Supporting Implementation of Smoking Cessation Programs in Public Housing Primary Care

Learning Collaborative Session 3

September 22, 2021

Housekeeping

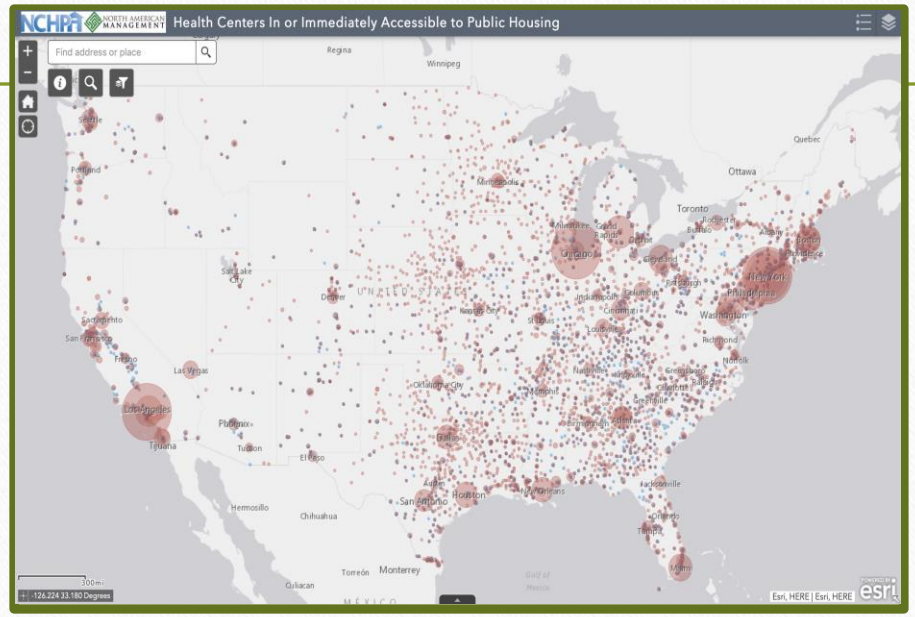
- All participants muted upon entry
- Cameras on (if possible)
- Engage in chat
- Raise hand if you would like to unmute
- Meeting is being recorded
- Slides and recording link will be sent via email and posted to Moodle within a week after session

National Center for Health in Public Housing

- The National Center for Health in Public Housing (NCHPH), a project of North American Management, is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U30CS09734, a National Training and Technical Assistance Partner (NTTAP) for $2,006,400, and is 100% financed by this grant. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.
- The mission of the National Center for Health in Public Housing (NCHPH) is to strengthen the capacity of federally funded Public Housing Primary Care (PHPC) health centers and other health center grantees by providing training and a range of technical assistance.

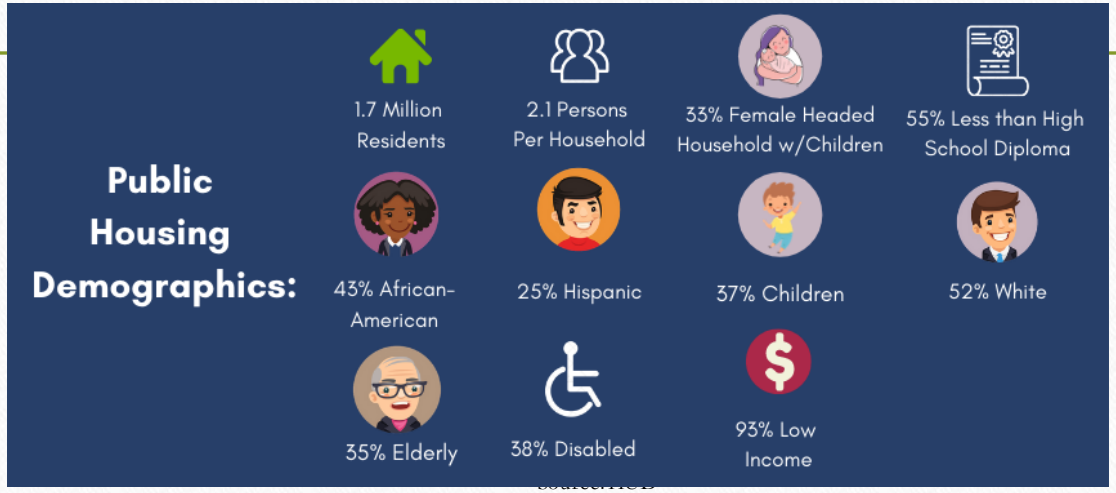
Health Centers close to Public Housing

- 1,375 Federally Qualified Health Centers (FQHC) = 28.5 million patients
- 435 FQHCs In or Immediately Accessible to Public Housing = 5.1 million patients
- 107 Public Housing Primary Care (PHPC) = 866,851 patients
  - Source: 2020 National Health Center Data



