Tobacco Interventions: Motivating Health Behaviour Change in Dentistry

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Speaker Disclosures: Dr. Peter Selby

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(Consultant and advisory board member)

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Objectives

- Relate research evidence to clinical practice implications in dentistry
- Apply evidence-based knowledge and skills in managing co-morbid conditions and special populations
- Motivate health behaviour change among patients who are ambivalent or resistant to addressing their tobacco use
- Set practice targets and develop an implementation plan for tobacco cessation interventions
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<td>BREAK</td>
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Introductions and Agenda Setting

09:30 TO 09:45

1. Please introduce yourself to your table
2. Discuss what are your key challenges in addressing tobacco use in your practice setting?
3. Take notes
4. Identify one key burning question for your table
Smoking Cessation in Dentistry

**WHY:**

- General health
- Dental health
- Opportunity to support positive health behaviors and to reinforce cessation

*How* does cessation fit in practice settings?

*What* are the strengths, weaknesses of involvement of the dental office?
Why should dental professionals get involved?

- Dentists have already been involved in tobacco use for over half a century…and not always in a healthy way!

*Tobacco industry targets dentists through PR:*
“The 1962 press run [of Tobacco and Health] is now over 550,000, with nearly 310,000 going to doctors, dentists and medical schools”

http://legacy.library.ucsf.edu/tid/zgo21a00
Why should dental professionals get involved?

• As dental professionals you can continue enhancing the health of your clients

• Tobacco is the #1 cause of preventable death in Canada

• Cessation counselling is one of the most cost-effective interventions a clinician can perform, after immunization

• The time dental professionals spend with patients allows for effective intervention


McIntosh & Ossip, 2010
Before we start...What is an addiction?

- Chronic disease of the brain implicating reward, motivation, memory

- Characterized by:
  - Inability to remain abstinent
  - Impairment in behaviour control
  - Craving
  - Dysfunction in emotion and recognition of addiction and related behaviour

- Involves cycles of relapse
- Can result in disability or death

American Society of Addiction Medicine, 2011
Tobacco Overview

Tobacco use and information

Clinical Practice Implications in Dentistry
Nicotine Delivery Devices & Methods

• Smoking tobacco
  – Cigarettes, cigars, cigarillos, shisha,…
  – Pre-rolled with filter, hand-rolled with filter, hand-rolled without filter, rolled in paper, rolled in a leaf, water pipe/hookah

• Smokeless tobacco or tobacco blends
  – Chew, dipping tobacco, snuff, snus, gutka,…
  – Loose, in a pouch

• Betel nut
Cigarettes: Tobacco and Nicotine

- Tobacco - plant that contains nicotine
- Nicotine - one of the major addictive components in tobacco
- **Nicotine is not known to lead to diseases such as COPD or cancer. It is the 4,000 other chemicals in cigarette smoke that contribute to these diseases.**
Cigarette Smoke and Carcinogens

- More than 60 carcinogens in cigarette smoke
- Min. 16 carcinogens in unburned tobacco
- Carcinogenesis induced through
  - DNA adduct formation
  - Free radical formation
  - Oxidative stress
  - Inhibition of apoptosis (pre-programmed cell death)
- Cadmium is one of the most toxic compounds in cigarette smoke

Tobacco Smoking

- Smokers risk of SCCA is 4 fold that of nonsmokers
- Pipe and cigar smokers are at greater risk than cigarette smokers
- Marijuana smokers are at increased risk for oral cancer
- Betel nut users at increased risk

“Cigarettes, some say, when used as directed by the manufacturer, are the most lethal product available for peacetime use in the United States.”

Canadian Cancer Statistics

~3,000 cases/yr; 12 cases/100,000 per year; deaths 4/100,000 in 5 yrs

Pop. Canada 33 mil; dentists in Canada 18,861 (Jan 2007);
63.7% pop seen prior yr=1,115 pts/dentist;
1.3 cases/dentist in 10 yrs

2. www.statcan.ca/english/edu/clock/population.htm

-Shift in causation of SCC due to HPV, however in patients who also smoke the prognosis is similar to those with tobacco-associated cancer
Smoking and Dental Health

- Smoking increases the chances of developing oral cancer 4 x as well as pharyngeal cancers
- Tobacco contains cell and tissue damaging cytotoxic substances
- Smoking increases calculus build-up
- Nicotine causes vasoconstriction – blood circulation in the mouth can decrease by 70% while smoking
- Smoke and second-hand smoke may cause periodontal disease
General Tobacco Use and Dental Health

• Bad breath, stained teeth
• Dental caries (sugar = 1/5 of some chewing tobacco)
• Periodontitis and Attachment loss
• Mouth sores, poor healing of sores
• Leukoplakia/erythroplakia
• Hairy tongue; candidiasis
• Decreased taste & smell
• Increased sensitivity to hot, cold
• Breathing difficulty, smoker’s cough
• Voice change
Smokeless Tobacco - Dental & Oral Health

• **Mouth Cancer** – cancer of the cheeks, gums, lips and tongue. Smokeless (spit) tobacco users have a 50% higher chance of getting oral cancer than non-users.

• **Throat Cancer** – cancer of the voice box and cancer of the esophagus.

