Substance Use Disorders In the Geriatric Population

Dr. Michelle Davids DO
Psychiatrist, Broadlawns Medical Center
ABPN Board Certified in Psychiatry and Addiction Psychiatry

Financial Disclosures

- I have no financial disclosures or conflicts of interest

Objectives

- Define Substance Use Disorders
- Understand ways in which to screen substances use disorder in the geriatric population
- Common substances of abuse or misuse
- Treatment of substance use disorders in the geriatric population

What is a Substance Use Disorder?

- Per the DSM-5:
- Substance is often taken in larger amounts or over a longer period than intended
- Persistent desire or unsuccessful efforts to cut down or control use
- A great deal of time is spent in activities necessary to obtain the substance or recover from its effects

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

DSM-5 Continued

- Craving or a strong desire or urge to use
- Recurrent use resulting in a failure to fulfill major obligations at work, home, or school
- Continued use despite persistent or recurrent social or interpersonal problems caused or exacerbated by effects of use
- Important social, occupational, or recreational activities given up or reduced due to use

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

DSM-5 Continued

- Recurrent use in situations in which it is physically hazardous
- Use is continued despite knowledge of having ongoing or recurrent physical or psychological problems that are likely caused by or worsened by the substance use

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

DSM-5 Continued

- Tolerance: A need to increased amounts of alcohol needed to achieve intoxication or desired effect OR a diminished effect with continued use of the same amount of a substance
- Withdrawal: varies based on substance. For alcohol: autonomic changes, tremor, insomnia, GI upset, hallucinations, agitation, anxiety, possible seizures

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

DSM-5 Continued

- Mild: 2-3 symptoms
- Moderate: 4-5 symptoms
- Severe: 6 or more symptoms

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

Substance Use Disorders in the Geriatric Population are often overlooked

- Patients are stereotyped as young
- Providers may be embarrassed to ask
- Patients may fear judgment and under report their use

Why should providers be concerned?

- Ongoing, undiagnosed substance use further complicates co-occurring medical problems
- Patients are at higher risk for falls and delirium
- Substance use worsens co-occuring psychiatric diagnosis and may increase the risk of suicide

Substance Use Breakdown

- Study by Dombrowski, Norrell and Holroyd
- Out of all geriatric psychiatric patients with SUD admitted between 1999-2009:
  - 73.3% alcohol related disorders
  - 11% sedative-hypnotic use disorders
  - 2.9% opioid use disorders
  - 1% cannabis use disorders

Dombrowski D, Norrell N, Holdroyd S. Substance use disorders in elderly admissions to an acadmic psychiatric inpatient service over a 10-year period. Journal of Addiction. Volume 2016, Article ID 4973018

Understanding Alcohol Use

-Equivalent of 0.5 oz of alcohol is considered one drink
- 12 oz of beer
- 5 oz of wine
- 1.5 oz of distilled spirits

-National Institute on Alcohol Abuse and Alcoholism in the elderly recommends the following for healthy people who do NOT take medication
- One drink a day on average for an elderly man.
- No more than 2 drinks at any one time
- People taking medication should further limit use or should not drink at all

Source: National Institute of Alcohol Abuse and Alcoholism, www.niaaa.nih.gov and SAHMSA TIP 26

Alcohol Use Continued

- **Early onset drinkers:**
- 2/3 of older patients
- Psychiatric comorbidities are common
- Severe medical complications secondary to heavy use
- **Late onset drinkers:**
- Often triggered by stressful life event
- Milder cases with fewer medical problems
- More amenable to treatment

Increased Effects of Alcohol in the Geriatric Population

- Increased Blood Alcohol Concentration because:
- Decreased lean body mass
- Decreased total body water
- Decreased gastric alcohol dehydrogenase
- Alcohol and drugs more intoxicating in geriatric patients

Social Factors Contribute to Drinking

- Play an important role in the initiation of AUD
- Difficult experience filled with:
- Loss
- Physical limitation
- Isolation
- Loss of income
- Loss of occupation

Medical Complications of Alcohol in Geriatric Patients

- Cirrhosis: 60% 1 year death rate > age 60 vs 7% in younger population
- Heart problems (coronary artery disease, and atrial fibrillation)
- Increase in cancers
- Thrombocytopenia
- Neurologic complications (stroke, dementia, Wernicke's encephalopathy)

