ABI003: Asthma watch - using public relations to treat asthma *Prim Care Respir* 2002 **11**(2) 55**Author(s):** Dr Ian Charlton, General Practitioner, Australi

Background: Asthma is a complex problem. Many patients being under treated, under diagnosed, and seen only in crisis. Systematic reviews demonstrate that the most effective method of bringing about wholesale changes in attitudes and behaviour is through sustained media campaigns and the provision of written action plans for patients. (Gibson PG)

Aim: To establish a locally based public relations campaign utilising the print, radio and TV media which encourages patients to go to their local doctor, have their asthma properly assessed and get a written action plan

The Outcome Measures: Media activity, HIC reports on use of Spirometry, Hospital admissions, Casualty Attendances, Sentinel pharmacist and Sentinel GP programme, and Percentage of written action plans utilised by patients requiring admission

Results: Asthma Watch has been running for 12 months and has created 4 TV interviews, 15 newspaper articles and 5 radio announcements

Central Coast GPs have a high rate of spirometry utilisation (16.3 per GP) compared to other Divisions of General Practice, although this is well below the estimates set by guidelines. Up to 62% of patients attending GPs and 40% attending pharmacists have a written action plan compared to 9% requiring admission. There appeared to be a rise in the use of action plans coinciding with the launch of Asthma Watch although this rate has subsequently fallen. Hospital admissions and casualty attendances have remained unchanged during the study period

Conclusion: Asthma Watch has been associated with an increased awareness about asthma amongst general practitioners and the public alike. After an initial improvement many of the outcomes have remained resistant to further improvement. Strategies for improving the effectiveness of the Asthma Watch program will be discussed.

ABI004: Interpretation of spirometry: Flow-Volume curve recognition and decision-making by the general practitioner*(Prim Care Respir* 2002 **11**(2) 55**Author(s):** Dr Neil Chavannes, Dept. Of General Practice, Universiteit van Maastrich

Background: Spirometry is increasingly implemented in general practice, while the ability of general practitioners (GPs) to interpret flow volume curves (F-V curves) has been questioned. Studies so far have focused on overall scoring, neither taking into account separate disease patterns encountered in general practice, nor the influence of the F-V curve on the GPs decision-making process.

Aim/Methods: To determine (1) the achievements of 39 trained GPs as compared with an expert consensus panel in interpreting 12 cases with a wide range of F-V curves and (2) the influence of the F-V curve on the GPs decision-making. Diagnostic test characteristics were determined by multilevel analysis (DOR) expressed in positive and negative predictive values (PPV and NPV)

Results: Normal and obstructive F-V curves were reasonably well diagnosed (PPV 87.0%, NPV 93.3%, DOR 65.0 and PPV 75.1%, NPV 85.7%, DOR 48.9 respectively) while rare and mixed patterns achieved considerably lower scores (PPV 58.3%, NPV 88.4%, DOR 8.5 and PPV 40.8%, NPV 96.1%, DOR 13.1 respectively). Intermediate scores were obtained in the recognition of incorrect manoeuvres (PPV 67.7%, NPV 93.2%, DOR 24.4). The F-V curve influenced the GPs decision-making in reducing the differential diagnosis (OR 2.04 95% CI [1.79, 2.31]), but increased referral rates (OR 7.26 95% CI [4.71, 11.2]) and use of diagnostic prednisone courses (OR 4.55 95% CI [3.12, 6.64]) considerably.

Conclusion: GPs were able to differentiate between normal and obstructive disease patterns, while curves suggestive of rare and mixed pathology were often missed. The F-V curve seems to influence the decision-making process of the GP, but if this represents an initial overall effect remains to be evaluated in practice

Keywords: spirometry, general practice, decision-making

ABI005: Effects of physical activity in mild to moderate COPD. A systematic review *Prim Care Respir* 2002 **11**(2) 55**Author(s):** Dr Neil Chavannes, Dept. Of General Practice, Universiteit van Maastrich

Background: Pulmonary rehabilitation has become an evidence based treatment in patients with severe COPD. In contrast, large numbers of patients suffer from mild to moderate COPD, receiving treatment from their GPs. We performed a literature search on the effects of physical activity in patients with mild to moderate COPD on exercise tolerance, dyspnea and quality of life (QOL). In addition, we looked for number of hospitalisation days and number of exacerbations, expressed as oral prednisolone courses

Method: The literature search included Medline (1983-1999), Embase (1984-2000), and the Cochrane Library (2000). All hits were screened on subject and language; abstracts were selected on the basis of a protocol including disease severity, hypothesis, outcome parameters and control group. Review articles on physical exercise and COPD were examined and reference lists of selected articles were screened for relevant studies

Results: The broad literature search generated 4968 articles; after exclusion on title and abstract 35 original studies and 27 review articles were analysed. Of these, 5 original studies fitted the criteria, and none of the review articles was selected. A positive influence of physical activity on exercise tolerance in mild to moderate COPD was reported in 4 out of 5 studies. There was no clear effect on dyspnea or QOL probably because of low numbers of subjects. No studies were included addressing number of hospitalisation days or prednisolone course as outcomes

Conclusion: Physical exercise training (usually as part of a package of rehabilitation) can improve the fitness of patients with mild to moderate COPD, but has not been shown to significantly benefit QOL or dyspnoea (or long term disease progression).

Keywords: COPD, general practice, physical exercise training