



## Letter to the Editor

### COPD diagnosis in EPI-SCAN II<sup>☆</sup>



#### El diagnóstico de la EPOC en EPI-SCAN II

To the Editor

Following the publication of the results of the EPI-SCAN II study on the prevalence of chronic obstructive pulmonary disease (COPD) in Spain and its determinants,<sup>1</sup> we would like to make 2 methodological observations. First, the study series was generated from a pre-selected list of postal codes closest to each hospital. This pre-selection was not detailed in the study protocol listed on the *ClinicalTrials.gov* registry and constitutes a selection bias, because participating hospitals are located in major provincial cities, neglecting the more rural areas. However, it is well known that rurality, the professions associated with rural populations, and the socio-economic conditions of this environment have a clear impact on the prevalence of the disease, its clinical impact and its prognosis.<sup>2,3</sup> Consequently, the EPI-SCAN II leaves out information not only from the so-called “empty Spain” but also from populated rural areas. The use of phone numbers by postal code might also exclude a population that does not have a landline number.

Secondly, in an epidemiological study of prevalence, the definition of a case is crucial. In the EPI-SCAN II study, the cases are not identified as COPD patients, but are based solely on the identification of bronchial obstruction in post-bronchodilator spirometry. However, the diagnosis of COPD is not based solely on this functional finding. Currently, 3 diagnostic criteria are needed: previous exposure, respiratory symptoms, and bronchial obstruction.<sup>4</sup> However, according to EPI-SCAN II results, 27% had never smoked and report no other exposure except for some cases of electronic cigarettes. Moreover, the recorded symptom rate of less than 50% and the CAT questionnaire score of 9.07 points in patients with COPD suggest that many cases identified as COPD were in fact asymptomatic. All of this suggests that the authors are evaluating the prevalence not of COPD, but rather of airflow obstruction. Only in the headings of some of the tables and figures do the authors recognize that they are not evaluating the prevalence or under-diagnosis of COPD, but airflow obstruction.

The confusion between COPD and chronic airflow obstruction has been exacerbated for years by epidemiological studies that have equated bronchial obstruction with COPD.<sup>5</sup> However, bronchial obstruction is a functional finding associated with numerous airway diseases, and should not be synonymous with COPD. The EPI-SCAN II study itself states that 16.9% of these “COPD” cases had a diagnosis of bronchial asthma. As pulmonologists we believe it is important to place value on the correct diagnosis of diseases in our specialty, in order to avoid propagating confusing concepts that overestimate actual prevalence and do not help clinicians in making decisions and seeking the best treatment for their patients.

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### Conflict of interests

JLLC has received honoraria in the past 3 years for lectures, scientific consultancy, clinical trial participation, and writing of papers for: AstraZeneca, Boehringer Ingelheim, Chiesi, CSL Behring, Esteve, Ferrer, Gebro, GlaxoSmithKline, Grifols, Menarini, Novartis, Rovi and Teva. BAN declares having received honoraria in the past 3 years for speaking engagements, scientific consultancy, participation in clinical trials, and writing of papers for: AstraZeneca, Boehringer Ingelheim, Chiesi, FAES, Ferrer, GlaxoSmithKline, Menarini, Novartis and Rovi.

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