• **Dental diseases** – stained teeth, tooth decay, receding gums, gum disease, bad breath and black hairy tongue.

• **Loss of taste and smell** – causes loss of appetite which results in poor nutrition and poor health.

http://www.health.gov.sk.ca/rr_smokeless_tobacco.html
Smoking-Attributable Periodontitis

• Smoking is a major risk factor for periodontitis
• Current smokers are approximately 4 x as likely as persons who have never smoked to have periodontitis
• Periodontal disease is one of the main causes of tooth loss worldwide

Tomar et al., 2000
Smoking-Related Oral Conditions

- Increased candidiasis: pseudomembranous and erythematous, leukoplakia

Tomar et al., 2000
Smokeless Tobacco - General Health

- **Heart disease** – heart attacks, strokes and high blood pressure.
- **Stomach problems** – ulcers, stomach upset, increased bowel activity and stomach cancer.
- **Physical changes** – fatigue, muscle weakness, dizziness and decreased physical performance, dermatologic changes

http://www.health.gov.sk.ca/rr_smokeless_tobacco.html
Smokeless Tobacco as Harm Reduction?

- As dependence-forming as cigarettes
- High co-use of cigarettes (est. 10-20%)
- When abstaining: cravings and nicotine withdrawal
- Almost all users are male
- 90% of smokeless tobacco users are regular users before age 18
- 38% of users develop oral lesions within 3 years
Bottom Line on Harm Reduction

Using fewer tobacco products may have little to no effect on reducing morbidity and mortality

BUT

Reducing consumption may increase likelihood of future cessation
Benefits of Cessation

• Health Effects
  – Cardiovascular Risk
  – Cancer Risk
  – Oral health benefits

• Money Saved

• Quality of Life

• Freedom from Addiction
Evidence-Based Interventions

• Despite best intervention, max. quit rate ~20%
• Self-help materials tend to have good quit rates
• Telephone quit lines are a cost-effective way to reach smokers with some efficacy
  • Counselling doubled abstinence rates
  • Seven quit-line counselling sessions
  • Brief treatment often no different than intensive counselling
  • Consider NRT if behavioural interventions do not work

Zhu, 2002; www.Pregnets.org; Ershoff, 1999
Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-Informed Tobacco Treatment

Dr. Peter Selby, Principal Investigator

www.can-adaptt.net
General Considerations

• Approach tobacco dependence as any other medical condition

• Tobacco use is common, but expect the following:
  – Embarrassment re: usage, or failure to quit
  – Perceived need as a stress management tool
  – Concern over increased health insurance premiums

• Confidentiality
Types of Behavioural Interventions

- Self-help
- Brief Intervention: < 3 min
- Intensive Intervention
- Multi-session
- Inpatient

Fiore et al., 2009; Pbert et al., 2008; USDHHS, 2008
Brief Intervention: The 5 A’s

1. **Ask** - initiate conversation – how much do you smoke?
2. **Advise** - encourage to quit or reduce – Considered quitting? Can I share information about smoking and your dental health?
3. **Assess** – evaluate smoking status – How soon after you wake up do you smoke?
4. **Assist** – help to quit or reduce – You have more options than quitting now. Would you reduce now to eventually quit?
5. **Arrange** (Advocate) – follow up support, policy advocacy – We have support materials to use on your own, and if you’d like we can refer you to a smoking cessation counsellor.

Brief Intervention: 30 Second Approach

- Ask
- Advise
- Assess
- Assist

- Arrange follow-up / Advocacy
The 5A’s Approach

Ask
Advise
Assess
Assist
Arrange

Designed for the busy office environment
Flexible
Easily implemented
Every patient visiting your clinic should be asked about tobacco use at every visit.

It is time to create a new standard of care.
ASK About Tobacco Use

Document in health history
- Consider using Brief Tobacco Assessment form
- Use “Vital Signs” stamp
Routine Oral Cancer Examination

- Take history of alcohol & tobacco use of all new patients & update
- Perform thorough head/neck examination at each dental visit especially for those who use tobacco and/or alcohol
- Educate patients about oral cancer & other oral complications of tobacco use
ADVISE Every User to Quit

• **Clear**

  “I think that it is important for you to quit using tobacco now, and I will be happy to help you.”

• **Strong**

  “In my opinion, quitting is the most important thing you can do for your health.”

• **Personalized**

  “Your family history for cancer puts you at higher risk than others, and smoking increases that risk even more.”
During an Assessment

• Delivered during regular visits in at little as 3 minutes or even 30 seconds!!
• Ask about:
  – # smoked per day (time lines)
  – Time to first cigarette of the day
  – History of smoking and quit attempts (what factors were associated with success)
  – Confidence and Motivation scales (score from 1-10)
What to Ask During an Assessment

• Withdrawal symptoms
• Previous use of NRT, Zyban, varenicline, behavioural interventions
• Side effects if any
• Supports
ASSESS for Co-Morbid Factors

• **Rationale**
  – Strong relationship with outcome
  – Give serious consideration for referral

