Tobacco Use Disorders

Susan Blank, MD, FAPA

Lori D. Karan, MD, FASAM, FACP
<table>
<thead>
<tr>
<th>Name</th>
<th>Commercial Interests</th>
<th>Relevant Financial Relationships: What Was Received</th>
<th>Relevant Financial Relationships: For What Role</th>
<th>No Relevant Financial Relationships with Any Commercial Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan Blank, MD</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Lori D. Karan, MD</td>
<td>Gilead Sofosbuvir (HCV Rx)</td>
<td>$1,500</td>
<td>Honorarium to attend San Francisco meeting</td>
<td></td>
</tr>
<tr>
<td>Lori D. Karan, MD</td>
<td>Titan Pharm. Probuphine (implantable buprenorphine rod)</td>
<td>$10,000</td>
<td>Consultation to Woodside Capital Partners (Jeff Karan, brother)</td>
<td></td>
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</table>
Case #1 SW

- 64 y/o Retired Railroad Worker

- Hospitalized for pneumonia complicating COPD
  pO\textsubscript{2}=65% when admitted to hospital 6mo ago

- Now, pO\textsubscript{2} on room air is normal (98%), even as he continues to smoke

- SW lives independently
- He walks slowly due to back and knee ailments
Family members and physicians repeatedly urge SW to quit smoking.

SW gets anxious and responds by changing the subject and avoiding the issue.

SW chain smokes; onset 16y/o, max 4ppd, now 1.5 ppd.

SW smokes within seconds of awakening.

SW gets up and leaves conversations to smoke, even when doing so is not socially appropriate.
SW did not smoke for a few days when he was ill.

SW has tried smoking cessation books, classes, & groups, as well as nicotine gum and the patch.
Case #1  SW

How do you assess the severity of SW’s nicotine withdrawal and nicotine addiction?

What is the most appropriate level of care to treat SW?
1. Taken in larger amts or over a longer period of time than intended
2. Persistent desire or unsuccessful efforts to cut down or control use
3. A great deal of time is spent in activities necessary to obtain or use
4. Craving, or a strong desire or urge to use tobacco
5. Recurrent use ➔ failure to fulfill major role obligations (work, school, home)
6. Continued use despite social or interpersonal problems
7. Important social, occupational, or recreational activities reduced
8. Recurrent use when physically hazardous (i.e., smoking in bed)
9. Tobacco use is continued despite knowledge of physical or psychological problem exacerbated by tobacco
10. Tolerance, as defined by either:
   a. A need for markedly ↑ tobacco to achieve the desired effect
   b. A markedly ↓ effect with continued use of the same amt

11. Withdrawal, as defined by either:
   a. Characteristic withdrawal syndrome
   b. Tobacco (or nicotine) is taken to relieve withdrawal sx
Tobacco is not a drug
It is a set of toxic chemicals that serves as a flavorant and drug delivery system

Nicotine is psychoactive
Nicotine, not tobacco, causes:
dose escalation
tolerance
intoxication
withdrawal
Assessing Severity: DSM 5 Problems

General DSM issues:

- Measures are context-specific
- No threshold to determine if a specific criteria is met

Nicotine vs other drugs:

1. Nicotine does not cause gross intoxication
   - not socially acceptable ≠ behavioral disruption caused by intoxication
   - Judgment is not worsened by nicotine use
   - Less interference with role obligations & interpersonal relations

2. Dose escalation and tolerance are less important
Why is nicotine so addicting?

Craving
What is the wildest thing that you ever did to get a cigarette?

Relapse
Cigarettes are more difficult to quit than other substances
Why is nicotine so addicting?

- Early onset – often 1\textsuperscript{st} drug used (incl. as a fetus)
- Rapid onset of action
- Fine-tunes behavior (both stimulates + relaxes)
- Rapid onset of action (cigarette enables ‘freebase’)
- Can self-adjust dose
- Numerous doses each day (1 pack = 200 puffs)
- Use linked with environmental and internal cues
# Fagerstrom Test For Nicotine Dependence

How soon after you wake up do you smoke your first cigarette?

- <5 min [ ] 3
- 6-30 min [ ] 2
- 31-60 min [ ] 1
- >60 min [ ] 0

Do you find it difficult to refrain from smoking in places where it is forbidden i.e., in church, at the library, in cinemas, etc?

