Tobacco Cessation
The Role of the Dentist/Oral Medicinist

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Statement of Disclosure

I have no actual or potential conflict of interest in relation to this presentation
Background

- 42 million US adults continue to smoke

- Cigarette smoking is responsible for 1 in 5 deaths from all causes in the US

- More than 50% of smokers visit the dentist annually


Tobacco & Nicotine

- Tobacco was cultivated and used since 6000 BC
- Nicotine makes up 5% of the tobacco plant
- Once cigarette contains 8-20 mg of nicotine
- 1 mg is absorbed into the body with smoking
- Delivered through skin, lungs, mucous membranes
A Burning Cigarette

- 4,000 chemicals
- 43 carcinogens
- 400 toxins
- Nicotine
Smokeless Tobacco

- Placed inside the mouth for a continuous high from the nicotine
  - Snus: leafy form of tobacco sold in pouches
  - Plug: chew tobacco pressed into a brick
  - Snuff/Chew: powdered, moist form of tobacco “dipping”
Smokeless ≠ Safe

- 8-10 chews/dips per day is equivalent to 30-40 cigarettes per day (nicotine content)
- Made from a mixture of tobacco, nicotine, sweeteners, abrasives, salts, chemicals
- 3,000 chemicals, 28 carcinogens, more addictive than cigarettes due to high nicotine levels
Tobacco Dependence as a Chronic Disease

• Long term disorder
• Periods of relapse and remission
• Requires ongoing rather than acute care
The Dental Office is an Excellent Venue for Providing Tobacco Intervention Services

• Dental hygienists, dentists and OM specialists are in a prime position to show patients the health effects of tobacco use
• You can be as effective - if not more so - than the primary care physician in helping patients quit tobacco
• Patients do have increased success rates with tobacco cessation with brief interventions from dental professionals
Smoking & Oral Health

- Cancer
- OPMDs
- Periodontitis
- Tooth loss
- Implant Failures
- Dental caries
- Increased pigmentation oral mucosa
  - Smokers melanosis
- Altered taste
- Altered smell
- Candidiasis
- Dry socket
- Black hairy tongue
- Discoloration
  - Teeth
  - Restorations
  - Dentures

Common Reported Barriers for Not Helping Patients Quit

• Patient resistance
• Not enough time / too busy
• Lack of knowledge
• No financial incentive
• Lack of staff training
• Not my role- go to PCP
• Stigmatizing tobacco users
• Fear of scaring patients away
• Personal beliefs or smoking habits (staff who smoke)
Background

Patients who received tobacco cessation counseling at the dental office were 1.4 times more likely to quit and remain abstinent at 12 months or longer [OR 1.44; 95% CI: 1.16 – 1.78]

Carr AB, Ebbert JO. Interventions for tobacco cessation in the dental setting The Cochrane database of systematic reviews. 2006 (1): CD005084.
Treating Tobacco Use and Dependence: 2008 Update

- Reviewed scientific evidence from 1975-2007
- 8,700 scientific publications
- Recommendations on effective counseling and medication treatments and institutional policies for clinicians, specialists, and health systems


www.surgeongeneral.gov/tobacco/gdlnrefs.htm
Tobacco Cessation 5 A’s

• ASK
• ADVISE
• ASSESS
• ASSIST
• ARRANGE
Tobacco Cessation

**ASK**

– Systemically ask every patient about tobacco use at every visit
  • Treat tobacco use as a vital sign
– Determine if patient is current, former, or never tobacco user
– Determine what form of tobacco is used
– Determine frequency of use
– Document tobacco use status in the dental record
Tobacco Cessation

ADVISE

– In a clear, strong, personalized manner, urge every user to quit.
– “Quitting tobacco is the most important thing you can do for your health. I will help”
– Most people make repeated attempts before they are successful
– Employ the teachable moment: link oral findings with advice
Tobacco Cessation

