Tobacco Cessation, E-Cigarettes and Hookahs

AMY V. LUKOWSKI, PSY.D.
CLINICAL DIRECTOR, ASSOCIATE PROFESSOR
NATIONAL JEWISH HEALTH

Objectives

- Discuss evidence-based tobacco cessation interventions including pharmacologic options.
- Review e-cigarette and hookah facts and safety considerations.

PUBLIC HEALTH SERVICE (PHS)
2008 Guidelines

- Tobacco dependence is a chronic disease that requires multiple interventions and attempts to overcome.
- Clinicians should consistently attempt to identify, document and treat every tobacco user.
- Counseling and medications are effective and should be recommended by clinicians.
- Individual, group and telephonic counseling are effective and enhanced by medications.
- If an individual is unwilling to quit at the present time, use motivational treatment to encourage future attempts.

2014 CDC Best Practices for Cessation Interventions

- Promote health systems change.
- Expanding insurance coverage and utilization of proven cessation treatments.
- Supporting state quitline capacity.
What Works:
Multi-Disciplinary Approach

- Establish staff roles (front desk staff, R.N., M.D., N.P., social worker) to implement smoking cessation in the clinic:
  - assessment of smoking status
  - brief interventions (based on stage of change)
    - Motivational Interviewing
    - Cognitive-behavioral strategies
    - Relapse prevention
  - addiction education
  - referral to quitline or other counseling
  - prescription of medication
  - follow-up


What Can Multi-Disciplinary Teams Do?

- Ask tobacco questions at every visit
  - Document responses as a vital sign
  - Provider reminders to ask about tobacco use:
    - electronic prompt, stamp, or vital sign checkbox
- Advise all tobacco users to quit smoking
  - Use clear, strong and personalized message
  - Provide a brief intervention – brief (3-4 minutes)
- Refer individuals to an appropriate program
  - Individual counseling
  - Group counseling
  - Quitline
- Follow-up with all patients on tobacco status and quit process at every visit


Impact of Multi-Disciplinary Team Approach

- Patients expect that health team will address tobacco use, even if they are ambivalent
- Patient perspective
  - Tobacco cessation intervention = quality care
- Different types of providers are effective at significantly increasing quit rates
- Multiple types of providers can enhance abstinence rates.


Next Step: Where Do you Focus the intervention?

- Assess Stage of Change
  - Pre-Contemplation & Contemplation = Motivational Interviewing Intervention
  - Preparation, Action, Maintenance, Slip/Relapse = Tobacco Cessation Intervention or Referral
- Assess Readiness
  - Importance
    - How important is it to you to quit using tobacco?
  - Confidence
    - How confident are you in your ability to quit using tobacco?

1. Transtheoretical Model of Change: Stages of Change (Prochaska & Velicer, 1997)
Brief Interventions:
Motivational Interviewing (MI)

- Specific communication style
- Facilitates “change talk” - patients argue for change, not the provider
- Maximize motivation
- Opportunity for patients to make decisions
- Build on patients’ resources for change


Evidence-Based Tobacco Cessation Medications

SUMMARIZING MOTIVATIONAL INTERVIEWING

First Line Available Therapy – FDA Approved

Effective Treatments
- All of the following improve the chances of quitting, with a low-risk of harm
  - NRT (patch, gum, lozenge, inhaler and spray)
  - Bupropion
  - Varenicline
- Combination NRT = Varenicline
  - more effective than single types of NRT

Nortriptyline improves the chances of quitting, with little evidence of harmful events
Clonidine helped people to quit, but caused side effects

Other aids (not 1st or 2nd – FDA)
Cytisine has potential as a safe, effective and affordable treatment

Nicotine replacement therapy (NRT) can be used instead of tobacco to aid quitting
NRT delivers nicotine without the toxins from tobacco
NRT helps combat the symptoms of withdrawal
Nicotine dose from NRT is lower and administered more gradually than with smoking and this reduces the addictive potential
Most available OTC

Rapidly emerging and diversified
Deliver nicotine, flavorings, and other additives via an inhaled aerosol
Referred to as “e-cigs,” “e-hookahs,” “mods,” “vape pens,” “vapes,” and “tank systems”
Most commonly used tobacco product among youth

