ABI021: The prevalence and severity of bronchial hyper-responsiveness (BHR) in asthmatic children in general practice. *Prim Care Respir* 2002 **11(2)** 61

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Background The degree of BHR, in relation with the presence of symptoms, is generally accepted as an estimate of asthma severity. The majority of asthmatic children is treated in general practice while measurement of BHR is not being used
Aim of the study To assess the prevalence and severity of BHR in children with asthma in general practice.
Method 800 Children treated in general practice who used asthma medication in the previous year were asked to participate. BHR was evaluated in 373 of these possible asthmatic children (age: 7-16) by a methacholine challenge test. The degree of bronchial responsivenes was expressed as PD20
Result 277 (74%) of all participating children were hyperresponsive according to the PD20: 55 (20%) severe (PD20 < 0.075 mg), 10 (36%) moderate (PD20 0.075-0.30 mg), 63 (23%) mild (PD20 0.30-1.0 mg) and 58 (21%) borderline (PD20 1.0-4.0 mg). In 13 (3.5%) the inhalation challenge was not started because of a FE_1 < 75% of predicted. 72 children did not demonstrate BHR. In 11 childre performance of lungfunction was technically inadequate
Conclusion Two-fifth of children treated in general practice with asthma medication demonstrate moderate to severe BHR and sometime even severe airflow obstruction. These data could be an indication that asthmatic children are not using appropriate medication

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ABI022: An education program for asthma and COPD patients conducted by a general practice assistant; a randomised controlled trial. *Prim Care Respir* 2002 **11(2)** 61

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Aim To improve disease control and thereby health related quality of life (HRQoL) in patients with asthma or chronic obstructive pulmonary disease (COPD) in general practice, we developed and evaluated an education program conducted by a practice assistant.
Method 272 Asthma and COPD patients were stratified by age and randomly assigned to the intervention (n=139) or control group (n=137). The intervention program consisted of training regarding inhalation technique, and patient centred information about the disease medication, hyperreactivity, and coping with their disease. The control group received usual care. Measurements took place before randomisation and after one and two years. Outcome measures included HRQoL and disease symptoms. Furthermore, process measure included compliance, inhalation technique, coping and self-efficacy.
Result 209 patients (77 %) completed at least one year follow-up. No differences regarding HRQoL and disease symptoms were observed between the intervention and the usual-care group. In addition, no differences were observed in compliance, coping, and self-efficacy However, after one and two years the inhalation technique improved significantly ($p<0.05$) in the intervention group (adequate technique in respectively 62% and 71%) compared to the control group (respectively 42% and 59%)
Conclusion Our results show that an education by a practice assistant may result in an important improvement of inhalation technique in patients with asthma or COPD. However, no effects were found on HRQoL or disease symptoms

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ABI023: Monitoring the quality of life of patients with asthma and COPD in general practice: psychometric properties of a 10-item questionnaire (the RIQ-MON10). *Prim Care Respir* 2002 **11(2)** 61

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Background: Physicians need a good assessment of patients' perceived burden of the disease in order to provide adequate treatment and support. As doctors' judgements often differ from patients'own assessments, a manageable method to incorporate the latter into routine primary care might support patient-centered decision-making. For this purpose we converted a 55-item 7-point Likert scale questionnaire measuring quality of life of patients with mild to moderate respiratory diseases (QOL-RIQ), into a short form. Prototypes proved applicable in normal care
Method We analysed the data of three controlled studies performed in primary care (N = 328, 502 and 555 patients). Procedures: inter-item correlations, scale distributions, Cronbach's alpha and factor analysis. A panel of 15 GP-experts judged the clinical relevance of the selection Dyspnoea, FE_1 % pred, the MRC-ECCS, COOP/WONCA charts and the MOS-SF 36 served as external criteria to test validity and responsiveness.
Result Item reduction resulted in a 10-item short form (alpha's .87 to .90), consisting of two 5-item factors: physical and emotional complaints and physical and social limitations. The panel (>70%) considered the selection fit for monitoring in routine care. The correlation of the shortlist with the original instrument (r=.89-.92) was high as well as with dyspnoea (r=.57-.60) and the generic health status instruments (r=.39-.59). As expected there was a low correlation with lung function (r=.10-.15). The short form shows a clinical relevant score difference (>.5) between upper and lower quartiles of the convergent instruments and a high correlation between the repeated scores in a stable group of patients (ICC =.82). The short form reflected the change in a group of 15 improved patients (SRM =.86).
Conclusion The short form questionnaire (RIQ-MON10) maintained the psychometric properties of the original instrument. It has good discriminative properties and seems promising as a practical tool for monitoring quality of life in routine primary care. Large-scaled testing of its reliability and sensitivity to change is planned
Keywords health-related quality of life, needs assessment, asthma, COPD, primary care