Tobacco Cessation: A Key to Recovery for Persons with Addictions
Chad Morris, Ph.D.
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Anchorage, Alaska

Common Concerns of Addressing Tobacco

“I don’t have time to do this on top of everything else.”

“I don’t have the training necessary.”

“If we go tobacco-free, behavioral problems will increase.”

“How are we going to fund this?”

“It’s always heard smoking helps symptoms. I don’t want to make their symptoms worse.”

“Why spend time on this when there are more important psychiatric, substance abuse, and medical issues?”

Better Health
Better Quality
Lower Cost

Triple Aim
The Health Consequences of Smoking
50 Years of Progress

Trends in U.S. Adult Smoking

Health Disparities

General population rate of use of tobacco products is 21.3%

<table>
<thead>
<tr>
<th>Population</th>
<th>Rates of Use Compared to General Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Health</td>
<td>2-3 times higher</td>
</tr>
<tr>
<td>HIV/AIDS Diagnosis</td>
<td>2-3 times higher</td>
</tr>
<tr>
<td>Homeless (or at risk)</td>
<td>Nearly 4 times higher</td>
</tr>
<tr>
<td>Justice Involved</td>
<td>3 times higher</td>
</tr>
</tbody>
</table>
On average, persons diagnosed with mental illnesses and addictions have higher rates of disease and disability, and die up to 25 years earlier than the general population.

Tobacco Industry Targeting

- Every year tobacco companies spend about $9 billion on advertising and promotional materials
- Promoted smoking in treatment settings
- Monitored or directly funded research supporting the idea that people with schizophrenia need to smoke to manage symptoms

For every $1 the state spends to reduce tobacco use, $18 is spent by tobacco companies to promote their products.

The Biology of Tobacco Addiction
Tobacco Use Affects Behavioral Health Care and Treatment

Persons with behavioral health conditions who use tobacco:

- Have more psychiatric symptoms
- Have increased hospitalizations
- Require higher dosages of medications
- Are twice as likely to leave against the advice of their doctors, if withdrawal symptoms are not treated

Chemicals in Tobacco Products

- Tobacco and tobacco smoke contain over 7,000 chemicals, many of which can damage cells and lead to cancer
  - arsenic, benzene, butane, cyanide, formaldehyde, methanol, ammonia, and cadmium
  - poisonous gases such as carbon monoxide

Dopamine Reward Pathway

- Nicotine enters brain
- Stimulates nicotine receptors
- Dopamine release
- Prefrontal cortex
- Nucleus accumbens
- Ventral tegmental area
- Dopamine release
Neurochemical Effects of Nicotine

- **Dopamine**: Pleasure, reward
- **Norepinephrine**: Arousal, appetite suppression
- **Acetylcholine**: Arousal, cognitive enhancement
- **Glutamate**: Learning, memory enhancement
- **Endorphin**: Reduction of anxiety and tension
- **GABA**: Reduction of anxiety and tension
- **Serotonin**: Mood modulation, appetite suppressant

Nicotine Addiction Cycle

Nicotine addiction is often a chronic, relapsing condition (e.g., Nicolaï, 2006; Steinberg et al., 2008)

A problematic pattern of tobacco use leading to clinically significant impairment (DSM-5, 2013)

An addiction...

is an addiction...

is an addiction
Coping Through Nicotine Addiction

- The majority recognize smoking is physically unhealthy
- But mistakenly believe it has positive psychological functions
  - In particular, relief from stress, anxiety, and depression
    - Smoking is used as an indirect coping strategy
    - Reinforces coping through addiction
    - And perceived stress reduction is often relief of withdrawal symptoms

Medications Known or Suspected To Have Their Levels Affected by Smoking and Smoking Cessation