• **Medical**
  – CV, Respiratory, Cancer
  – Pregnancy
  – Other

• **Substance Abuse**

• **Other Psychiatric Disorders**
  – Depression / Anxiety D/O, past or present
  – Serious Axis I: Schizophrenia, BPD
  – Axis II or related traits likely to interfere with treatment effort
ASSIST with Quit Attempt

- Set a Quit Date within 2 weeks
  - Use meaningful upcoming dates
  - Encourage serious effort
  - Emphasize complete abstinence
- Provide self-help materials
- Consent to Quitline
  
  Bridge Counseling
  
  www.smokershelponline.ca
Treatment Approaches for Tobacco Dependence

• Variety of approaches to cessation, including many treatments without evidence of effect
  – Nicotine lollipops
  – Acupressure / Acupuncture
  – Filtering systems
  – Hypnosis (very limited support)
  – Low light laser therapy

• Endorse and implement evidence-based treatments
Quit Day Preparations

- Inform supportive family & friends
- Inform supportive tobacco users (do not offer any tobacco)
- Throw away any remaining tobacco
- Put away ashtrays, lighters, etc.
- Negotiate smoke-free areas in home
- Plan distracting activities
- Monitor smoking
Managing Stress

- Engage in distracting activities
- Physical activity
- Schedule time for hobbies
- Relax...explore preferences
- Enjoyable social activities
Manage Potential Weight Gain

- Typical 10 – 12 lb gain with cessation
- Associated health risks minimal
- Anticipation of gain is a better predictor of poor outcome over actual gain
- NRT and Bupropion delay, but do not prevent weight gain
- Clinical considerations:
  - Cessation first; option to target later
  - Modest increase in physical activity level
  - Modest changes in diet
Consider Pharmacotherapy

- All patients may benefit
  - Heavier users: consider higher doses

- Evaluate previous quit attempts
  - Attempt to quit completely?
  - Sufficient amount (dosage) used?
  - Sufficient duration?
  - Proper technique?
  - Withdrawal symptoms?
  - Medication side effects?
Mechanism of Action of Nicotine in the Central Nervous System

- Nicotine binds predominantly to nicotinic acetylcholine (nACh) receptors in the CNS; the primary is the α4β2 nicotinic receptor in the Ventral Tegmental Area (VTA).
- After nicotine binds to the α4β2 nicotinic receptor in the VTA, it results in a release of dopamine in the Nucleus Accumbens (nAcc) which is believed to be linked to reward.
The Cycle of Nicotine Addiction

- The half-life of nicotine is only 2 hours. This along with its rapid clearance from the CNS results in withdrawal symptoms occurring quickly. Withdrawal symptoms, combined with cravings for tobacco, result in relapses that reinforce the reward and satisfaction from nicotine- starting the addiction cycle over again.

Nicotine Withdrawal Symptoms
- Irritability
- Difficulty concentrating
- Restlessness
- Depressed mood
- Anxiety
- Insomnia
- Increased appetite
- Decreased heart rate

Nicotine used for pleasure, enhanced performance, mood regulation

+ Tolerance and physical dependence (cravings)

Nicotine used to self-medicate withdrawal symptoms and used for pleasure, enhanced performance, mood regulation

Abstinence produces withdrawal symptoms

Primary Symptoms of Nicotine Withdrawal

- **Insomnia**
  - within 1st day of quitting
  - sleep fragmentation; can lead to dysphoria
  - Some have decrease in sleep latency
  - Peaks within 1 – 3 days
  - Lasts 3 – 4 weeks

- **Irritability / Frustration / Anger**
  - Can last > 1 month
  - 80% of quitters endorse this item

- **Anxiety**
  - Often prior to quit attempt
  - Peaks within days
  - Lasts 3 – 4 weeks

- **Dysphoric / Depressed Mood** - Can last > 1 month

- **Difficulty Concentrating**
  - within 1st day of quitting
  - Peaks within 1 – 3 days
  - Lasts 3 – 4 weeks
  - Generally mild

- **Restlessness**
  - Lasts < 1 month

- **Increased Appetite / Weight Gain**
  - Appetite change x10 weeks

- **Decreased Heart Rate**
  - Average decrease 10 bpm
Current Medication Options

• Nicotine Replacement Therapies (NRTs)
  – Patch
  – Gum
  – Inhaler
  – Lozenge
  – Nasal spray
  – Nicotine mist-metered dose

• Other Medications
  – Bupropion SR (Zyban)
    • Zyban XL
  – Nortriptyline *
  – Clonidine *
  – Varenicline (Champix)

• Under Development
  – sl NRT tablet
  – Nicotine vaccine (NicVax)
  – Other non-nicotine

*Not Health Canada Approved
Transdermal Nicotine Patch

- Generally initiate at 21 mg
- Consider 14 mg if:
  - Smoking 10 or less a day
  - Weight < 100 lbs
  - Side effects with 21 mg patch
- Not a rate fading method, however:
  - Health-related concerns are minimal
  - Tobacco use while on patch (or any NRT) may indicate insufficient dose

- Usage
  - First patch applied on morning of quit day
  - Place on different, non-hairy area of upper torso on waking
  - May remove at night if vivid dreams or sleep interference occurs
  - 8 – 12 weeks duration
  - Can wean; not required

