

STUDY REPORT SUMMARY

ASTRAZENECA PHARMACEUTICALS

FINISHED PRODUCT: No applicable **ACTIVE INGREDIENT:** No applicable

Study No: NIS-RFR-DUM-2008/1

SYMPTOMES: MIRROR EVALUATION OF THE WORDS USED BY PATIENTS AND DOCTORS TO EXPRESS ASTHMA SYMPTOMS ACCORDING TO THE PATIENT'S

LEVEL OF ASTHMA CONTROL IN GENERAL PRACTICE

Developmental phase: No applicable

Study Completion Date: LSLV = 31 March 2009

Date of Report: 10 March 2010

OBJECTIVES:

The primary objective of this cross-sectional observational survey, conducted during 2009, was to evaluate the concordance between the words most commonly used by patients and those most commonly used by doctors to express asthma symptoms as a function of the level of asthma control. It was also designed to describe the word combinations used by the doctor and by the patient as a function of the level of asthma control, the words most commonly used to describe symptoms, and the level of severity attributed to these words by the patient. The study also aimed at describing the attitudes and actions induced by these choices of words and finally the words most commonly used in the context of rescue medication.

METHODS and RESULTS:

This survey was conducted with the participation of 857 general practitioners.

More than 1,600 asthmatic patients analysed

A total of 1,659 patients with a mean age of 44.6 years were included in this survey. More than half (55.1%) of these patients were men. Their asthma had been diagnosed for an average of 16 years.

The presenting complaint was follow-up of asthma and/or renewal of prescription for more than half of patients (53%), deterioration of symptoms or urgent consultation for

asthma attack/exacerbation (19%), and the presenting complaint was not related to asthma for 28%.

More than 7 out of 10 patients suffered from atopic asthma, and less than 1 out of 10 patients suffered from occupational asthma.

Almost one half of patients consulted a specialist in addition to their general practitioner. Five per cent of patients had received treatment education in addition to their usual follow-up,. The majority of patients (58%) were treated with an inhaled corticosteroid and a long-acting bronchodilator, 18% also received a leukotriene antagonist, while 10.2% were treated with an inhaled corticosteroid alone and only 5.5% of patients were treated with an inhaled corticosteroid and a leukotriene antagonist. The remaining patients (8.1%) were treated with an inhaled corticosteroid associated with another maintenance treatment and possibly a leukotriene antagonist and/or a long-acting bronchodilator.

Asthma controlled or partially controlled in about 2/3 of patients

Asthma was controlled or partially controlled in 16.9% and 46.4% of patients, respectively, and was not controlled in 36.7% of patients.

Hierarchy of words and concordance of words used by doctors and patients to describe symptoms

The questionnaires asked doctors and patients to choose a maximum of 3 to 5 words from a list of 19 words (identical list for the doctor and the patient) to express the discomfort related to asthma symptoms. The doctor then had to propose actions and/or treatment recommendations associated with each word chosen. Patients also had to report the level of severity experienced and their reaction in relation to this discomfort.

The words most frequently cited (29% to 48%) by both the patient and the doctor included the words "breathlessness", "wheezing" and "cough", followed by a different expression for patients, who used the word "suffocation", while doctors indicated "dyspnoea", and finally the words "asthma attack" and "breathing difficulties on exertion" used by both patients and doctors. The words "expiratory wheeze" and "bronchospasm" were reported much less frequently by patients than by doctors and correspond to a more medical terminology. Similarly, the words "suffocation" and "breathlessness", commonly used by patients, were used much less frequently by doctors. Nevertheless, a parallel was observed between the words "dyspnoea" and "expiratory wheeze" used by the doctor and the words "suffocation" and "wheezing" predominantly used by patients.

Analysis of the results according to the level of asthma control, the presenting complaint, and the patient's age and gender showed that the expression "woken by asthma at night" used by the patient and the doctor, the words "suffocation" used by the patient and "dyspnoea" and "limitation of physical activity" used by the doctor were the expressions most frequently associated with the concept of poorly controlled asthma, exacerbation (in terms of both the patient's history and the presenting complaint).

Doctor/patient concordance for the words used to describe symptoms

A level of concordance close to 46% was observed.

Level of severity associated with the words used by the patient

Analysis of the mean level of severity associated by the patient to the words used showed that the words "suffocation", "asthma attack" and "woken by asthma at night" were used to describe a high level of severity, while the words "breathlessness" and "wheezing" were associated with a moderate level of severity, and the word "sneezing" was associated with a low level of severity.

The word "suffocation", commonly used by patients and used much less frequently by doctors, appeared to indicate a serious symptom for the patient and should be part of the alert vocabulary during the consultation.

Attitudes and actions linked with symptoms

The patients predominantly reported using their rescue inhaler for all symptoms except for sneezing and productive cough.

When a patient experienced a symptom that he/she considered to be serious (level 4-5), his/her first reaction was to take the rescue medication (68.9% of cases), then call the doctor (44.1%) and finally consult an emergency doctor (22.5%).

However, for the expressions associated with the highest level of severity (level 4 or 5, related to "suffocation", "asthma attack"), only 75% of patients used the rescue medication; more than 20% of patients did not report using their inhaler in the case of an asthma attack, even when this remained their first reaction.

Use of the rescue inhaler to treat an "asthma attack" was not reported by almost 25% of doctors. PEF measurements were reported by 5% of patients and 15% of doctors.