

Smoking Cessation and Mental Health Populations

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U.S. Department
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Portions of this program were adapted, with permission, from the Rx for Change: Clinician-Assisted Tobacco Cessation program



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Overview

Tobacco Use in Mental Health and Substance Use Disorder Populations

- Prevalence, costs, consequences
- Reducing tobacco use disparities
- Role of mental health providers

Treatment Research for Co-Occurring Disorders

- SUD, Depression, Schizophrenia, PTSD, Bipolar

VA Tobacco Cessation Resources

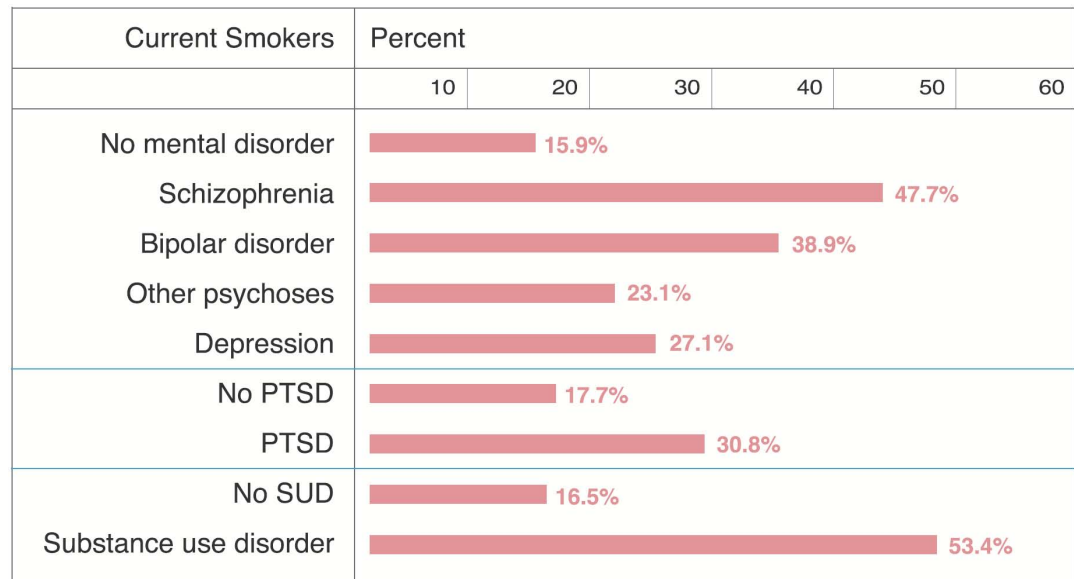
Smoking Rate by Psychiatric History in VA

