

# DETERMINE THE LEVEL OF KNOWLEDGE AND PRACTICE AMONG ASTHMATIC PATIENTS ATTENDING CHEST OPD AT SELECTED HOSPITALS, CHENNAI

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**Abstract-** *Bronchial Asthma is a thwarting respiratory sickness. Asthma is a chronic disease that affects the airways. Deterioration of the Lung function with productive cough will have poor treatment control. Most of the people are still visiting the physicians twice monthly and on maintenance drugs only. Most asthma deaths are preventable in order to avoid unusual deaths.. Hence a study was conducted to determine the level of knowledge and practice among asthmatic patients. The objectives of the study were to determine the level of knowledge and practice among asthmatic patients. A Qualitative study design was adopted and the study was conducted in Chest and TB OPD, Sri Ramachandra Hospital, Chennai, Tamilnadu. 40 asthmatic patients were selected for the study by using convenient sampling technique. The result suggests that there is an inadequate level of knowledge and the poor level of practice among asthmatic patients. There is a significant association between the level of knowledge and practice with the selected demographic variables among the asthmatic patient. Hence the Nurses play an vital role in building their knowledge and understanding the importance of prevention of complications of asthma. This can be facilitated by motivating the nurses to provide outpatient based education programme to improve their health.*

**Keywords:** *Knowledge, Practice, Bronchial asthma*

## I. INTRODUCTION

The term Bronchial asthma refers to an intermittent, reversible, obstructive airway disease. It is one of the most common disease with 4 to 5 % are being affected. It is perhaps the treatable condition that is mounting in terms of prevalence, severity and mortality.

There has been a dramatic increase in the amount of research related to asthma. Recently there have been important advances in the understanding of some of the basic mechanisms involved in the pathophysiology of asthma and this has led to the appropriate use of existing treatments and in the future will lead to the development of new therapies.

Education programme on bronchial asthma and its self management helps to reduce asthma severity. Thus the researcher felt that assessing the knowledge and practice among patients with bronchial asthma may help them to overcome the physical and psychological issues and will have better quality of life.

Scherer YK (2001) examined the relationship between knowledge, attitudes, and self-efficacy and compliance with prescribed medical regimen, number of emergency department (ED) visits, and hospitalizations among 29 adults with asthma by survey design. Higher their knowledge and self-efficacy scores, optimistic towards their illness. In addition, higher self-efficacy scores correlated with lower numbers of hospitalizations.

Hani Lababidi (2014) , conducted a study to characterize the current practice of asthma among general practitioners (GPs) in Lebanon. The study findings reveal that totally, 302 completed the questionnaire achieving a response rate of 91.5%. Chest radiography was the most commonly used diagnostic test (98%), while stain for eosinophilia was the less commonly used (7.9%). For clinical monitoring, cough and wheezing (98.7%) were mostly assessed. Short acting inhaled  $\beta_2$ -agonists were often the most prescribed (94.3%) followed by inhaled corticosteroids (87.4%) then by long acting  $\beta$ -agonist (LABA) and theophylline (27.5% and 20.9%, respectively). Moreover, 10% of GPs provided formal asthma education program, 72.2% attended professional education and 65% adopted guidelines. . Therefore, it is recommended to improve monitoring parameters, implement the asthma guidelines nationally and improve patient education.

Thus the researcher felt that assessing the knowledge and practice among patients with bronchial asthma is essential to improve their well being and prevent from complications.

### 1.1 Objectives

- Assess the level of knowledge among patients with bronchial asthma
- Assess the level of practice among patients with bronchial asthma
- Associate the selected demographic variables with knowledge and practice among patients with bronchial asthma

### 1.2 Related Studies

- Knowledge about bronchial asthma
- Practice about bronchial asthma

## II. LITERATURE REVIEW

### 2.1 Conceptual framework

The conceptual framework for this study was derived from Nightingale's environment model. She identified good ventilation, air, bedding, cleanliness, nutrition and health as major areas of the environment. Based on this theory, the core and the central aspect of this framework is the patient. The Nurse is the person who provides care to the patient maintaining a balance between the environment and the various aspects of the life situation, eg, ventilation, nutrition.

