SARS-COV-2 CORONAVIRUS PANDEMIC: NOW IS THE RIGHT TIME TO STOP SMOKING

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The major effort of the healthcare systems during the new SARS-CoV-2 coronavirus pandemic is directed towards primary prevention (prevention of virus infection) and secondary prevention (prevention of severe forms of COVID-19 illness and its complications). As at this time of global health threat the general population may be more attentive and susceptible to the healthcare workers advices, it is of great importance to send clear messages on how to modify behavior in a manner that increases the chances of preserving health.

It is somehow surprising that the majority of existing guidelines do not explicitly advice to stop smoking, as one of the factors associated with the negative progression and adverse outcomes of COVID-19 (Vardavas & Nikitara 2020, Guan et al. 2020). Smoking cessation is associated with many positive health effects, including improved lung function and a reduction in the presence and severity of respiratory symptoms (Gratziou 2009), which may possibly prevent severe forms of COVID-19 illness and its complications, through a number of possible mechanisms, as mentioned below:

- carbon monoxide levels drop to normal, increasing free hemoglobin for oxygen transport;
- lower blood pressure and pulse, which may be especially important in people with hypertension and cardiovascular disease, who are at higher risk of developing severe COVID-19 symptoms (WHO 2020a);
- cilia in the respiratory system begin to recover and regain their function to remove small particles and impurities in breath from the respiratory system;
- restoration of the immune response;
- slowing the progression of smoking-related illnesses (for example chronic obstructive pulmonary disease);
- decreasing frequent hand to mouth contact, thus reducing the possibility of infection (WHO 2020b);
- less second-hand smoke, which may be more intense when more time is spent indoors;
- the need to go out for tobacco supply or consumption is interrupted, thus lowering the risk of virus transmission;
- reduced tobacco (and coffee) related anxiety.

Since quitting smoking and other forms of tobacco use has an almost immediate positive impact on respiratory and cardiovascular organs and functions, and these improvements increase over time (CDC 2014), the decision to quit smoking may be related to decrease of severe forms of COVID-19. Subsequently, faster recovery and milder symptoms also reduce the risk of the transmission of the virus to other people (WHO 2020b), which is the case also when decreasing hand to mouth contact or gatherings due to tobacco use. Also, there is no proof that the stress related to tobacco abstinence may decrease immune response or precipitate the development of the severe forms of COVID-19.

Thus, smoking cessation strategies should be included in the broader concept of SARS-CoV-2 coronavirus pandemic prevention and management and should be strongly advocated by health organizations.

Acknowledgements: None.

Conflict of interest: None to declare.

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