Current overall smoking rate in VA: 16.8%

Smoking rates among VA patients with mental illness

Odds ratio of being a current smoker compared to not having a mental disorder

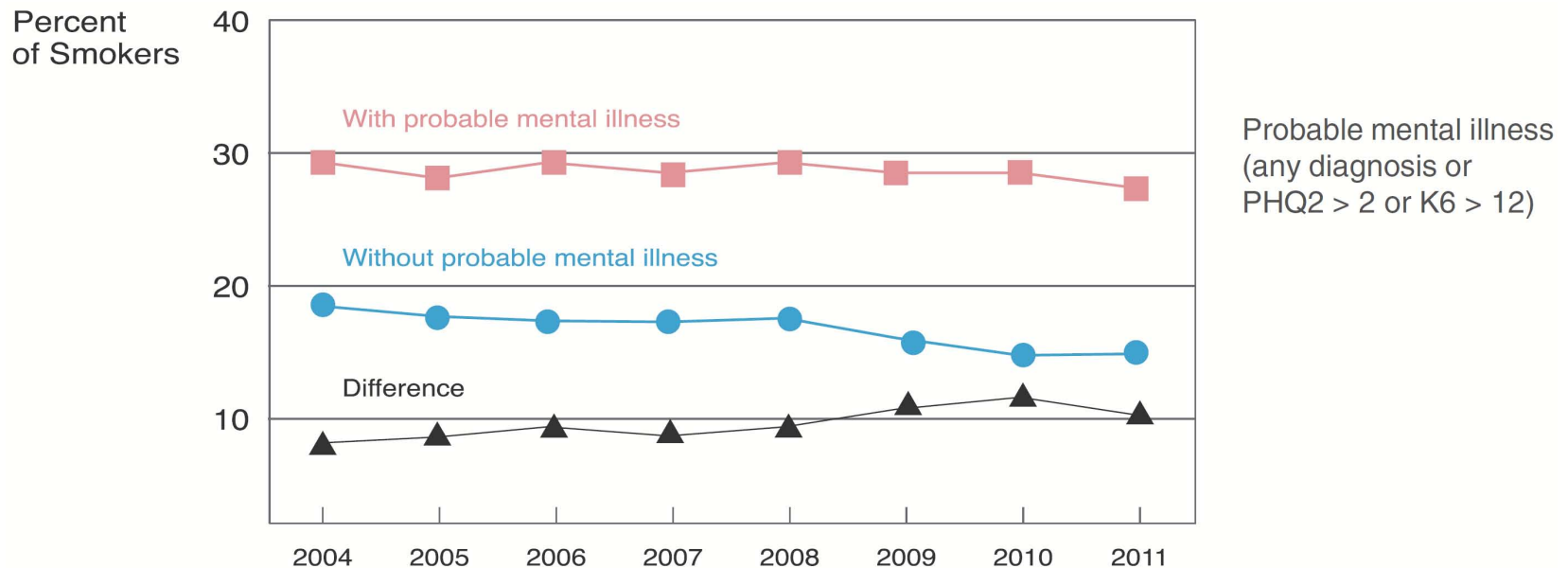
- Schizophrenia: 1.78
- Bipolar disorder: 1.46
- Depression: 1.18
- PTSD: 0.95
- Substance use: 2.74



Duffy et al., 2012

Tobacco Use by Smokers with Mental Health Disorders: Changes in Prevalence

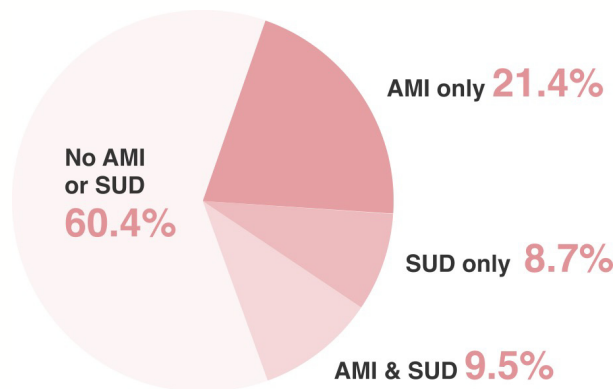
Trends in Smoking Rates Among Individuals With and Without Mental Illness



LeCook et al., 2014

Tobacco Use by Smokers with Mental Health Disorders: Percent of Cigarettes Smoked Past Month

Percentage of Cigarettes Smoked in the Past Month among Adults aged 18 or older, by Any Mental Illness (AMI) or Substance Use Disorder (SUD) in the past year 2009-2011



SAMHSA, 2013

Tobacco Kills People with Mental Illness

- Tobacco users with mental illness die 25 years earlier than non-users
(Colton & Manderscheid, 2006)
- Tobacco users with mental illness have a greater risk of dying from CVD, respiratory illnesses, and cancer, than people without mental illness
(e.g., Dalton et al., 2002; Himelhoch et al., 2004; Lichtermann et al., 2001, Olfson et al., 2015)
- Tobacco related disease accounts for approximately half of the mortality for individuals with schizophrenia, bipolar disorder and depression
(Callaghan et al., 2014)
- Tobacco use predicts future suicidal behavior in Veterans Independent of age, gender, psychiatric disorder, service connection and severity of medical comorbidity
(Bohnert et al., 2014)

