Editorials

COPD in primary care:

from episodic to continual management

Increased attention for chronic obstructive pulmonary disease (COPD) in primary care has paid off. In recent years guidelines were developed for spirometry and numerous GPs were trained to interpret results.[1] Active case finding in patients with respiratory complaints, like cough, has revealed more early cases, while COPD used to be undetected until invalidating obstruction had occurred. Moreover, despite earlier fatalism, the benefit of treatment is now widely acknowledged and its evidence base was recently substantially consolidated.

Stop-smoking interventions, self-management programmes, and vaccination against influenza have proven cost effective and improved quality of life.[2–4] Clinical trials have shown that inhaled bronchodilators and to a lesser extent corticosteroids improve symptoms and reduce exacerbations.[2,5,6] Notably, recent studies suggest that lung function decline is fastest in early instead of advanced COPD, and that maintenance treatment with inhaled medication is also beneficial in moderate, and not only in severe, obstruction.[7]

EVIDENCE AND DIAGNOSIS

Notwithstanding these achievements, much can still be gained regarding implementation of available evidence and guidelines in daily care. The number of established COPD cases in primary care largely increased during the last decade because of early detection and a shift of reimbursement from secondary to primary care. Considering the ageing population and limited improvement of smoking habits in deprived groups, this number will probably remain high in the years ahead.[2,8] Several steps are needed to provide sufficient care to the large number of patients while health care budgets are being cut.

The first challenge is in more clear disease labelling. This is partly hampered by the ongoing confusion about diagnostic criteria for COPD.[1] Assessment requires judgment of symptoms, signs, and spirometry combined, while spirometry abnormities are subtle in the early stages of the disease.[1] Most physicians now prefer a sex- and age-related threshold or 'lower limit or normal' (LLN) to define obstruction (low forced expiratory volume in 1 second [FEV1]/forced vital capacity) above a fixed value of <0.7, because the latter increases misclassification, but there is a paucity of LLN reference values.[1] Moreover, distinction with asthma can be difficult, especially in older people with overlapping characteristics.[9] Smokers with asthma can develop incompletely reversible obstruction, and many early COPD cases show 'reversibility', a substantial improvement of FEV1 after treatment.[10]

REVERSIBILITY IN COPD

Abandoning the dogma of COPD as an irreversible disease will probably improve generalisability of future trials, as reversibility was often a reason to exclude study patients. However, this renewed disease concept, although more realistic, might make it more difficult for GPs to diagnose or exclude COPD with confidence. The need for more objective diagnostic criteria is well illustrated by Miravitlles *et al* in this issue of the *BJGP*.[11] They compared four methods of defining asthma or COPD in 324 Spanish primary care patients with chronic respiratory symptoms using inhaled medication, who underwent history taking and spirometry with bronchodilation. The methods were the physician's judgement, Tinkelman *et al*'s questionnaire, Beeh *et al*'s questionnaire, and a classification by history taking and spirometry results described by Price *et al*. Correlation between methods was weak, with agreement for all four in only 26%, and physicians had difficulties classifying 20% of the patients.

Until more objective and validated criteria are available, uncertainty about COPD presence should not discourage GPs to reconsider COPD when symptoms persist by repeated history taking[12] because symptom assessment is the most relevant tool. Repeated spirometry, test treatment with inhaled bronchodilators, or body plethysmography can also add diagnostic information. Such efforts are worthwhile because establishing a diagnosis of COPD (or asthma) not only allows for effective treatment, it could also reduce the overuse of antibiotics in respiratory symptoms in primary care, as future exacerbations will be more likely to be recognised as such, instead of labelled as 'infection'.

DEMOGRAPHIC DIFFERENCES AND TREATMENT

Regarding treatment, primary care professionals are currently in transition between conventional episodic care responding to acute complaints (exacerbations), and proactive continuous and multidisciplinary disease management, including standardised recording of results of monitoring, self-management, and incidents. This requires a change in practice organisation and work routines, but also innovation of electronic medical records software.

Martin *et al* in this issue of the *BJGP* show that many patients who need it are not provided with adequate care.[13] They determined the relationship between ethnicity and prevalence, severity, and management of COPD by analysing computerised data of three socially-deprived inner east London primary care centres, caring for 7901 patients with COPD, and found striking differences with ethnicity. COPD prevalence was 4.4% in white, 1.3% in south Asians, and 0.6% in black people. The proportion of smoking was higher in white people compared to other ethnic groups; black patients used less medication compared to white patients regardless of

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symptoms, and were most likely to be hospitalised; south Asian and black people were less likely to receive pulmonary rehabilitation referral.

Martin *et al* state it is unlikely that varying access to health care caused these inequalities, and suggest that differences in health beliefs and understanding play a role. One could speculate that communication between professionals and patients differs with patients' ethnicity, as similar patterns were reported for other chronic diseases. Their study clearly shows that primary care should give priority to adequate communication with, and timely diagnosis and treatment of, all subgroups of patients with COPD or at risk of the disease, including stop-smoking interventions, inhaled bronchodilators, and lifestyle counselling. The ways to do this will depend on the characteristics of local populations and settings.

PATIENT EDUCATION FOR SPECIFIC RISK

A clear illustration of the need to inform patients and the public about a more specific risk of COPD is given by Tsiligianni *et al* in this issue of the *BJGP*.[14] They report on a female patient who repeatedly suffered severe breathlessness during air travelling, not aware that she needed inflight oxygen. Many patients and physicians do not know that most patients with moderately or severe COPD should be provided oxygen during flights, even when breathlessness in rest is absent, because of dynamic hyperinflation.

The authors provide guidelines for pre-flight assessment and a relevant link on several airlines' oxygen policies.

ADDRESS FOR CORRESPONDENCE

Berna DL Broekhuizen
University Medical Center Utrecht, Julius Center for Health Sciences and Primary Care, P.O. Box 85500, 3508 GA Utrecht, the Netherlands.

E-mail: b.d.l.broekhuizen@umcutrecht.nl

It is neither feasible nor warranted for GPs to counsel and inform all patients individually on all such details of COPD. Nevertheless, primary care physicians could largely improve COPD management by providing continual adequate information to their patients, their staff, and the public, including relevant electronic information. Active patient information and involvement will remain key in primary care COPD management.

Berna DL Broekhuizen,
GP and post doctoral researcher, University Medical Center Utrecht, Julius Center for Health Sciences and Primary Care, the Netherlands.

Alfred PE Sachs,
GP and associate professor, University Medical Center Utrecht, Julius Center for Health Sciences and Primary Care, the Netherlands.

Theo JM Verheij,
GP and professor in general practice, University Medical Center Utrecht, Julius Center for Health Sciences and Primary Care, the Netherlands.

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