

# COVID-19 and smoking habits: a smoky situation!

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Dear Editor,

the issues recently raised by Carratù *et al.* [1] on the role of smoking/former smoking in patients hospitalized for COVID-19 all around the world as widely reported in many different published papers, are important for different reasons, although the authors probably did not focus the core of the problem. We completely agree that in COVID-19 patients a careful assessment of smoking history should be mandatory, although it is frequently lacking in the evaluation of COVID-19 patients with severe ARDS. An accurate clinical history is important to precisely classify these patients when analyzing the possible risk or (putatively) protective factors for COVID-19. To this regard it has been reported an unexpectedly low prevalence of current smokers among hospitalized patients with COVID-19 [2,3]. The low prevalence of active smokers among COVID-19 hospitalized patients is confirmed by the low prevalence of COPD in these patients, as reported in many different published papers as recently reviewed by Singh *et al.* [4]. These observations are not in contrast with the findings that smokers and COPD patients might have more severe COVID-19, although a recent meta-analysis, performed after a sensitivity analysis to exclude heterogeneous case histories, showed that the effects of smoking on the severity of COVID-19 was not significant [5]. Interestingly the only confounding case history of patients was that of Guan *et al.*, which data have been considered

in the study by Carratù *et al.* [1]. It is well known that smoking is the main risk factor for COPD and consequently, we would have expected higher prevalence of smokers (and of COPD) in COVID-19 patients, while the contrary has been reported [2-5].

What is important to note is that the rates of active smokers among COVID-19 patients are low in all published studies, with respect to former and no smokers, while one should have expected the opposite. Thus we do not agree with the suggestion of Carratù *et al.* to group active smokers together with former smokers since it is possible that an important issue could be the presence of smoke (active smokers) with respect to the absence of smoke (former/never smokers). Further studies will be necessary to investigate if this hypothesis is true and its potential pathophysiological mechanisms [6].

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