

SMOKING CESSATION FOR PATIENTS WITH PSYCHOTIC DISORDERS

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Heavy cigarette smoking is extremely common among patients with such psychotic disorders as schizophrenia, and for these patients, quitting may be even harder than it is for the average smoker. Here's what you can do to help.

Approximately 80% of patients with schizophrenia or bipolar affective disorder smoke cigarettes¹—and most are heavy “chain smokers.” These patients are at high risk for premature death: Half of long-term smokers die from illnesses caused by smoking, losing an average of 12 to 21 years of life compared with nonsmokers.²⁻⁴

Both psychotic disorders and smoking are common in the U.S. veteran population. A 2003 VHA directive indicated that the prevalence of smoking among veterans who seek care from the VA is 33%, which is significantly higher than

the 23% observed in the general U.S. population.⁵ Furthermore, in fiscal year 2001, two types of schizophrenia appeared among the 25 most common discharge diagnoses tracked in VA hospitals, and both schizophrenia and tobacco use disorder were among the 25 most common outpatient diagnoses tracked in VA clinics.⁶

Patients with psychotic disorders are unlikely to quit smoking on their own. Fewer than 15% of people with psychotic disorders who have ever smoked have quit smoking, compared with 50% of “ever-smokers” who don't have psychiatric conditions.¹ Even more than most smokers, these patients need our help to quit.

This article briefly reviews medical literature on smoking cessation interventions for patients with psychotic disorders—primarily schizophrenia—with the aim of

illuminating key factors that could help raise success rates and improve the overall health of this challenging patient population.

WELL TIMED INTERVENTION

The mortality risk of smoking is dose related. The more a person smokes, the greater the probability of premature death. In their investigation involving male smokers, Wynder and Stellman found a 10-fold risk of developing lung cancer associated with smoking one to 10 cigarettes a day—which soared to 70-fold in participants who smoked 40 or more cigarettes a day.⁷ When patients who smoke heavily are not physically or emotionally ready to quit, helping them reduce the number of cigarettes they smoke is better than not intervening at all.

Given the challenges of helping patients with psychotic disorders control their symptoms and

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maintain an optimal level of functioning, the timing of smoking cessation counseling is critical. Hughes and Frances suggest withholding advice about smoking cessation during the acute crisis phase of treatment, when the patient may be delusional.⁸ Instead, they suggest intervening during the phase of ongoing outpatient psychotherapy and medication checks. Likewise, the joint *VHA/DoD Clinical Practice Guideline to Promote Tobacco Use Cessation in the Primary Care Setting* recommends that tobacco cessation treatment begin after comorbid conditions, including psychosis, are clinically stable.⁹

STANDARD APPROACHES: HOW WELL DO THEY WORK?

A few studies demonstrate that patients with schizophrenia can quit smoking when treated aggressively with cognitive-behavioral therapy plus medication, though six- to 12-month quit rates have been lower than the 25% to 30% typically seen in nonpsychiatric populations.¹⁰

In 24 smokers receiving outpatient treatment for schizophrenia, Ziedonis and George evaluated the success of a smoking cessation program consisting, in most cases, of nicotine replacement medication plus 10 weekly behavioral group therapy sessions and 10 weekly individual therapy sessions to enhance motivation. Half of the patients completed the program, and three (13%) remained abstinent over the six-month follow-up period.¹¹

Addington and colleagues enrolled 65 outpatients with stable schizophrenia in a modified version of the American Lung Association's smoking cessation program. In 40 patients, transdermal nicotine re-

placement patches also were used. By the second group session, 15 patients had dropped out. Of the remaining 50 patients, 21 achieved initial abstinence and six were still abstinent at six-month follow-up (9.2% of the original sample). A key finding was that the quit attempt was associated with no changes in either the positive or negative symptoms of schizophrenia.¹²