Assessment

- Skillful Interviewing, willing to ask difficult questions
- Psychiatric evaluation
- Neurological evaluation
- Social Evaluation
- Evaluation of motivational stage of change
- Functional Evaluation

Screening Tools

- Questions about quantity and frequency
  - How many days does the individual drink?
  - Maximum number of drinks on any given occasion
- Instruments:
- CAGE
- AUDIT
- MAST-G

Protective Factors

- Married
- Supportive, safe living environment
- Gerontologist trained in addiction supervising diverse medications
- Adequate income to meet needs (medical expenses
- likely to far exceed those of younger adult)
- Annual substance abuse screening including psycho-education. (SAMHSA recommends for 60+)
- Wellness factors including eating, sleeping, exercise, spirituality.
- Linkage to age-specific groups and activities
- Access to transportation

Source: SAMHSA 2015

Treatment and Intervention

- Brief Advice
- Brief Interventions
- Time limited (20 minutes in 1-3 brief sessions)
- Facilitates treatment entry and change in behavior
- Referral Management

Interventions in Geriatric Patients

- Avoid confrontational approaches
- Communicate with empathy in a straightforward simple manner
- Pay attention to what is important to patients and motivate them (Motivational Interviewing)
- Involve family members or other social support whenever possible

Detoxification in Elderly Patients

- Confusion (rather than tremor) early withdrawal sign
- Duration of withdrawal/hallucinosis increased
- Rule out Delirium Tremens in confused patients
- Replace electrolytes in nutrients
- Use short acting benzodiazepines (lorazepam, oxazepam)
- Symptomatology monitored with Clinical Institute Withdrawal Assessment for Alcohol (CIWA)
- In the emergency setting, it is imperative to give thiamine, folate and mutivitamins early.

Source: LeRoux C, Tang T, Drexler K. Alcohol and Opioid Use Disorder in Older Adults: Neglected and Treatable Illnesses. Curr Psychiatry Rep(2016) 18:87

A Note About Wernicke's Encephalopathy

- Clinically the classic triad is: ocular findings, cerebellar dysfunction and confusion
- Thiamine needs to be given BEFORE glucose to avoid Wernicke's encephalopathy because glucose depletes thiamine in the body.
- If Wernicke's is suspected, immediate, high dose thiamine is required, some suggest 200mgTID, IV or IM for 3-5 days
- Source: Gavin et al. EFNS guidelines for diagnosis, therapy, and prevention of Wernicke encephalopathy. Eur J Neurol. 2010;17(12):1408-18.

Treatment Strategies

- Age specific psychosocial approaches are indicated for persons that are not affected with dementia
- Psychotherapy
- Medication management
- Self help groups
- Crisis Management may be needed

Pharmacology

- 3 FDA approved medications for AUD: naltrexone, acamprosate, disulfiram
- Disulfiram is generally not recommended in older adults

Sedative-Hypnotic Use

- 20% of patients in intermediate care facilities received benzodiazepines (87% as a standing order)
- 41% of psychotropic drug orders in nursing homes are antianxiety agents (mainly benzodiazepines)

- Source: Beers M, Avorn J, Soumerai S.B., Everitt DE, Shermann DS, Salem S. Psychoactive medication use in intermediate - care facility residents. JAMA 1988; 260: 3016-20.
- Beardsley RS, Larson DB, Burns BJ, Thompson JW, Kamerow DB. Prescribing of psychotropics in elderly nursing home patients. J Am Geriatr Society 1989; 327-30.

Why are sedatives in the elderly concerning?

- Absorption: slower (peak levels 45min-3h)
- Protein binding: elderly patients with low albumin have increased sedation
- Volume of distribution :increased due to increase proportion of body fat to lean body
- Metabolism: slower hepatic metabolism in the elderly; several benzodiazepines have complicated liver metabolism

Why are sedatives concerning?

- Sedation
- Cerebellar toxicity
- Cognitive impairment
- Psychomotor impairment
- The longer a person is prescribed these medications, the more likely they are to develop misuse and abuse

How do discontinue Benzodiazapines

- Gradual taper of benzodiazepines
- Elderly patients report significantly less withdrawal symptoms
- Slower clearance of medication attenuates withdrawal symptoms
- Diminished neuronal capacity causes less rebound activity

Guidelines for Prescribing Benzodiazpines

- Prescribe only small dosages
- Prescribe short half-life benzodiazepines without active metabolite
- Avoid prescribing benzodiazepines to confused or demented patients
- Prescribe benzodiazepines for short periods of time
- Be aware of potential interaction between CNS depressant substances

- Salzman C et al. Clinical Geriatric Psychopharmacology, 3rd Edition,1998, William & Wilkins 343-355.

