



Tobacco Cessation and Behavioral Health



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Gary Tedeschi, PhD
Kirsten Hansen, MPP
Chad Morris, PhD

Lydia Becerra
Kalene Gilbert, LCSW



Faculty List

- ▶ Gary Tedeschi, PhD – Course Director and Presenter
 - Psychologist, UCSD Cancer Center
- ▶ Kirsten Hansen, MPP - Presenter
 - Curriculum Development Manager, UCSD Cancer Center
- ▶ Chad Morris, PhD
 - Associate Professor, University of Colorado Denver Department of Psychiatry
 - Director, Behavioral Health and Wellness Program
- ▶ Kalene Gilbert, LCSW
 - Program Head, County of Los Angeles, Department of Mental Health
- ▶ Lydia Becerra
 - County of Los Angeles, Dept. of Public Health, Alcohol and Drug Program





The purpose of this course is to provide mental health and substance use disorder providers and counselors the knowledge, skills and confidence necessary to assess and treat tobacco dependence in smokers with co-occurring psychiatric and/or addictive disorders. Upon completion participants will be able to:

1. Describe population-based trends of tobacco use among smokers with co-occurring mental health and/or substance use disorders.
2. Identify health-related consequences of tobacco use.
3. Understand and counter the factors in mental health and addiction treatment settings that have served to maintain tobacco use in populations with mental health and/or substance use disorders.
4. Identify and implement evidence-based treatment for treating tobacco dependence.





Needs Assessment and Target Audience

- ▶ The content of this course was determined by rigorous assessment of educational need and includes surveys, program feedback, expert faculty assessment, literature review, medical practice and new medical knowledge.
- ▶ This course is designed for health care providers, counselors, and health educators to address smoking cessation.





Cultural & Linguistic Competency

California Assembly Bill 1195 requires continuing medical education activities with patient care components to include curriculum in the subjects of cultural and linguistic competency. It is the intent of the bill, which went into effect on July 1, 2006, to encourage physicians and surgeons, CME providers in the state of California, and the Accreditation Council for Continuing Medical Education to meet the cultural and linguistic concerns of a diverse patient population through appropriate professional development. The planners, speakers and authors of this CME activity have been encouraged to address issues relevant in their topic area. In addition, a variety of resources are available that address cultural and linguistic competency, some of which are included in your syllabus or handout materials. Additional resources and information about AB1195 can be found on our website at <http://cme.ucsd.edu>.





Behavioral Health and Wellness Program

University of Colorado Denver

The mission of The Behavioral Health and Wellness Program is to improve the quality of life for individuals and communities through research, education, clinical care, and policy change.

Co-Authors with Center for Tobacco Cessation

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www.bhwellness.org



Behavioral Health and Wellness Program



Additional Acknowledgements

- ▶ Planning Committee
 - County of Los Angeles, Dept. of Public Health, Tobacco Control and Prevention Program
 - ▶ Linda Aragon and Rachel Tyree
 - Smoking Cessation Leadership Center
 - ▶ Catherine Saucedo





Today's Objectives

- ▶ Why this? Why now?
- ▶ Morbidity and mortality
- ▶ Prevalence rates
- ▶ Unique challenges
- ▶ The evidence-base
- ▶ Resources and tools





Why Now?

▶ New Partnership

- LA County Mental Health, Alcohol and Drug, and Tobacco Control and Prevention
- Smoking Cessation Leadership Center
- Center for Tobacco Cessation
- Behavioral Health and Wellness Program

▶ Elements

- Consumer involvement
- Peer-to-peer program to augment provider driven services
- Trainings
- Technical assistance
- Impact Evaluation





Why Now? (cont.)

- ▶ 100% of California state psychiatric facilities are now smoke-free
 - Napa – 7/08
 - Coalinga – 8/08
 - Atascadero – 11/08
 - Patton – 4/09
 - Metro – 4/09

“There have been no significant issues in any of the hospitals”

California Department of Mental Health






Why Now? (cont.)

- ▶ Promotion of health
- ▶ Changing philosophy around addictions & co-occurring treatment
- ▶ Putting the “T” back in ATOD
- ▶ Increased treatment effectiveness
- ▶ A key component of the recovery process
- ▶ You are in the best position to offer these services
- ▶ The zeitgeist!






A Wellness Philosophy

A black and white close-up portrait of a woman, Ariana, looking directly at the camera with a slight smile. The background is a soft-focus outdoor scene.

I didn't survive depression
and suicide attempts
so I could die from lung cancer.
I had to stop smoking.
—ARIANA

CIGARETTES ARE MY GREATEST ENEMY
TOBACCO CAUSES MORE DEATHS THAN AIDS, DRUGS, BREAST CANCER AND GAY BASHING COMBINED

Funded by the American Legacy Foundation, however, this does not necessarily represent the views of the Providence, Rhode Island staff, or its Board of Directors
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To assist people to lead meaningful lives in their communities, we need to promote behaviors that lead to health





Alarming Statistics





Tobacco's Deadly Toll

- ▶ 435,000 deaths in the US/year
- ▶ 4.8 million deaths worldwide/year
- ▶ 10 million annual deaths estimated by year 2030
- ▶ 50,000 annual deaths in the US due to second-hand smoke exposure





Tobacco's Deadly Toll (cont.)

- ▶ 200,000 of the 435,000 annual deaths are people with mental illness and substance use disorders
- ▶ For patients in treatment for alcohol and drug dependence, more than half die from tobacco-caused illnesses¹
- ▶ Among treated narcotic addicts, smokers' death rates are 4 times that of nonsmokers²

¹Hurt et al., 1996

²Hser et al., 1994; Lynch & Bonnie, 1994





Morbidity and Mortality

Thirteenth
in a Series
of
Technical
Reports

Morbidity and Mortality in People with Serious Mental Illness

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October 2006



Behavioral Health and Wellness Program



Morbidity and Mortality

- ▶ Persons with mental illnesses die up to **25 years** earlier and suffer increased medical comorbidity
 - ▶ Often from tobacco related diseases
 - ▶ More likely to die from these diseases than from their alcohol use
- ▶ Smokers with mental illnesses have more psychiatric symptoms, increased hospitalizations, and require higher dosages of medications

(Brown et al., 2000; Colton & Manderscheid, 2006; Dixon et al., 1999; Joukamaa et al., 2001; Osby et al., 2000; Dalack & Glassman, 1992; Desai, Seabolt, & Jann, 2001; Goff, Henderson, & Amico, 1992; Williams & Ziedonis, 2004; Ziedonis, Kosten, Glazer, & Frances, 1994).





Smoking is arguably the most modifiable risk factor for decreasing excess mortality & morbidity

(National Association of State Mental Health Program Directors, 2006;
U.S. Department of Health and Human Services, 2004)





Prevalence Rates





Who Smokes?

- ▶ California adult smoking prevalence is **13.3%*** ~ 4 million smokers
 - American Indian – 28.2%**
 - African American – 18.7%**
 - White – 16.2%**
 - Hispanic – 12.8%**
 - Asian/Pacific Islander – 12.0%**

* California Department of Health Services, 2007

** California Health Interview Survey, 2005





Who Smokes? (cont.)