IMPACT OF ATYPICAL ANTIPSYCHOTIC AGENTS

Evidence suggests that the choice of antipsychotic agent used to treat schizophrenia can affect the success or failure of smoking cessation. In a 2000 study, George and colleagues set out to compare the standard American Lung Association group therapy program for smoking cessation with another group therapy program developed specifically for smokers with schizophrenia. They randomly assigned 45 subjects to receive 10 weeks of group therapy in one of these two programs and 10 weeks of nicotine replacement treatment using transdermal patches. In addition, all patients continued their usual antipsychotic medication—either atypical (18 patients) or typical (27 patients). Although the researchers found no differences in outcomes between the two group therapy programs, they observed that patients taking atypical antipsychotic medications had significantly higher quit rates at the end of treatment (56% versus 22%) and at six-month follow-up (16.7% versus 7.4%).¹³

In this study, risperidone and olanzapine were associated with the highest quit rates.¹³ Other investigations have shown that smokers taking clozapine for schizophrenia decreased the number of cigarettes

smoked by 25% to 35%.^{14,15} These studies suggest that atypical antipsychotics may provide an advantage over conventional agents for patients with schizophrenia who attempt to quit smoking using nicotine replacement and cognitive-behavioral therapy.

ADDING BUPROPION TO THE MIX

In another study, George and colleagues treated 32 smokers diagnosed with schizophrenia or schizoaffective disorder with 10 weeks of either bupropion SR 300 mg/day or placebo. All participants also received 10 weekly group therapy sessions. Abstinence at the seven-day point was achieved by eight of the 16 participants who received bupropion (50%) versus two of the 16 who received placebo (12.5%). At six-month follow-up, three bupropion patients (18.8%) were abstinent versus one placebo patient (6.3%), a nonsignificant difference.¹⁶

As in the earlier study by George and colleagues,¹³ atypical antipsychotic medications had a clear impact on the relative success of the quit attempt.¹⁶ Within the bupropion group, a greater percentage of patients taking atypical antipsychotics achieved end-of-treatment abstinence than did those who were taking typical antipsychotic medications (eight of 12 compared with zero of four, respectively).¹⁶ In this trial, olanzapine tended to be associated with higher quit rates than was risperidone—though the sample size was too small to allow any definitive conclusions.¹⁶

SMOKING CESSATION AND PLASMA DRUG LEVELS

Cigarette smoke induces the production of several drug-metabolizing enzymes that increase the

Continued on page 59

Continued from page 56

clearance of many psychoactive drugs.^{1,17,18} When a patient quits smoking, therefore, decreased drug metabolism can result in significantly higher medication plasma levels. While this may improve therapeutic efficacy, it also may increase adverse effects.¹⁹ Consequently, it's important to monitor such patients closely to determine the necessity of medication dosage adjustment.

According to the American Psychiatric Association's *Practice Guideline for the Treatment of Patients with Nicotine Dependence*, psychoactive drugs that are likely to have their plasma levels increased after smoking cessation include: clomipramine, clozapine, desipramine, desmethyldiazepam, doxepin, fluphenazine, haloperidol, imipramine, oxazepam, nortriptyline, and propranolol (Table).²⁰ The plasma level of caffeine is also likely to rise. Smoking cessation may or may not affect plasma levels of alprazolam, chlorpromazine, and diazepam—and it appears to have no effect on plasma levels of amitriptyline, chlordiazepoxide, ethanol, lorazepam, midazolam, or triazolam.

THEY NEED OUR HELP

Smoking poses a significant health threat to patients with psychotic disorders. Such patients should be offered combinations of pharmacologic and nonpharmacologic smoking cessation aids. Those who are unable to quit should be offered similar treatments with the goal of substantially reducing cigarette consumption. Dosages of psychiatric or other medications may need to be adjusted in patients who significantly reduce their level of cigarette use. ●

Table. Drugs or substances for which plasma levels are likely to increase, may increase, or are unlikely to increase as a result of smoking cessation²⁰

Plasma levels likely to increase	Plasma levels may increase	Plasma levels unlikely to increase
<ul style="list-style-type: none"> • Caffeine • Clomipramine • Clozapine • Desipramine • Desmethyldiazepam • Doxepin • Fluphenazine • Haloperidol • Imipramine • Nortriptyline • Oxazepam • Propranolol 	<ul style="list-style-type: none"> • Alprazolam • Chlorpromazine • Diazepam 	<ul style="list-style-type: none"> • Amitriptyline • Chlordiazepoxide • Ethanol • Lorazepam • Midazolam • Triazolam

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