Tobacco treatment for people with serious mental illness (SMI)

An opportunity to close the mortality gap

Massachusetts Mental Health Center

National Resource Center for Academic Detailing

A compelling need

45% of people with SMI smoke- twice the rate in the general population[1]

People with SMI die **25 years** earlier than people in the general population[2]

Reducing tobacco use among people with SMI can be the **single most powerful** intervention for reducing mortality and morbidity in this group

50% of all deaths among people with SMI are tobacco-related[3]

Myths vs. Facts[4]

Myth: People with SMI don't want to quit smoking.

Fact: Most smokers with SMI want to quit[5], at the same rates as the general population (60-70% in contemplation or preparation stage of change).[6]

Myth: People with SMI aren't able to quit smoking.

Fact: Long-term smoking quit rates across strategies are roughly 30%, similar to the general population and for other addictions.[7] Every quit attempt helps people move towards permanent abstinence.

Myth: Quitting smoking interferes with recovery from mental illness.

Fact: Smoking itself actually interferes with recovery and can affect drug metabolism, reducing efficacy of psychotropic medications. It can hamper a person's ability to find work and housing[4] and is financially burdensome, consuming 1/3 of monthly disability income for people with behavioral health conditions who smoke.[7]

Myth: Tobacco treatment isn't a psychiatrist's job.

Fact: Tobacco use releases dopamine in the nucleus accumbens to activate reward pathways in a manner similar to other substances of abuse.[7] Psychiatrists routinely treat addiction and encourage behavior change, so they CAN and SHOULD do so for nicotine addiction.

Tobacco treatment works for people with SMI

Studies in people with schizophrenia and major depressive disorder have found that tobacco treatment interventions using bupropion or varenicline are effective and safe, with no exacerbations of the underlying mental health condition.[8,9]

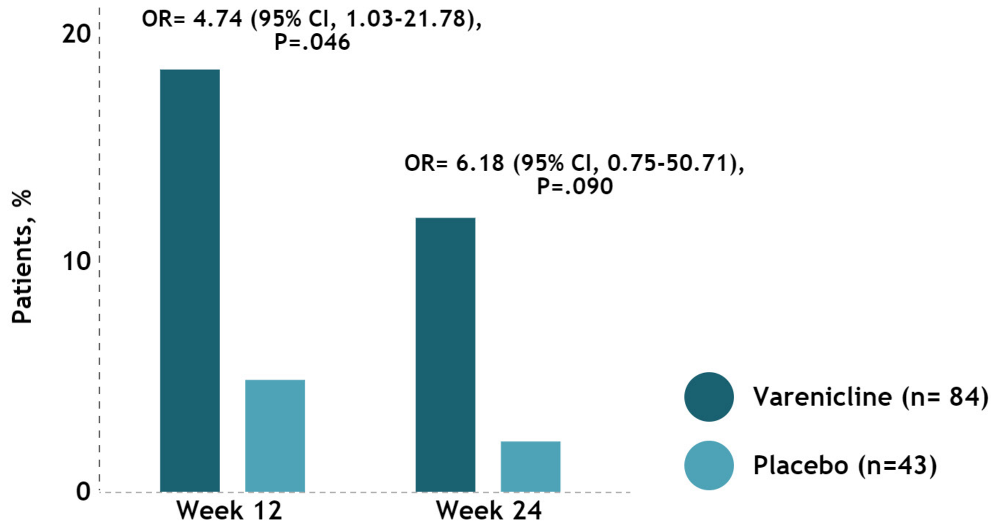

Figure 1. Abstinence at 12 and 24 weeks among patients with schizophrenia or schizoaffective disorder treated for 12 weeks with varenicline vs. placebo[9]