Health Canada Approved 1st Line Medication
Patch Advantages & Disadvantages

Advantages
Few contraindications
Once a day dosing
Steady state in plasma
Higher compliance

Disadvantages
Less “control”
Even 21mg dose may be insufficient for some
Longer time to peak levels
Skin-related side effects
Excessive sweating (use a stretchable, breathable tape like Cover Roll)
Insomnia
Caution with recent CV disease

"Are you sure this is the only way the nicotine patch will work for you?!"
Nicotine Polacrilex “Gum”

- Up to 24 pieces per day
  - 2mg: up to 24 cigs / day
  - 4mg: 25+ cigs / day

- Usage
  - One piece every 1 – 2 hours
  - Slowly chew – only a few times – then ‘park’
  - Staged reduction – over several weeks
  - 12 weeks recommended
Gum Advantages & Disadvantages

**Advantages**
- Flexible dosing – use as needed in high-risk situations
- Perceived control
- Oral substitute
- ‘Irregular’ smokers
- Non-stick, sugarless
- Orange / Mint / Original

**Disadvantages**
- Adherence: More complex to use
  - Chew / Park
  - Chewing too much
  - Drinking & eating
  - Insufficient use common
  - Unpleasant taste (Original)
- Mouth soreness
- Dyspepsia
- Cost
- Some abuse potential
Nicotine Inhaler

- Produces a nicotine vapor that is absorbed in mouth and throat
- Use 6 – 16 / day
- Usage
  - 12 weeks of primary treatment, can taper over 6-12 additional weeks
  - 1 cartridge: 20 minutes continuous use
  - Cartridge good for 24 hours once opened
  - Stop if not quit in 4 weeks
Inhaler Advantages & Disadvantages

• Advantages
  – Supports ad lib dosing
  – Most similar to smoking – oral substitute

• Disadvantages
  – Must actively manage treatment
  – Mouth / throat irritation
  – Expensive
  – Lower dosing
  – Caution with COPD
Nicotine Nasal Spray

- limited data and clinical experience
- Maximum of 40 doses per day
  (1 dose = 1 spray in each nostril)
- 1 – 2 doses per hour; max 5
- Usage
  - 12 weeks, up to 6 months
  - Do not inhale while spraying
  - Stop if not quit in 4 weeks
Nicotine Nasal Spray

- Advantages
  - Supports ad lib dosing
  - High dose delivery: good option for highly addicted users

- Disadvantages
  - Must actively manage treatment
  - Nasal irritation
  - Costly
  - Caution with COPD
Nicotine Lozenge

- Limited data and clinical experience
- Up to 20 per day; 5 per 6 hour period
  - 4mg: smoke within 30 minutes of waking
  - 2mg: smoke after 30 minutes
- Absorbed via oral mucosa
- Usage
  - Stop all tobacco
  - No eating or drinking 15 minutes before use
  - 12 weeks
Lozenge Advantages & Disadvantages

• Advantages
  – Ad lib dosing
  – Oral substitute
  – ‘Irregular’ smokers
  – Perceived control

• Disadvantages
  – Adherence Issues
  – No drinking or eating
Bupropion SR

- Therapeutic effect **NOT** based on antidepressant qualities
- Set quit date 7 (PDR) to 14 days after initiating bupropion treatment
- Usage
  - First 3 – 7 days: 150mg *qd*
  - Afterwards: 150mg *bid*
  - Active treatment: 7 – 12 weeks
  - D/C if no progress within 7 weeks
  - Tapering not necessary
Bupropion SR Advantages & Disadvantages

• Advantages
  – Can use while smoking
  – Weight
  – May be best choice for patients with a history of depression, or current depressive symptoms

• Disadvantages
  – Delay for therapeutic effect
  – Contraindications
    • Eating disorder
    • Seizure history
    • Pregnancy
    • Uncontrolled HTN
    • Low BMI
    • Heavy ETOH users
  – Side Effects
    • Agitation
    • Insomnia
    • Dry mouth
    • Shakiness
    • Sedation

• Medication Interactions
  - MAOIs / TCAs
  - Ethanol / sedative withdrawal
  - NRT
  - Some SSRIs
Varenicline (Champix)

- Set quit date for 1 week after initiating
- Take after eating, with a full glass of water
- Usage
  - Days 1 – 3: 0.5mg *per day*
  - Days 4 – 7: 0.5mg *twice per day*
  - Afterwards: 1.0mg *twice per day*
  - Active treatment: 12 weeks
  - Discontinue if not abstinent within 12 weeks
Varenicline (Champix):

• Advantages
  – Ease of use
  – Can use while still smoking
  – No important drug interactions

• Disadvantages
  – Cannot combine with NRT
  – Significant risk for nausea
Nortriptyline & Clonidine

- Not HC approved – possible 2nd Line
- Reasonable outcome data
- Higher side effect profile
- Need to taper Clonidine
Managing Side effects

- **Insomnia**
  - TNP: remove 1 hour prior to bedtime; replace upon awakening
  - BUP: separate doses by at least 8 hours; last dose taken no later than 4pm; reduce dose?
  - All NRT: possible reduction in dose

- **Unusual / Vivid Dreams**
  - TNP: often diminishes with time; remove 1 hour prior to bedtime