Prescription drug use

- Elderly patients constitute 13% of population
- They account for 30% of prescriptions, mainly benzodiazepines and prescription opiods
- One forth of patients in intermediate care facilities are on benzodiazepines (Beers, Avorn et al 1995

Opioids

Opiates: Derived from Opium

Opioids: Initially referred to synthetics, now generally refers to synthetic, natural and semi-synthetic

Opioid Use, Most commonly abused opioid medications

- Oxycodone (OxyContin)
- Oxycodone/acetaminophen (Percocet)
- Hydrocodone (Vicodin)

(Prescription Drugs April 13, 2010)

Signs of Opioid Misuse

- Confusion
- Depression
- Delirium
- Insomnia
- Parkinson's-like symptoms
- Weakness or lethargy
- Loss of appetite
- Falls
- Changes in speech; slurring

Signs of Opioid Misuse Continued

- Loss of motivation
- Memory loss
- Family or marital discord
- New difficulty with activities of daily living (ADL)
- Difficulty sleeping
- Drug seeking behavior
- Doctor shopping

******Always Check the Physician Monitoring Program (PMP) Before Prescribing! ******

Medication Assisted Treatment

- Naltrexone: Oral and Long acting injectable
  - Mu-receptor Antagonist
  - Although oral Naltrexone is FDA approved for opioid use disorder, its efficacy is questionable
  - IM Naltrexone has not been studied in older adults

Medication Assisted Treatment

- Buprenorphine: is a partial mu-receptor agonist with a very high affinity for the mu-receptor
  - Comes in several formulations
  - Must be prescribed by a provider with a waiver
  - Must be prescribed when patient is exhibiting symptoms of withdrawal

Medication Assisted Treatment

- Methadone: A full mu-receptor agonist
  - May only be dispensed from federally regulated opioid treatment programs "methadone clinics"
  - Monitored required for sedation and respiratory depression
  - May cause CNS depression if used with alcohol, sedatives, hypnotics, or opioids.

Naloxone

- All patients receiving MAT should have an emergency naloxone kid prescribed
- Helpful to engage the patient's family on overdose risk and availability of Naloxone

Tobacco Use

- Tobacco use is the leading cause of cancer and death from cancer.
- There is no safe level of tobacco use.
- People who quit smoking, regardless of their age, have substantial gains in life expectancy compared with those who continue to smoke.
- The NCI quitline, 1-877-44U-QUIT (1-877-448-7848), is available Monday through Friday, 9:00 a.m. to 9:00 p.m. ET.

Source: NIH National Cancer Institute: https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco Accessed on 10/2/17

Thank you

- Questions?

References

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.
- Dombrowski D, Norrell N, Holdroyd S. *Substance use disorders in elderly admissions to an acadmic psychiatric inpatient service over a 10-year period.* Journal of Addiction. Volume 2016, Article ID 4973018
- National Institute of Alcohol Abuse and Alcoholism, https://niaaa.nih.gov/alcohol-health/special-populations-co-occurring-disorders/older-adults accessed on 9/25/17
- SAHMSA Tip 26: http://adaiclearinghouse.org/downloads/TIP-26-Substance-Abuse-Among-Older-Adults-67.pdf
- Source: Beers M, Avorn J, Soumerai S.B., Everitt DE, Shermann DS, Salem S. Psychoactive medication use in intermediate - care facility residents. JAMA 1988; 260: 3016-20.
- Beardsley RS, Larson DB, Burns BJ, Thompson JW, Kamerow DB. Prescribing of psychotropics in elderly nursing home patients. J Am Geriatr Society 1989; 327-30.

References

- Salzman C et al. Clinical Geriatric Psychopharmacology, 3rd Edition,1998, William & Wilkins 343-355.
- LeRoux C, Tang T, Drexler K. Alcohol and Opioid Use Disorder in Older Adults: Neglected and Treatable Illnesses. Curr Psychiatry Rep(2016) 18:87
- Gavin et al. EFNS guidelines for diagnosis, therapy, and prevention of Wernicke encephalopathy. Eur J Neurol. 2010;17(12):1408-18.
- NIH National Cancer Institute: https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco. Accessed on 10/2/17