# Factors Affecting Compliance To Self Management Of Bronchial Asthma As Perceived By The Asthmatic Patients Receiving Care In Selected Hospitals, Chennai



## **MEDICAL SCIENCE**

KEYWORDS: FACTORS, COMPLIANCE, SELF MANAGEMENT, BRONCHIAL ASTHMA

PUSHPAKALA JAGANNATHAN ASSOCIATE PROFESSOR, CHETTINAD HOSPITAL AND RESEARCH INSTITUTE, RAJIV GANDHI SALAI, KELAMBAKKAM, KANCHIPURAM DIST-603103

## **ABSTRACT**

Aim: To explore the factors affecting compliance to self management of bronchial asthma as perceived by the asthmatic patients receiving care in selected hospitals, Chennai. Methods and Materials: A descriptive exploratory approach was used for the present study. The participants were about 60 in number and convenience sampling technique was used. Data was collected by administering a structured open ended questionnaire. Results: The result shown that 59% of them unaware about self management of asthma, 48% of them non-compliance to medication regimen, inhaler technique and breathing exercise, 52% of them non-compliance to regular follow-up. The asthmatic patients perceived reasons for non-compliance to medication regimen, inhaler technique and breathing exercise was costly medicine, inadequate skill in using in inhalers and breathing exercise, ever thought by health professionals and busy work schedule. The perceived reasons for non-compliance to regular follow-up because of disturbance in work schedule, hospital is away from home and unnecessary without any symptoms. There was a significant association between age (0.0251), Gender (0.019), monthly income (0.034), occupation (0.0219), duration of illness (0.05) with the perceived reasons of non-compliance at 0.005 level. Conclusion: The asthma patients in the need of effective planned teaching programme on self mnanagement of asthma to prevent recurrent hospitalisation.

#### INTRODUCTION

Bronchial Asthma is one of the chronic inflammatory disorders in which inflammation causes varying degrees of obstruction in the airway. One in every ten adults and one in every thirteen children currently has asthma. In Asia, the prevalence of asthma varies between 2% and 23% in western countries. Asthma cannot be cured, the good news is that it can be well controlled with self management. Complaince with self management is seen as self imposed discipline, which is essential for maintaining quality of life. Poor compliance is not always because of poor knowledge but may be influenced by the other factors such as attitude, personal and psychological attributes of the person. Nurses have a unique responsibility as front line care givers to recognize and assess effectively to prevent the widespread problem of uncontrolled asthma.

Almost 75% of admissions for asthma are avoidable, and potentially preventable factors are common in deaths from asthma. At least 40% of people with asthma do not react appropriately when their symptoms worsen, and over 50% of patients admitted with acute asthma have had alarming symptoms for at least a week before admission. As many as 60% of asthmatic patients are poor at judging their dyspnoea. Self management of asthma involves the patient making therapeutic, behavioural, and environmental adjustments in accordance with advice from healthcare professionals. Guided self management of asthma is a treatment strategy in which patients are taught to act appropriately when the first signs of asthma exacerbations appear. Hence the current study seeks to explore factors affecting compliance to self management of bronchial asthma as perceived by the patients receiving care among asthmatic patients.

## MATERIALS AND METHODS:

- **Setting:** The study was conducted in voluntary health service, adyar, southern railway headquarters hospital, government general hospital, Chrompet, Chennai.
- Research approach: The approach used for this study was descriptive exploratory approach.
- Research design: Descriptive design
- Sample: 60 bronchial asthma patients.
- Sampling technique: Convenience sampling method.

#### • Inclusion criteria:

The patients diagnosed as asthmatic within the age group of 25-  $60~\mathrm{yrs}$ .

Asthmatic patients' who were admitted in the ward and attending outpatient department in selected hospitals.

## • Exclusion criteria

Newly diagnosed asthmatic patients Critically ill patients.

#### • Data collection instruments:

Demographic proforma Open ended questionnaire

### Description of tool:

The tool consisted of two aspects:

Section 1: It is comprised of Baseline proforma with age, gender, educational status, occupation, monthly income, marital status, personal habits, family history of asthma, duration of illness and frequency of health check up.

Section 2: open ended questionnaire on factors affecting compliance to self management of asthma that include knowledge about asthma, early detection of symptoms, preventive measures, reasons for non compliance to to medication regimen, inhaler technique and breathing exercise, regular follow-up.

#### **Data Collection Procedure**

The investigator obtained permission to conduct the study from the concerned hospital authority and informed consent was taken from subjects. Convenience sampling technique was used. Data was collected through a open ended questionnaire on factors affecting compliance to self management of asthma that include knowledge about asthma, early detection of symptoms, preventive measures, reasons for non compliance to to medication regimen, inhaler technique and breathing exercise, regular follow-up. The interview was conducted and collected data analysed by using descriptive and inferential statistics.

