

COURSE TITLE: The Older Adult: The New Face of Addiction

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COURSE CREDITS: 2.5 CEUs

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COURSE DESCRIPTION: This course will examine the widespread problem of substance abuse and addiction among older adults. Elderly adults present with higher risks for cancer, infections and infectious diseases due to past and continued use of alcohol, tobacco and illicit drugs. The number of adults aged 50 and older with substance abuse disorders is expected to double by 2020 across gender, ethnicity and all age groups. Treatment admissions for substance abuse in this same group have more than doubled since 1992, with estimates continuing to grow as Baby Boomers age. A growing body of research supports that older adults currently engage in recreational drug use, and lifetime use of a variety of substances has increased significantly among Baby Boomers. Dependency on prescription drugs is widespread with a multi-factorial etiology. Normal physiologic changes in aging alter drug handling in the body, contributing to increased side effects, toxicities and overdose. Strategies for how to safely manage these patients in the dental setting will be discussed

LEARNING OBJECTIVES:

Upon completion of this continuing education course, the participant will be able to:

1. Identify substances that are commonly abused by elderly individuals.
2. Discuss normal physiologic changes of aging and the impact on drug pharmacokinetics.
3. Identify factors that contribute to recreational drug use in older adults.
4. Discuss chronic health conditions that contribute to risk for developing drug dependency.
5. Describe risks for cancer, infections and infectious disease associated with drug use among elderly patients.
6. Discuss assessment strategies used to determine suitability for elderly patients to receive dental treatment safely.
7. Identify strategies that can be used to reduce oral and systemic disease risks among elderly individuals with a history of substance abuse.

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Alcoholism Screening Test The CAGE Questionnaire

This is a VERY SIMPLE 4 question self-test. All you have to do is **answer yes or no** to the questions. It is important to note that when answering the questions you should take into account **your behavior and feelings over your whole lifetime** NOT just now.

Please answer ALL the questions:

1. Have you ever felt you needed to **C**ut down on your drinking?

Yes No

2. Have people **A**nnoyed you by criticizing your drinking?

Yes No

3. Have you ever felt **G**uilty about drinking?

Yes No

4. Have you ever felt you needed a drink first thing in the morning (**E**ye-opener) to steady your nerves or to get rid of a hangover?

Yes No

- **If you have answered yes to 1 question**, then the probability of you having an alcohol problem is about 25%.

- **If you have answered yes to 2 questions**, then the probability of you having an alcohol problem is about 50%.

- **If you have answered yes to 3 questions**, then the probability of you having an alcohol problem is about 75%.

- **If you have answered yes to 4 questions**, then the probability of you having an alcohol problem is about 95%.

Ewing JA. Detecting alcoholism. The CAGE questionnaire. JAMA. 1984 Oct 12;252(14):1905-7.

The Michigan Alcohol Screening Test-Geriatric Version

1. After drinking have you ever noticed an increase in your heart rate or beating in your chest?

Yes No

2. When talking with others do you ever underestimate how much you actually drink?

Yes No

3. Does alcohol make you sleepy so that you often fall asleep in your chair?

Yes No

4. After a few drinks, have you sometimes not eaten, or skipped a meal because you didn't feel hungry?

Yes No

5. Does having a few drinks help decrease your shakiness or tremors?

Yes No

6. Does alcohol sometimes make it hard for you to remember parts of the day or night?

Yes No

7. Do you have rules for yourself that you won't drink before a certain time of the day?

Yes No

8. Have you lost interest in hobbies or activities that you used to enjoy?

Yes No

9. When you wake up in the morning do you ever have trouble remembering parts of the night before?

Yes No

10. Does a drink help you sleep?

Yes No

11. Do you hide your alcohol bottles from family members?

Yes No

12. After a social gathering have you ever felt embarrassed because you drank too much?

Yes No

13. Have you ever been concerned that drinking might be harmful to your health?

Yes No

14. Do you like to end the evening with a night cap?

Yes No

15. Did you find that your drinking increased after someone close to you died?

Yes No

16. In general, would you prefer to have a few drinks at home rather than go out to social events?

Yes No

17. Are you drinking more now than in the past?

Yes No

18. Do you usually take a drink to relax or calm your nerves?

Yes No

19. Do you drink to take your mind off of your problems?

Yes No

20. Have you ever increased your drinking after experiencing a loss in your life?

Yes No

21. Do you sometimes drive when you have had too much to drink?

Yes No

22. Has a doctor or nurse ever said they were worried or concerned about your drinking?

Yes No

23. Have you ever made rules to manage your drinking?

Yes No

24. When you feel lonely does having a drink help?

Yes No

Analyzing the Michigan Alcohol Screening Test:

-More than **five positive answers** in this test is indicative of alcoholism.