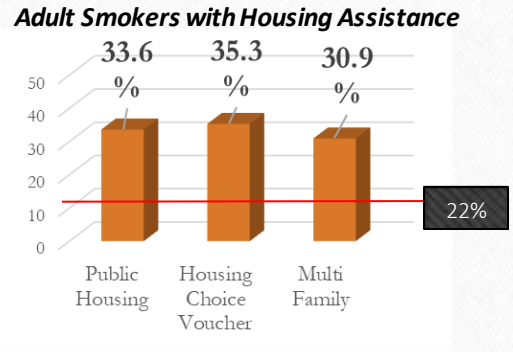
NCHPH
National Center for Health in Public Housing

Public Housing Demographics



A Health Picture of HUD-Assisted Adults, 2006-2012

Adults in HUD-assisted housing have higher rates of chronic health conditions and are greater utilizers of health care than the general population.



Source: Helms VE, 2017

	HUD-Assisted	Low-income renters	All Adults
Fair/Poor Health	35.8%	24%	13.8%
Overweight/ Obese	71%	60%	64%
Disability	61%	42.8%	35.4%
Diabetes	17.6%	8.8%	9.5%
COPD	13.6%	8.4%	6.3%
Asthma	16.3%	13.5%	8.7%

Access to Moodle

- LMS for all LC resources
- Visit Moodle.nchph.org select "Supporting Implementation of Smoking Cessation Programs…)
- Create account
- Detailed instructions on how to access materials included in our "Welcome Packet".

Timeline and Commitment

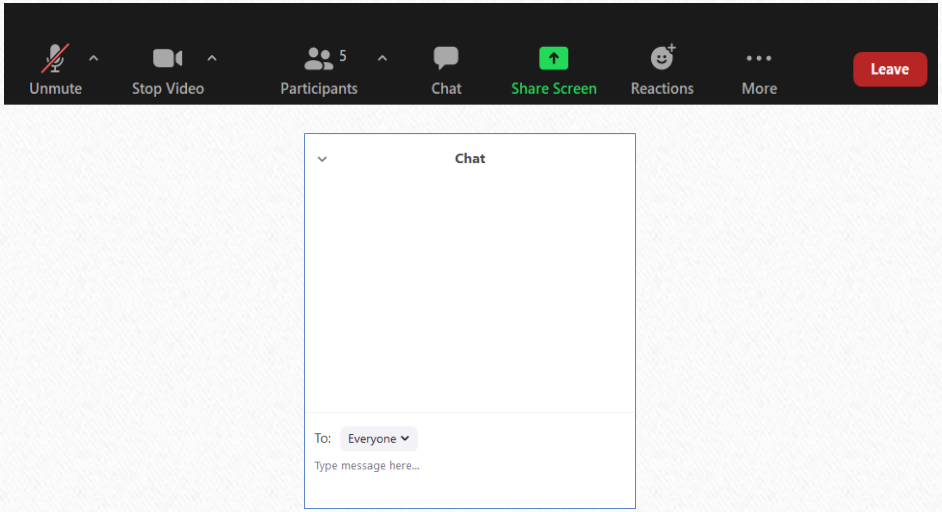
- Attend all four 60-minute live Zoom learning sessions.
- Engage in interactive dialogue during the live learning sessions.
- Complete post-evaluation surveys.

Icebreakers

In the Chat

- Name and role
- Health center name
- City and State

Answer the poll...



Panelist(s)

- **Frank Vitale**

National Director, Pharmacy Partnership for Tobacco Cessation

Clinical Assistant Professor, Purdue College of Pharmacy

Cessation Strategies for Behavioral Health Populations

Frank Vitale, M.A.