**ASSESS**

– Is the tobacco user willing to make a quit attempt?
– “Are you ready to try to quit tobacco?”
  • Yes- help patient create a quit plan
  • No- Enhance the patient’s motivation to quit
Tobacco Cessation

**ASSIST**

- Help create a quit plan
  - Set a date within 2 weeks
  - Review past quit attempts
  - Avoid other tobacco users
  - Change smoking time
  - Tell family and friends
  - Remove tobacco from home, work, car
  - Avoid alcohol
Tobacco Cessation

**ASSIST**

- Enhance motivation to quit - The 5 R’s
  - **Relevance** - why is quitting personally relevant?
  - **Risks** - identify consequences of tobacco use
  - **Rewards** - identify benefits of quitting
  - **Roadblocks** - identify barriers and ways to overcome them
  - **Repetition** - enhance motivation at every visit
Tobacco Cessation

ASSIST

– Recommend or prescribe pharmacotherapy
  • Medication
  • Nicotine Replacement Therapy (NRT)
Bupropion SR (Zyban)

<table>
<thead>
<tr>
<th><strong>Dose</strong></th>
<th>150 mg PO q AM x 3 days then 150 mg bid 7-12 weeks before quit date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adverse Effects</strong></td>
<td>Dry mouth, nausea, stomach pain, headache, dizziness, vision changes, decreased libido, sore throat, rash, appetite changes</td>
</tr>
</tbody>
</table>
| **Counseling** | Maximum daily dose 300 mg  
Start when still smoking  
Avoid bedtime dosing  
Can use with NRT  
Use for up to 6 months |
# Varenicline (Chantix)

| **Dose** | 0.5 mg per day for 3 days  
0.5 mg BID for 4 days  
1.0 mg daily for 11 weeks |
| **Adverse Effects** | Nausea, stomach pain, indigestion, constipation, gas, weakness, dry mouth, headache, insomnia, abnormal/vivid dreams |
| **Counseling** | Start treatment one week prior to quit date. Take after meal with a full glass of water. If quit at 12 weeks, consider another 12 weeks. Nausea/insomnia are temporary side effects |
## Nicotine polacrilex (nicotine gum)

| Dose | 2 mg and 4 mg per piece  
At least 1 piece every 1-2 hours, no more than 24 pieces per day  
1-3 months  
4 mg recommended for smokers of >25 cigarettes per day |
<table>
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</thead>
<tbody>
<tr>
<td>Adverse Effects</td>
<td>Soreness, mouth irritation, nausea and vomiting, hiccups, dyspepsia</td>
</tr>
<tr>
<td>Instructions</td>
<td>Chew slowly until a tingling sensation appears, then “park” between cheek and gum. Avoid eating or drinking acidic beverages 15 minutes before or during chewing</td>
</tr>
</tbody>
</table>
# Nicotine Replacement Therapy

## Nicotine polacrilex lozenge (Commit)

| Dose | 2 mg and 4 mg per lozenge  
At least 1 lozenge every 1-2 hours, no more than 20 lozenges per day  
1-3 months  
4 mg recommended if tobacco is used within 30 minutes of waking |
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<tr>
<td>Adverse Effects</td>
<td>Soreness, mouth irritation, nausea and vomiting, hiccups, dyspepsia</td>
</tr>
<tr>
<td>Instructions</td>
<td>Allow the lozenge to slowly dissolve (20-30 minutes). Minimize swallowing. Do not chew or swallow lozenge. Do not eat or drink 15 minutes before or during use.</td>
</tr>
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</table>
# Nicotine Replacement Therapy

