13.4 (range 2–40). 44 (38%) were still smoking and 17 of these accepted referral to cessation services. 27 of the other 125 smokers assessed but not thought to have COPD also accepted referral.

Case finding using this method in people already attending primary care clinics has a high yield (1 in 5) takes little time and deserves wider adoption.

REFERENCES

M21

SPACE TO BREATHE: A NEW HOSPICE BASED PALLIATIVE CARE, RESPIRATORY AND PSYCHOLOGY PROGRAMME FOR PATIENTS WITH SEVERE COPD AND THEIR CARERS

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Background People with severe COPD have a burden of symptoms, often greater than those with lung cancer and have unmet need (Gore and Brophy 2000). A local palliative care needs analysis was conducted across primary and secondary care. Gaps were identified in the management of anxiety, breathlessness, social isolation, advance planning and carer support. Patients had high comparative admission rate and length of stay. A team, including a psychologist, OT, palliative and respiratory medicine and physiotherapy and a palliative care CNS, developed and delivered the programme. The programmes focus was behavioural change through psycho-education, exercise and relaxation, underpinned by CBT.

Method Referral was from acute respiratory service for those with at least 2 acute admissions in the previous 6 months, FEV1 of <50% predicted and optimised medical management. They attended the hospice programme for 5 weeks with transport provided. Two programmes were completed with a total of 12 patients and 3 carers. HADS and CATS were taken at week 1 and week 6. 6 month pre and post course admission data was collected.

Results Patients described; improvement in confidence and quality of life and improved management of their exacerbations. HADS and CATS remained unchanged. Initial data from programme 1 demonstrated reduction in total admissions from 7 to 4 and reduction in total bed days from 47 to 20, over a 6 month period.

Conclusions Patient evaluated improvement in function and quality of life and reduction in hospital bed days would suggest continuation of the programme with a change in quality of life measurement.

REFERENCE
Gore JM, Brophy CJ, Greenstone MA. How well do we care for patients with end stage chronic obstructive pulmonary disease? Thorax 2000; 55:1000

M22

THE CHRONIC OBSTRUCTIVE PULMONARY DISEASE ASSESSMENT TOOL (CAT) IN PATIENTS ADMITTED TO HOSPITAL FOR EXACERBATION

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Background The COPD assessment tool (CAT) measures health status and is responsive to change with pulmonary rehabilitation and out-patient exacerbations of COPD (AECOPD). This study established i) CAT score at AECOPD hospital admission, ii) change during recovery and iii) CAT in relation to other outcome measures of COPD severity at stability.

Methods Consenting patients presenting to hospital with a clinical diagnosis of AECOPD self-completed the CAT and answered detailed history. Length of stay (LOS) was recorded. At four week follow-up assessment, the CAT score, MRC dyspnoea score, spirometry and six-minute walking distance (6MWD) were measured.

Results Of 133 patients recruited at admission, there were 5 in-patient deaths, all with a high (>20) CAT on admission. Median LOS per admission CAT category was CAT10–20: 2.5 days; CAT21–30: 4 days; CAT31–40: 5 days. 89 subjects were reassessed at 4 weeks and 72 had a clinical diagnosis of COPD confirmed, Table 1. In these subjects, the mean (95%CI) change in CAT score from admission was -7(-9, -5), p < 0.001. Whilst 61/72 had a high CAT score on admission, there remained 39/72 with high score at follow-up. CAT score at follow-up was related to 6MWD, r = 0.34, p < 0.01 but not to age or forced expiratory volume in one second (FEV1)% predicted.

Conclusion Despite marked improvement in CAT score with recovery from an AECOPD requiring hospital admission, a large proportion persist with high CAT scores at 4 weeks indicating poor health status. The CAT score offers prognostic information and adds another dimension to the COPD assessment.

REFERENCES

Abstract M22 Table 1. Results for the 72 patients with confirmed COPD.

| Gender Male: Female (n) | 49:23 |
| Age (years) Median (range) | 68 (48–86) |
| Length of Stay (days) Median (range) | 3 (1–20) |
| 6MWD (m) at 4 week follow-up Median (range) | 140 (5–420) |
| FEV1%predicted at 4 week follow-up Mean (SD) | 46 (16) |
| MRC score at 4 week follow-up Median (range) | 4 (1–5) |
| Admission CAT score Mean (SD) | 28(7) |
| Follow-up CAT score Mean (SD) | 21 (8) |

M23

COPD EXACERBATIONS OF LONGER DURATION WORSENS HEALTH RELATED QUALITY OF LIFE


Introduction Patient’s quality of life is related to the frequency of COPD exacerbations [Seemungal et al AJRCCM 1998: 157: 1418–1422]. There is increasing interest in reducing the duration of exacerbations but little evidence that this benefits patient’s quality of life.
Methods We analysed data from 384 patients in the London COPD cohort collected between 1995 and 2012. Patients completed diary cards recording respiratory symptoms. Exacerbation onset was defined as the first of two days of 2 major symptoms (increased breathlessness, sputum volume or purulence) or 1 major and 1 minor symptom (cold, increased cough, increased wheeze, sore throat). Recovery was defined as the first of two symptom free days and exacerbation duration was defined as the period between onset and recovery.

Patients completed the St. George’s Respiratory Questionnaire (SGRQ) annually when clinically stable. To avoid bias with repeated measures, exacerbation recovery and SGRQ total scores were averaged. FEV₁% predicted was measured at recruitment.

Results The 384 COPD patients (246 male); mean age 68.6 years (SD 8.4), FEV₁ % predicted 45.8% (16.6) and FEV₁/FVC 45.8% (12.2) with 122 patients (32.1%) still smoking at recruitment. There were 3498 exacerbations (median annual rate = 2.13 (IQR 1.0–3.2)).

The median exacerbation duration was 10 days (IQR 6–18). Exacerbation duration was not available for 350 (10.0%) exacerbations as no symptoms were recorded and for a further 109 (3.1%) where the patient continued to recorded symptoms post-exacerbation for 100 days or more.

In a multiple linear regression model, total SGRQ score increased by 0.20 units/1 day increase in exacerbation duration (95% CI 0.008–0.39; p = 0.041) after allowance for FEV₁% predicted and exacerbation frequency. The results suggest that halving the duration of 4 exacerbation events from 10 to 5 days will produce a 4 unit change in the total SGRQ score.

Conclusion Shorter exacerbations are associated with improved quality of life. More research is needed on acute interventions designed to ameliorate exacerbations.

Abstract M23 Figure 1 shows the partial residual plot for SGRQ score against exacerbation duration, with allowance of lung function and exacerbation frequency.
M23 COPD exacerbations of longer duration worsens health related quality of life


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