- ▶ Lesbian/Gay/Bisexual/Transgendered – 30.4%
- ▶ Navy – 39.6%
- ▶ Marine Corps – 30.3%
- ▶ Low Socio-Economic Status – 19.2%

California Department of Health Services, 2007



Behavioral Health and Wellness Program



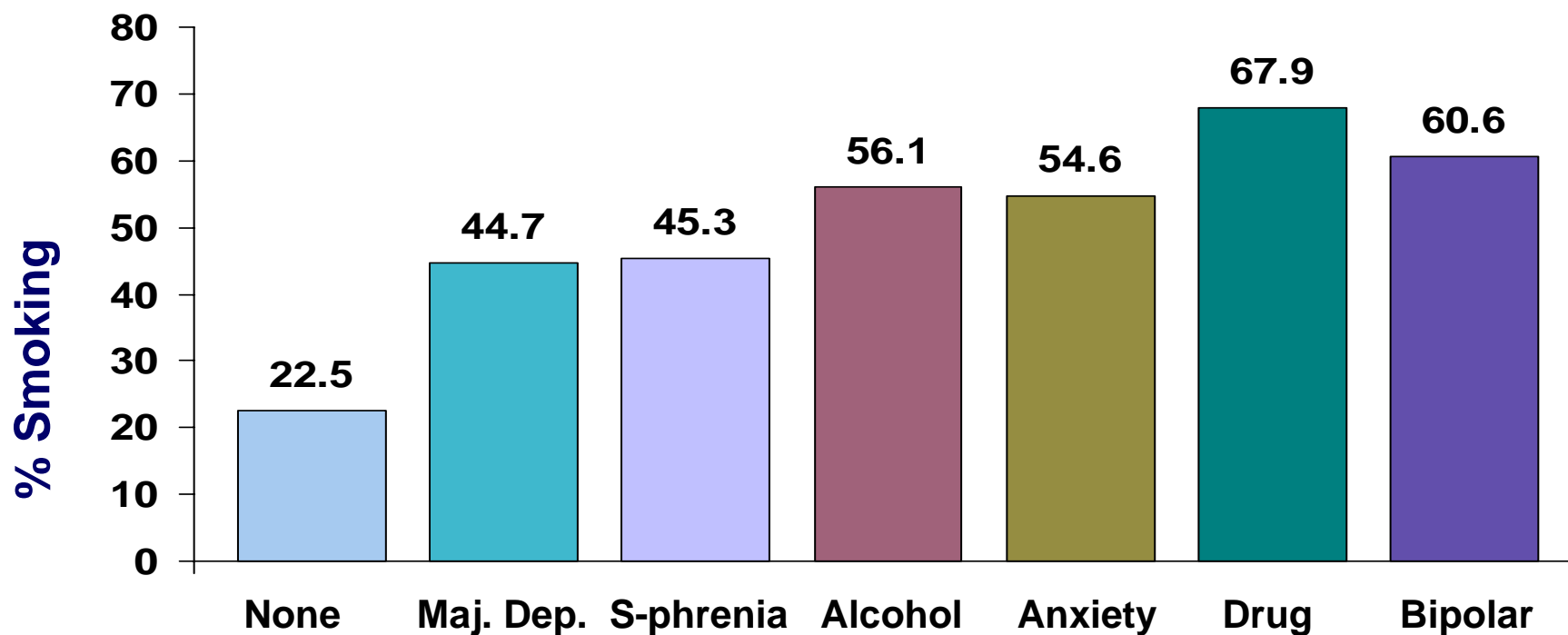
Smoking and Behavioral Health

- ▶ Rates of smoking are 2-4 times higher than among the general population.¹
- ▶ About 41% of people with mental illness & substance use disorders smoke.²
- ▶ 60% of current smokers report having had a mental health or substance use diagnosis sometime in their lifetime.¹
- ▶ This population consumes 45% of cigarettes smoked.³

1. Kalman, 2005 2. Lasser, 2000, 3. Breslau, 2003



Smoking by Diagnosis



Lasser et al., 2000





Smoking by Diagnosis (variety of surveys & settings)

Schizophrenia	45-88%
Bipolar disorder	51-70%
Major depression	36-80%
Anxiety disorder	32-60%
Post-traumatic stress disorder	45-60%
Attention deficit/hyperactivity disorder	38-42%
Alcohol abuse	34-80%
Other drug abuse	49-98%

Beckham et al., 1995; De Leon et al., 1995; Farnam 1999; Grant et al., 2004; Hughes et al., 1996; Lasser et al., 2000; Morris et al., 2006; Pomerleau et al., 1995; Stark & Campbell, 1993; Ziedonis et al., 1994





Why is This Population Vulnerable?





Barriers & Vulnerabilities

- ▶ Biological predispositions
- ▶ Barriers to tobacco interventions
 - Systems Factors
 - Clinician Factors
 - Client/Consumer Factors
- ▶ Tobacco industry targeting





Biological Predisposition

- ▶ Persons with behavioral health diagnoses have neurobiological & genetic features that may:
 - increase their tendency to use nicotine,
 - make it more difficult to quit, and
 - complicate the withdrawal phase.
- ▶ Nicotine enhances
 - concentration
 - information processing
 - learning
 - mood
- ▶ May reduce medication side effects





Barriers to Tobacco Interventions: Systems Factors

- ▶ Competing demands
- ▶ Tobacco as socialization activity, behavioral reward
- ▶ Staff acceptance and promotion
- ▶ Not part of current treatment milieu
- ▶ Lack of reimbursement for services





Barriers to Tobacco Interventions: Clinician Factors

- ▶ Expectation of failure
- ▶ Competing demands
- ▶ Fear of symptom exacerbation & relapse
- ▶ Lack of training
- ▶ Minimization





Smoking Prevalence Among Mental Health Providers

- ▶ 30% - 35% of mental health providers smoke as compared to-
 - Primary Care Physicians 1.7%
 - Emergency Physicians 5.7%
 - Psychiatrists 3.2%
 - Registered Nurses 13.1%
 - Dentists 5.8%
 - Dental Hygienists 5.4%
 - Pharmacists 4.5%

Strouse, Hall, Kovac, 2004





Barriers to Tobacco Interventions: Client/Consumer Factors

- ▶ Expectation of failure
- ▶ Lack of knowledge
- ▶ Fear of withdrawal symptoms
- ▶ Fear of weight gain
- ▶ Concern about recovery
- ▶ Concern about stress management (tension, anxiety)
- ▶ Doubt about dealing with boredom
- ▶ Part of daily routines
- ▶ Integral to social activity



“I’ve been schizophrenic since I was 14. I was told more or less when I went to the hospitals that cigarettes help control certain areas in my brain and the way we function out in society. I became more of a smoker because I was told it would help me with my illness. I was taught more about it helping my illness than I was about cancer and stuff like that.”