Tobacco Use Complicates Psychiatric Treatment

- Tobacco smoke can induce cytochrome P450 enzymes (CYP1A2) which can affect other drugs by altering:
Absorption Distribution Metabolism Elimination
- This may alter the effectiveness of certain medications
Metabolism of some antidepressants and antipsychotic medications can be increased by tobacco smoke, lowering blood levels and possibly reducing the therapeutic benefit
- When a patient quits smoking, enzyme levels normalize and adverse events need to be monitored as drug concentration increases

Limited Integration of Smoking Cessation into MH and SUD Care

- 2000 PHS CPG – Smokers with MH disorders should be provided with the same level of smoking cessation treatment as the general population (Fiore et al., 2000)
- 2008 update of CPG – Included an emphasis to practitioners to treat smokers with MH and SUD disorders (Fiore et al., 2008)
- Relatively few MH treatment programs provide smoking cessation treatment to their patients (Hall & Prochaska, 2009)
- The majority of SUD treatment programs in the US offer no smoking cessation treatment (counseling or medications) (Knudsen et al., 2015)
- Among medical specialists, psychiatrists are the least likely to address tobacco use with their patients (Association of American Medical Colleges, 2007)

Tobacco Use by People with Mental Illness is a Health Disparity

- Tobacco users with mental illness meet the criteria of a disparity group

(Williams et al., 2013)

Higher smoking prevalence

Heavy economic and health burden

Targeted marketing by the tobacco industry

Longer duration of smoking with less quitting

Limited access to treatment

Barriers to Addressing Smoking: Myths About Tobacco Use and Mental Illness

MYTH

Tobacco is necessary self-medication for the mentally ill

FACT

Nicotine does enhance concentration and attention, however this effect is short-lived and repeated exposure reduces the effect

MYTH

People with mental illness are not interested in quitting smoking

FACT

About 70% of smokers with mental illness are interested in quitting

FACT

Readiness to quit is unrelated to psychiatric diagnosis, severity of symptoms, or the coexistence of substance use

Barriers to Addressing Smoking: Myths About Tobacco Use and Mental Illness

MYTH

Mentally ill people cannot quit smoking

FACT

Studies have documented success in quitting in patients with depression, schizophrenia, PTSD, and substance use disorder

MYTH

Quitting smoking interferes with recovery from mental illness

FACT

Quitting smoking does not exacerbate depression or PTSD symptoms, lead to psychiatric hospitalization, or increase use of alcohol or illicit drugs

Prochaska, 2011

Barriers to Addressing Smoking: Myths About Tobacco Use and Mental Illness

MYTH

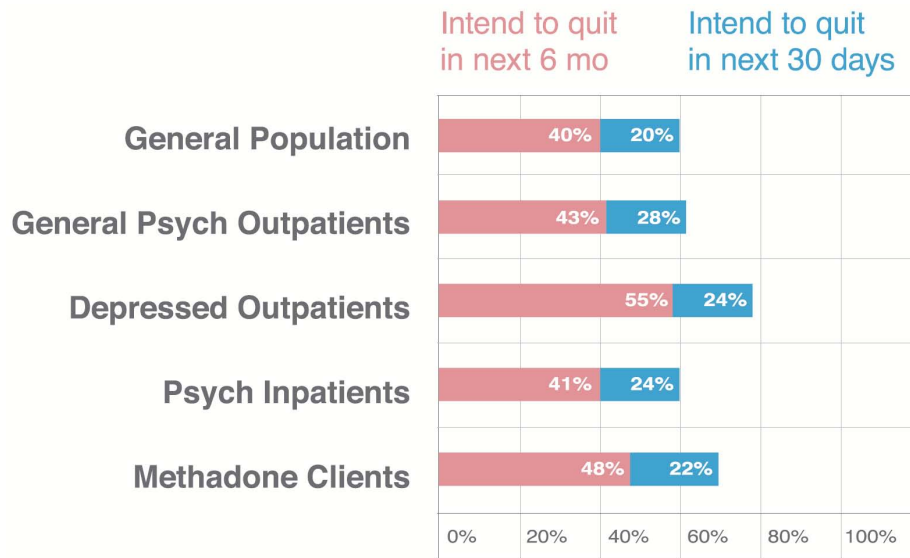
Smoking is the lowest priority concern for patients with acute psychiatric symptoms

FACT

People with psychiatric disorders are more likely to die from tobacco-related disease than from mental illness

Readiness to Quit in Patients with Psychiatric Disorders

Smokers with mental illness or addictive disorders are just as ready to quit smoking as the general population of smokers.