National Director,

Pharmacy Partnership for Tobacco Cessation

Objectives

Upon successful completion of this activity

participants should be able to:

- Examine the challenges posed by individuals with behavioral health issues who want to quit smoking
- Review the concerns confronted by individuals with substance abuse diagnoses who want to quit smoking
- Provide effective strategies for clinicians to employ with both groups when designing a cessation program

KEY POINTS

- Nicotine dependence most prevalent substance use disorder among persons with psychiatric issues
- Adults living with psychiatric illness:
  - Smoke more cig./month than persons without mental illness
  - Have higher prevalence of past-month cigarette use
  - Account for nearly half of 480,000 annual tobacco-related deaths in U.S.

SAMHSA, Center for Behavioral Health Statistics 2012-2014

KEY POINTS (cont'd)

- 50% of deaths in persons living with depression, schizophrenia, or bipolar disorder are attributable to tobacco-related diseases
- Cessation is not associated with exacerbation of psychiatric symptomatology
- Some evidence that cessation might reduce risk of re-hospitalization

KEY POINTS (cont'd)

- Adult smokers living with a psychiatric disorder:
  - Are motivated to quit and engage in treatment when offered
    - Quit at same rates as general public
  - Studies show quitting actually improves chances of recovery

Cessation Improves Recovery

- "…successful tobacco quitters were three times as likely not to use cocaine as their peers who smoked."

  Frosch et.al, 2000

- "…alcoholics who stopped smoking during recovery are more likely to maintain long term abstinence from alcohol than those who continued to smoke."

  Bobo et.al, 1987

POSITIVE BEHAVIORAL HEALTH OUTCOMES

- Cessation associated with decrease in:
  - Likelihood or reoccurring symptoms
  - Depression,
  - Anxiety
  - Stress
- As well as increase in:
  - Positive mood
  - Quality of life
  - Reported sense of well being

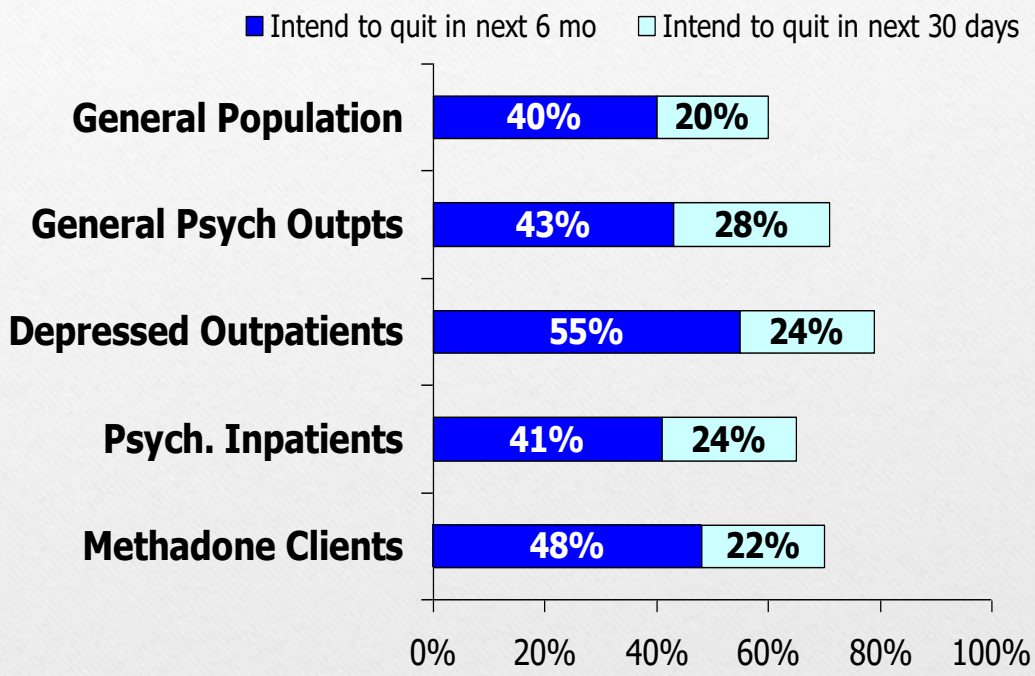
Cavazos-Rehg et al. Psychological Medicine 2014

POSITIVE BEHAVIORAL HEALTH OUTCOMES

- Among smokers with pre-existing alcohol use disorder, the likelihood of recurrence or continuation of their alcohol use disorder **decreased** if they quit smoking
- Smoking cessation interventions provided during addictions treatment has been associated with a 25% **increase** in likelihood of long-term abstinence

Taylor et al., BMJ, 2014; Cavazos-Rehg et al., Psychological Medicine, 2014; Prochaska et al., Consulting and Clinical Psychology, 2004.