- Consumer focus group participant

Morris et al, 2009





Tobacco Industry Targeting

- ▶ Monitored or directly funded research supporting the idea that individuals with schizophrenia were:
 - less susceptible to the harms of tobacco and
 - that they needed tobacco as self-medication
- ▶ Promoted smoking in psychiatric settings by:
 - providing cigarettes and
 - supporting efforts to block hospital smoking bans

Prochaska JJ, Hall SM, Bero LA., 2007





Myths and Myth-breaking Evidence





Myth #1

- ▶ **Myth**: Persons with mental illness and substance use disorders enjoy smoking and don't want to quit.
- ▶ **Fact**: **Persons with mental illness and substance use disorders want to quit smoking and want information on cessation services and resources.**





Interest in Quitting Results: Behavioral Health

- ▶ Study of 300 depressed smokers: 79% were interested in quitting. (Prochaska et.al., 2004)
- ▶ Study of 224 hospitalized psychiatric patients who smoke: 79% of eligible smokers recruited into the study (Prochaska et al., 2009)
- ▶ Review of clinical trials: 50% - 77% in substance use facilities were interested in quitting. (Joseph et.al., 2004)





Myth #2

- ▶ **Myth**: Persons with mental illness and substance use disorders are more addicted to nicotine and therefore are unable to quit smoking.
- ▶ **Fact**: Persons with mental illness and substance use disorders can successfully quit using tobacco.





Smoking Cessation Results: Mental Illnesses

Most combine meds & psycho-education
+/- CBT

▶ Schizophrenia: 8 studies (n= 9-70)

Quit rates 35-56% post-treatment,
12% at 6-months

▶ Depression: 8 studies (n= 29-615)

Quit rates 31-72% post-treatment,
12-46% at 12 months

(el-Guebaly et al., 2002)





Does Abstinence from Tobacco Cause Recurrence of Psychiatric Disorders?

- ▶ For depressed smokers who quit :
 - No increase in suicidality, hospitalization, use of marijuana, stimulants, or opiates
 - Less alcohol use among those who quit (Prochaska et al., 2008)
- ▶ For smokers with schizophrenia who quit:
 - No worsening of attention, verbal learning/memory, working memory, or executive function/inhibition, or clinical symptoms of schizophrenia (Evins et al., 2005)





Myth #3

- ▶ **Myth**: Smoking cessation will threaten recovery for persons with substance use disorders.
- ▶ **Fact**: Smoking cessation can enhance long-term recovery for persons with substance use disorders.

(Prochaska et al., 2004; Saxon, 2003; Signal Behavioral Health, 2008; Lemon et al. 2003; Gulliver et al 2006; Ziedonis et al, 2006; Baca & Yahne, 2009)





Smoking Cessation Results: During Addictions Treatment or Recovery

- ▶ Systematic review of 17 studies
- ▶ Smokers with current and past alcohol problems:
 - More nicotine dependent
 - Less likely to quit in their lifetime
 - As able to quit smoking as individuals with no alcohol problems

Hughes & Kalman, 2006, Drug Alc Dep





Does Abstinence from Tobacco Cause Relapse to Alcohol and Illicit Drugs?

- ▶ At > 6 months follow-up, tobacco treatment with individuals in addictions treatment was associated with a **25% increased abstinence** from alcohol and illicit drugs
- ▶ Caveat – one well done study looking at concurrent vs. delayed tobacco cessation treatment (n=499; Joseph, et al, 2004)
 - ▶ Comparable smoking quit rates at 18 months, but lower prolonged alcohol abstinence rates for concurrent treatment group at 6 months

Prochaska et al., 2004





What is Your Role?





Behavioral Health Professionals

- ▶ Often the clinician for whom contact is the most frequent and who knows the client/consumer best
- ▶ Able to coordinate pharmacotherapy and behavioral/counseling treatment
- ▶ Trained in mental health and/or substance abuse treatment
- ▶ Able to identify and address any changes in psychiatric symptoms during the quit attempt.

Adapted from Prochaska, 2009





Clinical Practice Guidelines

- ▶ Comprehensive, evidence-based approach for smoking cessation
- ▶ Released in June 2000 by the U.S. Public Health Service—updated version in 2008
- ▶ Systematic approach to tobacco cessation for all healthcare facilities





Clinical Practice Guidelines (cont.)

- ▶ All patients/clients should be screened for tobacco use, advised to quit and be offered intervention
- ▶ Those trying to quit should be offered pharmacotherapy, unless contraindicated
- ▶ There is a dose response relationship with the amount of contact provided





Evidence-Based Model: The 5 A's

Ask: Systematically identify all tobacco users at every visit

Advise: Advise tobacco users to quit

Assess: Assess each tobacco user's willingness to quit

Assist: Assist tobacco users with a quit plan

Arrange: Arrange follow-up contact





Determining Readiness to Proceed

- ▶ Motivation
 - “Interested” is sufficient
 - Don’t rule out initiating some type of intervention if not motivated to quit now
- ▶ Stability
 - Need to be psychiatrically stable-do not need to be in full remission
 - No major medication changes
 - No major life changes
 - No active intoxication/withdrawal; client in recovery process
- ▶ Match service to need





Unique Needs

- ▶ Determine need for involvement from primary care/other health care providers
- ▶ Determine need for more intensive behavioral therapy
- ▶ Address psychotropic medication issues
- ▶ Tailor treatment plan based on
 - Current stability of symptoms/recovery
 - Functional status
 - Current psychotropic medications
 - Previous quit history





The 5 A's and A, A, R

Ask: Systematically identify all tobacco users at every visit

Advise: Advise smokers to quit

Assess: Assess each smoker's willingness to quit →

Refer to the California Smokers' Helpline and/or Peer-to-peer counselor

Assist: Assist smokers with a quit plan →

The Helpline provides behavior modification counseling (quit plan and quit date)

Arrange: Arrange follow-up contact →

The Helpline provides 5 follow-up calls – timing is based on the probability of relapse.





Peer Counseling Program

- ▶ Peer-to-Peer smoking cessation program
 - University of Colorado Denver & UMDNJ
 - Two-day intensive training
- ▶ 41 peer advocates/supervisors trained
 - DMH Wellness and Client-Run Centers
 - ADPA contracted treatment facilities
- ▶ Provide individual motivational intervention as well as group counseling
- ▶ Additional peer trainings will be held in the fall





Peer Counseling Program

- ▶ American Recovery Center
- ▶ Divine Healthcare Services, Inc.
- ▶ Grandview Foundation, Inc.
- ▶ Trinity Plus Healthcare
- ▶ National Council on Alcoholism & Drug Dependence: Covina/Pomona
- ▶ B.R.I.D.G.E.S. Project Independence Wellness Center
- ▶ HealthView, Inc.
- ▶ Rio Hondo MHC Wellness Center
- ▶ San Fernando Mental Health Center
- ▶ Mental Health America-Project Return Peer Support Network
- ▶ Pacific Clinics
- ▶ Action Rehabilitation Center
- ▶ Alcoholism Center for Women
- ▶ Chabad Residential Treatment Center
- ▶ CLARE Foundation
- ▶ El Centro del Pueblo
- ▶ BACUP Life Center
- ▶ Exodus Recovery, Inc.
- ▶ Harbor UCLA
- ▶ Hollywood Wellness Center
- ▶ Northeast Mental Health Center
- ▶ South Bay Wellness Center
- ▶ West Central Mental Health Center
- ▶ S.H.A.R.E.! Self Help





California Smokers' Helpline

1-800-NO-BUTTS

- ▶ Free statewide tobacco cessation program
- ▶ Funded by tobacco taxes
 - Propositions 99 & 10
- ▶ Scientifically proven to be effective
- ▶ All services available by telephone
- ▶ In operation since 1992
- ▶ Adults, teens, pregnant women and proxy
- ▶ Multiple languages





