

PREFACE

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Chronic obstructive pulmonary disease (COPD) is a complex and heterogeneous disease that lacks of optimal therapeutic approach. COPD is the third world cause of death according to the Global Burden of Diseases data and also causes a wide use of resources in health, suffering, and disability¹. Its importance has been highlighted by various international organizations linked to health, and consequently, guidelines for diagnosis and treatment have been generated for both specialists and general practitioners².

This special issue of the Revista de Investigación Clínica –Clinical and Translational Investigation– addresses several relevant topics related to COPD, starting with the most important recognized cause: smoking, and accordingly the first preventable cause of death. The central theme is the standard treatment to help smokers quit smoking, which is the most important preventive strategy to avoid deterioration of patients with COPD. Another related topic addressed in the issue is the use of electronic cigarettes and similar devices that generate nicotine fumes without combustion and the great concern for public health as they initiate into nicotine addiction with attractive devices to young people of which a relevant proportion can pass to smoke normal cigarettes.

Both nicotine addiction and the susceptibility to develop COPD, have genetic factors that are analyzed in detail in another article of this issue clarifying the interactions between environmental and genetic factors, with data applicable to large populations and in particular to Mexico. Two current controversies in COPD are also part of the number: the diagnostic criteria for COPD, which vary considerably and the impact of mild COPD and in particular the impact of various radiological and functional alterations in smokers without obstruction. Smokers may have altered lung function and radiological emphysema, but without spirometric obstruction, and this has been a controversial issue since the 1970s, as it indicates by the development of tests capable of identifying early smokers who will develop COPD.

Finally, smoking is not the only cause of COPD. In developing countries and mainly in rural areas, domestic exposure to biomass smoke generates bronchial alterations and obstruction, but with differential clinical and functional characteristics of the smoking-associated COPD, that need to be specified and emphasized for clinicians.

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Public health measures are required, primarily the fight against smoking and toxic exposures such as air pollution and occupational exposures to reduce the problem of COPD. In a next step, the bulk of patients should be diagnosed and followed in primary care, which is the subject of another article. Moreover, only the most severe patients or those with comorbidities should get specialized attention. This staged scheme should be applied to COPD, and other chronic diseases since most of the relevant risk factors are shared and would benefit from general measures such as reducing smoking and pollution, regular exercise, and eating a healthy diet.

REFERENCES

1. GBD 2015 Chronic Respiratory Disease Collaborators. Global, regional, and national deaths, prevalence, disability-adjusted life years, and years lived with disability for chronic obstructive pulmonary disease and asthma, 1990-2015: a systematic analysis for the Global Burden of Disease Study 2015. *Lancet Respir Med.* 2017;5:691-706.
2. Mirza S, Clay RD, Koslow MA, Scanlon PD. COPD guidelines: a review of the 2018 GOLD report. *Mayo Clin Proc.* 2018;93:1488-502.