READINESS to QUIT *



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.

Barriers to Treatment

- Providers do not routinely screen for tobacco use
- Many psychiatric staff smoke
  - Use smoking as way to bond
- Belief that other addiction is more important
- Cessation is "impossible" for this population

Barriers (Cont.)

- Smoking is used by psychiatric staff as behavior modifier/reinforcer
- Cessation will cause relapse
- Many patients do not work:
  - Increased idle time
  - Use smoking to deal with boredom
  - Socialize with other smokers

Additional Psychological Factors

- Several studies with psychiatric/substance abuse patients show they considered cigarettes:
  - A "core need"
  - Essential to their existence
  - More important than food
  - Prevented relapse of their psychiatric disorders

Systems Changes

- Screen all patient for tobacco use
- Make all facilities tobacco free
  - Address staff and volunteer smoking
- Stop use of cigarettes as a reward system
- Incorporate tobacco cessation into overall treatment plan
- Train addiction specialists in tobacco treatment

Smoking Bans

- Meta-analysis of 22 investigations into impact of smoking bans in psychiatric facilities showed:

> " No major longstanding untoward effect in terms of behavioral indicators of unrest or compliance."

Nady, Psychiatr Serv 53:1617-1622

TOBACCO DEPENDENCE: A 2-PART PROBLEM

Tobacco Dependence

Behavioral

The habit of using tobacco

↓ Treatment

Behavior change program

↔

Physiological

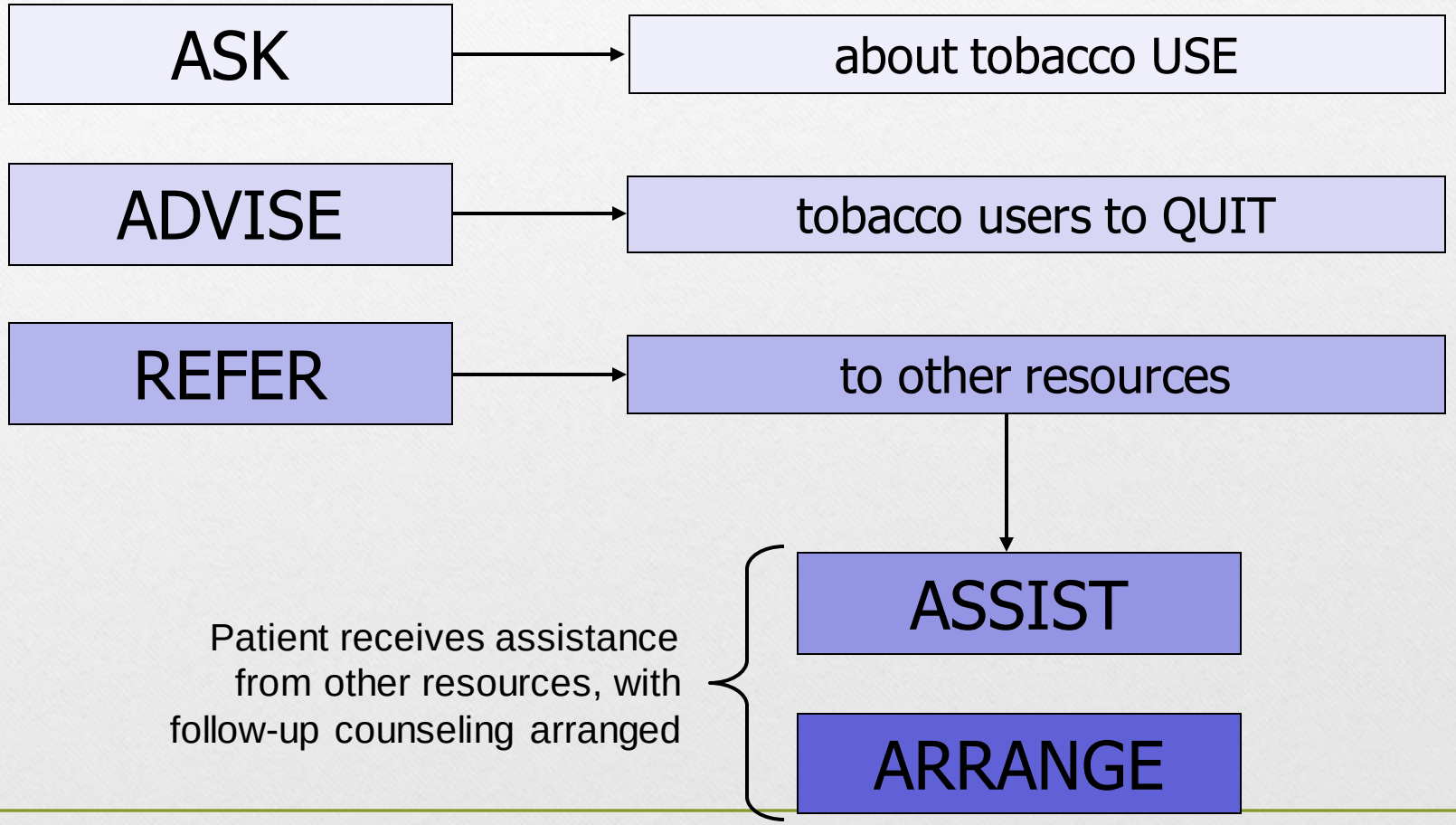
The addiction to nicotine

↓ Treatment

Medications for cessation