Multiple Languages

- ▶ English
1-800-NO-BUTTS (1-800-662-8887)
- ▶ Cantonese
1-800-838-8917
- ▶ Korean
1-800-556-5564
- ▶ Mandarin
1-800-838-8917
- ▶ Spanish
1-800-45-NO-FUME (1-800-456-6386)
- ▶ Vietnamese
1-800-778-8440





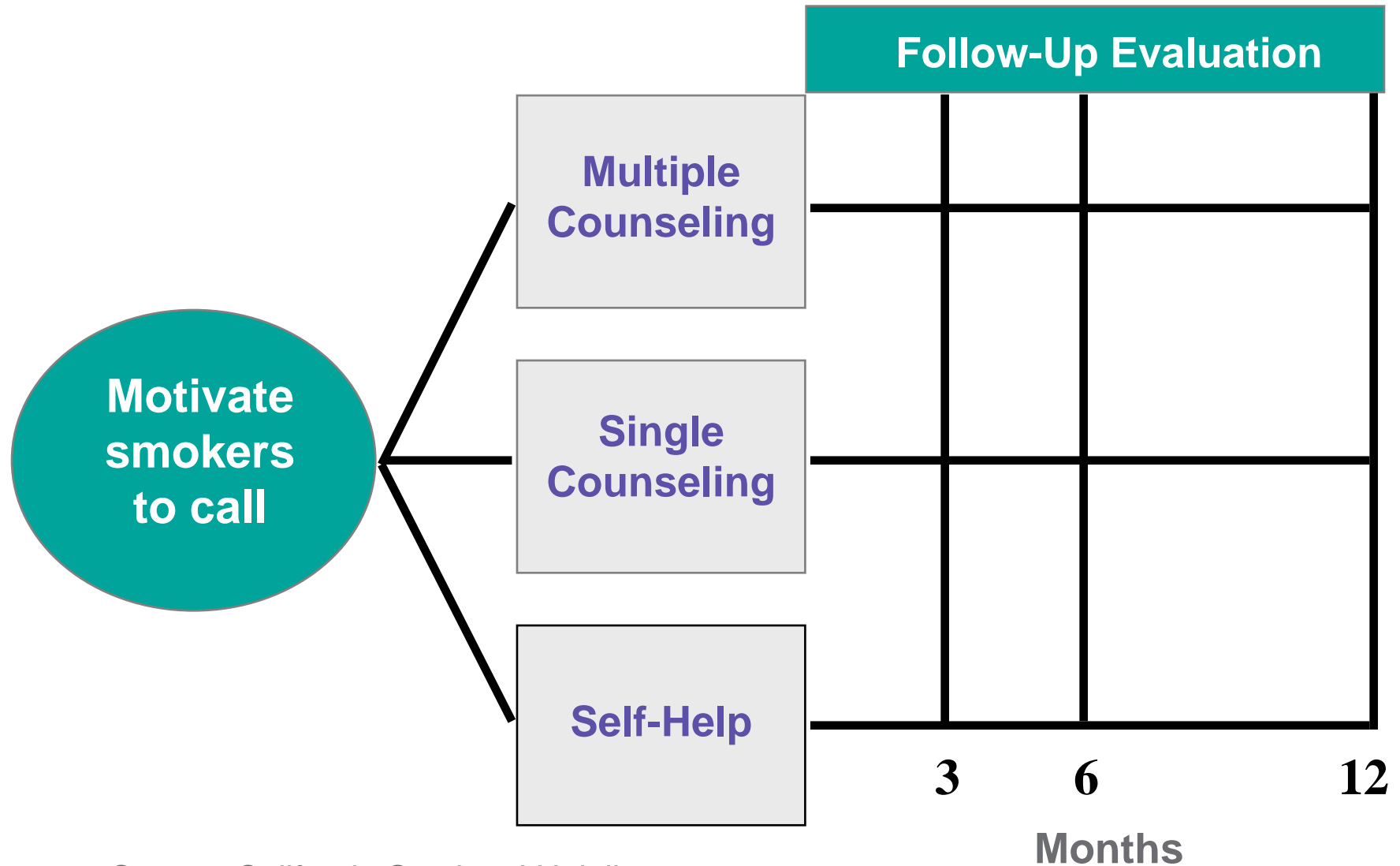
Available Services

- ▶ Self-help materials
- ▶ Referral lists of local cessation programs
 - ▶ Updated by each county's tobacco control program
- ▶ Individual telephone counseling
 - ▶ Confidential
 - ▶ One pre-quit call, multiple proactive follow-up calls
 - ▶ Trained counseling staff





