COPD Screening in High-Risk Groups

To the Editor:

We read with interest the article by Zieliński and Bednarek (March 2001) and the subsequent communications to the editor in a recent issue of CHEST (May 2002). We agree with Gourgoulianis et al that, besides smokers, other high-risk populations for COPD are ethnic minorities and people with occupational exposure.

In accord with other authors, we believe that limiting screening to high-risk groups will detect only a part of the population with airflow obstruction, while the clinical setting could provide a tremendous opportunity for a widespread program of early detection of airflow obstruction. However, even in this way, this pressing problem is only partially faced. The recently published guidelines on COPD (Global Initiative for Chronic Obstructive Lung Disease) underline that the presence of chronic cough and sputum production before airflow obstruction (stage 0) offers a unique opportunity to identify subjects at risk of COPD and to intervene before the disease has become a health problem. Because updated information on the prevalence of these indicators in the general population is scant and because in the last decades environmental, behavioral (particularly smoking habits), and socioeconomic conditions have changed fast throughout the world, ad hoc population-based studies are needed in the different countries. On the basis of this information, active interventions to prevent the disease in the future, such as effective smoking cessation and clean air programs, could be specifically addressed. In order to plan screening programs by mass spirometry, it is essential to know the true dimension of the bottom of the iceberg.

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References


To the Editor:

We very much appreciate comments of Cerveri and colleagues related to our article on the early diagnosis of COPD. We agree that updated estimates of COPD prevalence would be very helpful in planning widespread programs of early diagnosis of the disease. Several such studies have been performed in recent years. They confirmed that COPD affects approximately 10% of adult population in developed countries. One may expect that only 20 to 30% of that population have received diagnoses and undergo regular treatment. Seventy percent remain unaware of the disease. This is an enormous number of people, probably beyond the scope of the best programs of early diagnosis.

Considering limited resources for a preventive medicine in many countries, such programs are obliged to adopt the strategy of an optimal cost-effectiveness ratio. We are fully aware that there are multiple risk factors for COPD. However, 90% of all cases of COPD are smoking related, and smokers should remain the main target of such programs.

Programs of early diagnosis of COPD may be classified into case-finding programs or population screening. In both programs, there is an agreement that the disease should be looked for in the high-risk subjects. Opinions diverge as the lower limit of age of screened subjects is concerned. It varies from 35 years to 45 years. We think that the age cutoff point is an economic issue; the higher the age of a person screened, the better the cost-effectiveness ratio.

The case-finding method seems to be very cost-effective. Necessary investments are limited to purchase of a simple spirometer and training of a person performing spirometric measurements. However, the quality of spirometric measurements is crucial for reliability of the program.

Van Schayck et al calculated that a primary care physician may diagnose one case of COPD weekly in a case-finding program. Assuming that one physician takes care of 2,000