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**PREVALENCE OF ASTHMA AMONG
MEDICAL STUDENTS**

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ABSTRACT:

Asthma is a disease that hurts the airways inside the lungs. It causes the tissue inside the airways to swell. Asthma also causes the bands of muscle around the airways to become narrow. This makes it hard for enough air to pass through and for the person to breathe normally. This cross-sectional study was conducted among medical students of different medical colleges. Name, age, gender, presence or absence of asthma and frequency of asthma were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. There were 100 medical students in this study. There were 60 males (60%) and 40 females (40%). The mean age of the students was 20.23±1.23 years. Out of 100 students, five were suffering from occasional asthma and they use bronchodilators for this condition. One female student had frequent attacks of asthma and keeps visiting the pulmonologist often.

KEYWORDS: ASTHMA



INTRODUCTION:

Asthma is a disease that hurts the airways inside the lungs. It causes the tissue inside the airways to swell. Asthma also causes the bands of muscle around the airways to become narrow. This makes it hard for enough air to pass through and for the person to breathe normally. Asthma also causes mucus-making cells inside the airways to make more mucus than normal. This blocks the airways, which are already very narrow during an asthma attack, and makes it even more difficult to breathe. A person having an asthma attack often makes wheezing sounds when trying to breathe. This is the sound of air trying to pass through the very narrow airway. They also have shortness of breath, which means they cannot take a full deep breath. Chest tightness may happen which feels like their chest is being squeezed. They may also cough a lot. Asthma attacks can be a medical emergency because they can be fatal (cause a person to die). There is no

cure for asthma. There are treatments such as different kinds of medicines to help people with asthma. There are also things that people with asthma can do to help themselves to keep their asthma from getting worse.

There are a lot of risk factors for getting asthma. The exact reasons for each is not yet clearly understood. Some of the factors are believed to come from genetics. A person inherits genetic mutations from one or both of their parents that may increase the chances of developing asthma. Epigenetics, which are changes in the way a gene acts, may also increase their chances of getting asthma. These epigenetic changes may also be inherited. They may happen when a baby is still growing inside its mother, or during childhood. Socioeconomic status (SES) is also believed to play a part in developing asthma. A person's socioeconomic status is based on such things as how much money



their family makes, where they live, and their education level. Race and ethnicity also may play a part. It also is related to access to medical care, personal beliefs, and dietary habits. People of lower socioeconomic status suffer higher rates of asthma, have worse outcomes, and also have higher asthma-related death rates than people of higher economic status. Early warning signs of an asthma attack are physical changes in health that a person with asthma has before they have the attack. By knowing the early warning signs a person may be able to take steps to keep from having an asthma attack or if they do have one, to keep it from getting worse (1-3). The objective of this study was to see the prevalence of asthma in medical students.

MATERIAL OF METHODS:

This cross-sectional study was conducted among medical students of different medical colleges. Name, age, gender, presence or absence of asthma and frequency of asthma

were noted on a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. The quantitative variables were presented as mean and standard deviation. The qualitative variables were presented as frequency and percentages.

RESULTS:

There were 100 medical students in this study. There were 60 males (60%) and 40 females (40%). The mean age of the students was 20.23 ± 1.23 years.

Out of 100 students, five were suffering from occasional asthma and they use bronchodilators for this condition. One female student had frequent attacks of asthma and keeps visiting the pulmonologist often.

DISCUSSION:

The global Initiative for Asthma (GINA), launched in 1993, is a collaborative effort between the World Health Organisation (WHO), the National Institutes of Health USA



(NIH), and the National Heart, Lung and Blood Institute. Its aims include to increase public awareness of asthma, encourage research into the causes for the increasing prevalence of asthma worldwide, encourage research into the links between asthma and environmental factors, improve the effectiveness of asthma management practices, reduce the mortality and morbidity rates associated with asthma, and make treatments for asthma more readily available.

One of the ways in which GINA fulfils these aims is by producing medical guidelines on the management of asthma, which based on a systematically conducted review of the most recent-worldwide literature. These guidelines are free and available to all patients and clinicians from the GINA website. The GINA main report is updated annually and aims to reflect evolving best practice as it highlights changes in asthma management strategies.

GINA established 'World Asthma Day' in 1998, with the first event organised in Barcelona, Spain. It is held annually on the first Tuesday of May, and includes the participation of more than 35 countries.

In medicine epidemiology is the study of what causes diseases and medical conditions, how often they happen, where they happen and who they happen to.

It is more common in developed countries than developing countries. The United States and Canada have some of the highest asthma rates in the world even though they are not poor countries. In Africa the country of South Africa has the highest asthma rate on the whole continent even though it is one of the richest countries.

More than 80% of the people who die from asthma are usually from low and middle income countries, but not always, as South Africa has the fourth highest death rate in the world even though it is one of the richer countries in the world. In the United



States the death rates are higher for females, adults and people of African descent.

As of 2011, 235–300 million people worldwide are affected by asthma, and approximately 250,000 people die per year from the disease. Rates vary between countries with prevalences between 1 and 18%.

The amount of asthma cases reported each year has gotten much higher between the 1960s and 2008. Rates of asthma have plateaued in the developed world since the mid-1990s with recent increases primarily in the developing world. Asthma affects approximately 7% of the population of the United States and 5% of people in the United Kingdom. Canada, Australia and New Zealand have rates of about 14–15% (4-6).

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