A Randomized, Controlled Trial



Source: California Smokers' Helpline



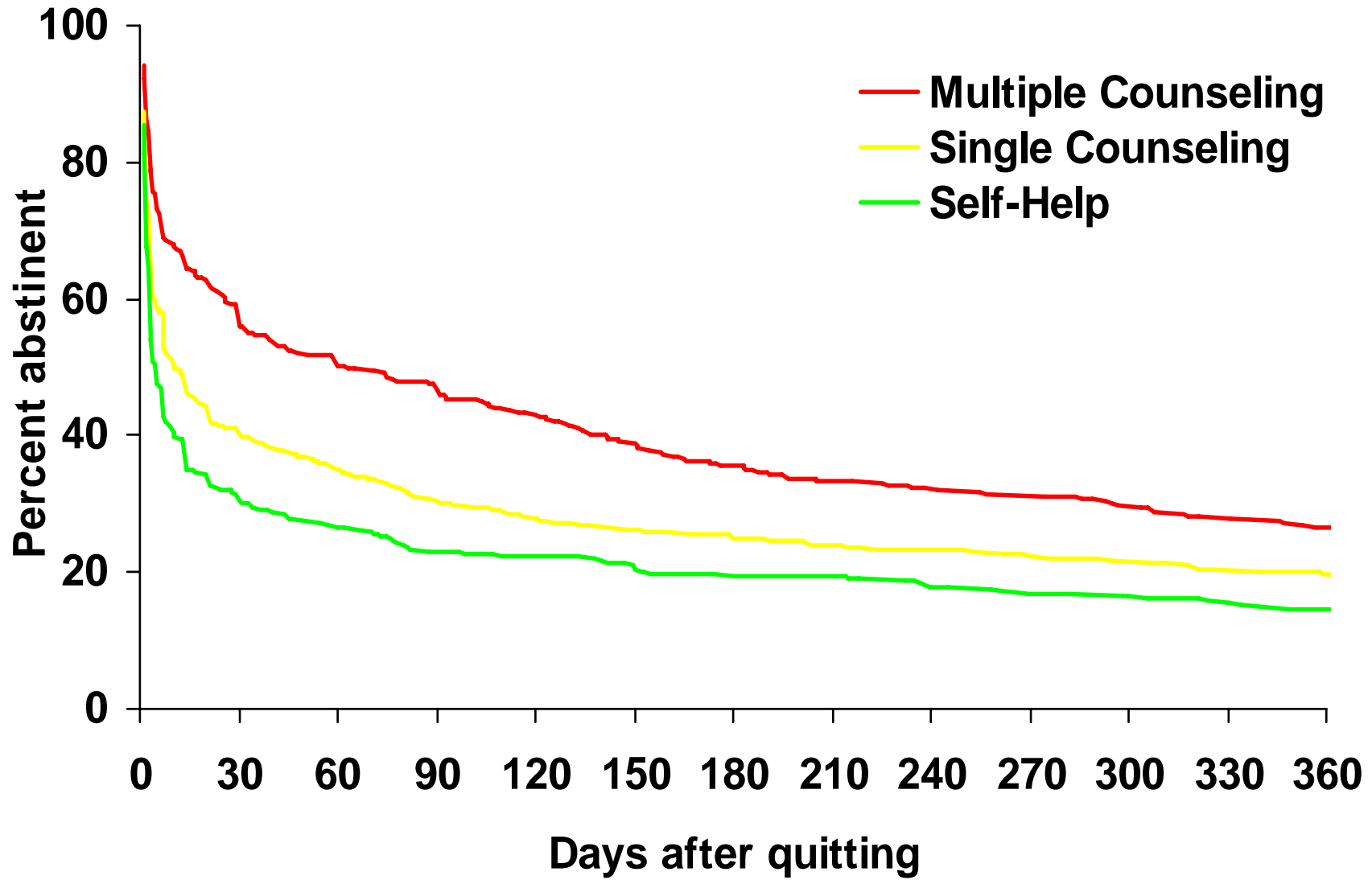
Quit Attempts by the 3 Groups

Treatment Group	Made a Serious Quit Attempt %
Self-Help	58.8
Single Counseling	66.7
Multiple Counseling	66.6

Source: Zhu et al. (1996), *JCCP*, 64, 202-211



Relapse Curves for the 3 Groups



Source: Zhu et al. (1996), *JCCP*, 64, 202-211



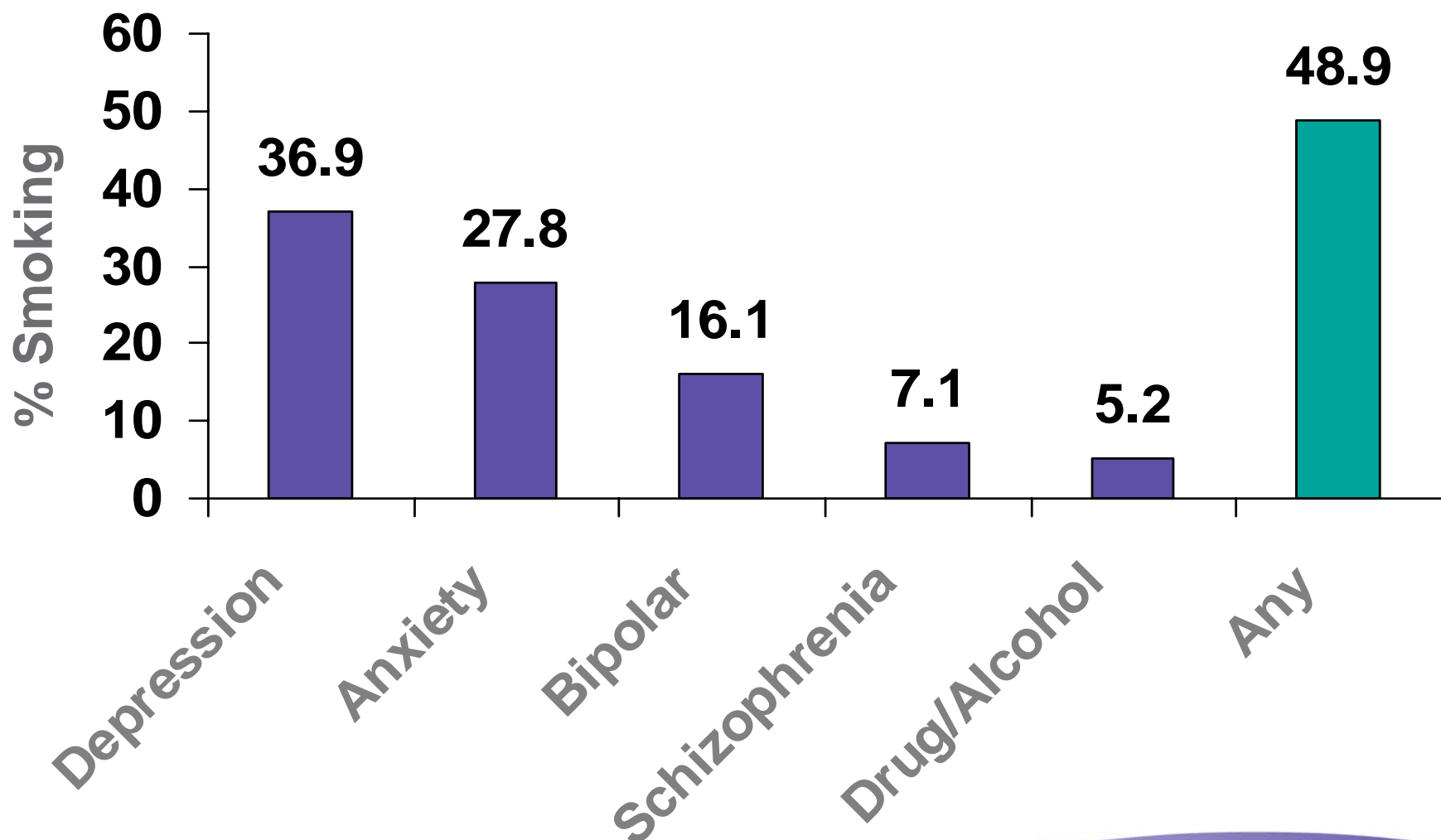
Self-Reported Behavioral Health Issues Among Helpline Callers

- ▶ Do you have any current mental health issues such as:
 - An anxiety disorder?
 - Depression?
 - Bipolar disorder?
 - Schizophrenia?
 - Drug or alcohol problem?
 - ▶ If yes, have you been actively using/drinking in the last month?





Self-Reported Behavioral Health Issues Among Helpline Callers



(Zhu, et al, 2009. Unpublished data)





What Happens in Each Call?