- **Irritability**
  - BUP: decrease dose; shift to NRT
  - NRT: may be withdrawal – consider dose increase

- **Dry Mouth**
  - BUP: usually diminishes with time; consider dose reduction or shift to NRT

- **Dizziness**

- **Heart Racing**
  - NRT: consider lowering dose

- **Skin Burning / Itching**
  - TNP: check location (proper?); try other locations; if no better use alternate form of NRT
Managing Side Effects

- **Nausea**
  - **VAR**: may diminish over time; reduce dose; treat medicinally

- **Dizziness**
  - **NRT**: reduce dose

- **Jaw Muscle Ache, Mouth Ulcers, Hiccups**
  - **NRT**: correct ‘chewing’ technique (hiccups, jaw ache)

- **Heart Racing**
  - **NRT**: reduce dose

- **Skin Burning / Itching**
  - **TNP**: re-locate (proper, sensitivity); switch to alternate NRT

- **Vomiting**
  - **VAR**: eat 1st; lower dose
Other Medication Considerations

- NRT
  - Type
  - Combining NRTs: evidence for greater effectiveness
  - Possibility of higher doses
    - Mounting evidence NRT initiated prior to quit date (~ 2 weeks) improves outcomes when used properly (set quit date, treatment plan in place, etc.)
- Bupropion + NRT
- Medication adjustments

- Duration of use
- Side effects
- Usage patterns
  - Weekend smokers
  - “Stress responders”
Other Points...

- Expected course of treatment
  - First 24-48 hours most difficult
  - Withdrawal symptoms peak within 1-3 weeks, then begin to fall
  - First 2 weeks: Highest relapse risk
  - First 3 months: Most relapses have occurred

- Long-term relapses highlight need for:

  Chronic Management
TOBACCO CESSATION

**ARRANGE for Follow-Up**

- **Important contact points**
  - 1-2 days prior to quit date
  - 1-2 weeks after quit date
  - Monthly while on meds
  - 3-6 month follow-up
  - Additional, as necessary

- **Contact**
  - In person
  - Phone
  - Mail/email
Dealing with Failure

- Give patient ‘permission’ to stop for now
- Recognize factors that interfered and prepare for next attempt
- If failure is related to high-risk situation, review ARRANGE and try again
Intervening on ETS Exposure

• Consider
  – Patient who is exposed
  – Smoker exposing others

• Environments
  – Home
  – Car (up to 23x exposure level)
  – Work

When to Refer

- For more intensive treatment…
  - Unsuccessful with brief approach
  - Previous failures
  - Complex medication management
  - Co-morbidities present
  - Highly nicotine dependent
Clinical Treatment Model

- **Primary Prevention**
- **ASK**
- **ASSESS**
- **ADVISE**
- **ASSIST**
- **ARRANGE**

- **Never User**
- **Current User**
- **Ex-User**
- **Relapse Prevention**
- **Motivational Intervention**
- **Ready**
- **Not Ready**
- **Relapse**
- **Abstinent**

Adapted from PHS Guideline (2000)
Specific Populations and Tobacco Use
General Canadian Smoking Behaviour

17.0% current smokers (≥15 yrs)  26.4% former smokers  56.9% never smokers  15.1 avg cpd by daily smokers

CTUMS, 2010 Annual Results
Why Focus on Specific Populations?

- Mental health issues
- Medical issues
- Addictions
- Gambling disorders
- People who are homeless or underhoused
- Older Adults
- LGBTTTTIQQ persons
- Youth
- Pregnant women
- Incarcerated individuals
- Military recruits
- Ethno-cultural groups
- Aboriginal Persons
Prevalence of Smoking in Psychiatric & Substance Use Disorders

<table>
<thead>
<tr>
<th>Clinical group</th>
<th>Smoking prevalence (%)</th>
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<tr>
<td>SZ</td>
<td>60%</td>
</tr>
<tr>
<td>BPD</td>
<td>75%</td>
</tr>
<tr>
<td>MDD</td>
<td>60%</td>
</tr>
<tr>
<td>PD</td>
<td>40%</td>
</tr>
<tr>
<td>OCD</td>
<td>30%</td>
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<tr>
<td>PTSD</td>
<td>50%</td>
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<tr>
<td>Alcohol</td>
<td>80%</td>
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<tr>
<td>Cocaine</td>
<td>70%</td>
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<tr>
<td>Opioid</td>
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<tr>
<td>Gen US pop</td>
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SZ, schizophrenia; BPD, bipolar disorder; MDD, major depressive disorder; PD, panic disorder; OCD, obsessive-compulsive disorder; PTSD, post-traumatic stress disorder

Kalman et al., 2005
Schizophrenia

- Prevalence rates of 72.5% (up to 90%)
- More likely to smoke and less likely to quit
- Biological variables
- Quitting smoking may impact on symptoms of schizophrenia

Hughes et al., 1986; Grant et al., 2004; Breslau et al., 1991, 1994; Lasser et al., 2000
Major mood disorders

- Depression
  - Of individuals with depression, smoking prevalence of **56%** (vs 44% not smoking)
  - Of general population, smoking prevalence of **26%** (vs 74% not smoking) *Farrell et al (2003); Mackay et al (2006)*

