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THE KNOWLEDGE REGARDING BRONCHIAL ASTHMA AMONG ASTHMATIC PATIENTS IN A SELECTED HOSPITAL AT KANPUR, UTTAR PRADESH WITH A VIEW TO DEVELOP AN EDUCATIONAL GUIDE

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**ABSTRACT** 

According to the Global Strategy for Asthma Management and Prevention Guidelines, asthma is a chronic inflammatory disease of the airways that is characterized by episodes of wheezing, dyspnea, chest tightness, coughing, especially at night or in the early morning, and increased airway hyperresponsiveness. Acute bronco-constriction, persistent mucus plug development, and airway wall edema or remodeling are among ways whereby airway inflammation limits airflow.

A descriptive survey approach was used for this study and the study was conducted in a selected hospital in Kanpur. A total of 50 samples were selected using purposive sampling technique. Data was collected by structured knowledge questionnaire. Formal written permission from the concerned authority of the hospital and informed consent from the patients were obtained prior to data collection process. Findings of this study have shown that the knowledge regarding bronchial asthma among asthmatic patients was less (Mean-10.22, Standard Deviation-2.46) and therefore support the need to develop the health educational material to increase the knowledge of patients regarding bronchial asthma. Educating the patients and providing them with correct information can help them to prevent complications. The investigator with the help of experts developed an educational guide on bronchial asthma to provide knowledge to asthmatic patients.

Key Words: Bronchial asthma, educational guide, knowledge, descriptive study.

**INTRODUCTION** 

Worldwide, asthma is a relatively prevalent condition. Research has shown that in the majority of countries, the prevalence of asthma has increased by over seven percent over the past

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three decades. Compared to rural areas, metropolitan areas are more likely to see the sharp rise in asthma cases. India's rising asthma rates may be primarily caused by two factors: increasing air pollution and upper respiratory tract infections. Although asthma can strike anyone at any age, over 50% of people have it before the age of ten, and more than 25% get it before the age of forty<sup>1</sup>.

Using a unified diagnosis and consistent technique using a validated questionnaire, a population research of 73,605 people conducted concurrently at four main sites in India revealed a 2.4% prevalence of "ever asthma." Among the several risk variables that were determined to be significant, exposure to ambient tobacco smoke throughout childhood, either alone or in combination over childhood and adulthood, was crucial for the onset of asthma and the rise in asthma-related morbidity. Concern over the shift in the clinical range and epidemiology of asthma is also widespread. Both the overall prevalence and the number of severe, refractory, and deadly asthma cases appear to have increased in a number of geographic areas<sup>2</sup>.

## **NEED FOR THE STUDY**

A long-term inflammatory condition of the airways is asthma. A rise in airway hyperresponsiveness brought on by the chronic inflammation results in frequent episodes of coughing, chest tightness, wheezing, and dyspnea, especially at night or in the early morning. Widespread but variable airflow blockage is linked to these episodes, and it is typically reversible with therapy or on its own

Millions of people worldwide suffer from asthma, one of the main health issues. The prevalence is 10% in children and 5% in adults. Over the past few decades, the prevalence of asthma has significantly increased. In central and southern Asia, the prevalence of asthma varies from 1.5% in Nepal to 4.6% in Uzbekistan. It has recently been acknowledged that the burden of health care has increased along with morbidity and mortality<sup>3</sup>.

In Birmingham (2003), a correlational descriptive study was carried out to investigate the association between social support, self-management, and asthma knowledge among African American teenagers with asthma. Purposive sampling was used in the study, and 53 identified adolescents with asthma from Alabama's southern metropolitan school system took part. A standardized asthma questionnaire was used to gauge participants' knowledge of asthma. The

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findings demonstrated that social support and asthma knowledge were significantly positively correlated with asthma self-management practices, accounting for 14% of the variability in self-management practices<sup>4</sup>.

## PROBLEM STATEMENT

"A study to assess the knowledge regarding bronchial asthma among asthmatic patients in a selected hospital at Kanpur with a view to develop an educational guide"

## **OBJECTIVES**

- To assess the knowledge regarding bronchial asthma among asthmatic patients, with the help of a structured knowledge questionnaire.
- To find out the association between mean knowledge scores and selected demographic variables of asthmatic patients.
- To prepare an educational guide regarding bronchial asthma.

## **HYPOTHESIS**

H<sub>1</sub>: There will be a significant association between knowledge scores and selected demographic variables of hospitalized asthmatic patients.

## **METHODS AND MATERIALS**

## Research approach

In the present study a descriptive survey approach was adopted.

## Research design

A descriptive survey design was adopted for the study.

# **SETTING OF THE STUDY**

The study setting for the present study was Rama Hospital and research center Kanpur.

## **VARIABLES**

## **Dependent variable**

In this study, knowledge of bronchial asthma was the dependent variable.

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## **Demographic variables**

In this study, the demographic variables are age of the patient, gender, educational status, and duration of illness.

## **POPULATION**

The population for this study comprises of bronchial asthma patients.

# **Target population**

In this study the target population wasbronchial asthma patients from the selected hospital Kanpur, UP.

# **Accessible Population**

The accessible population is bronchial asthma patients from Rama Hospital, Kanpur, UP.

