EDITORIAL

Taking the long view of COPD care

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Contrary to the optimistic predictions of my teachers 30 years ago, COPD (or 'chronic bronchitis and emphysema' as it was termed then) has not gone away. Instead, it is recognised as a major problem in both developed and developing economies,¹ the commonest cause of acute hospitalisation in many affluent countries, and a growing cause of global mortality.²

The last 20 years have seen increased awareness of COPD as a cause of persistent symptoms and impaired patient quality of life. There is now good evidence that different treatments – especially pharmacological therapies such as long-acting inhaled bronchodilators, and inhaled corticosteroids alone and in combination – can improve patient wellbeing and may modify the natural history of the disease.³⁻⁸ Although we have developed clinical guidelines which direct treatment,^{9,10} it is becoming clear that reliance on individual management approaches is insufficient to deal with the complex problems of COPD. In fact, the way that care is delivered is likely to be more important than the precise details of what comprises that care. Attempts to improve care delivery for COPD began in England when the Chief Medical Officer highlighted COPD as a neglected area, with the subsequent development of a National Clinical Strategy for COPD. This led to a consultation document which was published in early 2010, although its implementation has been modified by subsequent reorganisations of the UK National Health Service. A review of the evidence about care delivery formed part of that process, and it identified a substantial gap between the quality of studies looking at the impact of specific interventions and those which considered changes in the system of care.

This gap has now been bridged, to some extent, by the data reported in this issue of the *Primary Care Respiratory Journal* by Kinnula and colleagues.¹¹ This Finnish study reports the outcome of an ambitious programme to improve COPD health over a 10-year period. Five goals were established prospectively and a multi-disciplinary network was created, beginning in hospital and then taken up by primary care. There were educational activities for health professionals and patients, dissemination of updated locally-relevant COPD and spirometry guidelines, input from patient groups (especially to the smoking cessation programmes), and government support for the whole programme. The organisers wisely built on the existing provision of asthma nurses and by the end of their programme there were 21 hospitals and 271 primary care centres delivering care.

So was all this effort worthwhile? The answer is clearly yes. Some goals were too ambitious to be achieved in the timescale available. The number of COPD patients was unaffected, with 4.3% of men and 3.1% of women still diagnosed with COPD in 2007. The data used to test this part of the study are relatively insensitive to change and could only have been influenced by about three years of the programme's actions anyway. Similarly, mortality for COPD was uninfluenced by this programme, although it will be useful to have information about the age of death as this may well have increased with better care. The quality of spirometry did improve, with only 83% of operators calibrating their equipment daily and 92% of centres now using appropriate reference values for interpretation. This confirms earlier predictions¹² that high quality spirometry can be delivered through primary care at a national level provided an appropriate infrastructure is available. The number of people smoking decreased among male and female patients, although these data appear to be a population estimate and they are not necessarily specific to the effects of the COPD programme. However, this cannot be said about the decline of hospital admissions

associated with COPD, which fell by almost 40% from the 1997 level. This is likely to be a direct consequence of better care and is a major finding, not least because it reduced COPD healthcare costs in Finland from €800M towards €174M.

Inevitably, a study of this kind has limitations. It is not possible to conduct a randomised controlled trial of a whole-system intervention, since setting up the trial influences those in the control group. The reduction in smoking is likely to be multi-factorial not simply a consequence of this programme. However, it is harder to dismiss the improvement in spirometry and the decrease in hospitalisations, even if general changes in healthcare behaviour played a role. The authors are rightly cautious about the role that screening played in this programme as there was no general agreement about whether to use this opportunity to identify cases earlier. Certainly, this study is not the one to resolve the vexed question about when and how the ascertainment of COPD cases should be conducted.

The Finnish healthcare system has led the way in many innovations, including the use of β -blockers and statins in cardiovascular disease, and the creation of nationally-organised asthma care. Their approach to COPD is equally pioneering and has many lessons for the rest of the world. It does reflect a 'European' model of care, with integration between state-supported actions to improve different healthcare behaviours and patient organisations which play a key role in this system. It is easier to achieve such a goal in a country of 5 million people where the lines of communication between government, care providers and patients are shorter. However, the benefits of applying integrated care are clear. The challenge for those of us living in larger, more complex societies is how to apply these lessons to our own situation. Only by doing so will we really impact on the wellbeing of our current and future COPD patients.

Conflict of interest

PMAC is a member of the Department of Health Respiratory Programme Board for England.

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