Saving lives with smoking cessation treatment for patients with depression

August 3 2021, by Matt Kristoffersen

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Ateam of scientists estimates that providing patients with depression with the tools to quit smoking could save as many as 125,000 lives over the next 80 years. That number jumps to 203,000 when extended to

people with depression who are not yet in mental health care settings.

Led by the Yale School of Public Health, the study underscores the potential benefits of smoking cessation in a population that suffers disproportionately from tobacco-related disease and death. It's also the first known study to estimate the population health effects of integrating smoking cessation treatments with standard mental health care.

To build their model, the scientists used more than a decade of data from the National Survey on Drug Use and Health. They then used the model to project the effectiveness of smoking-cessation treatments into the future, and assessed how the benefits varied based on different rates of treatment adoption over the next 80 years.

Simulating the health benefits reveals that, at minimum, 32,000 deaths could be averted by 2100 if a significant number of patients with depression adopted any kind of cessation treatment. With 100% mental health service utilization and pharmacological cessation treatment, the number of potential lives saved rose to 203,000.

"We've known for a long time that people with depression smoke more than the general population, and that mental health care settings often don't have cessation treatment as part of standard care. Our study asks: what is that missed opportunity? What do we have to gain when mental health care and smoking cessation treatment are fully integrated," said Jamie Tam, Ph.D., an assistant professor and the study's lead author. The findings are published in the *American Journal of Preventive Medicine*.

The researchers wrote in the study that such high benefits would be a best-case scenario. Still, they explained, the model's results line up with what public health experts have long predicted if smoking-cessation treatment were to become a routine part of mental health care. The findings show that even less-than-optimal cessation treatments would

make a sizable impact in the quality of life—and length of life—for patients living with depression.

"Beyond reducing the risk of early death, smoking cessation improves quality of life and increases productivity," Tam added. "Decision makers should remove barriers to mental health care and smoking cessation treatments for people with mental health conditions."

Study authors concluded that while existing treatments, such as nicotine replacement therapy, varenicline, and bupropion, can increase cessation rates by nearly 60%, health gains would be even larger if cessation treatments became more effective in the future.

  More information: Jamie Tam et al, The Potential Impact of Widespread Cessation Treatment for Smokers With Depression, *American Journal of Preventive Medicine* (2021). DOI: 10.1016/j.amepre.2021.04.024

Provided by Yale University