- Anxiety disorders
  - Smoking rate 2x general population
    - Panic Disorder 40%, PTSD 63% rate
  - Nicotine is anxiogenic
    - Lower anxiety within 2 weeks of quitting *Amering et al., 1999; Valenca et al., 2001; Herzbert et al., 2001; Hughes et. al, 1996*
Tobacco and Other Substances

• Alcohol and Tobacco
  – Strong correlation
  – Dose-dependent
  – Mortality rates increased
  – Possible gateway hypothesis? Colby, 1994; Selby & Els, 2003

• Other substance-related disorders
  – 25% of clients in addiction treatment want to quit all substances, many are willing to explore the issue¹
  – Relapse rates are lower if all substances are addressed concurrently

¹ Schroeder & Morris, 2010; 2) Kohn et al., 2003; 3) Kalman et al., 2010
Alcohol Cessation: CAGE

• C – Have you thought about cutting down or has anyone suggested it?

• A – Are you annoyed by criticism of your “social drinking”?

• G – Do you feel guilty after using?

• E – Have you ever had an eye-opener?

(Yes - 2 or more questions indicates need for follow up)

Fiellin et al., Screening for Alcohol Problems in Primary Care., Arch Inter Med.2000;160.13
Gambling Disorders

- Strong positive association
- 43 – 66% tobacco prevalence
- Limited empirical evidence
- Systemic approaches, e.g. bans, have little impact on monetary profits

Potenza et al., 2004; Petry & Oncken, 2002; Glantz & Wilson-Loots, 2003
Incarcerated Individuals

- Smoking prevalence of up to 91% reported (2), ~50% have other substance abuse and mental health issues (3)
- Limited treatment or programs available
- Forced abstinence through bans leads to short-term cessation only
- Smoking bans will contribute to a healthier environment, better air quality; but should be coupled with cessation interventions for sustained quit

People who are homeless or underhoused

- Difficult research population
- 75-85% tobacco prevalence
- Master Settlement Agreement revealed industry marketing
- No peer-reviewed smoking cessation programs
- Interest likely exists in quitting

Connor et al., 2002; Folsom & Jeste, 2002; Martens, 2001; Arnsten et al., 2004
Youth and Smoking

• Smoking youth aged 15-19: 14%
• Lowest rate recorded since Health Canada first began recording prevalence
  – Smoking: 8% daily; 6% occasional; 11.6 avg. cpd
    (CTUMS, 2009 Annual Results)
• Sexual and physical abuse/trauma
• Other psychiatric disorders
• Impoverished and dysfunctional households

De Von Figueroa-Moseley et al., 2004; Nichols & Harlow, 2004; Menutt et al., 2002; Dube et al., 2003; Potter et al., 2004; Cornelius et al., 2001
Indigenous Populations

- Traditional use of tobacco
- Smoking rates higher
- Lower age groups overrepresented
- Factors to consider
  - Diversity among Indigenous Populations; Access to healthcare resources; Traditional approaches to healing/recovery; Geographical location; Intergenerational trauma; Economic incentives from tobacco sales/production in some communities

Envirionics Research Group, 2004
Von Gernet, 2000
LGBTQITIQ Population

- Limited studies & almost no Canadian data – demographics vary & methodological flaws
- Reasons for high smoking rates?
- Treatment on small scale with limited evidence
- Some US studies estimate 48% of LGBTQITIQ population smoke
- Association between smoking and bacterial pneumonia, hairy tongue, oral candidiasis and AIDS-related dementia

L = Lesbian; G = Gay; B = Bisexual; T = Transsexual; T = Transgendered;
T = Two-Spirited; I = Intersex; Q = Queer/Questioning

Greenwood et al., 2005; Stevens et al., 2004; Ryan et al., 2001; Tang et al., 2004; Mays & Cochran, 2001
Women and Pregnancy

Why women smoke

- Addiction
- Controlling weight / fear of weight gain
- Concurrent mental health problems
- Coping with emotions, stress
- “Fitting in”
- Fashion, style, and marketing

Risks decrease with quitting

- Vaginal bleeding, premature delivery, abruptio placenta and placenta previa
- Spontaneous abortion
- Perinatal mortality
- Better chance of having a healthier birth weight
- Easier time with breastfeeding
Tobacco Control Implications & Suggestions

- High prevalence & high risk
- Disproportionate smoking impact
- Rates overrepresented in subgroups
- Mentally ill youth at greater risk of uptake
- Often not addressed by mainstream tobacco control approaches

Suggestions

- Identify high-risk youth, hard-to-reach populations
- Offer counselling/medications in criminal justice settings
- Parity of coverage
Health Break!
11:00 to 11:15 am
Motivating Change

11:15 to 12:30

Motivating health behaviour change among patients who are ambivalent or resistant to addressing their tobacco use
Defining Motivational Interviewing

- A form of collaborative conversation for strengthening a person's *own motivation* and commitment to change.

- A person-centered counseling style for addressing the common problem of *ambivalence about change* by paying particular attention to the *language of change*.

- Designed to strengthen an individual's motivation for and movement toward a specific goal by eliciting and exploring the person's *own reasons for change* within an atmosphere of acceptance and compassion.”

http://www.motivationalinterviewing.org/
“It’s not that some people have will power and some don’t. It’s that some people are ready to change and others are not.”

