Response letter to: the Hispanic paradox further unraveled?

Dr Young and Ms Hopkins¹ suggest that the lack of a confirmation of the ‘Hispanic paradox’ for lung phenotypes in the Multi-Ethnic Study of Atherosclerosis (MESA) Lung Study could be due to differences in the distribution of Hispanic subgroups and lower smoking exposure in MESA compared to the study by Bruse et al.² As suggested, we repeated our analyses stratifying the Hispanic group into those of Mexican and non-Mexican origin and found similar results to initial findings. In a sensitivity analysis including only those Hispanic-Americans who identified Mexico as their country of origin, we again found that among both women and men, genetic ancestry did not modify the effect of pack-years of cigarette smoking on either the forced expiratory volume at 1 s (FEV₁) or the ratio of the FEV₁ to the forced vital capacity (all p values >0.20). Furthermore, in analyses restricted to smokers with greater than 10 pack-years, findings were again unchanged (p>0.4). While the results of these sensitivity analyses were underpowered and should not be taken as definite statements on this topic, they support our general conclusion that smoking is similarly harmful across these race/ethnic groups.

Although the prevalence of COPD varies by race/ethnic groups in the USA, there is relatively little evidence to suggest that the risk of developing COPD varies substantially by race/ethnic identity after accounting for established risk factors. For example, the prevalence of COPD among non-Hispanic blacks is higher than that of Mexican-Americans, and the prevalence of smoking is higher as well.³ Indeed, our results for both self-reported and genetically estimated ancestry do not show evidence of greater susceptibility to cigarette smoke among those of African ancestry.⁴ That said, we agree with Dr Young and Ms. Hopkins that non-genetic and genetic factors may play an important role in the risk of developing COPD, including dietary explanations, as suggested, and some of these factors may vary substantially across continents and cultures. Ongoing research in the Hispanic Community Health Study⁵ and other studies should provide a better-powered understanding of COPD risk among Hispanic populations and other groups.

Rhea Powell, R Graham Barr
Department of Medicine, Columbia University, New York, New York, USA

Correspondence to: Dr R Graham Barr, Department of Medicine, Columbia University Medical Center, PH 9 East—Room 105, 630, West 168th St., New York, NY 10032, USA; rgb9@columbia.edu

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Competing interests

Please see original ICMJE COI forms submitted with the initial article for Drs Powell and Barr. No competing interests related to this letter. In general, RP has no competing interests. RGB received costs of conference travel from Boeringher Ingelheim.

Ethics approval

IRB from all participating universities and the National Heart Lung Blood Institute (NHLBI).

Provenance and peer review

Not commissioned; internally peer reviewed.

Data sharing statement

Researchers interested in working with MESA. Investigators are welcome to submit a manuscript proposal or ancillary study proposal directly to the study. Please feel free to review additional materials related to establishing a collaborative relationship with MESA at the following link http://www.mesa-nhlbi.org/ancillary.aspx.

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REFERENCES