## **SAMPLE**

The sample for the present study comprises of bronchial asthma patients in Rama Hospital and research centre.

## **SAMPLE SIZE**

The sample size for the present study consists of 50 bronchial asthma patients who will fulfill the inclusion and exclusion criteria.

## **SAMPLING TECHNIQUES**

In the present study, purposive sampling technique was used to select50 bronchial asthma patients.

## **Inclusion criteria**

Bronchial Asthma Patients: -

- Who are admitted to the selected hospital at Kanpur.
- Who are willing to participate in the study.
- who knows to read and write English& Hindi

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#### **Exclusion Criteria**

Bronchial Asthma Patients: -

- who are not willing to participate in the study
- who are below 20 years and above 60 years of age
- who are exposed to previous teaching programme on bronchial asthma.

## METHODS OF DATA COLLECTION

Assessment of knowledge regarding the bronchial asthma was measured by survey method with the help of administering self structured questionnaire.

## DEVELOPMENT OF RESEARCH TOOL

On the basis of developed framework, to achieve the objectives of the study, A self-structured knowledge questionnaire was prepared to assess the knowledge regarding the bronchial asthma.

## **DESCRIPTION OF THE TOOL**

Section A: A self-structured questionnaire was used to collect socio-demographic data.

**Section B:** A self-structured questionnaire was used to assess the knowledge bronchial asthma.

## **RESULTS & FINDINGS**

#### **Section A:**

# The major findings of the present study are;

- Majority 36% samples were between the age group of 21-30 years.
- Majority 52.% samples were males.
- Majority 64 % samples belonged to Hindu religion.
- Majority 30% samples have middle school education.
- Majority 32% samples don't have employment.
- Majority 58%sample's monthly income was below 4000 Rs.
- Majority 64% samples are married.

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- Majority 66% samples belong to rural area.
- Majority 46% samples have less than 3 year duration of illness.
- Majority 52% samples don't have any family history of asthma.

## **Section B:**

## Knowledge regarding bronchial asthma

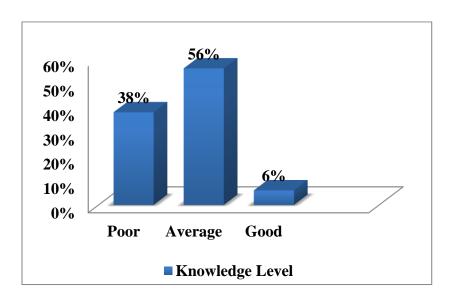


Figure 1: Bar Diagram Showing Distribution of Samples According to Level of Knowledge

Data from the above figure depicts that in 38% subjects had poor knowledge, 56% subjects had average knowledge and 6% subjects had good knowledge regarding bronchial asthma.

## **Section C:**

# Association between knowledge level regarding bronchial asthma and selected demographic variables

Sl. No	Variables	>mean	<mean< th=""><th>χ² value</th><th>Inference</th></mean<>	χ² value	Inference
1	Age in years	5	37	0.241	Not
		1	7		Significant
2	Gender	3	23	0.108	Not
		3	21		Significant

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3.	Educational	2	12	0.033	Not
	Qualification				Significant
		4	32		
4	Duration of illness	4	37	0.225	Not
		2	7		Significant
5	Marital status	3	29	0.274	Not
		2	16		Significant

From the above mentioned statistical finding, it shows that, there is no significant association between the knowledge of bronchial asthma with their selected demographic variables. Hence the  $H_1$  was rejected.

## **NURSING IMPLICATIONS**

## **Nursing education:**

A nurse as an educator has a vital role to play in imparting knowledge regarding bronchial asthma among people in order to reduce the prevalence of asthma. The findings of the study can be used by the nurse educator to educate the student nurses, which will help them to provide an effective nursing care and to practice the management of bronchial asthma.

## **Nursing administration:**

Nursing administrator can influence the quality of nursing care in hospitals, nursing homes and community by planning health programmes and supervising care at different levels. The nurse administrator can also co-ordinate and discuss about bronchial asthma and its consequences at various forums and meetings so that health programs are organized at various levels.

## **Nursing practice**

The findings of the study could be utilized as a basis for orientation programs and in-service education of the community health nurses so that constant awareness and clear understanding may be created regarding bronchial asthma.

## **Nursing research:**

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Today nursing is an evidence-based practice, so it is important to carry out research studies to improve nursing care and improve the scientific knowledge base of care. Asthma is a major health problem throughout the world; hence it is more focused on nursing research. This could help the researcher to increase the awareness regarding bronchial asthma among people.

## **Recommendations:**

- A study can be undertaken with a large sample to generalize the findings
- ➤ An experimental study can be undertaken with control group
- A comparative study can be done between the rural and urban people.
- ➤ A study can be conducted to assess the knowledge and attitude of people regarding bronchial asthma.

#### **Conclusion:**

The study was conducted to assess the knowledge regarding bronchial asthma among asthmatic patients in a selected hospital at Kanpur with a view to develop an educational guide. On the basis of findings of the study showed that, in the survey, 38% subjects had poor knowledge, 56% subjects had average knowledge and 6% subjects had good knowledge regarding bronchial asthma. Thus, this study revealed that there was a need of educational guide regarding bronchial asthma to enhance their knowledge.

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