COVID-19 and Tobacco Harm Reduction: What's the Relationship?

BY MICHAEL MCGRADY MARCH 10, 2020

COVID-19 and Tobacco Ha

At publication time, over 113,000 people worldwide were known to be infected by the novel coronavirus, and the number of deaths had exceeded 4,000. As of March 5, the World Health Organization (WHO) placed the mortality rate from COVID-19 at 3.4 percent.

Like the previous viral outbreaks MERS or SARS, COVID-19 attacks the lungs and other parts of the respiratory system. No vaccine or pharmacological therapy is currently available.

A working theory links the harms of COVID-19 to the damage done to the lungs from smoking cigarettes. Michael Ryan, executive

hypothesis" for why men seem to be more heavily impacted by COVID-19 than women.

A study published by the Chinese government on February 17 found that of 45,000 confirmed cases at the time, the gender split was roughly equal, but that the fatality rate then recorded was 2.8 percent for men, compared with 1.7 percent for women.

China has the world's largest population of smokers, at well over 300 million. But a study published in 2019 found that in 2015, there was a huge gender divide within an overall smoking rate of 28 percent—with 52 percent of Chinese men smoking, compared with under 3 percent of women.

The general rate of infection from respiratory viruses is higher among smokers. And while smoking hasn't been definitively linked to exacerbating COVID-19, for MERS—the respiratory syndrome coronavirus first identified in the Middle East in 2014—increased risk of infection has been linked to smoking by a multinational research team.

Then-acting US Surgeon General Boris D. Lushniak released a report in 2014 stating that smoking greatly reduces someone's ability to fight against ailments like respiratory infection. It specifically noted that there is "conclusive evidence that smoking is associated with an increased risk of respiratory viral infection."

According to a briefing on coronaviruses from the American Lung Association, the severity of symptoms will vary depending on numerous factors. "For the milder strains, respiratory symptoms like a runny nose, headache, cough, sore throat, fever and fatigue are common," it states. "If an infection progresses to something more severe, it can cause pneumonia, bronchitis, kidney failure and even death. This is more likely to happen in children, the elderly and people with weakened immune systems."

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While switching smokers to risk-reduced nicotine products like vapes would likely come too late to slow the current spread of COVID-19, it is therefore plausible—though unproven—that large-scale switching would significantly mitigate against future respiratory viruses. A 2019 study—notably authored by Dharma N. Bhatta and the controversial anti-vaping researcher Stanton Glantz—found that e-cigarettes could reduce the impact of respiratory infections in smokers if they made the switch.

"Current use of e-cigarettes appears to be an independent risk factor for respiratory disease in addition to all combustible tobacco smoking," they said. "Although switching from combustible tobacco, including cigarettes, to e-cigarettes theoretically could reduce the risk of developing respiratory disease, current evidence indicates a high prevalence of dual use, which is associated with increased risk beyond combustible tobacco use."

Despite Bhatta and Glantz's opposition to e-cigarettes as a way to reduce the risks of respiratory illness among smokers, they still found an empirical probability that risk-reduced products could assist in immune system recovery.

Dr. Alex Wodak, an addiction medicine physician, prominent drug policy reform advocate and board member of the Australian Tobacco Harm Reduction Association, raised this question in a February 27 email to colleagues.

Wodak merely asked this question in hypothetical terms, and noted that we are in "uncharted territory" when it comes to determining any efficacy of tobacco harm reduction in curtailing COVID-19.

He pointed out that public health authorities in a number of countries are recommending that people refrain from smoking to reduce their risks of infection, "Although of course that's not proven yet." Such messaging is understandable—and of course, it is always better for one's health not to smoke—yet in an environment where panic-fueled misinformation abounds, there is also a risk of overemphasis blaming an already-stigmatized population for hastening the spread of COVID-19 without sufficient evidence.

The purported—also unproven—additional risk for vapers compared with people who don't use nicotine sees harm reduction products included in such messaging.

"If you are a smoker or a vaper, that does make you more vulnerable," New York Mayor Bill de Blasio said at a March 8 press conference. "If you are a smoker or a vaper this is a very good time to stop that habit and we will help you."

"If you smoke or vape, stop," recommended John Silvernail, director of the Pitt County public health department in North Carolina. "Smoking or vaping doesn't make you a bad person, but it is bad for you. Furthermore, smoking and vaping irritate your respiratory system, potentially making it easier for infections to invade your body."

Questions should be asked of such declarations, especially in light of the potential for people who quit smoking through vaping to return to smoking.

Marewa Glover, a behavioral scientist and director of the New Zealand-based Centre of Research Excellence: Indigenous Sovereignty and Smoking, believes such messaging to be

"The behavioral changes we may be asked to make will not all be as easy as washing our hands," Glover continued. "This is where I should plug the importance of involving behavioural scientists like myself and other behaviour change experts. Motivating people to change, to adhere to a prescribed course of action—this is our thing! Will we be called upon for advice? I'd guess not."

The fast-developing situation with COVID-19 requires public health authorities to make decisions without the benefit of substantial evidence, but balanced communications are essential. The far more predictable health harms of smoking continue to contrast with the substantial relative benefits of switching to risk-reduced nicotine products (of which some, such as oral snus, have no known respiratory impact).

If that key message—already denied by the WHO and many others—were to be further obscured by stop-vaping calls amid the COVID-19 crisis, there's every likelihood that it will further exacerbate the harms of this outbreak.

The author is a recipient of Tobacco Harm Reduction Scholarship from Knowledge-Action-Change (KAC), independently administered by KAC and supported by a grant from the Foundation for a Smoke-Free World (FSFW). Dr. Marewa Glover's Centre of Research Excellence: Indigenous Sovereignty & Smoking,has also received grants from FSFW. The Influence Foundation which operates Filter, has received restricted and unrestricted grants, respectively, from KAC and FSFW.

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