## Nicotine transdermal patch (Nicoderm CQ)

<table>
<thead>
<tr>
<th>Dose</th>
<th>Various doses according to manufacturer. Heavier smokers should start with higher-dose patches.</th>
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<tbody>
<tr>
<td></td>
<td>&gt;10 cigarettes - 21mg/day x 4-6 weeks</td>
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<td>14mg/day x 2 weeks</td>
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<tr>
<td></td>
<td>7mg/day x 2 weeks</td>
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<tr>
<td>≤10 cigarettes</td>
<td>14mg/day x 6 weeks</td>
</tr>
<tr>
<td></td>
<td>7mg/day x 2 weeks</td>
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</tbody>
</table>

| Adverse Effects | Skin irritation, headache, insomnia, abnormal/vivid dreams                                          |

| Instructions | Treat for 6-8 weeks. Rotate patch site. Do not cut the patch. Remove patch prior to bedtime if sleep disturbances present. |
### Nicotine Replacement Therapy

<table>
<thead>
<tr>
<th>Nicotine inhaler (Nicotrol Inhaler)</th>
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</table>
| **Dose** | 4 mg cartridges  
6-16 cartridges per day for up to 6 months  
Prescription only |
| **Adverse Effects** | Mouth/throat irritation, unpleasant taste, dyspepsia, headache, hiccups, rhinitis |
| **Instructions** | Taper dose over 3 months. Dispense: 3 month supply (168 cartridge pack = 1 month supply)  
Best results with continuous puffing for 20 minutes. Inhale into back of throat or puff in short breaths. Do not inhale into the lungs. |
## Nicotine Replacement Therapy

### Nicotine Nasal Spray (Nicotrol NS)

<table>
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<tr>
<th>Dose</th>
<th>0.5 mg to each nostril, 1-2 times per hour. 10 mg/ml Dispense: 1 10 ml bottle (1 month therapy = 4 bottles) Prescription only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse Effects</td>
<td>Nasal/throat irritation, headache, sneezing, rhinitis</td>
</tr>
<tr>
<td>Instructions</td>
<td>Max of 5 times per hour or 40 doses/day. Initially use at least 8 doses a day and use for 3-6 months.</td>
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</table>
Nicotine Replacement Therapy

• Use caution in patients 2 weeks post-MI or stroke, arrhythmias, serious angina pectoris, pregnant or breastfeeding
• Studies show NRT is safe and effective in post-MI patients
• Combinations of patch, gum and nasal spray are generally safe and effective
• Combination of bupropion and NRT is more effective than either alone
Nicotine Replacement Therapy

- Pharmacotherapy valuable adjunct to cessation treatment for most patients making a quit attempt
- Efficacy of these drugs not established for use with adolescents
- Generally not indicated in individuals who smoke less than 10 cigarettes per day
Tobacco Cessation

ASSIST

– Refer
  • Tobacco counselor
  • Telephone quitline
  • Community-based groups
Tobacco Cessation

ASSIST

– Just Breathe (Roswell Park Cancer Institute)
  • Individualized quit plans
  • Behavioral counseling
  • Cessation support
  • Access to pharmacotherapy

– NYS Smokers’ Quitline
  • Quit coaching support
  • Nicotine patches
  • Refer-to-Quit program for medical providers
Tobacco Cessation

ARRANGE

– Schedule in-person or phone follow up

– Offer reinforcement and encouragement
What About Electronic Nicotine Delivery?
Electronic Nicotine Delivery

- Inhalation of a vapor containing addictive nicotine and other products through battery operated device
- Now regulated by the FDA
- Sales of e-cigarettes have doubled each year since 2008
- More scientific inquiry is needed to understand the potential health impact
Electronic Nicotine Delivery

• Flavoring and battery output voltage impacts the toxicity of the devices

• Smokers who switch to e-cigarettes show reduced exposure to tobacco-related carcinogens

Leigh NJ, et al. Flavourings significantly affect inhalation toxicity of aerosol generated from electronic nicotine delivery systems (ENDS) Tobacco Control Published Online First: 15 September 2016. doi: 10.1136/tobaccocontrol-2016-053205

Electronic Nicotine Delivery

• Is it really a harm reduction strategy?

• Should you be recommending your patient switch to e-cigs?

• Not enough information yet- studies ongoing
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