- Institute of Preventive Medicine, London and Oxford, Oxford University Press, 2002.
- **3** Loddenkemper R, ed. European Lung White Book. Huddersfield, European Respiratory Society, 2003.
- **4** Peto R, Lopez AD, Boreham J, Thun M, Heath C Jr. Mortality from Smoking in Developed Countries 1950–2000. 2nd Edn. Oxford, Oxford University Press, 2004.
- **5** Mannino D. Chronic obstructive pulmonary disease in 2025: where are we headed? *Eur Respir J* 2005; 26: 189.
- **6** Pride NB. Smoking cessation: effects on symptoms, spirometry and future trends in COPD. *Thorax* 2001; 56: Suppl. 2, 7–10.

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From the authors:

We would like to thank N.B. Pride for the interest in our article [1] and the opportunity to elaborate on our projections of the increasing prevalence of chronic obstructive pulmonary disease (COPD) in the Dutch population.

First, we would like to emphasise that, like all model projections, the numbers should not be considered as infallible projections for the future. This was not the aim of our model. Rather it has been developed as a tool to help explain the current situation, given current COPD treatment and knowledge on the demographics and smoking trends, and to support policy makers in their choices. While the current practice scenario may be interesting on its own, the main purpose of model projections over a certain time period is to enable comparison of different policy choices regarding prevention, as with the smoking cessation measures used as an illustration in our article.

N.B. Pride addressed the issue as to why the prevalence of COPD for males increased despite the decline in smoking prevalence over the last 30 yrs. In our current practice scenario, the prevalence of COPD was projected to increase from 24 to 33 per 1,000 inhabitants of all ages for males and from 15 to 27 per 1,000 inhabitants for females.

Indeed, the smoking prevalence in Dutch males has decreased substantially since 1970. As a consequence, the percentage of ex-smokers in the Dutch population increased during this period. The relative risk (RR) of these ex-smokers for developing COPD is still increased (males aged 45-69 yrs, RR=11.2; males aged >70 yrs, RR=7.4). Many of these exsmokers have reached the older age classes, where the incidence of COPD is high. The RR to develop COPD in our model is based on the average RR among ex-smokers. This group of ex-smokers consists of males who recently gave up smoking and males who gave up smoking a while ago. On average, this RR represents the entire group of ex-smokers well, unless there is a relatively large proportion of ex-smokers who gave up smoking a long time ago. In the latter case, the RR may be overestimated. However, there is evidence that the RR of developing COPD after smoking cessation does not decline as fast as it does for other smoking-related diseases, such as lung cancer [2].

Our dynamic life-table model accounts for demographic changes, as well as changes in smoking prevalence. The past smoking behaviour of the population is present in the current distribution of nonsmokers, smokers and ex-smokers in the different age and sex classes. This distribution changes each year as a result of ageing of the birth cohorts and the application of age- and sex-specific start, stop and restart rates [1]. Commonly, projections of the burden of disease are not based on dynamic life-table models, but on simple demographic projections in which age- and sex-specific prevalence rates are multiplied by the expected number of people in the age and sex classes in the future (Statistics Netherlands, Voorburg/Heerlen, the Netherlands). We recently compared the results of our model with a simple demographic projection [3]. Figure 1 shows the results of this comparison for the Netherlands. For males, the simple demographic projection resulted in a considerably higher number of patients than our model projection had predicted. Accounting for changes in smoking prevalence decreases the projection for the total number of male COPD patients for the year 2025 from 315,000 to 270,000. For females, the opposite is seen. Hence, not taking into account changes in smoking prevalence would certainly overestimate the burden of COPD among males. These findings are in accordance with an earlier publication [4].

Figure 2 also sheds more light on the issue raised by N.B. Pride. It shows the age specific prevalence rates of COPD among males. For all age classes except 80–84 yrs and >85 yrs, the COPD prevalence rate over the period 2000–2025 decreased. As the number of people in the older age classes in the general population increased considerably, the absolute number of male COPD patients increased from 188,000 to 270,000, despite a decline in age-specific prevalence rates. Thus, as the total number of males in the population hardly changed (from 7.8 to 8.2 million), the prevalence rate for males expressed per 1,000 inhabitants increased from 24 to 33.

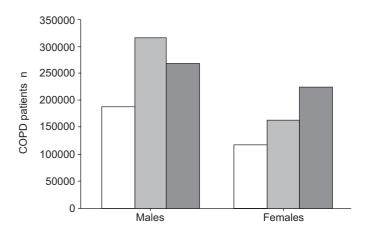


FIGURE 1. Absolute number of chronic obstructive pulmonary disease (COPD) patients in 2000 (□), simple demographic projections for the year 2025 (■) and dynamic model projections for the year 2025 (■) in males and females.



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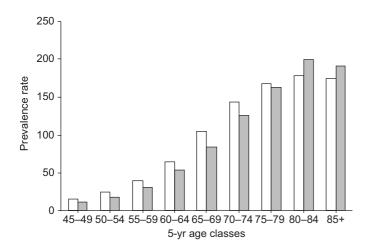


FIGURE 2. Chronic obstructive pulmonary disease prevalence rates for males (number per 1,000 inhabitants in each age class) by 5-yr age group for the year 2000 (□) and projections for the year 2025 (■).

In conclusion, the increase in the chronic obstructive pulmonary disease prevalence among males is primarily explained by ageing of the population, as already suggested by N.B. Pride, in combination with the increased relative risk of developing chronic obstructive pulmonary disease in ex-smokers.

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REFERENCES

- 1 Hoogendoorn M, Rutten-van Mölken MP, Hoogenveen RT, *et al.* A dynamic population model of disease progression in COPD. *Eur Respir J* 2005; 26: 223–233.
- **2** U.S. Department of Health and Human Services. The Health Benefits of Smoking Cessation. 1990, U.S. Department of Health and Human Services. Public Health Service, Centers for Disease Control. Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- **3** Hoogendoorn M, Feenstra TL, Rutten-van Mölken MP. [Projections of future resource use and costs of asthma and COPD in the Netherlands]. *Ned Tijdschr Geneeskd* 2006; (In press).
- **4** Feenstra TL, Van Genugten ML, Hoogenveen RT, Wouters EF, Rutten-van Mölken MP. The impact of aging and smoking on the future burden of chronic obstructive pulmonary disease: a model analysis in the Netherlands. *Am J Respir Crit Care Med* 2001; 164: 590–596.

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ERRATA

"DRIVING SIMULATOR AND NEUROPSYCHOLOGICAL TESTING IN OSAS BEFORE AND UNDER CPAP THERAPY". M. ORTH, H-W. DUCHNA, M. LEIDAG, W. WIDDIG, K. RASCHE, T.T. BAUER, J.W. WALTHER, J. DE ZEEUW, J-P. MALIN, G. SCHULTZE-WERNINGHAUS AND S. KOTTERBA. *EUR RESPIR J* 2005; 26: 898–903.

Unfortunately, the title of this paper was printed incorrectly. Neuropyschological should read neuropsychological.

DOI: 10.1183/09031936.06.00129405

"STANDARDS FOR THE DIAGNOSIS AND TREATMENT OF PATIENTS WITH COPD: A SUMMARY OF THE ATS/ERS POSITION PAPER". B.R. CELLI, W. MACNEE AND COMMITTEE MEMBERS. *EUR RESPIR J* 2004; 23: 932–946.

Unfortunately, in reference 37, an author's name was presented incorrectly as published. Vicken should read Vincken.

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