* No relationship between psychiatric symptom severity and readiness to quit

Quit Rates in Patients with Psychiatric Disorders

Lifetime diagnosis	U.S. Population %	Current Smoker %	Lifetime Smoker %	Smoking Quit Rates %
No psychiatric diagnosis	50.7	22.5	39.1	42.5
PTSD	6.4	45.3	63.3	28.4
Major depression	16.9	36.6	59.0	38.1
Dysthymia	6.8	37.8	60.0	37.0
Bipolar disorder	1.6	68.8	82.5	16.6

Schroeder & Morris, 2010

Smoking and Substance Use Disorder

- Approximately two-thirds (67%) of individuals entering treatment for substance use disorders (SUD) use tobacco

(SAMHSA, 2009)

- Tobacco-related diseases account for 50% of deaths among individuals treated for alcohol dependence

(Hurt et al., 1996)

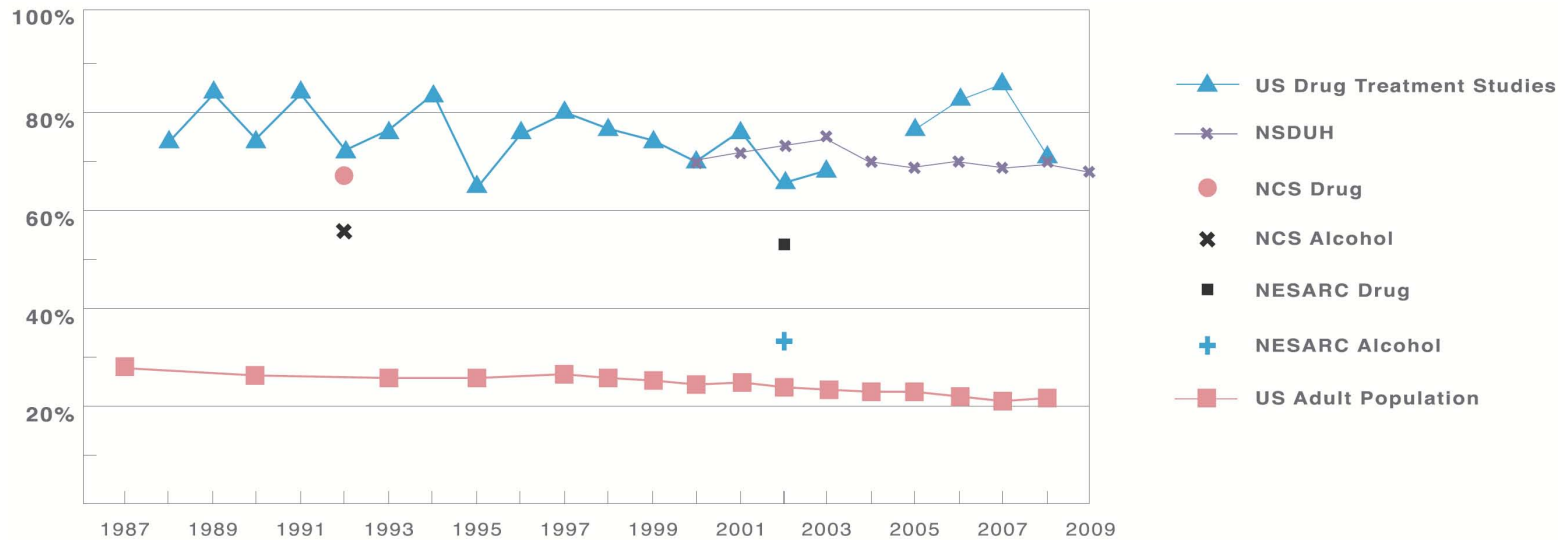
- Death rate 4 times greater for cigarette smoking vs. nonsmoking long-term drug abusers

(Hser et al. , 2004)