- Yes [ ] 1
- No [ ] 0

Which cigarette would you hate most to give up?

- 1st one of the morning [ ] 1
- any other [ ] 0

How many cigarettes do you smoke?

- >31 [ ] 3
- 21-30 [ ] 2
- 11-20 [ ] 1
- <10 [ ] 0

Do you smoke more frequently during the first hours after awakening for the day?

- Yes [ ] 1
- No [ ] 0

Do you smoke when you are so ill that you are in bed most of the day?

(I you never get sick, give the most likely response)

- Yes [ ] 1
- No [ ] 0

**TOTAL (10 points possible = most severe)**
### Classification of Severity

**Classification of Tobacco-Dependence Severity**

<table>
<thead>
<tr>
<th>Clinical Features Before Treatment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cigarette Use</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td><strong>Very Severe</strong></td>
</tr>
<tr>
<td><strong>Severe</strong></td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
</tr>
<tr>
<td><strong>Mild</strong></td>
</tr>
<tr>
<td><strong>Non-Daily Social</strong></td>
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</tbody>
</table>
Case #1 SW

How do you assess the severity of SW’s nicotine withdrawal and nicotine addiction?

What is the most appropriate level of care to treat SW?
Severe Nicotine Addiction
- Death imminent if smoking continues
- Physically Dependent, Prior Tries & Unable to Quit

Education & Intervention

Refer to Residential Treatment
- Intensive Pharmacotherapeutic Intervention
- Intensive Behavioral & Addictions Rx
<table>
<thead>
<tr>
<th>Level of Care</th>
<th>Tobacco Use Disorder Treatments</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 Early Intervention</td>
<td>Print &amp; Online Self-Help Education</td>
</tr>
<tr>
<td>1.0 Outpatient</td>
<td>Over-the-Counter Nicotine Replacement</td>
</tr>
<tr>
<td>1.0 Outpatient</td>
<td>Online Social Support &amp; Problem Solving</td>
</tr>
<tr>
<td>1.0 Outpatient</td>
<td>Brief Interventions: Physicians Who Ask (Screen), Advise, Assess, Assist, and Arrange Tobacco Cessation</td>
</tr>
<tr>
<td>1.0 Outpatient</td>
<td>Telephone Quit-Line Counseling</td>
</tr>
<tr>
<td>1.0 Outpatient</td>
<td>Interactive Online Counseling</td>
</tr>
<tr>
<td>1.0 Outpatient</td>
<td>Group Face-to-Face Outpatient Treatment Programs (SmokEnders, American Cancer Assoc, American Lung Assoc Programs)</td>
</tr>
<tr>
<td>1.0 Outpatient</td>
<td>Tobacco Treatment Specialty Consultation and Follow-Up (Stand Alone or in Ambulatory Health Care Settings)</td>
</tr>
<tr>
<td>Level of Care</td>
<td>Tobacco Use Disorder Treatments</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>2.1 Intensive Outpatient</td>
<td>(NONE)</td>
</tr>
<tr>
<td>2.5 Partial Hospitalization</td>
<td>(NONE)</td>
</tr>
<tr>
<td>3.1 Clinically Managed Low-Intensity</td>
<td>(NONE)</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
</tr>
<tr>
<td>3.3 Clinically Managed Population-Specific,</td>
<td>(NONE)</td>
</tr>
<tr>
<td>High-Intensity Residential</td>
<td></td>
</tr>
<tr>
<td>3.5 Clinically Managed High Intensity</td>
<td>(NONE)</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
</tr>
<tr>
<td>3.7 Medically Monitored Intensive Inpatient</td>
<td>Medically Monitored Inpatient Treatment</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>4.0 Medically Managed Intensive Inpatient</td>
<td></td>
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</tbody>
</table>
Treatment matching research is needed
Case #2: MP

- 28-y/o single mother
- 16 weeks pregnant
- Cigs: 1 ½ ppd x 10 yrs
- Onset: 14 y/o
- Daily Use: 16 y/o
- Longest w/o cigs: < 36 hrs
Unable to quit during 1st pregnancy

1st Child

- 3 wks premature
- 5.5 lbs
- asthma & allergies
Case #2: MP (cont-3)

- Believes herself “healthy and active”
  Denies alcohol & other drugs
- Denies hx depression
- MD has advised cigarette cessation for the health of her 4 y/o & unborn child
- Prior Rx: nicotine patch nicotine gum
Case #2: MP (cont-4)

