

“What We Do Not Know About Smoking and COVID-19 Can Hunt Us Down”

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Abstract: In the COVID-19 pandemic, smoking is often overlooked, and it is widely abused by underserved populations. Drug addictions such as tobacco could influence future outcomes as they impact obstructive pulmonary and cardiovascular diseases that might prove long-lived and worsens the impact of COVID-19. Future studies need to focus on smoking related illness by COVID-19 patients.

Keywords: smoking, COVID-19, pandemic.

INTRODUCTION

The new outbreak resulting from the emergence of a novel Coronavirus 19 (COVID-19), also known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), is a tragedy of incredible proportions.[1] In the midst of the pandemic, all eyes around the globe are focused on the last treatment for COVID-19 and when the vaccine will be ready. However, there is another dimension of this pandemic that has received little to no attention. The increase of drug use typically observed during other public health catastrophes. Among them, smoking is not only the leading cause of morbidity and mortality, but also widely abused by vulnerable populations, and is frequently used to cope with undue distress.

Approximately 1.1 billion people around the world smoke cigarettes, causing 8 million deaths every year. [1] The situation is even worse among people living with HIV (PLWH) for whom the rates of smoking triple those of the general population. [2] In addition, PLWH not only are more susceptible to the deleterious health effects, smoking is curtailing the effectiveness of antiretroviral therapy. [2-3] Unfortunately, studies indicated that PLWH are less likely to respond to existent therapies. Therefore, we are performing a randomized smoking cessation trial to assess if a tailored combination therapy is superior to standard therapy for smokers living with HIV. We are now concerned because stressors and reduced social contact associated with the quarantine

may have adverse effects on individuals in recovery from substance use and abuse.

Moreover, tobacco companies around the world are heavily marketing their products. For example, during this pandemic they are using popular hashtags from government and health authorities such as “Stay at Home”, “Frena La Curva (#Flatten the Curve) or “Distanti Ma Vicini (Distant But Close). In the U.S. their advertisements offer free masks with the purchase of tobacco products. Bidi Vapor claimed on Instagram that “A bidi stick a day keeps the pulmonologist away.”

To make matters worse, the recent report from the World Health Organization indicated that up to June 30, 2020 “there are currently no peer-reviewed studies that have evaluated the risk of SARS-CoV-2 infection among smokers. [1] They also concluded that there are currently no peer-reviewed studies that directly estimate the risk of hospitalization with COVID-19 among smokers. [1] Current evidence is now drawn from studies reporting the prevalence of smoking amongst hospitalized COVID-19 patients. An analysis of 13 Chinese studies that had registered smoking as a precondition found that the number of smokers across the whole sample of 5,300 patients was 6.5%. [4] An astonishingly small number when considering that in China approximately 28% of the general population smokes regularly, and these rates are even higher among males. [4] The results also fall in line with a study published in France. Scientists from the Pitié-

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Salpêtrière reported that out of 11,000 patients admitted to the hospital with coronavirus, 8.5 percent were smokers. [5] These figures contrast sharply with the France smoking rate of 25.4 percent. [5] This preliminary analysis does not support the argument that current smoking is a risk factor, and instead raises the hypothesis that nicotine may have beneficial effects on COVID-19.

This is quite similar to the “smoker’s paradox” raised some decades ago when it was claimed that a current smoker was less likely to die from a first heart attack than a non-smoker. [7] Similarly, the research design was faulty, and when confounders such as sociodemographic were considered, the theory was completely debunked [7-8].

In accord with this concern, analyzes of almost 1100 confirmed cases of COVID-19 showed that 12.4% of smokers died, required ICU admission, or needed intubation, compared to 4.7% among never smokers. [9] The study by Guan and colleagues found that a significantly higher proportion of current and former smokers were among the severe cases: 17% and 5%, as compared to the non-severe cases (12% and 1%, respectively). [9] Furthermore, the proportion of smokers was even higher when analyzing those admitted to an intensive care unit, those requiring mechanical ventilation, or those who died (26% vs. 12%). [6] Based on these and other case series, Vardavas and Nikitara conducted a systemic review and estimated risks concluding that “smoking is most likely associated with rapid progression and adverse outcomes of COVID-19” [10].

Drug addictions such as tobacco could influence future outcomes as they impact obstructive pulmonary and cardiovascular diseases that might prove long-lived and worsens the impact of COVID-19. Therefore, smoking is a serious threat that goes untreated while we focus exclusively on the physical aspects of COVID-19.

Finally, nations will be in a better position to fight this and future pandemics by fighting the smoking epidemic, by holding tobacco companies accountable, by taking advantage of public health strategies, and by providing the clearly established risks of smoking. Helping smokers quit will reduce the amount of people with underlying conditions, which could make them more susceptible to COVID-19 and other infections.

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