<table>
<thead>
<tr>
<th>Medications Known or Suspected To Have Their Levels Affected by Smoking and Smoking Cessation</th>
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</thead>
<tbody>
<tr>
<td>ANTIPSYCHOTICS</td>
</tr>
<tr>
<td>Chlorpromazine (Thorazine)</td>
</tr>
<tr>
<td>Olanzapine (Zyprexa)</td>
</tr>
<tr>
<td>Clozapine (Clozaril)</td>
</tr>
<tr>
<td>Thiothixene (Navane)</td>
</tr>
<tr>
<td>Fluphenazine (Permitil)</td>
</tr>
<tr>
<td>Trifluoperazine (Stelazine)</td>
</tr>
<tr>
<td>Haloperidol (Haldol)</td>
</tr>
<tr>
<td>Ziprasidone (Geodon)</td>
</tr>
<tr>
<td>Mesoridazine (Serentil)</td>
</tr>
<tr>
<td>ANTIDEPRESSANTS</td>
</tr>
<tr>
<td>Amitriptyline (Elavil)</td>
</tr>
<tr>
<td>Fluvoxamine (Luvox)</td>
</tr>
<tr>
<td>Clomipramine (Anafranil)</td>
</tr>
<tr>
<td>Imipramine (Tofranil)</td>
</tr>
<tr>
<td>Desipramine (Norpramin)</td>
</tr>
<tr>
<td>Mirtazapine (Remeron)</td>
</tr>
<tr>
<td>Doxepin (Sinequan)</td>
</tr>
<tr>
<td>Nortriptyline (Pamelor)</td>
</tr>
<tr>
<td>Duloxetine (Cymbalta)</td>
</tr>
<tr>
<td>Trazodone (Desyrel)</td>
</tr>
<tr>
<td>MOOD STABILIZERS</td>
</tr>
<tr>
<td>Carbamazepine (Tegretol)</td>
</tr>
<tr>
<td>ANXIOLYTICS</td>
</tr>
<tr>
<td>Alprazolam (Xanax)</td>
</tr>
<tr>
<td>Lorazepam (Ativan)</td>
</tr>
<tr>
<td>Diazepam (Valium)</td>
</tr>
<tr>
<td>Oxazepam (Serax)</td>
</tr>
<tr>
<td>OTHERS</td>
</tr>
<tr>
<td>Acetaminophen</td>
</tr>
<tr>
<td>Riluzole (Rilutek)</td>
</tr>
<tr>
<td>Caffeine</td>
</tr>
<tr>
<td>Ropinirole (Requip)</td>
</tr>
<tr>
<td>Heparin</td>
</tr>
<tr>
<td>Tacrine</td>
</tr>
<tr>
<td>Insulin</td>
</tr>
<tr>
<td>Warfarin</td>
</tr>
<tr>
<td>Rasagiline (Azilect)</td>
</tr>
</tbody>
</table>

Cessation Concurrent with Psychiatric Treatment

Smoking cessation has no negative impact on psychiatric symptoms and smoking cessation generally leads to better mental health and overall functioning

Baker et al., 2006; Lawn & Pols, 2005; Morris et al., 2011; Prochaska et al., 2008
Psychiatric Symptoms Are Not Exacerbated by Smoking Cessation

Smoking cessation is associated with:
- ↓ depression, anxiety, and stress
- ↑ positive mood and quality of life compared with continuing to smoke
- The effect size seems as large for those with psychiatric disorders as those without
- The effect sizes are equal or larger than those of antidepressant treatment for mood and anxiety disorders

Tobacco Use Affects Treatment & Recovery from Addiction

Addressing tobacco dependence during treatment for other substances is associated with a 25% increase in long-term abstinence rates from alcohol and other substances

Tobacco Cessation: What Works
- Price Increases
- Media Campaigns
- Insurance Coverage
- Quitlines
- Web-Based & Mobile Phone Based Interventions
- Tobacco-Free Policy
- Psychosocial Treatment
- NRT / Cessation Medications
Cessation Rates Across Interventions

<table>
<thead>
<tr>
<th>Treatment Format</th>
<th>Abstinence Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaided</td>
<td>4-7%</td>
</tr>
<tr>
<td>Self-Help</td>
<td>11-14%</td>
</tr>
<tr>
<td>Individual Counseling</td>
<td>15-19%</td>
</tr>
<tr>
<td>Group Counseling</td>
<td>12-16%</td>
</tr>
<tr>
<td>Medication Alone</td>
<td>22%</td>
</tr>
<tr>
<td>Medication + Counseling</td>
<td>25-30%</td>
</tr>
</tbody>
</table>

