



## IMPACT OF EDUCATION ON THE CONTROL OF ASTHMA

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### ABSTRACT

*Asthma is to be by morbidity and mortality a public health problem. Its management requires more medical means a good education asthmatic patient. This is what the authors attempt to highlight specifically a prospective study of 97 patients. In all patients recruited in two months, we asked about the type of treatment they take, the level of information regarding the treatment and the manner of use of aerosols and finally the level of control of asthma by the ACT (asthma Control Test) score. All patients received a single educational session with immediate reassessment and re explanatory brochure and reviewed after three months for a second reassessment. Only 13% of patients had a good knowledge of different types of treatment, this value increased to 56% three months after the educational session*

*Only 5% of patients using the inhalation devices correctly. Three months after the educational session the figure rose to 16.5%. The level of disease control evaluated by the ACT score above 20 in only 15.5% of patients to 34% three months after the educational session which is very significant.*

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### INTRODUCTION

Asthma remains a global health problem because of its frequency and the difficulty of its management, it appeals to pharmacological treatment but also to educate the asthmatic patient.

#### • PURPOSE OF THE STUDY

The objective of this study is to evaluate both the level of information asthmatic patients regarding treatment and its use and secondly the impact of education on the control of their disease

### MATERIALS AND METHOD

The study included 97 patients recruited for most of the consultation of the Association ANFAS for 2 months and who have been specified treatment adherence, knowledge about the treatment and the level of control of asthma based on the ACT (asthma Control Test) score. These patients received individual educational session, explanatory brochures were issued their recounting the main points of the meeting and they were reviewed three months after revaluation.

## RESULTS AND DISCUSSION

In our study 82% of patients were female with a mean age of 47.5 years. 59% of patients are illiterate. 52% had moderate persistent asthma, 27% mild persistent asthma and 21% severe persistent asthma. 89% of patients are under CI, CI + 8% in BDLA and 3% in CI + + BDLA theophylline. Avoid abbreviations Only 13% of patients had good knowledge (ie med crisis vs mdc bottom) of different types of treatment, this value increased to 56% three months after the educational session. Adherence to treatment was observed in only 39% of patients to 62% in the three months after reevaluation.

Only 5% of patients using the inhalation devices correctly (ie the steps to know ...) 3 months after the educational session the figure rose to 16.5%.

The level of control of the disease evaluated by the ACT score above 20 (high control) in only 15.5% of patients to 34% three months after the educational session which is very significant.

## DISCUSSION

The average age of our patients was 47.5 years and the majority are women which is consistent with literature data. [1]

Therapeutically, the majority of patients are on inhaled corticosteroids as single DMARD, that said, these patients are under-treated because of an association (CI + BDLA) is fully justified in asthmatic stages 3 and 4, whose disease is not controlled by corticosteroids alone or is not completely. [2]

Adherence to treatment is less than 70% according to the ECRHS study [3], but our study shows that the values can be improved by properly conducted educational sessions and regular.

The authors chose the ACT score because it is an objective score, easy to perform and validated by several studies. [4,5]

Improving ACT score after the educational session during our study, mean concretely improved respiratory status and quality of life of asthma as reported meta-analysis GUEVARA [6] and GIBSON [7]

## CONCLUSIONS

Educating asthmatic patients seems to be an efficient tool in the armamentarium of the physician, this allows good management and better asthma control

## REFERENCES

- [1]. A. Prudhomme, Influence du sexe féminin sur l'asthme ; revue de Pneumologie Clinique Vol 55, N° 5 - novembre 1999 p. 296
- [2]. GINA (Global initiative for asthma) report - Global Strategy for Asthma Management and Prevention 2007 (update)
- [3]. Cerveri I, Locatelli F, Zoia M, Corsico A, Accordini S, de Marco R, International variations in asthma treatment compliance: the results of the European community Respiratory Health Survey (ECRHS). Eur Respir J 1999;14:288-294
- [4]. Juniper EF, O'Byrne PM, Guyatt GH, Ferrie PJ, King DR. Development and validation of a questionnaire to measure asthma control. Eur Respir J 1999; 14:902-7.

- [5]. Kerlinger FN. Foundations of Behavioral Research. New York: Holt, Rinehart and Winston; 1973. 22. Juniper EF, Svensson K, Mork A, Stahl E. Measurement properties and interpretation of three shortened versions of the asthma control questionnaire. *Respir Med* 2005; 99:553-8.
- [6]. Guevara JP, Wolf FM, Grum CM, Clark NM. Effects of educational interventions for self management of asthma in children and adolescents: systematic review and meta-analysis. *BMJ* 2003;326:1308-9
- [7]. Gibson PG, Powell H, Coughlan J, et al Self-management education and regular practitioner review for adults with asthma. *Cochrane Database Syst Rev* 003;CD001117