

Original Research Article

A study on perception of illness among Bronchial asthma patients

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Abstract

Introduction: Bronchial asthma is a major chronic illness and its prevalence is increasing. The control of the symptoms of asthma is related to the perception of its symptoms. *Methodology:* A descriptive study was conducted in a tertiary care hospital for a period of 3 months. 130 patients with bronchial asthma, selected by purposive sampling were interviewed using the standard Illness Perception Questionnaire – Revised (IPQ - R). *Results:* 42 (32.30%) were males and 88 (67.70%) females met the inclusion criteria. The mean age of study subjects was 35.75±15.89 years. 124 (95.38%) subjects experienced breathlessness and 120 (92.30%) experienced wheezing; however, only 62(47.69%) and 84 (64.61%) subjects respectively, related these symptoms to asthma. Possible causes of asthma according to the study subjects were pollution (113, 86.92%), diet (96, 73.85%), poor medical care in the past (50, 38.46%), hereditary (48, 36.92%) and stress/worry (41, 31.54%). *Conclusion:* Patients with bronchial asthma patients have poor perception of their illness.

Key words: Bronchial asthma, Illness perception, Asthma control, Asthma management

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Introduction

The World Health Organization (WHO) has estimated that 300 million people around the world suffer from asthma.^{1, 2} It is a major public health problem worldwide. The prevalence of asthma is increasing both in developed and developing countries. Bronchial asthma is a chronic inflammatory disorder of the airways characterized by cough, breathlessness, wheezing and chest tightness.³ In most of patients, symptoms can be controlled with medication. However, compliance

with these medications is a major problem in asthma management. The control of asthma symptoms in a patient is related to the perception of their symptoms.

Illness Perception Questionnaire (IPQ) is a new method to assess the cognitive representation of illness which in turn determines the ability of a patient to cope with his/her illness.⁴ Poor perception and understanding of symptoms is related to poor compliance with treatment and thus frequent exacerbations of symptoms, leading to near death or even death in some cases.^{5, 6} Only few

studies have been conducted in India in relation to illness perception among patients with bronchial asthma. This study was therefore conducted with the aim of assessing the perception of illness among patients with bronchial asthma patients.

Materials and Methods

It was a descriptive study was conducted in a tertiary care hospital for a period of 3 months following approval from the Institutional ethics committee. The sample size of 130 was calculated based on the assumption that the prevalence of bronchial asthma is 9% (as determined in previous studies), with a precision of 5 %.. Patients aged 18-65 years, attending the outpatient clinic of the Department of Respiratory Medicine, with an established diagnosis of mild to moderate persistent bronchial asthma (GINA Guidelines), and consenting to participation in the study, were included. Seriously ill patients were excluded from the study. Purposive sampling was employed to obtain the appropriate sample. Standard Illness Perception Questionnaire – Revised (IPQ-R) developed by Weinman.J et.al⁷ was administered to all the study subjects. Information regarding baseline characteristics and each patient’s views about their illness and the possible causes of asthma were collected by the trained investigator in the local language. SPSS version 16.0 was used for data entry and analysis. Descriptive statistics were used.

Results

There were 42 (32.30%) males and 88 (67.70%) females. Majority of the subjects were aged between 21-30 years (34, 26.15%). The mean age of the study subjects was 35.75 ±15.89 yrs (Mean ±SD). Majority of patients i.e. 40 (30.77%) have had studied up to primary/middle school and 44 (33.84%) were unskilled workers. (Table 1).

It was observed that 124 (95.38%) subjects experienced breathlessness but only 62 (47.69%) of these related this symptom with asthma. 120 subjects (92.30%) experienced wheezing but only 84 (64.61%) of these attributed this symptom to

asthma. 118 (90.76 %) of subjects experienced cough but only 66 (50.76 %) related this to asthma. The possible causes of asthma according to the study subjects were pollution (113 subjects, 86.92%), diet (96 subjects, 73.85%), poor medical care in the past (50 subjects, 38.46%), hereditary (48 subjects, 36.92%) and stress/worry (41 subjects, 31.54%). (Table 2).