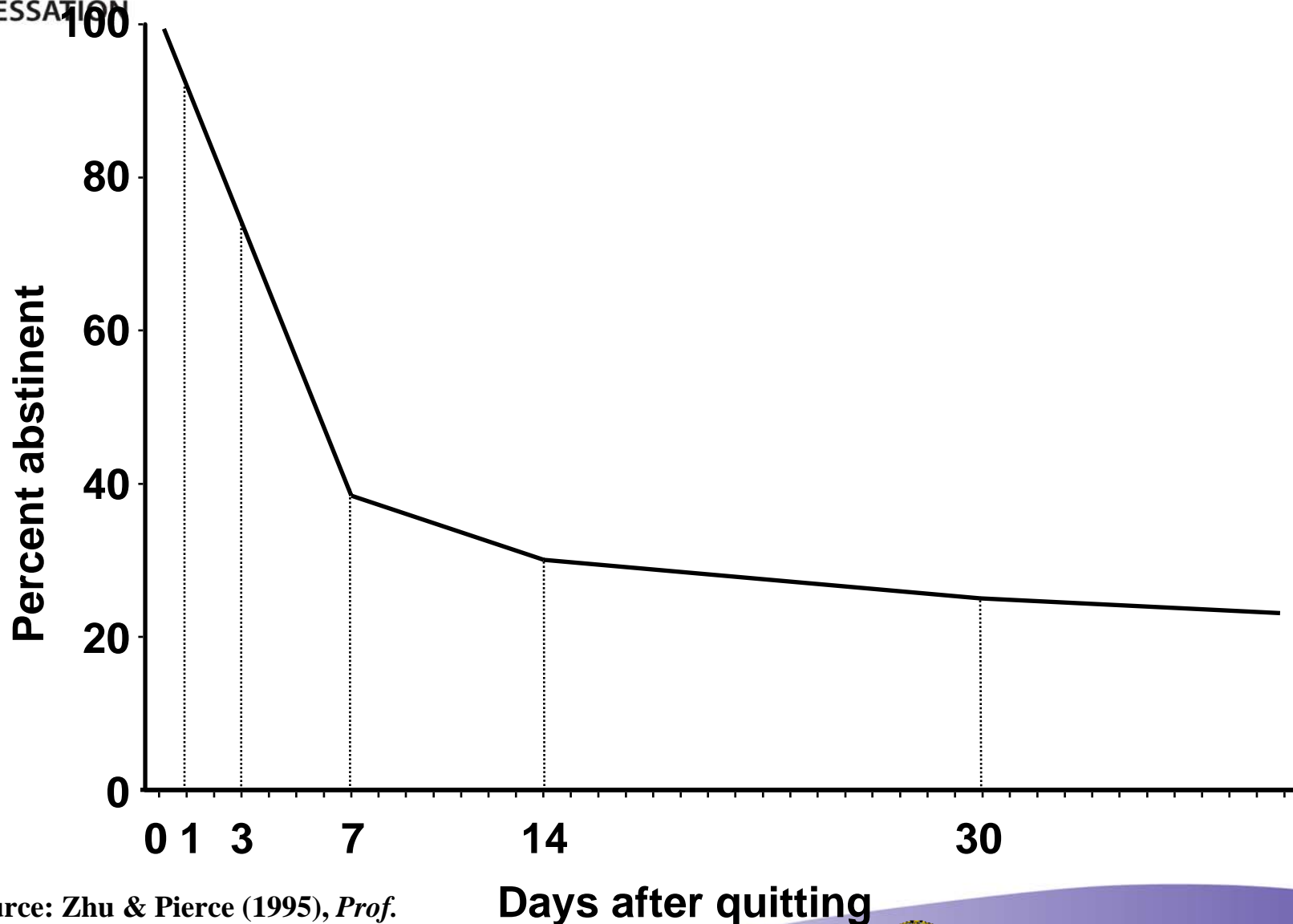
- ▶ Initial session
 - Comprehensive, 30-40 min. call
 - Preparation to quit
 - Setting a quit date

- ▶ Follow-up sessions
 - Up to five 10-15 min. calls
 - Relapse prevention
 - Pharmacotherapy review





Relapse-Sensitive Scheduling



Source: Zhu & Pierce (1995), *Prof. Psych. Res. & Practice*, 26, 624-625

Days after quitting





First Session

- ▶ Treatment overview & rationale
- ▶ Motivation
- ▶ Health considerations
- ▶ Smoking & quitting history
- ▶ Quitting methods
- ▶ Environmental considerations
- ▶ Self-efficacy
- ▶ Self-image
- ▶ Planning
- ▶ Call summary
- ▶ Setting a quit date
- ▶ Addressing follow-up calls

Source: Zhu S-H, Tedeschi GJ, Anderson CM, Pierce JP. *J Couns Devel* 1996;75;93-102.





Proactive Follow-up Sessions

- ▶ Quit status
- ▶ Withdrawal review
- ▶ Pharmacotherapy review
- ▶ Challenges & smoking events
- ▶ Motivation & self-efficacy
- ▶ Support
- ▶ Planning for future
- ▶ Self-image

Source: Zhu S-H, Tedeschi GJ, Anderson CM, Pierce JP. *J Couns Devel* 1996;75;93-102.





Helpline Intervention Summary

- Identify a strong reason (Motivation)
- Bolster belief in ability (Confidence)
- Develop a solid plan (Skills)
- Adopt a new view of self (Self-image)
- Keep trying (Perseverance)





What Happened for Callers with Behavioral Health Issues?





Received Counseling

No Mental Illness 74.0%

Mental Illness 84.0%

(Zhu, et al, 2009. Unpublished data)





NRT Use

No Mental Illness

33.3%

Mental Illness

41.7%

(Zhu, et al, 2009. Unpublished data)





Quit Attempts

Quit in 2 Months (%)

No Mental Illness	53.1*
Mental Illness	56.4*

(Zhu, et al, 2009. Unpublished data)

* Descriptive data, not based on results of a randomized controlled trial





Quitting Success

30-Day Point Prevalence (%)
at 2 Months

No Mental Illness	20.8*
Mental Illness	19.0*

(Zhu, et al, 2009. Unpublished data)

* Descriptive data, not based on results of a randomized controlled trial





Conclusions from the Helpline

- ▶ Smokers with mental illnesses call in high numbers
 - Across all demographics
- ▶ They appear to be more motivated
 - More likely to get counseling & use NRT
- ▶ The motivation and use of treatment seem to compensate for the vulnerability associated with their mental health condition.
- ▶ As a result, they are equally likely to try to quit & succeed
- ▶ Randomized controlled trials are needed to determine efficacy of telephone counseling for smokers with mental illnesses





Pharmacotherapy





Role of Nicotine Receptors

- ▶ Chronic nicotine use results in permanent increase in the number of receptors.
- ▶ The brain gets used to a new, "nicotine normal" level.
- ▶ Reduced nicotine use (e.g. quitting smoking) disrupts "nicotine normal" receptor activity; causes nicotine withdrawal symptoms.
- ▶ Without nicotine, receptor activity normalizes again in 3-6 months, but increase in receptors remains indefinitely.
- ▶ Increase in receptors is responsible for:
 - Difficulty reducing amount smoked.
 - Quick relapse to former levels of smoking





Withdrawal Symptoms

- Depressed mood
- Sleep disturbance
- Irritability, frustration or anger
- Difficulty concentrating
- Anxiety
- Restlessness
- Decreased heart rate
- Increased appetite or weight gain
- Craving

American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.) Washington, DC.





Pharmacotherapy Options

- ▶ Nicotine Replacement Therapy (NRT)
 - Nicotine Patch (OTC)
 - Nicotine Gum (OTC)
 - Nicotine Lozenge (OTC)
 - Nicotine Inhaler
 - Nicotine Spray

- ▶ Medication
 - Bupropion SR (Wellbutrin SR, Zyban)
 - Varenicline (Chantix)
 - Other: Nortriptyline, Clonidine





Nicotine Replacement Therapy

- ▶ Used to help smokers get off nicotine slowly. Nicotine is released into the bloodstream (via the type of NRT) in order to help reduce physical withdrawal symptoms.
- ▶ NRT works by replacing some of the nicotine from smoking at the receptor sites with nicotine from less harmful sources.
- ▶ Reduced efficacy for women over time, unless paired with high intensity support (Cepeda-Benito et al., 2004).

Contraindications: pregnancy or nursing, recent heart attack, irregular heart beat, severe or worsening heart pain, stomach ulcers, overactive thyroid, high blood pressure, diabetes requiring insulin.