Major public health concern among youth and young adults
In 2014, young adults (18-24) surpassed adults
Young adults doubled use from 2013 to 2014
2014 - more than one-third had tried e-cigarettes
Most recent data show that the prevalence of past 30-day use of e-cigarettes was 13.6% among young adults (2014) and 16.0% among high school students (2015)
Data available show that the prevalence of past 30-day use of e-cigarettes is similar among middle school students (5.3%) and adults 25 years of age and older (5.7%)
**Electronic Nicotine Delivery Systems: Safety Considerations**

- Most contain nicotine
- Adolescent brain development
- The effects of nicotine exposure during youth and young adulthood
- Nicotine has potential to prime young brains for addiction
- Ingestion can cause acute toxicity and possible death
- The constituents of e-cigarette liquids can include solvents, flavorants, and toxicants
- Aerosol created by e-cigarettes can contain ingredients that are harmful and potentially harmful to the public’s health

**E-Cigarettes & Current Cessation Practices**

- 3 out of 4 adults who tried to quit in the past three months used multiple quit methods
- Most commonly used quit methods:
  - “cold turkey”
  - reducing the number of cigarettes they smoked
  - substituting some cigarettes with e-cigarettes
- E-cigarettes used by about one-third of smokers making quit attempts and more commonly used than the nicotine patch, gum, or other FDA-approved cessation aids

**Application: E-cigarettes ≠ Cessation: Provider Opportunity**

- Result - patients are using e-cigarettes when talking about cessation:
  - Provide a clear message about e-cigarettes, may be safer but not safe
  - Use this as opportunity to congratulate patient on working toward cessation
  - Ask about what they know about other quit medications (that are proven)
  - Ask about their plan and if they need support

**Current State – Regulations May 2016**

- Not allowing products to be sold to persons under the age of 18 years (both in person and online);
- Requiring age verification by photo ID;
- Not allowing the selling of covered tobacco products in vending machines (unless in an adult only facility); and
- Not allowing the distribution of free samples.
Hookah: The Facts

- Hookah use by youth and college students is increasing
  - 2015 – High school use ≈ 7% (almost = cigarettes use)
- Hookah typical use (teens and young adults):
  - hour-long session involves 200 puffs, while smoking an average cigarette involves 20 puffs
  - may absorb more of the toxic substances
  - amount of smoke inhaled 90,000 milliliters vs. 500–600 ml

Hookah Safety Considerations

- Cancer
  - Charcoal produces carbon monoxide, metals, and cancer-causing chemicals¹
  - Hookah tobacco and smoke contain several toxic agents known to cause lung, bladder, and oral cancers¹
  - Tobacco juices from hookahs irritate the mouth and increase the risk of developing oral cancers¹

- Other Health Effects of Hookah Smoke
  - Hookah tobacco and smoke contain many toxic agents that can cause clogged arteries and heart disease¹
  - Infections may be passed to other smokers by sharing a hookah²

References

Questions

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LUKOWSKIA@NJHEALTH.ORG
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Posttest Questions

1. What can providers do to help patients with smoking cessation? (Choose the best answer from a-d below.)
   a. Ask every patient about smoking use
   b. Advise every patient to quit smoking
   c. Refer patients to an appropriate program
   d. All of the above

2. The following gives patients the best chance of quitting tobacco:
   a. Counseling
   b. Medication
   c. Counseling and medication
   d. All of the above

3. The first-line medications approved by the FDA for smoking cessation are: (Choose all that apply)
   a. Bupropion
   b. Gum
   c. Lozenge
   d. Cytisine
   e. Varenicline
   f. Nortriptyline
   g. Clonidine
   h. Inhaler
   i. Patch
   j. E-Cigarettes
   k. Nasal Spray

4. We know that the following changes occur in the brain in response to chronic exposure to nicotine: (Choose the best answer from a-d below.)
   a. Tolerance
   b. Increased number of brain receptors sensitive to nicotine
   c. Psychological dependence
   d. All the above

5. What are the concept(s) needed to assess readiness for any behavior change:
   a. Importance and Motivation
   b. Importance and Confidence
   c. Motivation

6. Electronic Nicotine Delivery Systems (ENDS) are a proven cessation strategy to quit tobacco.
   a. True
   b. False