- Frequent urges to smoke
- Trigger: home environment, where she & her cousins smoke most of the time
- Lacks transport & childcare for local Freedom from Smoking Class
Tobacco and Pregnancy

To enable tobacco cessation and protect the unborn fetus, this woman would be best treated:

* Level 2.1-2.5 Intensive Outpt-Partial Hospitalization with child care and transportation

* Level 3.1-3.5 Residential Perinatal Rx program

* Level 3.7-4 OB-Gyn Ward with smoking cessation consultation, Rx, & skill building

Sound Expensive?
A low birth wt baby with cognitive impairment is more costly!
Case #3: BR

- 63 y/o homeless Vietnam Veteran
- Dishonorably discharged; no VA benefits
- Praised by MD - Heroin Recovery
Case #3: BR (cont 2)

- 2 ppd x 50 yrs
- Dx COPD
- Rarely attends the free clinic
- MD advised smoking cessation & offered nicotine replacement
Case #3: BR (cont 3)

- PTSD and Paranoia after 2\textsuperscript{nd} tour
- Poorly adherent with his medication and therapy
- BR’s anxiety and mistrust of the system makes it difficult for him to engage
Smoking has gotten to be increasingly expensive, so BR “wouldn’t mind stopping”

He has a difficult time organizing himself enough to follow through with the recommendations
Silos of Neglect
Case #3: BR

- Level 2.5 Partial Hospitalization with Day Treatment
- Integrate tobacco cessation Rx with Mental Health Rx
- Provide Primary Care in Pt Centered Medical Home
- Monitor Lung Fx
- Screen-Lung Ca
- TB test, influenza vaccine, & pneumovax
## Benefits of Integrated Care

<table>
<thead>
<tr>
<th></th>
<th>10 VA Centers PTSD &amp; Tobacco</th>
<th>6 mo tobacco abstinence (7 day point prevalence)</th>
<th>18 mo tobacco abstinence (7 day point prevalence)</th>
<th>Prolonged tobacco abstinence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N = 943</strong> (2004-09)</td>
<td></td>
<td></td>
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<tr>
<td>Integrated care</td>
<td></td>
<td>16.5%</td>
<td>18.2%</td>
<td>8.9%</td>
</tr>
<tr>
<td>MH &amp; Referred to Smoking Cessation</td>
<td></td>
<td>7.2%</td>
<td>10.8%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

Case #4: TH

- 50 y/o Addiction Counselor - Residential Rx Center
- Rx Center to begin treating tobacco addiction along with all other addictions
- Staff cannot smell of smoke, nor smoke at work
Case #4: TH (cont 2)

- “Recovery” alcohol & pain meds x 23 yrs

- Always knew tobacco was not part of his disease

- Feels extra rapport when takes smoking breaks with pts

- Advised pts, who wanted to stop smoking, to wait > 1 yr “it is too hard to quit more than one thing at a time.”
Case #4: TH (cont 3)

- Frequent bronchitis
- MD told to stop before permanent lung damage
- 40 lbs overweight, fears wt gain if quits cigs
- Angry that workplace is forcing him to quit smoking
Case #4: TH

- Motivate for treatment & cessation
  Improve bronchitis & lung function
- Begin with Level 0.5-1 Education & Outpatient Rx
- Devise Rx plan to address weight concerns
- Utilize knowledge of addiction &
  12 step Skills - Nicotine Anonymous
Addiction Professionals: Issues

- Staff may have belief system - Nicotine Addiction
  - “you can only deal with one addiction at a time”
  - “you should wait a year before you attempt to stop…”
  - “tobacco use disorders are less harmful than the immediate consequences of alcohol, illicit drug use…”

ASAM: The Voice of Addiction Medicine
Staff who are still smoking themselves:

- May be reticent to diagnose and treat tobacco addiction
- May be tempted to use smoking time as “milieu management”
- May “feel sorry” for the patients and sabotage the patients treatment
Leadership must recognize TUD can no longer be ignored during prevention, Dx & Rx of other addictions & mental illness.

- Staff need to be trained in Dx & Rx of TUD
- All facility staff, including clinical and non-clinical support staff should not smell of tobacco
- All staff who want to quit should have access to Rx & support for cessation
Discussion
THE END