The Nurse focuses that the patients has to follow preventive measures when coming in contact with the polluted surroundings. She gives more importance to nutrition aspect by providing education about the diets to be avoided and taken by the patients. The clean environment prevents the chances of being affected with bronchial asthma. She stimulates the patients to keep the bed away from the contact with dust. Thus the Nurse coordinates that keeping in a balance with all these precautionary measures of life maintains person to be in good health.

## III. METHODOLOGY

The research design is qualitative design. The settings of the study are Chest and TB OPD of Sri Ramachandra Hospital, Chennai. Population of the study included is patients with mild, moderate, severe persistent asthma. The samples selected for the study were patients attending Chest OPD. Inclusion criteria included patients who belong to the age of 20 to 60 years, who could understand Tamil or English and willing to participate. Exclusion criteria were those who were not willing to participate, or suffering from any chronic illness or disability. The sample size was 40 and the sampling technique used was convenience sampling technique.

### 3.1 Description of Tool

SECTION A: Demographic variables of the patients with bronchial asthma consist of age, education, locality, occupation, income, marital status, type of family, number of children, family history of asthma etc.

SECTION B: Semi structured questionnaire prepared by the investigator consisting of 30 in knowledge and 30 questions related to the practice. The tool was validated by the experts of Department of Medical surgical Nursing. The tool has got the following categories the questions related to the myths of asthma, definition, causes, treatment, preventive and control measures and likewise the practice questions too.

Each knowledge and practice statement has got score for the right answer has 1 and 0 for wrong answer. The scoring has been interpreted as the score of <50 % is inadequate knowledge and poor practice, 50-75 % as moderately adequate and good practice and >75 % as adequate knowledge and excellent practice.

### 3.2 Data collection procedure

The study was conducted for a period of 4 weeks. Permission to conduct the study was obtained through proper channel. Patients with bronchial asthma who met the inclusion criteria and those with the history of bronchial asthma for more than 5 years were selected for this study. Using the tool, the data were collected from the patient to find out their knowledge and practice regarding bronchial asthma.

## IV. RESULTS

The major findings of the study are depicted below in tables and graphs.

*Table 1: Frequency and percentage distribution of the demographic variables among patients with bronchial asthma.*

Demographic Variables	N=40	
	No.	%
<i>Age (in yrs)</i>		
a. 21-30	4	10
b. 31-40	12	30
c. 41-50	15	38

d. 51-60	3	7	e.> 20,001	11	26
e.>61	6	15	<b>Residence</b>		
<b>Gender</b>			a. Rural	12	30
a. Male	23	57	b. Semi-urban	18	45
b. Female	17	43	c. Urban	10	25
<b>Educational status</b>			<b>Type of family</b>		
a. No formal education	12	30	a. Joint	13	33
b. Primary school	10	25	b. Nuclear	12	30
c. High school	8	20	c. Extended	15	37
d. Higher secondary	2	5	<b>Smoking habit</b>		
e. Degree	8	20	a. Non smoker	18	45
<b>Marital status</b>			b. Cigarette smoker	07	18
a. Married	10	25	c. Bidi smoker	15	37
b. Unmarried	13	33	<b>Family history of asthma</b>		
c. Divorced	-	-	a. First degree relative	28	70
d. Widow	17	43	b. No First degree relative	12	30
<b>Occupation</b>			<b>Presence of co-morbid medical illness</b>		
a. Coolie	10	25	a. Diabetes mellitus	16	40
b. unskilled	7	18	b. Hypertension	8	20
c. Skilled	12	30	c. Cardiac disease	10	25
d. Professional	11	28	d. Bone disease	-	-
<b>Income ( in Rs.) per month</b>			e. Gastro-intestinal disease	6	15
a. ≤ 5000	5	13			
b. 5001- 10,000	15	38			
c. 10,001-15,0000	6	15			
d. 15,001-20,000	3	8			

Table- 1 depicts the frequency and percentage distribution of the demographic variables of patients with bronchial asthma. Among which 15 (38 %) of them belongs to the age group of 41-50 years and 23 (57 %) of them are male patients, and majority of 12 (30 %) had no formal education, 12 (30 %) are skilled labors with the income of Rs.5001 to 10,000 are 15 (38

%),18 (45 %) are living in the rural area, 15 (37 %) has habit of beedi smoker occasionally, 28 (70 %) had family history of first degree relative with bronchial asthma, 16 (40 %) has comorbid illness of diabetes mellitus.

