COVID-19, smoking, and cancer: a dangerous liaison

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For the **GBD Article** see **Articles** *Lancet Respir Med* 2021; published online Aug 16. https://doi.org/10.1016/S2213-2600(21)00164-8

For more on **smoking rates during the pandemic** see **Editorial** *Lancet Respir Med* 2021; **9:** 435

For more on **tobacco smoking and SARS-CoV-2 infection** see **Spotlight** *Lancet Respir Med* 2020; **8:** 664–65

For more on **tobacco company tactics during the pandemic** see **Spotlight** *Lancet Respir Med* 2021; published online July 29. https://doi.org/10.1016/S2213-2600(21)00361-1

For the **ERS open letter** see https://www.ersnet.org/wp-content/uploads/2021/07/Open-letter_ERS_Final_PDF_14.7.2021-2.pdf

An Article published in *The Lancet Respiratory Medicine* on Aug 16, 2021, makes shocking reading. The paper reports the latest Global Burden of Disease (GBD) incidence and mortality data from 1990 to 2019 for tracheal, bronchus, and lung cancers. There were, globally, 2·26 million new cases, 2·04 million deaths, and 45·9 million disability-adjusted life-years in 2019. Notably, the rates increased in the lower socioeconomic indices and in women, reflecting the known trajectory of smoking-associated cancers in relation to global and temporal tobacco use patterns. Unsurprisingly, smoking was ranked as the number 1 cause in all GBD regions, both overall and in men, and accounted for 64·2% of all deaths from these respiratory cancers. However, women were also at risk of these cancers from exposure to household air pollution and ambient particulate pollution; these risk factors were ranked the number 1 cause in parts of Africa and Asia.

It is noteworthy that the above figures are from before the COVID-19 pandemic and it has been widely documented that early diagnosis and treatment of cancers, such as those of the lung, have been negatively impacted over the past year and a half, and that people with a lower socioeconomic status have been disproportionately affected in terms of the risk of lung disease, health outcomes, and access to health-care infrastructures. Furthermore, lung cancer and SARS-CoV-2 infection share similarities in symptoms, such as persistent cough, low oxygen levels, and breathlessness—factors that might have further delayed these cancer diagnoses. A late diagnosis for lung cancer is also associated with a poor prognosis.

The COVID-19 pandemic could have been an opportunity to reduce global smoking rates, with concerted advertising campaigns, better social support, and use of digital technologies. But, conversely, although a survey from ASH (Action on Smoking and Health) suggested that quit numbers had increased in the UK in the early months of the pandemic, the number of smokers has since been reported to have risen in 2021. The reasons behind this increase are probably multifactorial, but the effects of numerous lockdowns and the associated stress, boredom, and isolation might have played a part. The debate during the pandemic around the so-called nicotine hypothesis, with preliminary data suggesting that smokers might be at less risk of infection, will have added to the confusion and affected smoking control efforts. Tobacco companies have also been quick to capitalise on the opportunities offered by the pandemic, lobbying for their products to be considered on essential goods lists, and supplying several countries that have high smoking rates with SARS-CoV-2 testing kits, face masks, or hand sanitiser, under the guise of corporate social responsibility.

Several societies and health organisations have put forward some strategies to tackle these issues. An open letter from the European Respiratory Society and 27 organisations was written to BECA (the European Parliament Committee on Beating Cancer) ahead of the release of their draft report on July 15, 2021, urging BECA to consider endorsing a target increase in the early diagnosis of lung cancer by 20% by 2030. The letter also asked the committee to consider adding lung cancer screening to their recommendations by 2022, to set up awareness campaigns on early diagnosis, to promote European early diagnosis programmes, and to connect expertise via cross-border multidisciplinary centres of excellence. In another effort the European Cancer Organisation highlighted a *Time to Act* campaign, which has been launched in recent months in over 30 languages, to tackle the negative effects of the pandemic on cancer control efforts. The campaign has reinitiated previous messaging around ensuring that cancer is not "the forgotten C" and uses stark estimates in Europe to drive its messaging home—1 million undiagnosed cases of cancer, 100 million screening tests not done, one in two people with symptoms not urgently referred, and one in five people not receiving the surgery or chemotherapy they require. The figures in low-income and middle-income countries will certainly be worse.

The consequences of the COVID-19 pandemic have worsened an already unacceptable global burden of disease for respiratory cancers, as well as highlighting substantial global health inequities, which continue to grow and must be addressed. The explosion in digital technologies since the start of the pandemic could have been better applied to reach those at high risk and to tackle global smoking rates, and to take the necessary steps to address the dangerous liaison of COVID-19, smoking, and cancer. The numbers can no longer be tolerated or ignored. It is time to act.

■ *The Lancet Respiratory Medicine*