-Also, **questions 8, 19, and 20 are each considered indicators of alcoholism** if answered positive.

Blow, F.C.; Brower, K.J.; Schulenberg, J.E.; Demo-Dananberg, L.M.; Young, J.P.; and Beresford, T.P. The Michigan Alcoholism Screening Test - Geriatric Version (MAST-G): A new elderly-specific screening instrument. *Alcoholism: Clinical and Experimental Research* . 1992a; 16:372

Luttrell, S; Watkin, V., Livingston, G., Walker, Z., D'ath, P., Patel, P., & Katona, C (1997). "Screening for Alcohol Misuse in Older People". *International Journal of Geriatric Psychiatry* 12 (12): 1151–1154.

CAGE Questionnaire Modified for Smoking Behavior*

1. Have you ever felt a need to **C**ut down or control your smoking, but had difficulty doing so?
2. Do you ever get **A**nnoyed or angry with people who criticize your smoking or tell you that you ought to quit smoking?
3. Have you ever felt **G**uilty about your smoking or about something you did while smoking?
4. Do you ever smoke within half an hour of waking up (**E**ye-opener)?

*--Two "yes" responses constitute a positive screening test.

Information from Lairson DR, Harrist R, Martin DW, Ramby R, Rustin TA, Swint JM, et al. Screening for patients with alcohol problems: severity of patients identified by the CAGE. *J Drug Educ* 1992;22:337-52.

Physical Symptom Screening Triggers for Alcoholism



Figure 4-2: Physical Symptom Screening Triggers

- Sleep complaints; observable changes in sleeping patterns; unusual fatigue, malaise, or daytime drowsiness; apparent sedation (e.g., a formerly punctual older adult begins oversleeping and is not ready when the senior center van arrives for pickup)
- Cognitive impairment, memory or concentration disturbances, disorientation or confusion (e.g., family members have difficulty following an older adult's conversation, the older adult is no longer able to participate in the weekly bridge game or track the plot on daily soap operas)
- Seizures, malnutrition, muscle wasting
- Liver function abnormalities
- Persistent irritability (without obvious cause) and altered mood, depression, or anxiety
- Unexplained complaints about chronic pain or other somatic complaints
- Incontinence, urinary retention, difficulty urinating
- Poor hygiene and self-neglect
- Unusual restlessness and agitation
- Complaints of blurred vision or dry mouth
- Unexplained nausea and vomiting or gastrointestinal distress
- Changes in eating habits
- Slurred speech
- Tremor, motor uncoordination, shuffling gait
- Frequent falls and unexplained bruising

From: Chapter 4 - Identification, Screening, and Assessment



Substance Abuse Among Older Adults.
Treatment Improvement Protocol (TIP) Series No. 26

If concerned about an older adult's drinking practices, try asking direct questions, such as:

- "Do you ever drink alcohol?"
- "How much do you drink when you do drink?"
- "Do you ever drink more than four drinks on one occasion?"
- "Do you ever drink and drive?"
- "Do you ever drink when you're lonely or upset?"
- "Does drinking help you feel better [or get to sleep more easily, etc.]? How do you feel the day after you have stopped drinking?"
- "Have you ever wondered whether your drinking interferes with your health or any other aspects of your life in any way?"
- "Where and with whom do you typically drink?" (Drinking at home alone signals at-risk or potentially abusive drinking.)
- "How do you typically feel just before your first drink on a drinking day?"
- "Typically, what is it that you expect when you think about having a drink?" (Note: Positive expectations or consequences of alcohol use in the presence of negative affect and inadequate coping skills have been associated with problem drinking.)