James Gordon M.D.
Stages of Change

People do not move in a linear fashion through stages of change in the cessation process!

Precontemplation - No quit in next 6 months
Contemplation - Quit within 6 months
Preparation - Quit within 1 month
Action - Quit for up to 6 months
Maintenance - Quit for over 6 months
Persuasion Exercise

• Choose one person near you to have a conversation with, and work together

• One will be the speaker, the other will be the listener

**Partner A: Speaker**

Pick something about yourself that you want, need, or should change or have been thinking about changing – but you haven’t changed yet…in other words, something you’re ambivalent about.
Partner B: Listener

Find out what change the person is considering making, and then…

- Explain *why* the person should make this change
- Give at least three specific *benefits* that would result from making the change
- Tell the person *how* they could make the change
- Emphasize how *important* it is to change
- If you meet resistance, repeat the above.

P.S. This is *NOT* motivational interviewing!
Speakers:
What were you thinking or feeling during this conversation?
Persuasion:

Common Reactions to Righting Reflex

- Angry, agitated
- Oppositional
- Discounting
- Defensive
- Justifying
- Not understood
- Not heard
- Procrastinate

- Uncomfortable Helpless, overwhelmed
- Ashamed
- Trapped
- Afraid
- Disengaged
- Don’t come back – avoid
A Taste of MI: *The same exercise – but this time…*

**The listener will:**

1. Listen carefully with a goal of understanding the dilemma
2. Give no advice
3. Ask these four open questions and listen with interest:
   - Why would you want to make this change?
   - a) How might you go about it, in order to succeed?
   - b) What are the three best reasons to do it?
   - c) On a scale from 0 to 10, how important would you say it is for you to make this change?

**Follow-up:** And why are you at __ and not zero?

- a) Give a short summary/reflection of the speaker’s motivations for change
- b) Then ask: “So what do you think you’ll do?” and just listen
Speakers:
What were you thinking or feeling during this conversation?
LISTENING:

Common Reactions to Being Listened To

- Understood
- Want to talk more
- Liking the dental worker
- Open
- Safe
- Engaged
- Accepted
- Respected
- Able to change
- Empowered
- Hopeful
- Comfortable
- Interested
- Want to come back
- Cooperative
“He that complies against his will is of the same opinion still.”

Samuel Butler
1612-1680
English Poet
The natural response of anyone who is challenged about a behaviour over which they are ambivalent is to argue the counter position.

- In being ambivalent we are only too aware of both sides of the argument and if pressed will automatically, and ably, argue the opposite.
- It is our task to state the reasons for making a change, and it is not another person’s role to confront us into accepting some therapist-determined (usually predetermined) diagnostic label.

(Saunders & Wilkinson, 1990)
TOBACCO CESSATION

Following:
Psychodynamic Psychotherapy
Rogerian Therapy (Listening)

Directing:
Behavioural Therapy CBT
Reality Therapy Dr. Phil (Informing)

Guiding:
Motivational Interviewing Solution-focused therapy (Asking)
The “Spirit” of Motivational Interviewing

- **Authority**
  - As your dentist, I have to tell you that you need to quit smoking, and soon.

- **Coercion**
  - By your next visit I need to see you’ve made an effort to quit smoking

- **Education**
  - Smoking is harmful to your teeth. It can lead to some really nasty things over time, like tooth decay.

- **Autonomy**
  - In the end it’s your choice – where would you like to go from here?”

- **Collaboration**
  - I’m interested in your ideas on how you want to tackle this

- **Evocation**
  - What do you know about the link between smoking and plaque build-up?
FOUR KEY STRATEGIES – OARS

OPEN questions (to elicit client change talk)

AFFIRM the client appropriately (support, emphasize personal control)

REFLECT (try for complex reflections)

SUMMARIZE ambivalence, double-sided reflection
Open versus Closed Questions

• CLOSED questions invite a “yes/no”, one-word or very limited answer

• OPEN questions encourage elaboration – they evoke the client’s ideas, opinions, hopes, concerns, etc.

FOUR KEY STRATEGIES – O A R S
Affirmations

Praising versus Affirming

- Go beyond “giving a good grade”
- Are not about the therapist’s approval of the client
- Acknowledge the client’s experience, struggle, expertise, efforts, etc.

FOUR KEY STRATEGIES – O A R S
Example of Praising:

I think it’s great that you are planning to quit smoking!

Thank you!

I really hope I don’t disappoint you...
Example of Affirming:

You have really given this a lot of thought.

I’m living away from home now. I’m committed to taking good care of myself as an adult.

Maybe I can really do this!
Example of Praising:

Look how far you’ve come! I know you can do this.

I sure hope so...

But actually I'm not so sure at all
Example of Affirming:

You’ve hung in there even though the cravings have been pretty bad.

Yes – I can’t believe how far I’ve come!

Maybe I can really do this!
Reflective Listening

Simple reflection

Complex reflection
“I am tired of people going on about my smoking! I know it’s bad for me, but so are a lot of things.”

