



## Letter to the Editor

### Smoking history and clinical outcomes in COVID-19 hospitalized patients



#### *Antecedentes de tabaquismo y resultados clínicos en pacientes hospitalizados por COVID-19*

Dear Editor,

In their paper Navas Alcantara et al. described a large group of patients hospitalized for COVID-19 in Spain focusing on the effects of cigarette smoking history on patients clinical outcomes concluding that an history of cigarette smoking (past or active) is an independent factor for negative prognosis in COVID-19 patients.<sup>1</sup>

The unhealthy effects of cigarette smoking are well known and have not to be questioned and thus the observations of the Authors are probably expected also in COVID-19 patients. To this respect, at now, it is still debated a possible 'protective' effect of active cigarette smoking on the risk of hospitalization for COVID-19 and in particular for interstitial lung pneumonia due to SARS-CoV-2 infection.<sup>2-4</sup>

These hypothesized protective effect of active smoking on the risk of hospitalization for COVID-19 seems confirmed also by the data reported by the Authors even if they have not highlighted nor discuss them in their paper. Infact as detailed in Table 1 of Navas Alcantara et al. paper, among patients with a history of smoking (previous or active), only 733 were active smokers, i.e. 5% of all considered patients hospitalized for COVID-19.<sup>1</sup> This means that among all hospitalized patients for COVID-19 considered by the Authors, 95% were no-active smokers.

Cigarette smoking has to be discouraged for its well known unhealthy effects. Nonetheless, although well far to suggest a 'protective' effect of active cigarette smoking on the risk of hospitalization for COVID-19, we have to push research to investigate what are the possible mechanisms leading to this quite low prevalence of active smokers among hospitalized patients for COVID-19 observed also in Spain, a country with about 25% of active smokers.<sup>5</sup>

### References

1. Navas Alcántara MS, Montero Rivas L, Guisado Espartero ME, Rubio-Rivas M, Ayuso García B, Moreno Martínez F, et al. Influence of smoking history on the evolution of hospitalized in COVID-19 positive patients: results from the SEMI-COVID-19 registry. *Med Clin (Barc)*. 2021. S0025-7753(21)00650-3. DOI 10.1016/j.medcli.2021.10.011.
2. Lee SC, Son KJ, Kim DW, Han CH, Choi YJ, Kim SW, et al. Smoking and the risk of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. *Nicotine Tob Res*. 2021;23:1787–92. <http://dx.doi.org/10.1093/ntr/ntab079>.
3. Farsalinos K, Barbouni A, Niaura R. Systematic review of the prevalence of current smoking among hospitalized COVID-19 patients in China: could nicotine be a therapeutic option? *Intern Emerg Med*. 2020;15:845–52. <http://dx.doi.org/10.1007/s11739-020-02355-7>.
4. Rossato M, Russo L, Mazzocut S, Di Vincenzo A, Fioretto P, Vettor R. Current smoking is not associated with COVID-19. *Eur Respir J*. 2020;55:2001290. <http://dx.doi.org/10.1183/13993003.01290-2020>.
5. <https://www.statista.com/statistics/1069099/tobacco-use-prevalence-in-spain/>

Marco Rossato\*, Angelo Di Vincenzo

*Clinica Medica 3, Department of Medicine – DIMED, University-Hospital of Padova, Italy*

\* Corresponding author.

E-mail address: [marco.rossato@unipd.it](mailto:marco.rossato@unipd.it) (M. Rossato).