P1589  EFFECTIVENESS OF MONITORING AND FEEDBACK OF ASTHMA AND COPD PATIENTS IN GENERAL PRACTICE ON PATIENT-OUTCOME


Introduction. In a prospective experimental study the effectiveness of monitoring and feedback of asthma and COPD patients was compared with the effectiveness of post-graduate medical education (PME), and a control-group.

Methods and patients. Three groups of GPs were formed. The monitoring/feedback group (25 GPs with 305 patients) consisted of an intake, regular follow-up, and feedback given to the GP concerning lungfunction (FEV1), symptoms, medicine-use, and follow-up of patients. The post-graduate medical education (17 GPs with 270 patients) consisted of a course of four meetings (each 2 hours) with the GPs, in which the national guideline on asthma and COPD was discussed. The control group consisted of 19 GPs with 316 patients (no intervention). Main outcome measures were asthma-symptoms (MRC-questionnaire), disease specific quality of life (Mairel/Kaptein), smoking habit, and patient-satisfaction/need for information (11 questions).

Preliminary results. After one year there was an improvement concerning disease-specific quality of life in all three groups, most in monitoring/feedback group (average 15% of base-line value compared with 8% in PME and control-group). This within group improvement was significant (p<0.05) on all 7 sub-scales in monitoring/feedback-group. In PME and control-group only 2 out of 7 sub-scales improved significant (p<0.05). The symptom-score changed most from base-line value (16%) in monitoring/feedback group (p<0.001). Concerning smoking habit no changes were observed. Patient-satisfaction and need for information changed most in monitoring/feedback group. All changes were only significant within group and not significant compared with control-group. In a sub-group analysis of more severe patients the symptom-score showed a significant (p=0.002) improvement in monitoring/feedback group compared with controls.

Conclusion. Although the changes found are not significant compared with controls, in the monitoring/feedback group all changes are in the same direction and most (compared with PME and controls). This may indicate that monitoring/feedback of asthma and COPD patients in general practice may alter patient outcome. PME does not seems to have an effect on patient-outcome.

GUIDED SELF-MANAGEMENT REDUCES MORBIDITY, TIME OFF WORK AND CONSULTATIONS FOR UNCONTROLLED ASTHMA IN ADULTS

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In a randomised controlled study of 311 adults attending the Accident and Emergency Department (A&E) for treatment of acute asthma, 78% of patients in the active arm (n=103) attended at least one nurse appointment for advice in asthma self-management using a specially designed 'credit card' (NZ Med J 1993; 106: 336-338). Outcome measures (baseline, 3 months and 6 months) included home peak flow and symptom diaries, telephone questionnaires and audit of general practitioner register (6 months before and after A&E). Data was analysed on an intention to treat basis by multiple and logistic regression.

Results: 353 (48%) of active vs 45 (42%) controls had severe attacks (61 and 70 respectively, OR 0.96 CI 0.7-1.4) during the 6 months. The active group increased their use of inhalated topical steroids in 31/61 (51%) vs 15/70 (21%) attacks in controls (OR 3.91 CI 1.6-8.4) and their use of rescue medication in 54/61 (89%) severe attacks vs 53/70 (76%) controls (OR 2.88 CI 1.1-7.9). Active patients had fewer days off work (mean 2.57 vs controls mean 7.13) during the first three months (NS) and fewer episodes away from work in the first (0.34 vs 0.54, p=0.08) and the second 3 months (0.40 vs 0.65, p=0.08) than the controls. Active and control patients' general practitioners returned extracts from their records. The active group had less routine consultations with the doctor (p=0.03), the practice nurse (p=0.03), less consultations for uncontrolled episodes (p=0.06) and less hospital visits (NS) than the controls. Active patients had significantly higher and less variable PEF and significantly lower and less variable symptom scores (see table).

Multiple regression of the 6 month on baseline (at recruitment) variables of diary chart data (PEF and symptom scores for one week). Mean PEF was 201/min more in the active group.

Conclusion: Hospital-based specialist nurses reduced asthma morbidity by improving patient self-management behaviour in acute attacks leading to reduced severe symptoms, improved lungfunction, less time off work and fewer consultations with health professionals.

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PUTTING THE ASTHMA GUIDELINES INTO PRACTICE - AN AUDIT IN GENERAL PRACTICE


We report an audit of the effectiveness of the introduction of Asthma Guidelines in general, non-specialist practice. 120 patients from 6 General Practices were studied. At entry existing treatment was recorded and symptoms of wheeze, cough and sleep disturbance scored. Subsequently the BTS guidelines were clearly followed and treatment steps and symptoms at the end of 1 year compared with those at the start of the study.

Initially, the majority of patients were in steps 1 and 2. After 1 year there had been a tendency for movement to higher steps, with the number of patients in step 3 increasing from 16 to 30, and those in step 1 declining from 25 to 7. There was some stepping down of treatment, especially in those starting in the higher steps. Symptoms improved with 64% of patients wheeze-free at the end of the year and only 20% reporting wheeze more frequently than once per week. Similar improvements were seen in cough. Sleep disturbance fell from 52% to 15%.

Applications of the guidelines in General Practice can improve symptom control, whilst allowing treatment reduction in some patients.

P1592  ASTHMA SYMPTOMS CHECKLIST: RELIABILITY AND CONSTRUCT VALIDITY IN SPANISH ASTHMATICS

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Important decisions associated with the medical care of asthmatics are often influenced by patients' reports about their asthma symptoms. The Asthma Symptoms Checklist (ASC) (Kinsman et al.,) was designed to assess the subjective symptomatology of asthma (36 symptoms grouped into 5 categories: panic-fear, irritability, hyperventilation, bronchoconstriction and fatigue). The aim of the present work has been to validate the ASC in Spanish asthmatic population. For this purpose, 100 outpatients (57F, 43 M; age mean 39 years) in stable situation fulfilled the questionnaire. The following variables were also recorded: age, sex, amount of education, duration of asthma, hospitalizations and/or visits to the emergency room in the preceding year, dyspnoea, nocturnal symptoms, severity (Consensus scale) and self-efficacy to cope with asthma. The internal consistency (Cronbach's α) ranged from 0.64 to 0.86. The structure of the ASC (principal components factor analysis; varimax rotation; score-test) revealed 5 factors (variance explained: 53.19%); the items loading on the four were not ever identical to those reported in the original study. The construct validity (Spearman correlations) showed that panic-fear was linked with panic-fear (rs: 0.23; p<0.05) and irritability (rs: 0.23; p<0.05). It is concluded that the ASC Spanish version shows a low reliability although its construct validity is acceptable apart from the hyperventilation symptom group. Accordingly, this instrument should be re-examined to be used as a diagnostic instrument of asthma symptoms in our country.