Letter to the Editor, International Journal of COPD [Letter]

This article was published in the following Dove Press journal:
International Journal of Chronic Obstructive Pulmonary Disease

Martin Miller ¹
Brendan G Cooper ²
Sanja Stanojevic³

¹Institute of Applied Health Sciences, University of Birmingham, Birmingham, UK; ²Lung Function and Sleep, Queen Elizabeth Hospital, Birmingham, UK; ³Community Health and Epidemiology, Dalhousie University, Halifax, NS, Canada

Dear editor

We read the paper by Llordés et al¹ with some interest. The results from this small study are interesting but the analysis and conclusion seem to be at odds with the data. The authors consider a COPD diagnosis by both lower limit of normal (LLN) and the fixed ratio (FR), that is FEV1/FVC<0.7, as concordant (LLN+FR+) and subjects who are FR+LLN- as discordant. Their data show that the discordant group have lower CAT score and lower BODE index suggesting that this group likely has other co-morbidities. As expected, the discordant group is older, more male-dominated² and has fewer hospital admissions. Furthermore, the discordant group has a better overall survival and less respiratory mortality which highlights that the discordant group is quite dissimilar to the concordant group. It is not clear how these data clearly demonstrate that using the FR in the diagnosis COPD is superior to LLN.

The single piece of data the authors have to support their main conclusion, that the FR is better for diagnosing COPD than the LLN, is that the discordant group has a greater decline in FEV1/FVC than the concordant group. This is not an acceptable way to look at deterioration of airflow obstruction.³ In patients with a low FEV1/FVC the ratio can increase with severity since the FVC starts to reduce to a greater extent because of premature airway closure. Decline in FEV1 should be used to assess deterioration, and no significant difference in annualised decline in FEV1 was shown.

The authors strong conclusion that LLN is less useful than FR for diagnosing COPD in primary care seems to be a misinterpretation of the data presented.

Disclosure

The authors report no conflicts of interest in this communication.

References

1. Llordés M, Jaen A, Zurdo E, Vazquez I, Almagro P. Fixed ratio versus lower limit of normality for diagnosing COPD in primary care: long-term follow-up of EGARPOC Study. *J COPD*. 2020;15:1403–1413.
2. Miller MR, Levy ML. Chronic obstructive pulmonary disease: missed diagnosis versus misdiagnosis. *Br Med J*. 2015;351:h3021. doi:10.1136/bmj.h3021
3. Pellegrino R, Viegi G, Brusasco V, et al. Interpretative strategies for lung function tests. *Eur Respir J*. 2005;26:948–968. doi:10.1183/09031936.05.00035205

Correspondence: Brendan G Cooper
Lung Function and Sleep, Queen Elizabeth
Hospital Birmingham, Mindelsohn Way,
Edgbaston, Birmingham B15 2GW, UK
Tel +44 121 371 3890
Email Brendan.Cooper@uhb.nhs.uk

Dove Medical Press encourages responsible, free and frank academic debate. The content of the International Journal of Chronic Obstructive Pulmonary Disease 'letters to the editor' section does not necessarily represent the views of Dove Medical Press, its officers, agents, employees, related entities or the International Journal of Chronic Obstructive Pulmonary Disease editors. While all reasonable steps have been taken to confirm the content of each letter, Dove Medical Press accepts no liability in respect of the content of any letter, nor is it responsible for the content and accuracy of any letter to the editor.

International Journal of Chronic Obstructive Pulmonary Disease

Dovepress

Publish your work in this journal

The International Journal of COPD is an international, peer-reviewed journal of therapeutics and pharmacology focusing on concise rapid reporting of clinical studies and reviews in COPD. Special focus is given to the pathophysiological processes underlying the disease, intervention programs, patient focused education, and self management

protocols. This journal is indexed on PubMed Central, MedLine and CAS. The manuscript management system is completely online and includes a very quick and fair peer-review system, which is all easy to use. Visit <http://www.dovepress.com/testimonials.php> to read real quotes from published authors.

Submit your manuscript here: <https://www.dovepress.com/international-journal-of-chronic-obstructive-pulmonary-disease-journal>