

Reducing Health Disparities by Tackling Tobacco Use

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L ast November, the United States achieved a public health milestone with news that the prevalence of cigarette smoking among U.S. adults had fallen to a historic low of 15.1% in 2015, the latest date for which national data are available.¹ Behind the good news of this summary statistic, however, lie broad disparities in tobacco use by geography, sociodemographic characteristics, sexual orientation, and other factors.¹ For example, adults with low education and income levels are roughly twice as likely to smoke as individuals without these characteristics. Smoking rates are even higher among adults with severe mental illness or substance use disorder (SUD).²

These disparities contribute to disturbing differences in health status and life expectancy that exist across the U.S. population. With tobacco use still the leading preventable cause of death in the U.S., any serious effort to reduce health disparities must include an effort to reduce the higher prevalence of tobacco use among vulnerable populations. Approximately half of the estimated 36.5 million U.S. adults who smoke regularly will die of a tobacco-related illness, losing on average a decade of life expectancy. In contrast, smokers who quit gain life expectancy, reduce symptoms, and improve their quality of life, even when quitting occurs late in life or only after a chronic tobacco-related illness develops. Efforts to promote tobacco cessation in the U.S. population, a key public health priority, must not neglect vulnerable populations that are harder to reach, or these efforts might further worsen health and tobacco use disparities.

Most U.S. adults who smoke will see a physician or other health care provider this year. What is that clinician likely to do about this health threat? In this issue of *JGIM*, a paper by Keith and colleagues³ uses data from a large nationally representative survey, the National Survey on Drug Use and Health (NSDUH), to address this question from the patient's perspective. The analysis confirms other survey data showing that the large majority of U.S. adults who saw a health care professional in the past year report being asked about tobacco use, and about half of current smokers recall being advised to quit.⁴ Clearly, clinicians could do a better job by advising all smokers to quit and doing so in a way that patients will not only hear but remember.

However, this is only part of the challenge. Physician advice to quit does increase the likelihood that a smoker will try to quit, but quit attempts made without the benefit of tobacco cessation treatments such as medication or counseling are not likely to succeed. The NSDUH did not ask smokers whether their clinicians had provided any assistance with quitting, but we know from other data that far fewer smokers actually use these evidence-based treatments during their guit attempts.⁴ Other evidence indicates that clinicians' efforts rarely include specific assistance to help a smoker translate motivation to guit into practical effective actions. This is an important missed opportunity. Advising smokers to quit is necessary but not sufficient. Clinicians need to connect smokers to evidencebased treatment by promoting and prescribing cessation medications and by guiding smokers to sources of ongoing assistance that can be delivered by phone, text message, or in person after the visit ends. Helping smokers to quit is one of the most effective preventive actions that physicians can take.⁵

A major contribution of Keith and colleagues' study is in showing how clinicians' efforts to address tobacco use vary by patients' medical and psychiatric conditions. It confirms that the prevalence of cigarette smoking is higher in individuals with a range of comorbidities including asthma, heart disease, hypertension, diabetes, anxiety, depression, and SUD, than it is in individuals without these chronic diseases.

Furthermore, it demonstrates that physicians' actions vary among individuals with these chronic conditions. Smokers are more likely to report being advised to quit if they have any of these chronic conditions. However, the odds ratios for adults with SUD, anxiety, and depression tended to be lower than those for adults with cardiopulmonary or metabolic disorders. What might explain the difference?

One possibility is that different measures were used to ascertain SUD versus all other chronic conditions. Smokers did not have to report having ever been told by a doctor that they had a SUD in order to be given a SUD diagnosis, and it is possible that the clinician was unaware of the SUD diagnosis. If so, one would expect that patients with SUD and those with no chronic conditions would have comparable rates of being asked about tobacco use and being given advice to quit, as appeared to be the case.