Treatment should address the physiological **and** the behavioral aspects of dependence.

BRIEF COUNSELING: ASK, ADVISE, REFER



Tobacco Quitlines: A Systematic Review

- Inclusion criteria
  - English language
  - Experimental or quasi-experimental study design
  - Evaluation of a tobacco quitline intervention among adult participants (18 years or older)
  - DSM-V diagnosable mental illness

Tobacco Quitlines: Systematic Review

- N=4 published studies over a period of 11 years met the inclusion criteria
- 50% of quitline callers disclose a current or history of a mental illness
  - Seek out assistance
  - Report satisfaction with services

TOBACCO QUITLINES: A SYSTEMATIC REVIEW

- Results:
  - Compared to telephone counseling alone, customized counseling was significantly more likely to generate positive outcomes
  - Persons with co-occurring mental illness might respond more positively to a multi-modal approach to tobacco dependence treatment
    - Phone counseling/Medication
    - Live individual counseling
    - Support

Schwindt et al. (2018). Impact of tobacco quitlines on smoking cessation in persons with mental illness: A systematic review. *J of Drug Education: Substance Abuse Research and Prevention,*

WHY MENTAL HEALTH PROVIDERS?

- Most frequent contact/ knows the patient best
- Able to combine psychopharmacological and behavioral/counseling treatment
- Trained in substance abuse treatment
- Able to identify and address any changes in psychiatric symptoms during the quit attempt

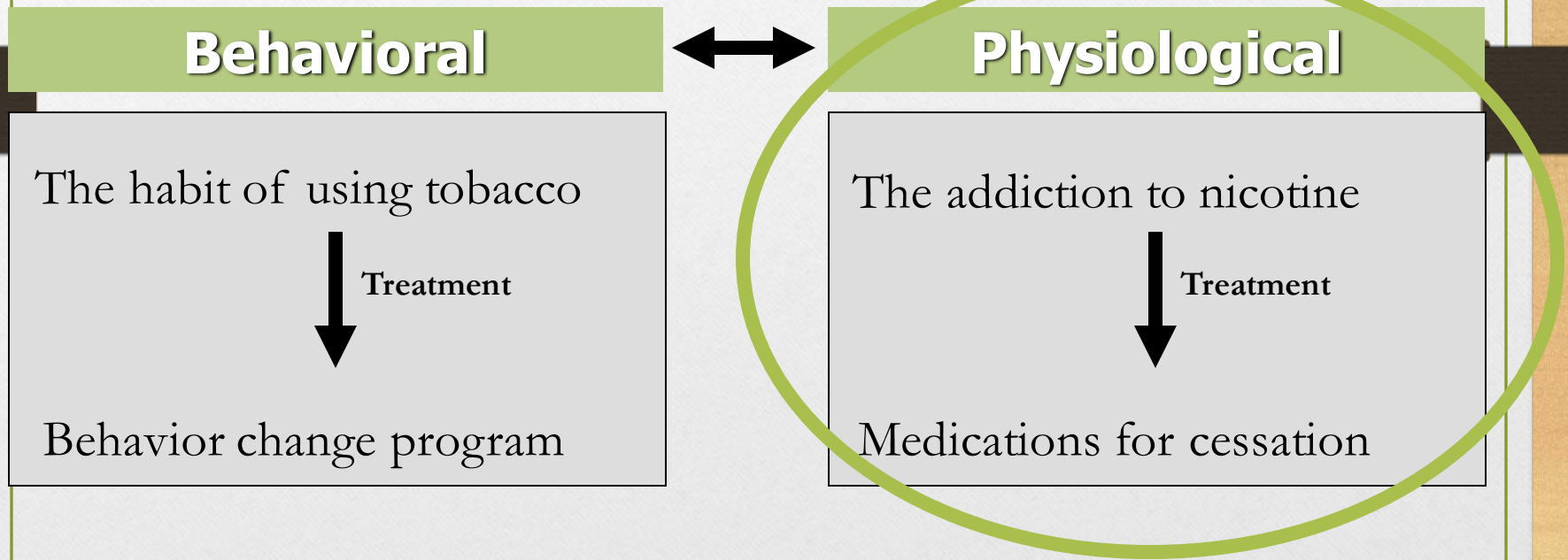
Failure to address tobacco use tacitly implies that quitting is not important or that the patient is not worth helping.