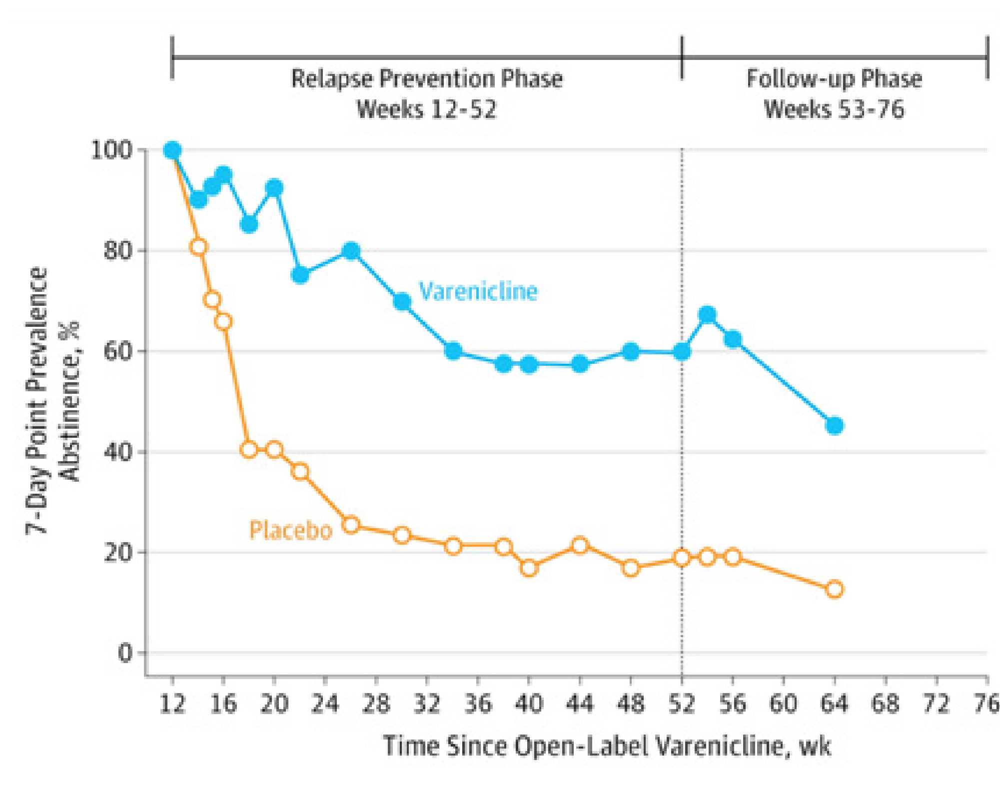

Figure 2. Point-prevalence abstinence rates during maintenance treatment with varenicline vs. placebo in people with SMI[10]

A 2010 Cochrane systematic review of smoking cessation interventions for people with schizophrenia found that bupropion was clearly superior to placebo in supporting abstinence.[8]

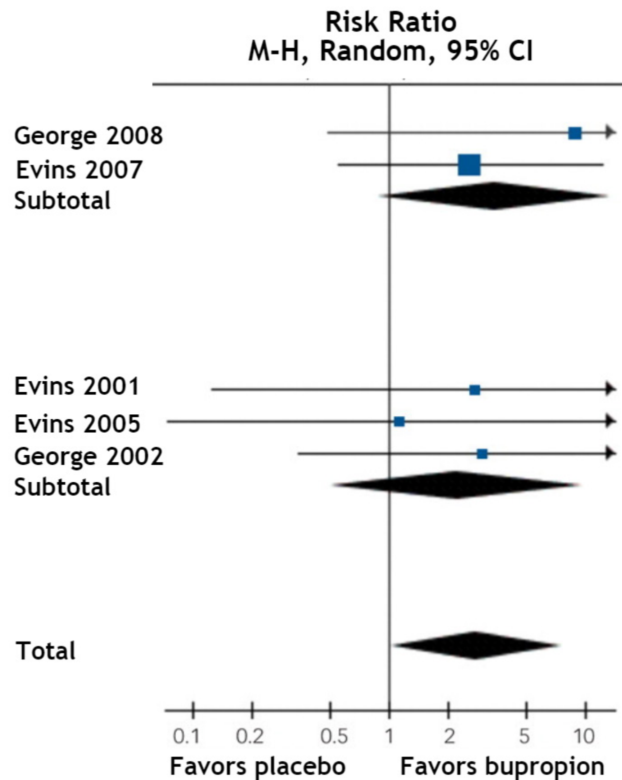

Figure 3. Bupropion vs. placebo: abstinence rates at 6 months among patients with schizophrenia[8]