Evidence-Based Guidance

Supplements

- Behavioral Health
- Youth (Ages 11-18)
- Young Adults (18-25)
- Low-Income
- Pregnant and Post Partum
- MI Video Modules

http://www.bhwellness.org/resources/toolkits/

The 5A’s

- ASK About Healthy Living
- ADVISE Regarding Needed Behavior Change
- ASSESS Readiness to Change
- ASSIST With Planning, Resources and Skills
- ARRANGE Follow-Up

The 2A’s & R

- ASK
- ADVISE
- REFER
Tobacco Cessation Interventions: 5 A’s

**ASK** all individuals about tobacco use
- “Do you, or does anyone in your household, use any type of tobacco?”
- “How many times have you tried to quit?”
- Explore tobacco use history

Integration into Standard Practice

- **Assess** tobacco as part of normal assessment & screening
- **Add** tobacco cessation to treatment plan

Tobacco Cessation Interventions: 5 A’s

**ADVISE** people who use tobacco to quit
- Provide a clear, personalized and non-judgmental message about the health benefits of quitting tobacco
  - What would motivate the person to quit?
Advice Can Improve Chances of Quitting

Compared to people who smoke who do not get help from a clinician, those who get help are 1.7–2.2 times as likely to successfully quit for 5 or more months.

Type of Clinician

- No clinician
- Self-help material
- Nonphysician clinician
- Physician clinician

Estimated abstinence at 5+ months

- 1.0
- 1.1
- 1.7
- 2.2

Ask - Advise - Refer

ASSESS readiness to quit
- “How do you feel about your smoking?”
- “Have you considered quitting?”
- Explore barriers to quitting
- Assess nicotine dependence
  - “How many cigarettes do you smoke a day?”
  - “How soon after you wake do you have your first cigarette?”

Tobacco Cessation Interventions: 5 A’s
1. How soon after you awake do you smoke your first cigarette?
2. Do you find it difficult to refrain from smoking in places where it is forbidden (e.g., church, library, work, airplane)?
3. Which cigarette would you hate to give up? (Morning/Other)?
4. How many cigarettes a day do you smoke?
5. Do you smoke more during the morning than during the rest of the day?
6. Do you smoke when you are so ill that you are in bed most of the day?

Tobacco Cessation Interventions: 5 A’s

ASSIST individuals interested in quitting
- Set a quit date or gradually cut down
- Discuss their concerns
- Encourage social support

Tobacco Dependence Has Two Parts

Tobacco dependence is a 2-part problem
- Physical
  - The addiction to nicotine
    - Treatment
    - Medications for cessation
- Behavior
  - The habit of using tobacco
    - Treatment
    - Behavior change program

Treatment should address both the addiction and the habit.
Motivational Intervention

- Conduct 30-minute semi-structured interview
- Work with individuals to increase their readiness for tobacco cessation
- Provide brief, personalized feedback about their carbon monoxide levels and the cost of smoking
- Encourage individuals to set concrete and manageable goals
- Discuss and list the supports they need to set a quit date and sustain their quit attempt

The Stethoscope of Smoking Cessation

- Non-invasive
- Visual motivational tool
- Severity of dependence
- Likelihood of cravings

Behavior Change Interventions

- Cognitive-Behavioral Therapy
- Clinician advice
- Individual counseling
  - > 4 sessions
  - > 10 minutes
- Psycho-educational groups
- Peer support
- Age-tailored self-help materials
DIMENSIONS: Tobacco Free & Well Body Program Training Materials

- Advanced Techniques Manual
- Group Facilitator Manual
- Electronic copies of materials

Tobacco Free Group (or Individual Counseling)

- Session A: Creating a Plan
- Session B: Healthy Behaviors
- Session C: The Truth about Tobacco
- Session D: Changing Behaviors
- Session E: Coping with Cravings
- Session F: Maintaining Change

*Groups are typically 90 minutes

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Courtesy of the University of California, San Francisco
Tobacco Cessation Medications
The only medications approved by the Food and Drug Administration (FDA) for tobacco cessation are:

- Nicotine gum
- Nicotine lozenge
- Nicotine patch
- Nicotine nasal spray
- Nicotine inhaler
- Bupropion SR tablets
- Varenicline tablets