Your Focus

- Basic Cognitive/Behavioral Techniques
- Coping
  - Type
    - Changing how you think
    - Changing what you do
  - Time
    - Prior to entering the situation
    - During the situation

TOBACCO DEPENDENCE: A 2-PART PROBLEM

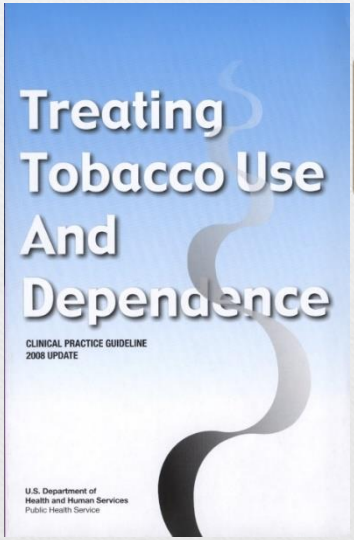
Tobacco Dependence



Treatment should address the physiological **and** the behavioral aspects of dependence.

PHARMACOTHERAPY

"Clinicians should encourage all patients attempting to quit to use effective medications for tobacco dependence treatment, except where contraindicated or for specific populations* for which there is insufficient evidence of effectiveness."



** Includes pregnant women, smokeless tobacco users, light smokers, and adolescents.*

Medications significantly improve success rates.

Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.* Rockville, MD: USDHHS, PHS, May 2008.

PHARMACOTHERAPY: FIRST-LINE AGENTS

Nicotine gum

- Brand/Generic

Nicotine lozenge

- Brand/Generic

Transdermal nicotine patch

- Brand/Generic

Nicotine nasal spray

- Nicotrol NS (Rx)

Nicotine oral inhaler

- Nicotrol (Rx)

Bupropion SR tablets

- Generic (Rx)

Varenicline tablets

- Chantix (Rx)

These are the only medications approved by the FDA for smoking cessation.

NICOTINE GUM/LOZENGE

Available: 2 mg, 4 mg; various flavors

Pros:

- Oral substitute for tobacco
- Can titrate to manage withdrawal symptoms
- Can use in combination with other agents to manage situational urges

Cons:

- Frequent dosing = poor adherence
- Gum might be problematic with dental work/jaw issues
- Proper chewing technique is necessary (gum)
- Complexity of usage instructions for those with cognitive impairment

NICOTINE PATCH

Available: 21 mg, 14 mg, 7 mg

Pros:

- Once-daily dosing
- Can use in combination with other agents; delivers consistent nicotine levels over 24 hours

Cons:

- Cannot be titrated to acutely manage withdrawal symptoms
- Not recommended for use with dermatologic conditions

NICOTINE NASAL SPRAY

Available: 10ml bottle; 0.5 mg per spray

Pros:

- Can titrate to more closely manage withdrawal symptoms
- Can use in combination with other agents to manage situational urges

Cons:

- Frequent dosing = poor adherence
- Nasal administration; nasal irritation often problematic
- Not recommended for use with chronic nasal disorders or severe reactive airway disease

NICOTINE ORAL INHALER

Available: 10mg cartridge delivers 4mg inhaled vapor for absorption across buccal mucosa

Pros:

- Oral substitute
- Can titrate to manage withdrawal symptoms
- Mimics hand-to-mouth ritual of smoking
- Can use in combination with other agents to manage situational urges

Cons:

- Frequent dosing = poor adherence
- Cartridges might be less effective in cold environments (≤60°F)

COMBINATION NRT

Regimens with sufficient evidence to be 'recommended' as first-line

- **Combination NRT**

  Long-acting formulation (patch)

  - Produces relatively constant levels of nicotine

  PLUS

  Short-acting formulation (gum, lozenge, inhaler, nasal spray)

  - Allows for acute dose titration as needed for nicotine withdrawal symptoms

Fiore et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.* Rockville, MD: USDHHS, PHS, May 2008.

