

Understanding the Association between Smoking and Corona Virus Disease 2019

Dear Editor,

The Corona Virus Disease-2019 (COVID-19) pandemic has resulted in alarming health outcomes across the world and there is an immense need to take measures to contain the spread of the infection. As of 25 July 2020, 15581009 cases and 635173 deaths have been reported in 216 affected nations and territories and the global case fatality rate stands at 4.1%.^[1]

The epidemiological analysis of the reported deaths revealed that the probability of an adverse outcome, including death increases enormously in two categories of people, namely the elderly and those who are suffering from pre-existing comorbid illnesses.^[2] Despite these initial estimates and trends, the association between smoking and COVID-19 is still not clear.^[3] However, recently it has been proposed that during the act of smoking, the frequency of our fingers (which might be carrying the virus) touching our lips increases, and thus smokers are more vulnerable to acquire the infection, in contrast to the nonsmokers.^[3] Further, as there is a definite possibility that smokers share their cigarettes with each other and thus the possibility of community transmission of the infection can also be not ruled out.^[3]

On a similar note, we are not very much sure about the clinical attributes of the disease or even the prognostic factors. In general, the habit of smoking has been linked with poor respiratory outcomes (like reduced lung capacity, lung cancer, chronic bronchitis, etc.) and reduced immunity, and as COVID-19 has been linked with the development of respiratory distress or pneumonia, multiple hypotheses have been proposed to suggest a link between smoking and the outcomes of the novel infection.^[3,4] The findings of a systematic review concluded that COVID-19 patients who are current smokers have a higher probability of developing severe symptoms, required the support of mechanical ventilation, and admission to the intensive care units in hospitals.^[4] The potential reasons for such clinical outcomes could be due to the possibility that smokers might be already suffering from some form of lung disease or reduced lung volumes, which become really crucial determinants in having a favorable treatment outcome of COVID-19 infection.^[2-4]

In conclusion, the initially available evidence from COVID-19 patients has suggested that the habit of smoking plays an important role in the acquisition of COVID-19 and is even linked with poor treatment outcomes.

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Conflicts of interest

There are no conflicts of interest.

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