Bupropion (Wellbutrin S-R, Zyban)

- ▶ Bupropion (Zyban) is a non-nicotine prescription drug, the sustained-release form of the antidepressant Wellbutrin.
 - The “pill” is thought to stimulate dopamine and norepinephrine, brain chemicals that give smokers the sensation of alertness & energy.
 - Reduces the withdrawal symptoms such as cravings, irritability and depressed mood.
 - Works equally well for men and women.

Contraindications: seizure disorders, cranial trauma, stroke, withdrawing from alcohol, current or prior diagnosis of bulimia or anorexia nervosa, pregnancy/nursing, other meds like MAO inhibitors





Varenicline (Chantix)

- ▶ Varenicline (Chantix) is a non-nicotine prescription drug developed specifically for smoking cessation. Not an antidepressant.
 - The “pill” releases dopamine, but substantially less than with smoking.
 - Varenicline specifically targets the alpha-4 beta-2 ($\alpha 4\beta 2$) nicotinic receptors, blocking the binding of nicotine from smoking.
 - Reduces the urge to smoke and reduces the pleasure derived from smoking.
 - Works equally well for men and women.

Contraindications: < age 18, pregnancy/nursing, caution if psychiatric disorder, renal impairment, other meds like insulin, blood thinners, asthma puffers





Varenicline (Chantix)

- ▶ Post-marketing reports of adverse mood and behavior changes.
- ▶ Available research data has been reviewed and causal links have not yet been established.
- ▶ Warnings are for both patients and providers to closely monitor psychiatric symptoms of anyone taking varenicline to stop smoking.
- ▶ Studies are underway to test varenicline in patients with MI.





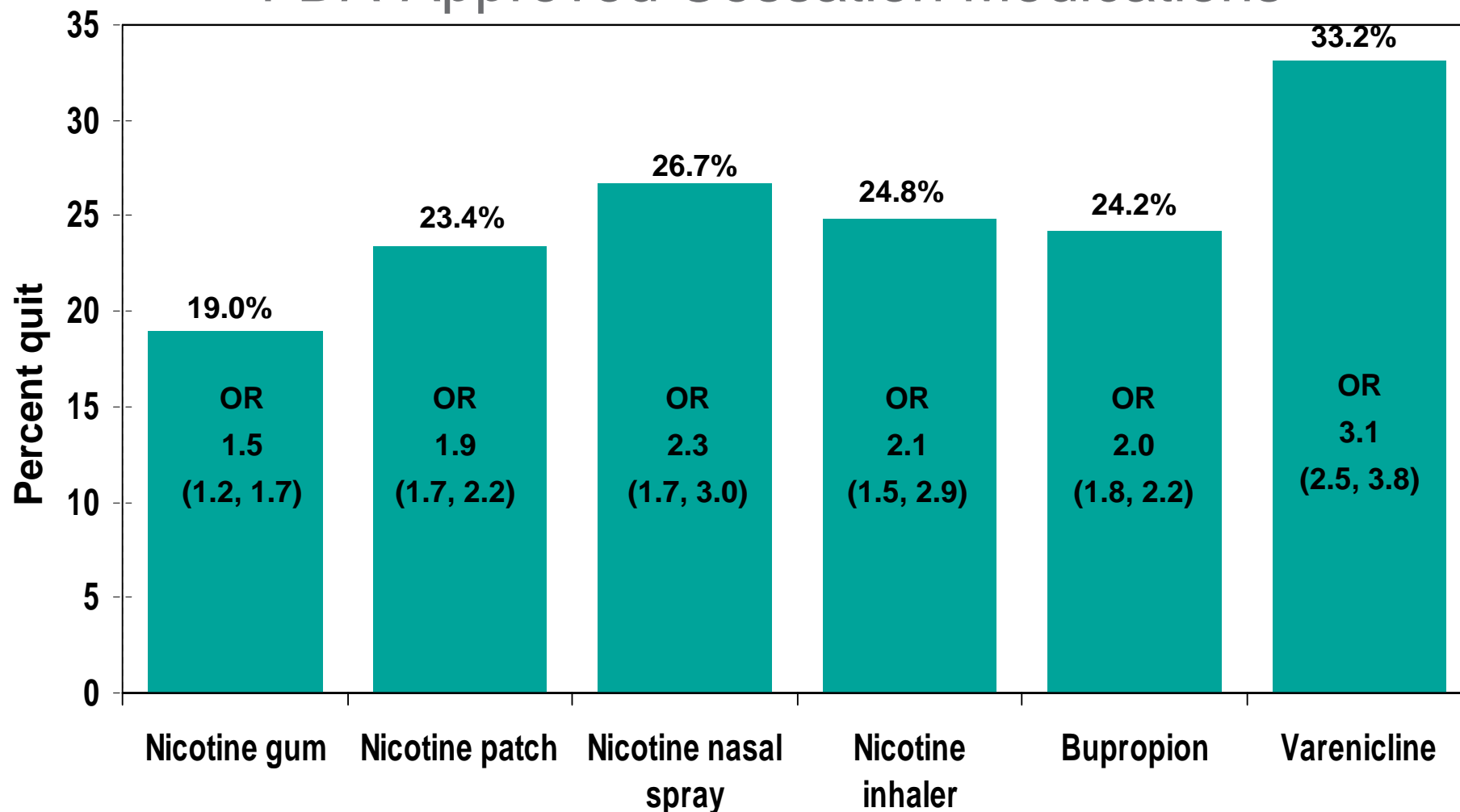
Boxed Warning for Chantix & Zyban

- ▶ July 1, 2009 – FDA announced it is requiring manufactures to use a Boxed Warning
- ▶ It will highlight the risk of serious issues including:
 - Changes in behavior
 - Hostility & agitation
 - Depressed mood
 - Suicidal ideation, behavior, & attempts
- ▶ The FDA also stated - the risk of serious adverse medication events must be weighed against significant health benefits of quitting smoking





Six Month Point Prevalence Quit Rates for FDA-Approved Cessation Medications



Nicotine lozenge: (single study results) 2 mg = OR 2.0 (1.4, 2.8) 4 mg = OR 2.8 (1.9, 4.0)

*PHS Clinical Practice Guideline, May 2008.





On the Horizon: Nicotine Vaccine

- ▶ In early development. Will take several more years.
- ▶ Works by stimulating immune system to produce antibodies to nicotine + protein molecule
- ▶ Antibodies then bind to any nicotine in bloodstream; can't pass the blood/brain barrier
- ▶ Effects of nicotine can't reach brain





Pharmacotherapy Guidance for Behavioral Health

- ▶ Smokers with behavioral health diagnoses who are trying to quit should receive pharmacotherapy (PHS Clinical Practice Guideline, 2008)
- ▶ Dose level and duration of drug treatment individualized.
- ▶ Many will need
 - Higher doses
 - Combination treatments
 - Longer duration of treatment





Bupropion SR

- ▶ Effective in smokers with Major Depression but relapse high when treatment discontinued
- ▶ Not appropriate as only medication in Anxiety disorders
- ▶ Effective in smokers with PTSD (limited evidence)
- ▶ Effective in smokers with Schizophrenia but relapse high when treatment discontinued
- ▶ Limited published data on effectiveness in SUD





Bupropion SR (cont.)