BUPROPION SR

Available: 150 mg tablets

Pros:

- Twice-daily dosing
- Might be beneficial in patients with depression
- Can use in combination with NRT

Cons:

- Seizure risk is increased
- Several contraindications and precautions
- Patients must be monitored for potential neuropsychiatric symptoms

VARENICLINE

Available: 0.5 and 1.0 mg tablets

Pros:

- Twice-daily dosing
- Offers a different mechanism of action

Cons:

- Nausea (30%): take with food or full glass of water
- Insomnia/sleep disturbances (13%)
- Patients must be monitored for potential neuropsychiatric symptoms

EAGLES TRIAL

FDA-mandated clinical trial

- 24-week, double-blind; active and placebo-controlled:
  - Varenicline: standard dosing, 12 wks
  - Bupropion SR: standard dosing, 12 wks
  - Nicotine patch: 21 mg/day with standard taper, 12 wks
  - Placebo, 12 wks
  - All arms: 13 counseling visits, 11 telephone calls
- N= 8,144 participants (4,116 in psychiatric cohort)
- Follow-up through 24 wks; outcome = continuous abstinence

Anthenelli RM et al. Lancet 2016;387:2508-2520.

EAGLES TRIAL: Safety Outcomes

Incidence of Moderate or Severe Neuropsychiatric Adverse Events

Patient cohort	Varenicline	Bupropion SR	Nicotine patch	Placebo
Non-psychiatric	1.3%	2.2%	2.5%	2.4%
Psychiatric	6.5%	6.7%	5.2%	4.9%

No significant differences in neuropsychiatric events by treatment arm

Anthenelli RM et al. Lancet 2016;387:2508-2520.

EAGLES TRIAL: Efficacy Outcomes

Continuous Abstinence

Patient cohort	Varenicline	Bupropion SR	Nicotine patch	Placebo
Non-psychiatric	25%	19%	18%	11%
Psychiatric	18%	14%	13%	8%

Highest efficacy with varenicline

Anthenelli RM et al. Lancet 2016;387:2508-2520.

DRUG INTERACTIONS WITH SMOKING

What Happens

- Hydrocarbons in smoke activate the CYP1A2 pathway in the liver
- Causes body to metabolize many medications faster than in non-smokers
- This is not an effect of nicotine.
- Reversed when patients quit

PHARMACOKINETIC DRUG INTERACTIONS with SMOKING

Drugs that may have a *decreased effect* due to induction of CYP1A2:

- Bendamustine
- Caffeine
- Clozapine
- Erlotinib
- Fluvoxamine
- Irinotecan)
- Haloperidol
- Olanzapine
- Riociguat
- Ropinirole
- Tacrine
- Tasimelteon
- Theophylline

Smoking cessation will reverse these effects.

Recommendations

- Closely monitor medication levels/side effects when quitting
- Reduce dosage if necessary
- Reminder:
  - Nicotine is not what causes change
  - Elimination of hydrocarbons does
  - Using NRT will not effect medication levels

Specific Treatment Recommendations

- Schizophrenia
- Depression/Mood Disorders
- Bipolar Disorder
- Anxiety Disorders
- Alcoholism
- Drug Abuse

Schizophrenia

- Abundant evidence exists to show that people with schizophrenia ***can*** quit smoking!
- Treatment suggestions:
  - Assess cognitive abilities
  - May need to be on medications longer
  - Find other activities as substitutes

TOBACCO CESSATION & SCHIZOPHRENIA SYMPTOMS

- Tobacco abstinence (1-wk) **not** associated with worsening of:
  - Attention, verbal learning/memory, working memory, or executive function/inhibition, or clinical symptoms of schizophrenia (Evins et al., 2005)
- Bupropion: decreased the negative symptoms of schizophrenia (Evins et al. 2005, George et al. 2002)
- Varenicline: no worsening of clinical symptoms and a trend toward improved cognitive function (Evins et al., 2009)

Cochrane Review

- Reviewed 34 trials
- Findings:
  - Bupropion was effective
  - Varenicline also effective
  - Patients respond to monetary rewards
  - Little evidence for NRT and psychosocial interventions

Tsoi DT, Porwal M, Webster AC. Cochrane Database of Systematic Reviews 2013, Issue 2.