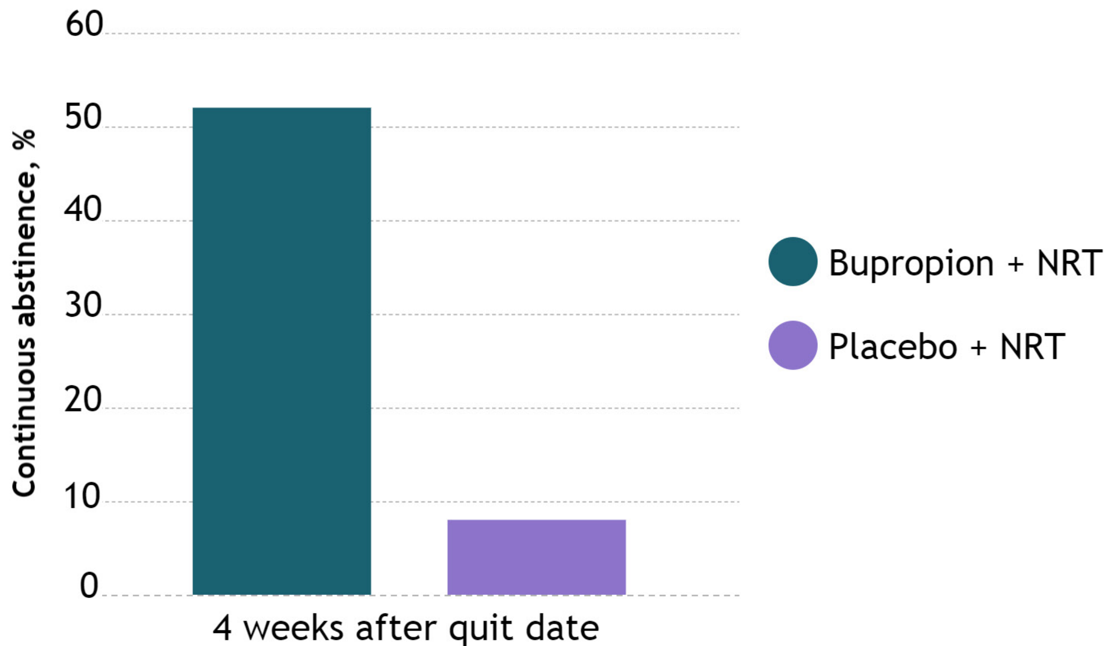

Figure 4. Bupropion added to dual (patch + gum) nicotine replacement therapy (NRT) and cognitive behavioral therapy (CBT) increases continuous abstinence in patients with schizophrenia when compared to patients receiving dual NRT and CBT but no bupropion[11]

Quitting does not worsen psychiatric illness

• People with SMI who quit smoking do not experience a worsening of their psychiatric condition, either from nicotine withdrawal or from the smoking cessation medications themselves.[5]

• Trials in smokers with schizophrenia evaluating bupropion, varenicline, and NRT have found no worsening of positive, negative, or depressive symptoms.[5]

Treatment approaches can be tailored

Use the same behavioral and pharmacological options for tobacco treatment in people with SMI as in the general population.

Treatment Strategy	Relevant data[4,5]
Individual counseling	18 months, abstinence rates of 18% in smokers with PTSD and 25% in those with depression
Group counseling with nicotine replacement therapy (NRT)	12 months, abstinence rates of 19-21% in people with SMI
Nicotine replacement (patch, gum, lozenge, inhaler, nasal spray)	Several studies in people with SMI (mostly schizophrenia) show significant increases in quitting and maintained abstinence with NRT compared with placebo.
Bupropion (Wellbutrin, Zyban)	Effective for smokers with current/past depression. A meta analysis of 7 trials showed significant positive effects on tobacco cessation at 6 months for patients with schizophrenia.
Varenicline (Chantix)	Well tolerated and effective in smokers with schizophrenia both for initial cessation and for maintaining abstinence. Doubled continuous abstinence rates in smokers with current or recent major depression.

Increased treatment intensity and duration for smokers with specific psychiatric illnesses may improve prolonged abstinence rates

Side effect rates in the general population for selected smoking cessation treatments[12,13]

	Patch	Patch + lozenge	Bupropion	Bupropion + lozenge	Varenicline	Placebo
Nausea	4.3%	7.9%	4-16%	5%	52%	16-19%
Sleep disturbances or abnormal dreams	11%	9%	12-17%	11%	15%	20-22%
Local irritation	Skin (15%)	Throat (2-7%)	Throat (2%)	Throat (2-7%)		
Irritability			11%		12%	10%

The bottom line for schizophrenia

• Treatment for at least three months with either bupropion (+/- NRT) or varenicline, combined with behavioral support, increases abstinence rates.

• Behavioral treatment alone may have a lower impact on these patients than the general population.

• Maintenance treatment with varenicline for up to 40 weeks after a successful quit attempt may be needed to support abstinence.

The bottom line for bipolar disorder

• Although data are limited, people with bipolar disorder face the same risks of smoking-related mortality as people in the general population. Initiating treatment with single or combination NRT prior to weighing the risks and benefits of other medications is supported by indirect evidence and may help patients quit.

The bottom line for major depressive disorder (MDD)

• Psychosocial treatments for smoking cessation may be more effective in people with MDD than those with schizophrenia spectrum or bipolar disorders.

• Any of the available smoking cessation treatment options can be tried, unless specifically contraindicated.

What about e-cigarettes?

- One small open-label study reported smoking reduction and psychiatric symptom stability after a year of e-cigarettes among smokers with schizophrenia[14]
- May reduce consumption of regular cigarettes (uncontrolled trial of 14 people with schizophrenia)[14]
- May be less physiologically harmful

BUT:[15]

- E-cigarettes contain significant levels of nicotine and are still addictive
- May delay smoking cessation attempts
- Flavoring and other added chemicals have potential toxicity

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Flip over to take action ➡

Make smoking cessation happen!

Step 1: Ask

- Ask if your patient uses tobacco

Step 2: Engage

- If patient uses tobacco, advise them to quit
- Assess level of motivation for quitting

Step 3: Act

- Refer the patient to the Smoke Free Team via phone or email
- Prescribe tobacco treatment medications to increase success rates
- Monitor and adjust specific psychiatric medications as needed

The MMHC Smoke Free Program can help!

We can connect patients with:

- Integrated, collaborative, team-based care
- Individualized assessment and treatment planning
- Personalized motivational enhancement strategies
- Patient-centered decision support tools
- Evidence-based treatment options (individual and group counseling, medication consultations, and more)
- Ongoing monitoring and support

Masschusetts Mental Health Center Smoke Free Team

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These are general recommendations only; specific clinical decisions should be made by the treating physician based on an individual patient's clinical condition.