

Psychopharmacology for the Clinician

Psychopharmacologie pratique

The information in this column is not intended as a definitive treatment strategy but as a suggested approach for clinicians treating patients with similar histories. Individual cases may vary and should be evaluated carefully before treatment is provided.

Treatment of comorbid tobacco use in people with serious mental illness

Rates of cigarette smoking among people with psychiatric disorders (e.g., schizophrenia, mood and anxiety disorders) are 2- to 4-fold higher than in the general population. Social, environmental, psychological and neurobiological factors may account for this high rate of comorbid smoking.

Psychosocial factors, especially stress and availability, may increase susceptibility to smoking behaviour in those with and without psychiatric illness. Cigarette smoking may be used to remedy clinical symptoms (e.g., depression, dysphoria), medication-induced side effects and cognitive deficits accompanying psychiatric illness.

Ms. S., a 38-year-old outpatient at a tertiary care mental health facility with a history of paranoid schizophrenia, was prescribed 200 mg of quetiapine twice daily for her psychosis, and an albuterol inhaler and 10 mg/d of prednisone for her chronic obstructive pulmonary disease. She had a 23-year smoking history (1 pack/d) with at least 10 previous quit attempts. She had used nicotine replacement products (i.e., transdermal nicotine patch, gum, lozenges) but she had never been able to quit for more than a few days. She said she liked the taste of cigarettes and that they "help pass the time" and allowed her to socialize with others at her group home. Moreover, she said smoking alleviated some side effects of her antipsychotic medication, which made her feel "restless" and "dull."

Two months later, Ms. S. presented to staff at the clinic upset after hearing that her "favorite uncle" had lung cancer. She reported a family history of smoking and lung cancer. She feared that she might get lung cancer too and wanted

to quit, but was uncertain that quitting would make a difference for her health.

Ms. S. was in the "contemplation" stage of the Stages of Change model, and her case worker started motivational interviewing to resolve her ambivalence about quitting. Using non-pharmacologic interventions such as cognitive-behavioural therapy helped her identify triggers and target maladaptive coping mechanisms. She was advised to increase her physical activity to limit cessation-related weight gain.

Ms. S. was started on 150 mg/d of sustained-release bupropion (Zyban) for 3 days; the dose was then increased to 150 mg twice daily.¹ On the 8th day, she set her target quit date and began using a transdermal nicotine patch (21 mg/d) to further reduce tobacco withdrawal and cravings. Although she admitted to occasional urges to smoke, she reported a decrease in cravings and quit smoking 2 weeks after the target quit date. Treatment was maintained for 12 weeks^{2,3} and, upon completion of the trial, she elected to continue counselling to prevent tobacco relapse. At 1-year follow-up, she had occasional urges to smoke but remained tobacco-free.

Given the heterogeneity of psychiatric diagnoses comorbid with tobacco dependence, smoking cessation treatments should ideally be tailored to the individual diagnosis and historical treatment response. Schizophrenia has one of the highest rates of smoking (58%–88%),⁴ and the most studied treatment is sustained-release bupropion. An intervention consisting of weekly cognitive-behavioural psychotherapy sessions, transdermal nicotine patch and bupropion showed substantial abstinence rates among smokers with schizophrenia (~35%), with long-term (6 mo) quit rates approaching

14%,³ which is similar to that in non-comorbid smokers.⁴ Similarly, studies with bupropion (300 mg/d) have yielded promising results for smokers with comorbid unipolar and bipolar disorder and posttraumatic stress disorder. Since bupropion is metabolized by CYP 2D6,⁵ special precaution should be considered when coadministering bupropion with CYP 2D6 inhibitors such as risperidone and first-generation antipsychotics (e.g., haloperidol, chlorpromazine). Interestingly, second-generation antipsychotics may facilitate smoking reduction and cessation when combined with standard tobacco treatments.⁶

The most recent treatment option is varenicline (Champix), a nicotinic receptor partial agonist that diminishes the reinforcing effects of nicotine and alleviates withdrawal and craving symptoms. There have been reports that varenicline may increase the risk of impulsivity, aggression and suicidal ideation, particularly in smokers with a history of psychiatric disorders, therefore, careful monitoring is strongly suggested.⁷

It is imperative that mental health clinicians learn to address tobacco issues more aggressively, given the health risks of tobacco to our patients.

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Psychopharmacology for the Clinician columns are usually based on a case report that illustrates a point of interest in clinical psychopharmacology. They are about 500–650 words long. Columns can include a bibliography which will be available only on the journal website and can be accessed through a link at the bottom of the column.

Please submit appropriate columns online at <http://mc.manuscriptcentral.com/jpn>; inquiries may be directed to jpn@cma.ca.

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