- ▶ Contraindicated in seizure and eating disorders
- ▶ Not recommended
 - Alcohol abuse/dependence
 - Bipolar disorder
 - Extended sleep deprivation
 - Past head trauma
- ▶ Interferes with efficacy of protease inhibitors used for HIV/AIDS treatment





Varenicline

- ▶ Anecdotal reports of effectiveness for MI/SUD
 - One study in UK; positive results
 - Gap in the varenicline evidence base
- ▶ Post marketing adverse behavior and mood changes
 - Have been reported in all samples
 - Boxed warning for neuropsychiatric issues, BUT still widely used by individuals with these issues
- ▶ Providers need to closely monitor mental status of anyone quitting smoking on varenicline





Pharmacotherapy Guidance

- ▶ Smoking induces CYP1A2 isoenzyme
- ▶ Approximately doubles clearance of
 - **Antipsychotics:** Prolixin (fluphenazine), Haldol (haloperidol), Zyprexa (olanzapine), Clozaril (clozapine), Thorazine (chlorpromazine)
 - **Antidepressants:** Elavil (amitriptyline), Aventyl (nortriptyline), Jaminine (imipramine), Anafranil (clomipramine), Sinequan (doxepin), Fluvox (fluvoxamine)
- ▶ Cessation may produce rapid, significant increase in blood levels
- ▶ Need to monitor for increased side effects





Clinical Monitoring Recommendations

- ▶ Patients should be seen 1-3 days after initiating smoking cessation
- ▶ Monitor weekly for the 1st 4 weeks for MI/SUD relapse and the need to adjust medication levels
- ▶ After 1st month, monthly review for 6 months
- ▶ Communication between the primary care provider and MI/SUD provider(s) should occur
 - During the initiation of the cessation attempt
 - During the cessation period if any psychiatric complications occur





Coverage for Tobacco Dependence Treatments

- ▶ Health insurance coverage & requirements vary by plan
- ▶ Medi-Cal provides FREE pharmacotherapy with:
 - Certificate of enrollment in behavior-modification, e.g. 1-800-NO-BUTTS
 - Prescription
- ▶ Medicare
 - Prescription drug benefits – Part D
 - Reimburses for cessation counseling

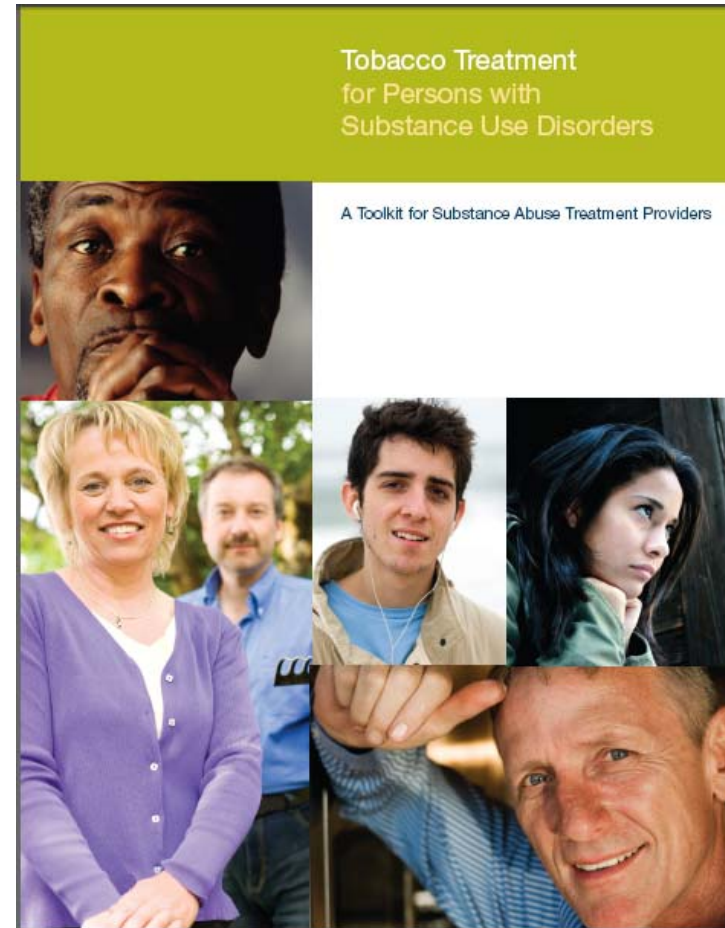
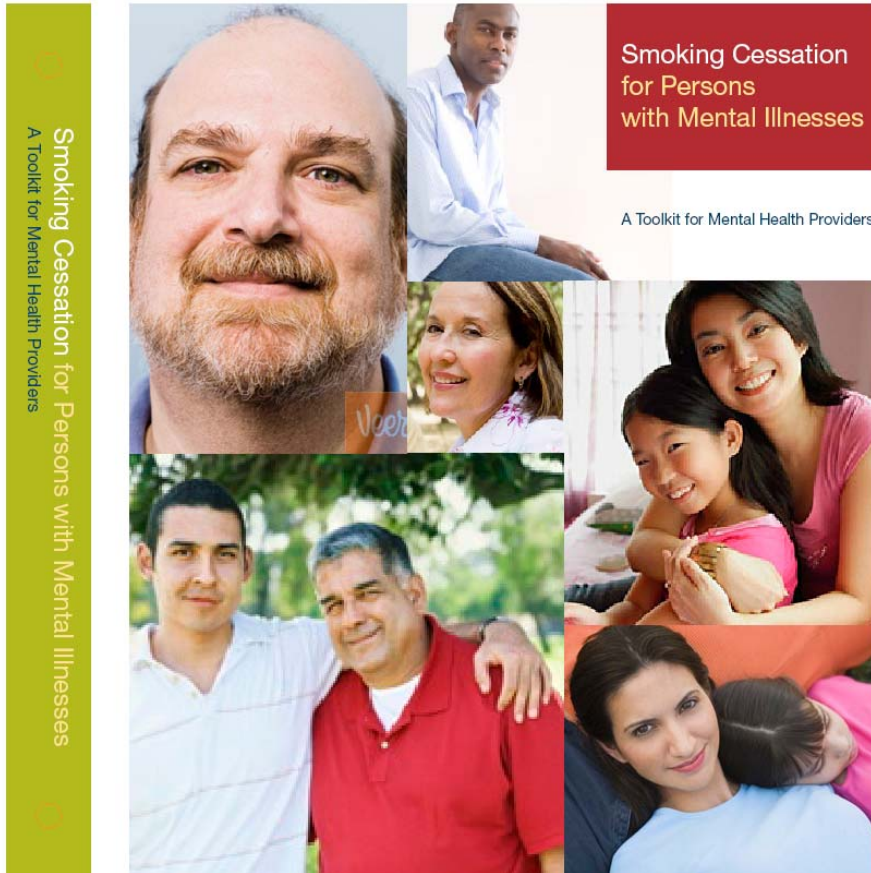
CPT Codes:

 - 99406 (3-10 minute intervention)
 - 99407 (>10 minute intervention)





Resources



For free copies go to:
<http://www.bhwellness.org>





Resources (cont.)

Center for Tobacco Cessation

www.centerforcessation.org

It's Quitting Time LA!

www.laquits.com

Smoking Cessation Leadership Center

www.smokingcessationleadership.ucsf.edu

Tobacco Cessation Leadership Network

www.tcln.org





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