If less direct questioning seems appropriate, other useful questions for identifying problematic alcohol or prescription drug use include

- "Are you having any medical or health problems? What symptoms do you have? What do you think these mean? Have you felt this way before?"
- "Do you see a doctor or other health care provider regularly? When was the last time? Do you see more than one? Why? Have you switched doctors recently? Why?"
- "Have you experienced any negative or unwanted events that altered the way you lived (in the last 5 years)? Any since we last met? How much of an impact did the event have on the way you lived or felt? What feelings or beliefs did it cause or change? Do you believe that you are coping with the changes in a healthy fashion? How (specifically) do you manage (control) the circumstances (consequences) of the problem(s) or event(s)?"
- "What prescription drugs are you taking? Are you having any problems with them? May I see them?" (This question will need to be followed by an examination of the actual containers to ascertain the drug name, prescribed dose, expiration date, prescribing physician, and pharmacy that filled each prescription. Note whether there are any psychoactive medications. Ask the patient to bring the drugs in their original containers.)
- "Where do you get prescriptions filled? Do you go to more than one pharmacy? Do you receive and follow instructions from your doctor or pharmacist for taking the prescriptions? May I see them? Do you know whether any of these medicines can interact with alcohol or your other prescriptions to cause problems?"
- "Do you use any over-the-counter drugs (nonprescription medications)? If so, what, why, how much, how often, and how long have you been taking them?"

If there is suspicion that prescription drug abuse may be occurring and the older adult is defensive about his or her use, confused about various prescription drugs, seeing more than one doctor, or using more than one pharmacy, a clinician should probably be notified to probe further. Other warning signs that may emerge in conversation and should prompt a more in-depth screen or an assessment include

- Excessively worrying about whether prescription psychoactive drugs are "really working" to alleviate numerous physical complaints; complaints that the drug prescribed has lost its effectiveness over time (evidence of tolerance)
- Displaying detailed knowledge about a specific psychoactive drug and attaching great significance to its efficacy and personal impact

- Worrying about having enough pills or whether it is time to take them to the extent that other activities revolve around the dosage schedule
- Continuing to use and to request refills when the physical or psychological condition for which the drug was originally prescribed has or should have improved (e.g., prescription of sleeping pills after the death of a loved one); resisting cessation or decreasing doses of a prescribed psychoactive drug
- Complaining about doctors who refuse to write prescriptions for preferred drugs, who taper dosages, or who don't take symptoms seriously
- Self-medicating by increasing doses of prescribed psychoactive drugs that aren't "helping anymore" or supplementing prescribed drugs with over-the-counter medications of a similar type
- Rating social events by the amount of alcohol dispensed
- Eating only at restaurants that serve alcoholic beverages (and wanting to know whether they do in advance)
- Withdrawing from family, friends, and neighbors
- Withdrawing from normal and life-long social practices
- Cigarette smoking
- Involvement in minor traffic accidents (police do not typically suspect older adults of alcohol abuse and may not subject them to Breathalyzer_ and other tests for sobriety)
- Sleeping during the day
- Bruises, burns, fractures, or other trauma, particularly if the individual does not remember how and when they were acquired
- Drinking before going to a social event to "get started"; gulping drinks, guarding the supply of alcoholic beverages, or insisting on mixing own drinks
- Changes in personal grooming and hygiene
- Expulsion from housing
- Empty liquor, wine, or beer bottles or cans in the garbage or concealed under the bed, in the closet, or in other locations.

Source: Substance Abuse Among Older Adults. Treatment Improvement Protocol (TIP) Series, No. 26. Center for Substance Abuse Treatment. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 1998. Chapter 4: Identification, Screening and Assessment. Available at: <http://www.ncbi.nlm.nih.gov/books/NBK64420/>

Dental Treatment Considerations with Alcoholism

- *Poor oral hygiene* from neglect
- *Bilateral enlarged parotid glands*
- *Liver failure* = causes increased risk for *bleeding*, including gingival bleeding
- *Ascites* = abdomen filled with fluid
- *Difficulty metabolizing drugs*, including local anesthetics

Oral Complications of Alcoholism

- Glossitis
- Loss of tongue papillae
- Angular cheilitis
- Fungal infections
- Bleeding (from liver damage)
- Oral cancer (squamous cell)
- Leukoplakia and ulceration of lateral borders of the tongue
 - examine tongue carefully for precancerous lesions