**Simple:** People are really on your case about this, even though smoking is not the only harmful thing out there.

**Complex:** It is frustrating because it feels like “why pick on smoking”?

**Simple:** Smoking has some negative consequences, and so do other things.

**Complex:** From your perspective, smoking is not the most harmful thing to be concerned about.
Video: The 5 R’s
Behavior Change Roadmap: The 4-Point Plan
To sum it all up...

“You can lead a horse to water, but you can’t make him drink.”

…But you CAN make him thirsty!
Lunch Break!
## AFTERNOON AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic / Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>14:00 to 15:20</td>
<td>Practicing Behaviour Change</td>
</tr>
<tr>
<td>15:20 to 15:30</td>
<td>Complete Assessments</td>
</tr>
<tr>
<td>15:30 to 15:45</td>
<td>BREAK</td>
</tr>
<tr>
<td>15:45 to 15:55</td>
<td>Discuss Assessments</td>
</tr>
<tr>
<td>15:55 to 16:45</td>
<td>Small Group Implementation Plan</td>
</tr>
<tr>
<td>16:45 to 17:00</td>
<td>Wrap-up</td>
</tr>
</tbody>
</table>
Welcome Back

Before we move on to apply what we’re learning today… Did any questions come up for you over lunch?
Practicing Behaviour Change
14:00 to 15:20

Practicing behaviour change

Developing an implementation plan suitable to your dental practice
Exercise: Assessing Readiness for Change

OARS: OPEN questions; AFFIRM client; REFLECT (complex); SUMMARIZE what you hear

Partner A: Take 5 minutes to…
- Select a behaviour you tell clients to change that you yourself may want to change (e.g. brushing, flossing, managing stress, eating healthy foods, limiting coffee, etc.) and express this behaviour to Partner B

Partner B: Take 10 minutes to…
- Use the OARS skills to explore Partner A’s ambivalence
- Use “spirit” of MI: Autonomy, Collaboration, Evocation
- Try for at least 3 reflections in your conversation
Group Response: How did it go?

- Sustain statements made by client?
- Did Partner B use OARS?
  - Number of closed vs open questions
  - Number of simple vs complex reflections
- Clinician talk time (%)?
- Use of MI “spirit”
  - Autonomy – low to high use?
  - Collaboration – low to high use?
  - Evocation – low to high use?
- Overall thoughts from Partner A & B..?

Targets:
- 2x as many reflections as questions
- At least 50% complex reflections
- No more than 50% clinician talk time
Developing Your Treatment Plan

• John is 55 and has smoked for years. Here for a routine cleaning, he tells you his ulcers are getting worse and his blood pressure is through the roof. On top of that his teeth are in bad shape from smoking. He says he’s done spending money on cigarettes and feeling trapped.

What is a realistic treatment plan for your time with John today? How might that span future visits?
Assessments

- At your tables, please take the next ten minutes to complete a brief learning assessment!
Health Break!

15:30 to 15:45
Assessments

• Take-up and discussion
Developing an Implementation Plan

15:55 to 16:40 Small Group Implementation Plan
Instruction: 15:55-16:15

At your table:

- Develop an implementation plan
- Consider solutions to barriers
  - For each of the 5As
- Discuss as a group
- One facilitator
- One scribe – for report back
Report Back: 16:15-16:40

What will you do?
Story Weaving

We work with complex clients every day… but we don’t always appreciate just how complex their lives really are.
Advancements in Ontario Tobacco Control

- Intensive Cessation Counselling training is available and subsidized (TEACH Project, PTCC, Ottawa Model, others)
- Varenicline and Bupropion have been added to the Ontario Drug Benefit Plan
- NRT is available free of charge in all post-secondary institutions across Ontario
- Nicotine Dependence Treatment specific Physician Coding is available through OHIP
- Smokers’ Helpline
You Can Make It Happen

We Can Help You Make It Happen.
Community partners, training opportunities and resources are available.
More >>

Created by Ontario's Public Health Units in partnership with the Canadian Cancer Society Smokers' Helpline.
• Public Health Unit staff and partners are available for consultation and support as you develop cessation services for your client population.

• Tobacco Control Area Networks can provide links with Public Health Units and local/regional cessation communities of practice and work groups.
Quitlines Exist Across Canada

- BC: quitnow.ca
- Alberta: albertaquits.ca
- Saskatchewan: smokershelpline.ca
- Manitoba: smokershelpline.ca
- Ontario: smokershelpline.ca
- Quebec: jarrete.qc.ca
- New Brunswick: smokershelpline.ca
- Nova Scotia: smokershelpline.ca
- P.E.I.: smokershelpline.ca
- Newfoundland & Labrador: smokershelp.net
- Yukon: smokershelpline.ca
- NWT: hlthss.gov.nt.ca
- Nunavut: hss.gov.nu.ca
Want to be a Tobacco Cessation Practice Leader?

An Opportunity to:

• Develop your skills
• Network
• Attend TEACH courses
• Achieve credit units
• Build support for ideas

Possible Roles:

- Clinical Consultation
- Conference Speaker
- In-Service Trainer
- Media Interviews
- Resource Link

Questions? Email: teach@camh.net
Thoughts, Comments, Questions?

That's all Folks!

Acknowledgements

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