OBJECTIVES: As chronic asthma in Finland is mainly treated by general practitioners limited data is available on the natural course of the disease. We evaluated the burden of this disease on health care providers and the adherence to accepted treatment protocols in this retrospective study.

METHODS: We examined the complete medical records of 30 asthmatic patients obtained from all reported health care providers (2000–05). Providers were registered according to site, location and personnel involved. Contact was specified as a visit, emergency room (ER) visit, phone call, prescription or procedure. The primary cause of contact labeled the event as asthma-(AR) or non-asthma related (NAR) according to clinical specifications. Data on all asthma medication and adverse drug reactions (ADR) were collected from medical records.

RESULTS: Asthma was the main reason for contact with health care providers in 961 (52%) of all 1847 events recorded. The number of events ranged from four to 94 per patient with a mean of 23. The type of contact was typically a visit (61%) and provider a general practitioner. ER visits were found in 40% of the patients, 64% of these were AR. Longest period for hospitalization due to asthma was 23 days, but no intensive care treatment was necessary. All patients had short-acting beta-agonists and inhaled corticosteroids (CS) as first-line medication and 32% had no need for additional treatment during the follow-up. Long-acting beta-agonists were used by 53% at some point and 48% of all patients had acute exacerbations treated with oral CS. ADR were observed in 57% of all patients and in 2.5% of all asthma-related events. An alteration to medication was done in 45% of asthma-related visits.

CONCLUSIONS: Reliable data were obtained from this evaluation of patient records regarding disease history. Non-responders can be identified as well as those prone to ADR.

THE HUMAN IMPACT OF SEVERE PERSISTENT ALLERGIC ASTHMA: RESULTS FROM A MULTINATIONAL STUDY

Turk F
Novartis Pharma AG, Basel, Switzerland

OBJECTIVES: The human impact (symptoms, quality of life and overall wellbeing) of severe persistent allergic asthma is great owing to the chronic nature of the disease and the burden of exacerbations. We undertook the present study to examine the human impact of severe persistent allergic asthma in patients who remain inadequately controlled and how human impact varies according to disease severity.

METHODS: Patients with asthma were enrolled in a large cross-sectional observational study and were stratified by disease severity (Global Initiative for Asthma [GINA] classification). Patients were recruited in the UK, Germany, France, Italy and Spain by physicians who were asked to recruit the next 6 patients presenting with asthma. Human impact was assessed using an extensive questionnaire, which included the EuroQol EQ-5D. RESULTS: Out of a total of 2802 patients, 1306 (47%) had allergic asthma. Of these, 985 patients (mean age 36.4 years; mean FEV1 89.6% predicted normal) had the following GINA asthma severity classifications: mild intermittent (3.2%); mild persistent (7.6%); moderate persistent (11.7%) and severe persistent (77.5%). Overall, 29% (n = 219) patients with severe persistent allergic asthma were inadequately controlled. These patients had more symptoms—including bronchospasm, nocturnal symptoms, difficulty breathing when resting and cough—than patients with moderate disease (all p < 0.01). Other human impact factors that were adversely affected included impaired mobility, nocturnal disturbance and impaired lifestyle (all p < 0.01 vs. moderate asthma). Quality of life was impaired in these patients: the mean EQ-5D score was 0.808 for severe persistent asthma that was inadequately controlled vs. 0.938 for moderate asthma (p < 0.01). CONCLUSIONS: The human impact of asthma increases according to disease severity; human impact is greatest in patients with severe persistent allergic asthma who remain inadequately controlled. Treatment options that aim to achieve adequate control will contribute to improved management of patients with severe persistent allergic asthma.

THE SPANISH VERSION OF THE MINI-ASTHMA QUALITY OF LIFE QUESTIONNAIRE: EXAMINATION OF RESPONSIVENESS TO CHANGE

Caloto MT1, Prieto L2, Hinojosa M3, Colás C4, Feo F5, Nocea G3
1Merck, Sharp & Dohme, Madrid, Spain; 2Hospital Universitario Dr Peset, Valencia, Spain; 3Hospital Ramón y Cajal, Madrid, Spain; 4Hospital Clínico, Zaragoza, Spain; 5Hospital Alarconos, Ciudad Real, Spain

OBJECTIVE: Asthma is a chronic disease that affects the quality of life of patients, mainly those with severe forms. The purpose of our study was to evaluate the responsiveness of the Spanish version of the Mini-Asthma Quality of Life (Mini-AQLQ) questionnaire, to evaluate changes in quality of life after asthma treatment.

METHODS: A sample of 122 patients with severe persistent asthma selected from the RESPIRE study programme. The Mini-AQLQ questionnaire was administered to these patients before and after 12 months of treatment. The responsiveness of the Mini-AQLQ questionnaire was assessed using the Wilcoxon test.

RESULTS: The Mini-AQLQ questionnaire is sensitive to changes in the quality of life of patients with severe persistent asthma after 12 months of treatment. The Mini-AQLQ questionnaire is a valid and reliable tool for evaluating changes in quality of life in patients with severe persistent asthma.

CONCLUSIONS: The Mini-AQLQ questionnaire is sensitive to changes in the quality of life of patients with severe persistent asthma after 12 months of treatment. The Mini-AQLQ questionnaire is a valid and reliable tool for evaluating changes in quality of life in patients with severe persistent asthma.

ASTHMA RELATED QUALITY OF LIFE IS CORRELATED WITH ASTHMA CONTROL AMONG RESPIRE STUDY PARTICIPANTS

Mosian J1, Jobin MS1, Dorval E2, Guénette L1, Bolduc Y3, Turchotte M4, Grégoire JP5
1Université Laval, Québec, QC, Canada; 2Merck Frosst, Canada, Kirkland, QC, Canada; 3Clinique médicale d’Alma, Alma, QC, Canada; 4Centre de santé et de services sociaux du Plekouagami, Alma, QC, Canada

RESPIRE: is a quasi-experimental study on the impact of an integrated primary care interventions program on asthma related quality of life (QoL) among individuals aged 12 to 45 years who have asthma. One of the aims of the RESPIRE interventions is to improve QoL through a better asthma control. However, before implementing the interventions, the assumption of a positive correlation between asthma control and QoL needed to be tested. OBJECTIVE: The current study aimed at assessing, among RESPIRE participants, the relationship between asthma control and QoL. METHODS: This is a cross-sectional analysis of baseline characteristics of individuals recruited by community pharmacists who identified among their clients those aged 12 to 45 years, who had a previous diagnosis of asthma and were using a short-acting beta-2 agonist more than three times a week or an inhaled corticosteroid. Participants were interviewed on socio-demographic characteristics, social support and perceived health. Asthma control and QoL were measured using the questionnaires developed by Juniper et al. We assessed the correlation between asthma control and QoL scores using multivariate linear regression analysis adjusting for age, sex, education, employment status, income, social support and perceived health status. RESULTS: A total of 220 individuals were interviewed. Their mean scores were 5.41/7 for QoL and 1.45/5 for asthma control (a higher QoL score indicates a higher QoL, while a higher asthma control score reflects a lower asthma control). An improvement in QoL was significantly associated with an increase in asthma control (correlation coefficient: -0.783 (p < 0.0001)). CONCLUSIONS: These findings confirm the theoretical basis of our approach. In RESPIRE, interventions aiming at improving asthma control should translate in an improvement in QoL.