The double-edged relationship between COVID-19 stress and smoking: Implications for smoking cessation

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Abstract
Introduction: Although recent research shows that smokers respond differently to the COVID-19 pandemic, it offers little explanation of why some have increased their smoking, while others decreased it. In this study, we examined a possible explanation for these different responses: pandemic-related stress.

Material and Methods: We conducted an online survey among a representative sample of Dutch current smokers from 11–18 May 2020 (n=957). During that period, COVID-19 was six weeks past the (initial) peak of cases and deaths in the Netherlands. Included in the survey were measures of how the COVID-19 pandemic had changed their smoking, if at all (no change, increased smoking, decreased smoking), and a measure of stress due to COVID-19.

Results: Overall, while 14.1% of smokers reported smoking less due to the COVID-19 pandemic, 18.9% of smokers reported smoking more. A multinomial logistic regression analysis revealed that there was a dose-response effect of stress: smokers who were somewhat stressed were more likely to have either increased (OR=2.37; 95% CI: 1.49–3.78) or reduced (OR=1.80; 95% CI: 1.07–3.05) their smoking. Severely stressed smokers were even more likely to have either increased (OR=3.75; 95% CI: 1.84–7.64) or reduced (OR=3.97; 95% CI: 1.70–9.28) their smoking. Thus, stress was associated with both increased and reduced smoking, independently from perceived difficulty of quitting and level of motivation to quit.

Conclusions: Stress related to the COVID-19 pandemic appears to affect smokers in different ways, some smokers increase their smoking while others decrease it. While boredom and restrictions in movement might have stimulated smoking, the threat of contracting COVID-19 and becoming severely ill might have motivated others to improve their health by quitting smoking. These data highlight the importance of providing greater resources for cessation services and the importance of creating public campaigns to enhance cessation in this dramatic time.

Recommended Citation