Tobacco Cessation Interventions: 5 A’s

ARRANGE follow-up visits to track progress

- Encourage individuals to join the Tobacco Free group
- Discuss ways to remove barriers
- Congratulate successes
- Encourage individuals to talk with their providers

Tobacco Dependence Treatment Does Not Need to Be in a Silo
Integration is the New Norm

- Mental health and addictions
- Across healthcare sectors
  - Integrated care & health homes
  - Public health
  - Quitlines
- Community integration
- Chronic care
- Diagnoses/codes
- EHRs & performance measurement

Why Community Treatment Settings?

- Expertise in behavioral change
- Therapeutic alliances
- Co-occurring treatment
- Access to high risk populations
- Patient-directed
- Complements other prevention and wellness activity
- Continuity of care
- Performance measurement

Chronic Care Model

- Informed, Activated Patient
- Prepared, Proactive Care Team
- Improved Outcomes
- Decision Support
- Delivery System Design
- Clinical Information Systems
- Self Management Support
Tobacco Use Screening

Screening:
ID smoking status

Treatment:
Offer counseling
Offer medications

Record Treatment Type & Referrals

- Maintain record of services provided:
  - A brief intervention (3-10 minutes)
  - More intensive treatment (10+ minutes)
  - Medication prescription or referral
  - Referral (electronic or fax) to the state quitline or other community resources

Quitline e-Referral

http://www.naquitline.org

Delivery System Design

- Clear, dedicated team member roles
- Clinical workflow (when, where, who, what)
- Follow-up
- Performance feedback for clinicians

Tobacco Cessation Workflow
**Billing**

<table>
<thead>
<tr>
<th>Diagnosis &amp; Treatment</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco Use Disorder Diagnosis</td>
<td>305.1</td>
</tr>
<tr>
<td>Personal History of Tobacco Use</td>
<td>V15.82</td>
</tr>
<tr>
<td>Symptomatic Tobacco Use Counsel 3-10 min</td>
<td>99406</td>
</tr>
<tr>
<td>Symptomatic Tobacco Use Counsel &gt;10 min</td>
<td>99407</td>
</tr>
<tr>
<td>Asymptomatic Tobacco Use Counsel 3-10 min</td>
<td>G0436</td>
</tr>
<tr>
<td>Asymptomatic Tobacco Use Counsel &gt;10 min</td>
<td>G0437</td>
</tr>
</tbody>
</table>

*Group sessions by a physician, 99078 and other qualified individuals 59453 may also reimbursable

**Self Management Support**

- **Patient-centered care**
  - Responsive to patient preferences, needs, and values
- **Engaged, empowered patients**
  - Tools and resources for self-care
  - Education and skills training
  - Referrals to community resources
  - Follow up

**A Peer-to-Peer Model**

“A peer provider is a person who uses his or her lived experience of recovery from mental illness and/or addiction, plus skills learned in formal training, to deliver services in behavioral health settings to promote mind-body recovery and resiliency.”
Peer Support

- Evidence-based information about the effectiveness of peer support programs
- Step-by-step instructions to create a successful and sustainable peer support program

http://www.bhwellness.org/resources/toolkits/

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ATTD - Association for the Treatment of Tobacco Use and Dependence

- An organization of providers dedicated to the promotion of and increased access to evidence-based tobacco treatment for the tobacco user
- Listserv provides up-to-date discussion and expert information

http://www.attud.org
Rocky Mountain Tobacco Treatment Specialist Certification (RMTTS-C) Program
- Interactive, 4-day course
- Graduates will leave with the confidence and skills to effectively treat tobacco dependence in any healthcare setting

**SAVE THE DATE:**
May 16-19, 2015 in Aurora, CO

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It is Never Too Late to Quit

![Graph showing years of extended life vs. age at cessation](image)

Quitting smoking at ANY age leads to a longer and healthier life

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**Quitting: It Can Be Done**

Persons with behavioral health conditions:
- Are able to quit using
- 75% want to quit using
- 65% tried to quit in the last 12-months
Behavioral Health & Wellness Program
303.724.3713
bh.wellness@ucdenver.edu
www.bhwellness.org