Table 1: Basic Demographic profile of study subjects

Parameters		Number	Percentage
Sex	Male	42	32.30
	Female	88	67.70
Mean Age (yrs) ± SD		35.75 ±15.89	
Education	Primary/middle school	40	30.77
Occupation	Unskilled	44	33.84

Table – 2: Distribution of study subjects according to possible causes of asthma (N=130)

Possible causes	Number*	Percentages
Pollution	113	86.92
Diet	96	73.85
Poor medical care in the past	50	38.46
Hereditary	48	36.92
Stress/worry	41	31.54
Ageing	20	15.38
Alcohol	11	8.46
Smoking	15	11.54

*Multiple responses

It was observed that 72 (55.38%) expected to have their asthma for the rest of the life, 48 (36.92%) believe that asthma is a serious condition, 62 subjects (56.36%) expected to suffer from the disease for the remainder of their lifetime, 83 patients (63.84 %) were of the opinion that the disease had serious financial consequences, 88 (67.70%) believed that asthma seriously affects quality of life, 112 patients (86.15%) reported a feeling of depression when they thought about their disease. Only 52 (40.76%) believed that they can

control their asthma symptoms with available medications. 98 (75.38%) feels that they will become addicted to inhalers if take long time, 80 (61.53%) believe that asthma medications have side effects and 112 (86.15%) thinks they are suffering from asthma only when they have symptoms.(Table 3).

Table – 3 : Distribution of study subjects according to their views about Asthma (N=130)

Patients views about their	Agree*	Percentage
I expect to have this asthma for the rest of my life	72	55.38
My asthma is a serious condition	48	36.92
My asthma has serious financial consequences	83	63.84
My asthma seriously affects my quality of life	88	67.70
I can control my asthma	52	40.76
I get depressed when I think about	112	86.15
My treatment can cause side effects	80	61.53
I can cure my asthma with available medications	47	36.15
I become addicted to medications	98	75.38
I am suffering from my asthma only when I have symptoms	112	86.15

*Multiple responses

Discussion

The success of the treatment of asthma is dependent upon the compliance of the patient to treatment, which in turn depends upon the patient's perception of asthma symptoms. In this study 47.69% of subjects attributed their symptom of breathlessness to asthma. Similarly, 64.61 % of subjects and 50.76% of subjects, related wheezing and cough respectively to asthma. Alberto Cukier observed that patients with bronchial asthma patients can be classified as either "under perceivers" or "over perceivers", with more importance being given to "under perceivers" owing to the possibility of an increased risk of hospitalization and morbidity in

this group due to postponement of treatment.⁸ Studies by ID Bijil-Hofland et.al and Cathy Hermann et.al also concluded that poor perception of asthma symptoms, as was observed in their studies was directly related to asthma attacks and its complications.^{9,10}

In our study, majority of subjects believed that pollution (86.92%), diet (73.85%), and poor medication in the past (38.46%) are possible causes of asthma. These findings are similar to those in a study conducted by R Prasad et al in India, who observed that a majority of the patients had wrong concepts about the disease aetiology, disease management, inhalation therapy and the prognosis of asthma. It was observed that 86.15% of our subjects believed that they have asthma only when they are symptomatic. Asthma is a chronic inflammatory disease, the absence symptoms of which, does not imply the absence of disease, thereby necessitating follow up examination at frequent intervals and long term medication. Treatment only during symptomatic periods may lead to complications and frequent exacerbations in subsequent years.¹¹ A study by Johannes C et al conducted in Leiden, Netherlands also concluded that poor perception of the symptoms of asthma was observed in patients with severe asthma along with sputum eosinophilia.⁶

In our study, it was observed that 89.09 % of patients wanted a permanent cure for their disease, 75.38% believed that they would become addicted to the medication if taken on a long term basis and 61.53% believed that the asthma medications had side effects. All these perceptual factors may lead to poor compliance with medication and therefore increased mortality and morbidity due to asthma in later life. In a study conducted by Rakhee Sodhi et.al in India, it was observed that 62.14% believed that asthma could be permanently cured and had tried an alternate system of medicine.¹²

In conclusion, it was observed in this study patients with bronchial asthma have poor perception of their illness and its symptoms. Appropriate timely health education is needed to improve compliance to asthma management.

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