Mood Disorders

- Growing evidence to show that many smokers are sub-clinically depressed
- Effects of smoking mimic anti-depressant
- Patients self medicate by smoking
- Treatment recommendations:
  - Regular behavioral interventions +
    - Bupropion
    - Combination therapies

OUTCOMES:
Depressed Smokers Treated for Tobacco Use

- Among depressed patients who quit smoking:
  - No increase in suicidality
  - No increase in psych hospitalization
  - Improvement in % of days with emotional problems
  - No difference in use of marijuana, stimulants or opiates
  - Less alcohol use among those who quit smoking

Prochaska et al., 2008, Am J Public Health

Cochrane Review

- 49 studies were reviewed in 2013
- Results:
  - Psychosocial mood management + standard intervention showed positive results for people with either current or past depression
  - Bupropion was effective especially in patients with past depression but weak for current depression
  - Not enough evidence to recommend any other antidepressant
  - No studies for NRT

van der Meer RM, Willemsen MC, Smit F, Cuijpers P. Cochrane Database of Systematic Reviews 2013, Issue 8.

Bupropion

- Can be used to treat both the depression and nicotine dependence
- Can be used for cessation once depression is stabilized
  - Tolerated well with SSRI's
  - Contraindicated with tricyclic antidepressants

Bipolar Disorder

- No specific treatment studies
- Some anecdotal evidence that Bupropion induces mania
- Treatment suggestions:
  - Stabilize condition
  - Then address cessation
  - Use NRT

Anxiety Disorders

- Subjective reports that smoking reduces anxiety
- Objective research shows it increase anxiety
- Probable misinterpretation of reduction in withdrawal symptoms as anxiety relief
- Treatment recommendations:
  - No specific studies have been done with this population

Alcoholism

- Many individuals with alcohol problems smoke
  - Increased alcohol consumption is linked to heavy smoking
  - Alcoholics may find nicotine more reinforcing than other smokers
- Evidence exists that alcoholics experience more severe withdrawal

Treatment Suggestions

- Make cessation an integral part of treatment plan
- Cessation may have to wait until drinking stabilized
  - Bupropion and patches have been shown to be equally as effective
  - Combination therapy may be warranted
- Do not reinforce smoking as substitute for drinking
  - "I have to be addicted to something!"

Drug Abuse

- Mounting clinical evidence suggests that cessation actually helps maintain sobriety
- Cessation may have to wait until drug use is abated
- No evidence exists that promoting cessation in this population will lead to relapse
- Regular cessation treatments should be effective

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 (Prochaska et al., 2004).

- Both daily and non-daily smoking are associated with a significantly greater risk of relapse back to alcohol abuse or dependence (Weinberger, et. al. 2015)

When to Quit?

- Should an individual quit all substances simultaneously?
- Should cessation be timed to a specific stage of the psychiatric recovery process?
- As with all cessation treatment tailor program to patient

In Conclusion:

- Individuals with psychiatric and/or substance abuse diagnoses can and do quit smoking at the same rate as the general population
- Not a matter of if they can quit but when
- Treatment needs to be individualized based on diagnosis
  - Many need longer course of medication
  - Many need additional behavioral support

Anyone Can Quit Smoking: It's Just a Matter of Creating the Right Plan!

Contact Information

Frank Vitale, M.A.

vitalefm@msn.com

or

412 481-7767

Upcoming session:

LC Session 4: Case Studies

Date: September 29th, 2020
Time: 1:00 – 2:00 pm EDT

Q&A

If you would like to ask the presenter a question, please submit it through the questions box on your control panel or use the "raise hand" icon and your line will be unmuted.

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Contact us

Robert Burns Director of Health Bobburns@namgt.com	Dr. Jose Leon Chief Medical Officer jose.leon@namgt.com
Saqi Maleque Cho DrPH, MSPH Manager of Policy, Research, and Health Promotion Saqi.cho@namgt.com	Fide Pineda Sandoval Health Research Assistant Fide@namgt.com
Chantel Moore Communications Specialist Cmoore@namgt.com	Please contact our team for Training and Technical Support 703-812-8822

THANK YOU!

National Center for Health in Public Housing • 2111 Eisenhower Ave, Alexandria, VA 22304 • 703.812.8822 • nchph.org