Forget the myths and help your psychiatric patients quit smoking

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Substance Use Disorders Section Editor

'Raise your hand if you have helped one of your patients try to quit smoking in the past month.' I routinely ask attendees at my lectures this question. The large number of hands in air—often most of the audience—contradict what's reported in the literature.

The National Ambulatory Medical Care Survey[1,2] (NAMCS) indicates that less than 1 out of 4 (23%) psychiatrists provide smoking cessation counseling to their patients, and even fewer prescribe medications.

What gives? How is it that so many psychiatrists endorse having recently helped a patient quit smoking when the data from large-scale surveys[1,2] indicate they do not?

From the "glass is half-full" perspective, the discrepancy might indicate that psychiatrists finally have bought into the message put forth 20 years ago when the American Psychiatric Association first published its clinical practice guidelines for treating nicotine dependence.[3] Because the figures I cited from NAMCS reflect data from 2006 to 2010, it is possible that in the last 5 years more psychiatrists have started to help their patients quit smoking. Such an hypothesis is further supported by the increasing number of research papers on smoking cessation in individuals with mental illness published over the past 8 years—a period that coincides with the release of the second edition of the *Treating tobacco use and dependence clinical practice guideline* from the U.S. Agency for Healthcare Research and Quality, which highlighted the need for more research in this population of smokers.[4]

Regardless of the reason, the fact that my informal surveys indicate a likely uptick in activity among psychiatrists to help their patients quit smoking is welcome news. With nearly 1 out of 2 cigarettes sold in the United States being smoked by individuals with psychiatric and substance use disorders,[5] psychiatrists and other mental health professionals play a vital role in addressing this epidemic. That our patients smoke at rates 2- to 4-times that of the general population and die decades earlier than their non-smoking, non-mentally ill counterparts[6] are compelling reasons

That our patients smoke at rates 2- to 4-times that of the general population is a compelling reason urging us to end our complacency and help our patients quit smoking

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Table

Study design of the EAGLES trial

Prospective, randomized, double-blind, triple-dummy, placebo-controlled and active-controlled (transdermal nicotine patch) trial of varenicline and bupropion at recommended dosages for 12 weeks with 12-week non-treatment follow-up
Psychiatric diagnoses assessed using the Structured Clinical Interview for DSM-IV-TR Axis I and II Disorders[14,15]
Primary safety endpoint was the incidence of a composite measure of moderate and severe neuropsychiatric AEs reported in the post-marketing experience for varenicline and bupropion and highlighted in their "black-box" warnings
Neuropsychiatric AEs collection enhanced via use of the semi-structured, 25-item Neuropsychiatric Adverse Event Interview, Hospital Anxiety and Depression Scale,[16] and Columbia-Suicide Severity Rating Scale[17]
Participants were psychiatrically stable at baseline: (a) excluded those with imminent suicidal risk or those engaging in self-injurious behaviors; (b) no exacerbations of their psychiatric condition in preceding 6 months; and (c) on stable treatment for at least 3 months
Primary efficacy endpoint was biochemically-confirmed abstinence for weeks 9 to 12

AE: adverse event

urging us to end our complacency and help our patients quit smoking.

EAGLES trial results help debunk the latest myth about smoking cessation

In an article that I wrote for CURRENT PSYCHIATRY 11 years ago,[7] I attempted to debunk 3 myths that might have influenced some psychiatrists' approach and motivation to intervene in tobacco dependence. Since that article appeared, a fourth myth has been promulgated—that the non-nicotine smoking cessation medications, bupropion and varenicline, are unsafe to use in patients with stable psychiatric disorders and cause serious neuropsychiatric adverse events (AEs) including suicide. Indeed, that is one implication of the "black-box" warning both of these medications received in July 2009, which caution that, "the risks of Zyban®/Chantix® should be weighed against the benefits of [their] use."[8,9] For an illness that causes 480,000 deaths each year in the United States,[10] and nearly 6 million across the globe,[11] tobacco treatment specialists find themselves in a quandary when 2 of the only 3 approved medications available—nicotine replacement therapy being the third—carry such a stern warning.

In addition to applying the "black-box" warning, the FDA issued a post-marketing requirement to the manufacturers of bupropion and varenicline to conduct a large randomized controlled trial—Evaluating Adverse Events in a Global Smoking Cessation Study (EAGLES)—the top-line results of which were published in *The Lancet* this spring.[12]

EAGLES is the largest, placebo-controlled trial of first-line smoking cessation medications conducted to date with more than 8,000 participants randomly assigned to 1 of 2 cohorts: those with histories of or current DSM-IV-TR[13] disorders (n = 4,166), including primary mood (71%), anxiety (19%), psychotic (9%), and borderline personality (<1%) disorders, and 4,028 smokers without a psychiatric disorder (***Table***[14-17]).

Key results of the EAGLES trial

The researchers found no significant increase in serious neuropsychiatric AEs—a composite measure assessing depression, anxiety, suicidality, and 13 other symptom clusters—attributable to varenicline or bupropion compared with placebo or the nicotine patch in smokers with or without psychiatric disorders. The study did detect a significant difference—approximately 4% (2% in non-psychiatric cohort vs 6% in psychiatric cohort)—in the rate of serious neuropsychiatric AEs regardless of treatment condition. In both cohorts, varenicline was more effective than bupropion, which had similar efficacy to the nicotine patch; all interventions were superior to placebo. Importantly, all 3 medications significantly improved quit rates in smokers with and without psychiatric disorders. Although the efficacy of medications in smokers with or without psychiatric disorders was similar in terms of odds ratios, overall, those with psychiatric disorders had 20% to 30% lower quit rates compared with non-psychiatrically ill smokers.

The EAGLES study results, when viewed in the context of findings from other clinical trials and large-scale observational studies, provide further evidence that smokers with stable mental illness can use bupropion and varenicline safely. It also demonstrates that moderate to severe neuropsychiatric AEs occur during a smoking cessation attempt regardless of the medication used, therefore, monitoring smokers—especially those with psychiatric disorders—is important, a role that psychiatrists are uniquely poised to play.

That all 3 smoking cessation medications are effective in patients with mood, anxiety, and psychotic disorders is good news for our patients. Combined with the EAGLES safety findings, there is no better time to intervene in tobacco dependence.

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The EAGLES study results provide further evidence that smokers with stable mental illness can use bupropion and varenicline safely with monitoring