Table 2: Mean and standard deviation of the respondents (N= 40)

VARIABLES	MEAN	STANDARD DEVIATION
KNOWLEDGE	60.10	18.84
PRACTICE	66.46	19.01

The mean and standard deviation of the knowledge variable is 60.10 and 18.84; practice is 66.46 and 19.01 respectively.

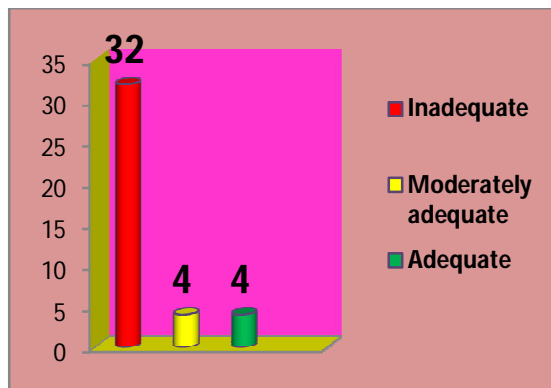


Fig 1 : Frequency and percentage distribution of the level of knowledge among patients with bronchial asthma.

This Fig : 1 depicts that 32 (80 %) had inadequate knowledge and 4 (10 %) had moderately adequate and 4 (10%) only had adequate level of knowledge regarding bronchial asthma.

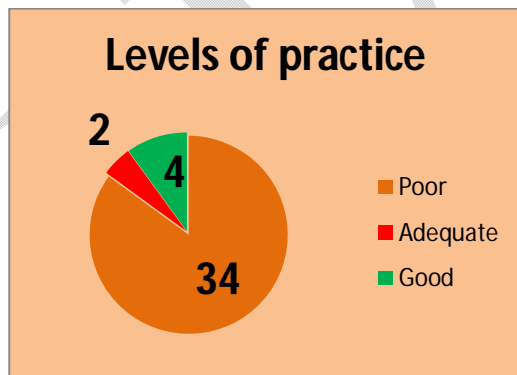


Fig 2: Frequency and percentage distribution of the level of practice among patients with bronchial asthma.

This Fig : 2 depicts that 34 (85 %) of them had poor levels of practice; 4(10 %) and 2(5 %) had adequate and good levels of practice regarding bronchial asthma.

## V. DISCUSSION

The descriptive statistics reveals that 32 (80 %) had inadequate knowledge and 4 (10 %) had moderately adequate and 4 (10 %) only had adequate level of knowledge regarding bronchial asthma.

Similarly, 34 (85 %) of them had poor levels of practice; 4(10 %) and 2(5 %) had adequate and good levels of practice regarding bronchial asthma. Journal of asthma (2011, March ) the study was conducted to explore among 23332 general practitioners behaviors, asthma patients knowledge requirements, and failures in patients' knowledge. The result suggest that the three topics on which the patient felt less informed were asthma control, integration of asthma into daily life and periodic checkups. Hence the nurse based education programme is crucial to improve their well-being.

There is an significant association between the age, residence, sex, occupation and co-morbid illness with the level of knowledge and practice of bronchial asthma.

## VI. CONCLUSION

The patients with bronchial asthma will have impairment in their physical, psychological and social dimensions. The findings of the present study suggest that even though the attending physician provides education to them during the consultation that is not enough for them to alleviate their myths. Hence separate education programme on the disease process is essential in order to alleviate their symptoms and avoid complications. The findings of the present study suggest that the nurse led education programme is essential key in the asthma management plan and to improve their quality of life.

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