- Health consequences of tobacco and other drug use synergistic: 50% greater than sum of each individually

(Bien & Burge, 1990; Castellsague et al., 1999; Pelucchi et al., 2006)

Smoking Prevalence in Addiction Treatment 1987 — 2009



During this time:

- U.S. population smoking prevalence dropped by 24%
- Smoking prevalence in addiction treatment settings has not changed

Guydish et al., 2011

Smokers with SUD's Want to Quit

- The majority of smokers with SUD's are interested in quitting smoking at some point during recovery

(Heffner et al., 2007)

- 75% of patients with alcohol use disorders in outpatient treatment willing to consider quitting smoking

(Ellingstad et al., 1999)

- 44% of VA patients treated for SUD attempted to quit smoking in the 6-months following treatment

(Unrod et al., 2004)

Smoking Cessation Outcomes and SUD's

- Smoking cessation intervention during SUD treatment
Meta analysis shows significant short term effects of active versus control conditions
(Prochaska et al., 2004)

High intensity smoking cessation interventions show promise for enhancing outcomes during SUD treatment (Burling et al., 2001; Kalman et al., 2010)
- Smoking cessation intervention during recovery
Meta analysis shows significant long-term effects of active versus control interventions
- A literature review found that smokers with past alcohol problems were equally successful quitting smoking as those with no history of alcohol problems
(Hughes & Kalman, 2006)

Smoking Cessation and Recovery

- The preponderance of evidence suggests smoking cessation does not increase risk for alcohol and other drug relapse
(Cavazos-Rehg et al., 2014; Gulliver et al., 2006; Lemon et al., 2003; Prochaska et al., 2004)
- Smokers have poorer long term substance use outcomes than non-smokers
(Satre et al., 2007)
- Receiving a smoking cessation intervention (either during treatment or later in recovery) is associated with 25% increased likelihood of long-term abstinence from alcohol and drugs
(Prochaska et al., 2004)
- Greater improvement in cognitive function for non-smoking recovering alcoholics than for those who smoked
(Durazzo et al, 2007)

Summary: Tobacco Treatment for SUD Patients

- Smoking cessation treatment does not adversely affect substance use outcomes
- Treatments effective for smokers in general are effective for smokers with SUD's
Tobacco cessation outcomes are better following than during SUD treatment
- Receiving smoking cessation treatment appears to enhance substance use outcomes
- Quitting smoking has substantial benefits for individuals with SUD's

Smoking and Mental Illness– Impact on Functioning

- Patients with schizophrenia who smoke, when compared to those who do not smoke, are likely to have higher rates of hospitalization, higher medication doses, and more severe psychiatric symptoms
(Prochaska, 2011)
- Among people with schizophrenia and bipolar disorder, current smokers had worse cognitive functioning and poorer functional outcomes than past or never smokers
(Depp et al., 2015)
- A study of outpatients with schizophrenia estimated the costs of cigarettes to be approximately 27% of their monthly income
(Steinberg et al., 2004)
- Persons with schizophrenia were found 3.5 times more likely to die than those in the general population. Cardiovascular disease had the highest mortality rate and lung cancer was the leading cause of cancer death
(Olfson et al., 2015)

Tobacco Cessation Treatment for Smokers with PTSD

- Integrated care (IC) RCT with 943 smokers with PTSD at VA Medical Centers

(McFall et al., 2010)

Integrated care doubled prolonged abstinence compared to referral to smoking cessation clinic

Both groups improved on PTSD symptoms

- Pilot studies have examined medication, contingency management, and Acceptance and Commitment Therapy (ACT)

(Herzberg et al., 2001; Herzberg et al., 2013; Kelly et al., 2015)

Results show promise for each of these approaches

- Almost all work to date has included only veterans and predominantly male smokers. Research needed with more diverse samples.

Does Abstinence from Tobacco Exacerbate Depression or Schizophrenia?

- Recent research finds no increased risk of depression or schizophrenia symptoms with abstinence from smoking:

No increased risk for MDE among those with a history of depression.