Desired Clinical Effects of Opioid Drugs

- Potent analgesia
- Sedation and euphoria
- Cough suppression

- GI effects
 - Increase smooth muscle tone
 - Decrease propulsion and motility
 - Used for *treatment of diarrhea*

Adverse Reactions of Opioid Drugs

- Physical addiction
- Respiratory depression (dose-related)
 - Decreases brainstem sensitivity to carbon dioxide
- Nausea and vomiting (emesis)
 - Directly stimulate the chemoreceptor trigger zone in medulla
 - Regular, repeated dosing prevents vomiting by depressing vomiting center (floor of fourth ventricle)
- Constipation
- Miosis (pinpoint pupils)
 - diagnostic of addiction
- Urinary retention
 - stimulate ADH; increase smooth muscle tone
 - watch if prostate problems
- CNS effects
 - Occasionally, stimulatory effects: anxiety, restlessness, nervousness, dysphoria
- Cardiovascular
 - Depress vasomotor center and stimulate vagus nerve = at high doses, postural hypotension, bradycardia, syncope
- Biliary tract constriction
 - Biliary colic (watch in patients with gallstones)
- Histamine release
 - Itching and urticaria (at injection site and at remote sites)
- Physical dependency/addiction
- Tolerance
 - *Tolerance readily develops = cross-tolerance*
 - *Cross-addiction can be produced*
- *Pharmacology effect may also be an adverse reaction*
 - may like sedation to help sleep with pain
- Severity of side effects is proportional to efficacy
- Overdose
 - Major symptom: respiratory depression
 - Pinpoint pupils
 - Coma
 - *Treated with antagonist = naloxone, naltrexone*
- Withdrawal
 - Occurs after abrupt discontinuance of drug
 - Yawning, lacrimation, perspiration, rhinorrhea, gooseflesh and piloerection (“cold turkey”), irritability, nausea, vomiting, tachycardia, tremors, chills

Dental Implications of Opiate Addiction

- Because addicts are tolerant to opioids, *they may require higher levels of pain meds to get the desired effect*
- Watch for *drug-seeking behaviors*: patients asking for very potent pain meds following dental procedures = a sign of addiction (use NSAIDS instead)
- IV injection of opioid drugs often results in:
 - Hepatitis B

- HIV infection
- Damaged heart valves (*IV drug users require antibiotic premedication prior to receiving any dental treatment*)

Lifelong Habits

- **Risks:**
 - Oropharyngeal and other cancers
 - Oral/Systemic infections
 - Infectious diseases
 - Substance abuse/addiction
- **Contributing Factors:**
 - Alcohol use
 - Smoking/tobacco use
 - Recreational drug use
 - Unprotected sexual activity
 - Cognitive impairment
 - Limited health education about and knowledge of health consequences
 - Failure of healthcare professionals to assess risk behaviors
- **Preventive Strategies:**
 - Take and record vital signs at every visit
 - Discuss adverse health consequences associated with habits
 - Obtain liver function test if Hx of chronic alcohol abuse
 - Obtain cardiac testing if suspected or Hx of IV drug abuse
 - Obtain testing for infectious diseases: HIV, hepatitis, STDs
 - Defer treatment if patient is under the influence
 - Avoid sedation, anti-anxiety medications and opiates with alcohol
 - Avoid vasoconstrictors if under influence of cocaine/stimulants
 - Provide tobacco cessation education: Ask, Advise, Refer
 - Set quit date
 - Recommend/prescribe medications for cessation therapy
 - Provide information about help-lines
 - Conduct regular oral cancer examinations
 - Teach patients to conduct oral cancer self-examinations
 - Educate patients about oral and systemic complications of drug use
 - Refer patients with drug addiction to appropriate healthcare professionals for evaluation and treatment
 - Encourage safe-sex practices in sexually active patients
 - Encourage patients to engage in outside activities to improve quality of life and reduce substance abuse and other risk behaviors

Considerations for Dental Professionals

- Medical history assessment
- Pharmacologic history assessment
- Assessment of substance abuse
- Assessment of oral cancer risks
- Tobacco and alcohol cessation education
- Avoidance of alcohol-containing mouthrinses in those with alcoholism or in recovery
- Caution with prescribing
- Management of oral disease risks
- Preventing falls

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Preventing Substance Abuse

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