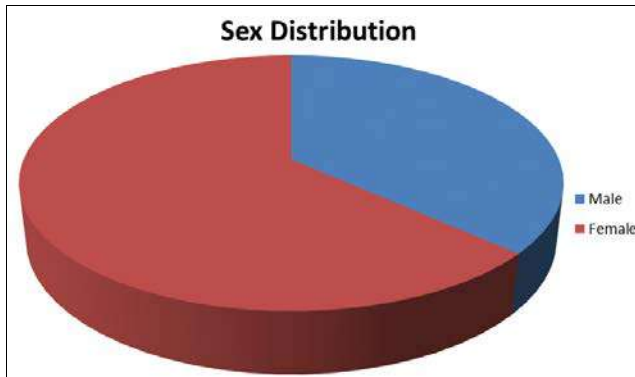Karnataka, India

Inclusion Criteria
Proved asthametics on spirometry.

Exclusion criteria
The patients who did not consent.

Results

Table 1: Age Distribution

Total	Mean age	Std deviation
90	31.82 years	± 9.27 years

Graph 1: Sex Distribution

Table 2: Family History

Present	11
Absent	79

Table 3: Frequency of symptoms

Daily	08
Once in a week	51
Twise in a week	22
Thrice or more in a week	09

Table 4: Time of attack

Morning	27
After noon	03
Evening	04
Night	56
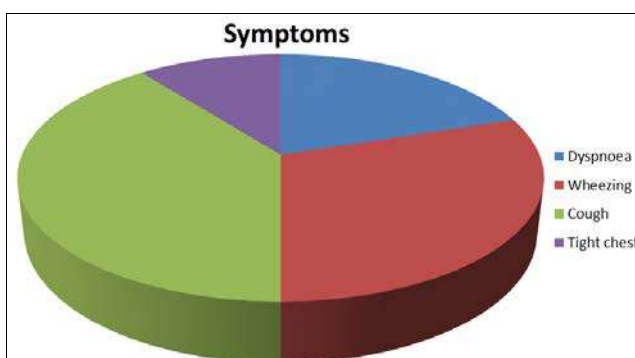
Graph 2: Symptoms

Table 5: Season of attacks

Summer	08
Winter	59
Rainy	23
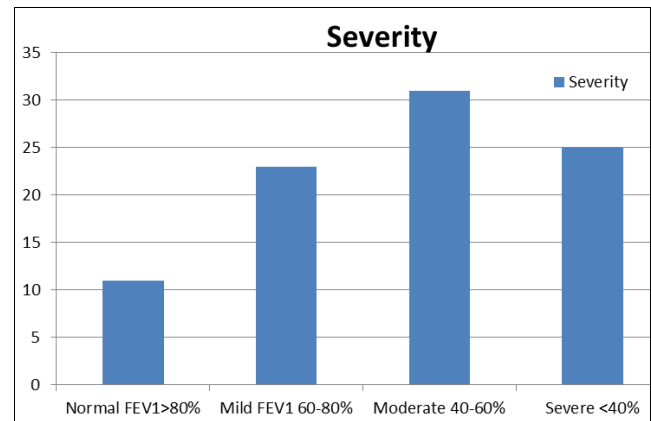
Graph 3: Severity

Table 6: Occupation

Students	21
White collar	11
Dusty environment	41
Household	17

Discussion
A study conducted by Anuradha study showed male predominance. In their study cough variant asthma was seen in 50%, nocturnal asthma in 17.5%, allergic asthma in 20.8% and occupational asthma in 10.8%. 59% of the patients showed family history of asthma. The study suggested that the patient should be aware of the triggering and aggravating factors [10]. Akimbani LJ *et al.* study in United states showed a higher outpatient visits among males but emergency department visits and hospitalization visits were the same for both males and females [11]. Alberto Papie *et al.*, concluded that asthma results from complex environmental and genetic interactions and is an important chronic non-communicable disease causing airway inflammation in both adults and children [12]. In a British study of Fleming predominant hospital admissions occurred in September and October months but deaths occurred more in November. In their study summer episodes were minimal [13]. Neil J Douglas in their study stressed the importance of nocturnal asthma as a symptom of severity that affects sleep. Asthma is a complex disease identifying and studying the genotypes and correlating with phenotypes can help in the study of epidemiology of asthma. Sputum differential count and exhaled nitric oxide can help in categorizing asthma [14].

Conclusion
Study of Demographic data, history of atopy, family history and season of attack and time of acute episode can help us understand the illness better to give a better relief to the patient.

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