(Torrez et al., 2010)

Depression found to predict continued smoking but not vice versa

(Shahab et al., 2015)

Preponderance of studies do not find an increased risk of depression or schizophrenia symptoms with abstinence from smoking

(Ragg et al., 2013)

Tobacco abstinence (1-wk) **not** associated with worsening of attention, verbal learning/memory, working memory, executive function/inhibition, or clinical symptoms of schizophrenia

(Evins et al., 2005)

Smoking Cessation and Mental Health Symptoms

- Review and meta analysis examining change in MH symptoms following smoking cessation

(Taylor et al., 2014)

Smoking cessation was associated with reduced depression, anxiety, and improved positive mood

The effect size was comparable for smokers with and without psychiatric disorders

The effect sizes are **equal or larger** than those of antidepressant treatment for mood and anxiety disorders

Among daily smokers with mood or anxiety disorder at Wave 1, quitting by Wave 2 predicted a decreased risk of diagnosis

(Cavazos-Rehg et al., 2014; Source: National Epidemiological Study of Alcohol and Related Conditions)

Recommendations for Treating Patients in MH and SUD Care

- Overall, evidence-based smoking cessation treatments are effective for patients with and without mental illness or SUD.
- Patients with mental illness or SUD may have more severe nicotine addiction than the general population, and so may require more intensive treatment and intervention.
- Patients *do not need to be free of mental health symptoms to quit smoking* and should be supported if they express an interest in quitting.
- Patients with mental illness and SUD should be encouraged to use medications to quit smoking. They may need combination treatment, higher doses, and a longer duration of treatment than the general population. Additional monitoring by a psychiatrist may be necessary.

Why Mental Health Providers?

- Frequent contact with the patient and existing therapeutic relationship
Appropriate to address smoking as a chronic disorder
- Have the skills to deliver tobacco cessation counseling
Expertise in behavioral and counseling treatment
- Many trained in substance abuse treatment
- Able to identify and address any changes in psychiatric symptoms during the quit attempt
- **Improved outcomes** compared to referring patients to smoking cessation clinic
(McFall et al., 2010)
- CPG 2008: ...such treatments could be conveniently delivered within the context of chemical dependence or mental health clinics.

What Can You Do?

- Every mental health clinician can play a role in addressing tobacco use (5A's)

Ask: Assess tobacco use as routine part of initial evaluation

Advise: Communicate your concern (e.g., effects on health and psychiatric symptoms)

Assess: Evaluate readiness for change (are you currently thinking about changing your tobacco use?)

If not: Is it ok if I check in with you about this again at a later time?

Assist: Encourage use of evidence based tobacco cessation treatment;
Identify resources to assist with cessation (VA Programs, Quitline)

Arrange: Make referrals as appropriate; follow up to assess and support progress

Clinical Case Discussion #1

GT is a 53 year old disabled veteran. He has smoked since he was 13 years old, currently 20 cigarettes per day, but as much as 40 per day in the past. His score on the Fagerström Test for Nicotine Dependence is 7, indicating very heavy dependence. He is diagnosed with PTSD, Depression and Alcohol Dependence in full sustained remission. GT reports that the only time he quit smoking was when incarcerated for 6 months, and he resumed immediately following release. He has several chronic medical conditions including type 2 diabetes, hypertension and early stages of emphysema. He currently lives in a hotel room that permits smoking, and describes that many of his neighbors smoke. He views smoking as an effective strategy for managing stress, and is unable to generate other coping strategies for stress management when asked. He's currently contemplating quitting, but is quite ambivalent.

Discussion

What intervention approach/strategies would be appropriate for GT?

What are the key obstacles that might impede GT 's efforts at quitting smoking?

What level of intervention would be most appropriate for GT?

Clinical Case Discussion #2

DR is a 38 year old veteran currently in outpatient treatment for substance use disorder. He has been abstinent from alcohol and drugs for 60 days but is smoking 15 cigarettes per day, and obtained a score of 5 on the FTND, indicating medium nicotine dependence. He resides in a recovery home where most of the residents are smokers (although smoking is not permitted inside the residence). He has previously quit smoking for extended periods of time (up to two years in the past), but returned to smoking in the context of alcohol and drug use. He has recently resumed exercising and voices a desire to adopt a healthy lifestyle that includes quitting smoking.