## **RESULTS:**

A total of 60 asthmatic patients were included in the study. This included 25 (38%) between 46 -55 years. More than half of them 36 (60%) were male. With regard to education status, 19 (32%) of them had completed primary school, occupation, 40(67%) were employed. With regard to monthly income, 29 (48%) were getting between Rs.1001-3000. More than half of them 49 (81%) was married.28 (47%) of them having asthma between 1-3 years, 25(42%) were visited hospital only when they had severe wheezing. More than half of them 37 (62%) had family history of asthma.

The result also reveals that 59% of them unaware about self management of asthma, 48% of them non-compliance to medication regimen, inhaler technique and breathing exercise, 52%

of them non-compliance to regular follow-up. The asthmatic patients perceived reasons for non-compliance to medication regimen, inhaler technique and breathing exercise was costly medicine, inadequate skill in using in inhalers and breathing exercise, ever thought by health professionals and busy work schedule, tend to forget, not necessary without symptoms. The perceived reasons for non-compliance to regular follow-up because of disturbance in work schedule, hospital are away from home and hospital visit unnecessary without any symptoms. There was a significant association between age (0.0251), Gender (0.019), monthly income (0.034), occupation (0.0219), duration of illness (0.05) with the perceived reasons of non-compliance at 0.005 level.

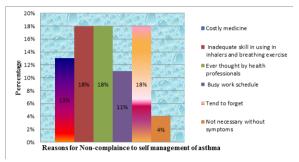


Fig 1: Reasons for Non-compliance to self management of asthma as perceived by asthmatic patients

#### DISCUSSION

The study was conducted to explore the factors influencing self management of bronchial asthma as perceived by the asthmatic patients receiving care in selected hospitals, Chennai. The result also reveals that 59% of them unaware about self management of asthma, 48% of them non-compliance to medication regimen, inhaler technique and breathing exercise, 52% of them non-compliance to regular follow-up.Similar study findings were obtained in a Europe. The study was carried out by means of a structured clinical interview in 971 subjects with asthma from 12 countries who participated in both the European Community Respiratory Health Survey: ECRHS-I (1990-94) and ECRHS-II (1998-2002). Subjects were considered adherent if they reported they normally took all the prescribed drugs. A logistic model was used to study the adjusted effect of the determinants. The findings highlight the key role of doctors and nurses in educating and regularly reviewing the patients and support the efforts for an improvement of clinical communication.5

#### CONCLUSION:

In conclusion the result shown that 59% of them unaware about self management of asthma, 48% of them non-compliance to medication regimen, inhaler technique and breathing exercise, 52% of them non-compliance to regular follow-up. Asthma selfmanagement education is an essential component of asthma disease management. The evidence is strong that there should be a collaborative relationship between the patient and provider, and that the patient should be an active participant in establishing the self-management goals and the asthma action plan. All types of healthcare providers, at every point of care, should establish and maintain a patient-provider partnership that emphasizes education and education-reinforcement that encourages self-management. Asthma self-management education improves asthma outcomes and saves money. Reimbursement for asthma education has not yet become routine.6 It must become routine to minimise recurrent hospitalisation of asthmatic patients.

## REFERENCE

1. Meza C, Gershwin E. Why is asthma becoming more of a problem?. Pulm Med 1997; 3:6-9. | 2. Wilson SR, Scamagas P, German DF, et al. A controlled trial of two forms of self-management education for adults with asthma. Am J Med 1993; 94:564-76. | 3. A Lahdensuo. Guided self management of asthma—how to do it. BMJ. 1999 Sep 18; 319(7212): 759-760. | 4. Prabhakaran L, Lim G, Abisheganaden J, Chee CBE, Choo YM. Impact os an asthma education programme on patients' knowledge, inhaler technique and compliance to treatment. Singapore Med J 2006; 47(3):225-31. | 5. Angelo G. Corsicoa, Lucia Cazzolettib.Roberto de Marco. Factors affecting adherence to asthma treatment in an international cohort of young and middle-aged adults.2007; 101(6):1363-1367. | 6. Ms Jones presented a version of this paper at the 41st RESPIRATORY CARE Journal Conference, "Meeting the Challenges of Asthma," held September28-30, 2007, in Scottsdale, Arizona. | 7. Centers for Disease Control and Prevention. Behavioural Risk Factor Surveillance System (BRFSS) Asthma Prevalence Data, 2010. Available from: http://www.cdc.gov/asthma/brfss/default.htm#2010 [Last accessed: May 25. 2012]. |