Another explanation could be a difference in physician specialty. Study participants did not identify the specialty of the clinician who screened them for tobacco use or advised them to quit. While primary care providers care for all of these

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chronic medical and psychiatric conditions, many smokers with these conditions also receive care from behavioral health providers. Patients with psychiatric or SUD disorders may see behavioral health providers or addiction medicine specialists far more frequently than they see their primary care providers, and these specialties traditionally have paid less attention to tobacco use.⁶

Despite these caveats, it is likely that clinicians of all types pay less attention to smoking among patients with SUD and psychiatric diagnoses than among patients with other chronic conditions. Why? Clinicians may worry that addressing smoking might worsen psychiatric symptoms or threaten sobriety. Indeed, anxiety and depression are symptoms of the nicotine withdrawal syndrome. However, longitudinal data now show that depression and anxiety symptoms improve rather than worsen after quitting smoking.⁷ Other data dispel the concern about endangering SUD treatment if a tobacco intervention is included.8 Contrary to the truth, clinicians may also feel that patients with SUD or psychiatric disorders are unable or unwilling to quit. In fact, patients with SUD and psychiatric diagnoses do express interest in guitting, and interventions are effective, albeit achieving lower quit rates than interventions in the general population of smokers.⁹

From the perspective of reducing disparities, one could argue that it is even more important to offer advice and treatment to smokers with psychiatric and SUD disorders than to other smokers. After all, patients with mental illness smoke at higher rates and, like other smokers, are most likely to die of cardiopulmonary diseases and cancer.¹⁰ We need to increase our efforts to reduce this mortality disparity. Doing so will require clinicians of all types to recognize that addressing tobacco use—not just advising smokers to quit, but also connecting them to appropriate treatment—is a core component of their job description.

Clinicians caring for patients with behavioral health and substance abuse disorders need to be prepared to treat tobacco use as the chronic condition that it is. Smokers with these comorbidities, much like smokers who have failed to quit after the first diagnosis of a myocardial infarction or other serious medical condition, are likely to need more intensive and prolonged treatment, possibly including combinations of medications along with behavioral support. Some may need medication treatment indefinitely. New collaborative care models for patients with medical and psychiatric disorders are widely advocated. It will be important for all providers in these models to accept tobacco use treatment as an integral part of their mission. The United States has made great strides in reducing tobacco use over the past several decades, but this can continue only if we acknowledge existing disparities in tobacco use and make addressing them a priority for comprehensive health care.

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REFERENCES

- Jamal A, King BA, Neff LJ, Whitmill J, Babb SD, Graffunder CM. Current cigarette smoking among adults-United States, 2005-2015. MMWR Morb Mortal Wkly Rep. 2016;65(44):1205–1211.
- Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. The NSDUH report: adults with mental illness or substance use disorder account for 40 percent of all cigarettes smoked. March 20, 2013. Available at: https://www.samhsa. gov/data/sites/default/files/spot104-cigarettes-mental-illness-substance-use-disorder/spot104-cigarettes-mental-illness-substance-usedisorder.pdf. Accessed May 19, 2017.
- Keith DR, Stanton CA, Gaalema DE, et al. Disparities in US healthcare provider screening and advice for cessation across chronic medical conditions and tobacco products. J Gen Intern Med. 2017. doi:10. 1007/s11606-017-4062-6
- Babb S, Malarcher A, Schauer G, Asman K, Jamal A. Quitting smoking among adults-United States, 2000-2015. MMWR Morb Mortal Wkly Rep. 2017;65(52):1457–1464.
- Maciosek MV, Coffield AB, Edwards NM, et al. Priorities among effective clinical preventive services: results of a systematic review and analysis. Am J Prev Med. 2006;31(1):52–61.
- Rogers E, Sherman S. Tobacco use screening and treatment by outpatient psychiatrists before and after release of the American Psychiatric Association Treatment Guidelines for Nicotine Dependence. Am J Public Health. 2014;104(1):90–95.
- Taylor G, McNeill A, Girling A, Farley A, Lindson-Hawley N, Aveyard P. Change in mental health after smoking cessation: systematic review and meta-analysis. BMJ: British Med J. 2014;348:g1151. doi:10.1136/ bmj.g1151
- McKelvey K, Thrul J, Ramo D. Impact of quitting smoking and smoking cessation treatment on substance use outcomes: An updated and narrative review. Addict Behav. 2017;65:161–170.
- Apollonio D, Philipps R, Bero L. Interventions for tobacco use cessation in people in treatment for or recovery from substance use disorders. Cochrane Database Syst Rev. 2016;11:Cd010274.
- Druss BG, Zhao L, Von Esenwein S, Morrato EH, Marcus SC. Understanding excess mortality in persons with mental illness: 17-year follow up of a nationally representative US survey. Med Care. 2011;49(6):599–604.