Discussion

What strategies would you use to engage DR in an active cessation attempt?

What questions would you ask DR to help plan his quit attempt?

Tobacco Cessation Resources for Health Care Providers

- VHA Intranet site: <http://vaww.publichealth.va.gov/smoking>

Clinical guidance

Medication and prescribing information

Publications and print resources for both patients and providers

VHA Policies

Link to internal SharePoint site

- Smoking Cessation Clinical Experts

Email group: VHA SCLC Clinical Experts VHASCLCClinicalExperts@va.gov

Answer treatment questions and advise on tobacco cessation programs

Resources for Patients: VHA Quitline



- Proactive quitline model with 4 follow-up calls
- Quitline counselors provide callers with:

Individualized counseling
Help formulating a quit plan
Strategies to prevent relapse
Up to 4 follow-up calls
Counseling in English and in Spanish

- Veterans referred back to health care provider for medications and other health concerns
- For Veteran safety: counselors able to initiate a warm transfer to Veterans Crisis Line
- Available Monday–Friday, 8 AM –10 PM ET

I feel great. I couldn't have done this without you guys. You have been such a support to me. Thank you for helping me through this.

Resources for Patients: Text Messaging Program



Automated text message smoking cessation program

- Sends 2-5 texts per day beginning 2 weeks before quit date and continuing for 6 weeks afterward
- Provides tips, support, and encouragement for quitting smoking
- Keywords (Urge, Stress, Smoked, Crisis) can be used anytime to receive an immediate tip in response
- Connects users with other VA resources: quitline, Veterans Crisis Line, Stay Quit Coach, refers back to VA provider for smoking cessation medications

smokefree.gov/VET

I've been trying to quit for years, this program has helped me accomplish my goal. Thank you for the support.

Resources for Patients: Stay Quit Coach app



- Designed to assist with smoking cessation as an enhancement to the face-to-face protocol
- Primarily to be used as a relapse prevention tool once a course of treatment is complete. Should be incorporated into sessions
- Intended for patients to use with their provider, but can also be used on its own



For Veterans:

Apple: <https://itunes.apple.com/us/app/stay-quit-coach/id655892317?mt=8>

Android: <https://play.google.com/store/apps/details?id=gov.va.stayquit&hl=en>

For Professionals:

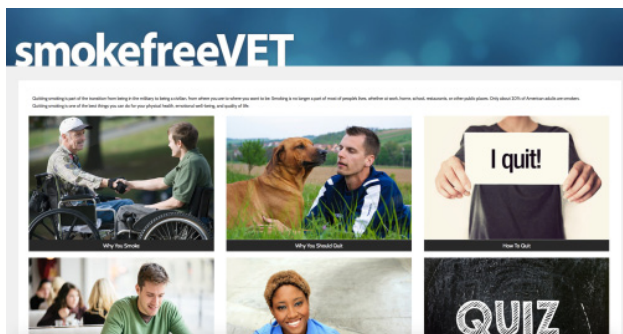
ptsd.va.gov/professional/materials/apps/stayquit_coach_app_pro.asp

Resources for Patients: SmokefreeVET Web and Facebook

SmokefreeVET Web

- Self-help info for quitting smoking
- Build Your Quit Plan tool
- Lets Veterans know how to find and connect with VA's resources for quitting

smokefree.gov/veterans



SmokefreeVET Facebook

- Online support community
- Regular tips, encouragement, and resources for quitting and staying quit
- Veterans can comment, ask questions and connect with others

facebook.com/smokefreevet



Summary of Links

Internet (patient-focused)

publichealth.va.gov/smoking/smokefree.gov/veterans

Intranet (VHA internal)

vaww.publichealth.va.gov/smoking

Monthly email newsletter

Email dana.christofferson@va.gov to be added to distribution list

Bimonthly audio conference series with CEUs

Email kim.hamlett@va.gov to be added to distribution list

VHA Tobacco & Health Program

Dr. Kim Hamlett-Berry, Director

Dr. Dana Christofferson, Sr. Program Mgr

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