Alcohol and Sedative-Hypnotic Addiction in the Elderly

David W. Oslin, MD Associate Professor University of Pennsylvania, School of Medicine Philadelphia VAMC

Self-Assessment Question 1

Which of the following is true about alcoholism in the elderly?

- A. It is more frequently seen in community-dwelling elderly than in primary care setting populations.
- B. It is less prevalent in the elderly than cocaine or hallucinogen addictions.
- C. Heavy drinking is associated with suicide risk to the same degree or greater than is depression.
- D. All of the above
- E. None of the above

Self-Assessment Question 2 Which of the following contains the greatest amount of ethanol?

- A. 12 oz of beer
- B. 10 oz of wine
- C. 4 oz of sherry
- D. 1.5 oz of vodka
- E. Each contains an equal amount of alcohol

Self-Assessment Question 3 Which of the following is a benefit of moderate

alcohol use?

- A. Reduced cardiovascular risk
- B. Decreased risk of fractures
- C. Increased risk of suicide
- D. Improved cognitive functioning in men
- E. None of the above

Self-Assessment Question 4

Which of the following is a treatment approach for alcohol addiction in the elderly?

- A. Psychoeducation
- B. 12-step groups
- C. Telephone disease management
- D. Pharmacotherapy
- E. All of the above

Self-Assessment Question 5

Which of the following is not true of pharmacotherapy of alcohol addiction in the elderly?

- A. Naltrexone is considered unsafe and ineffective as an agent in treating elderly patients.
- B. Naltrexone is an opioid receptor antagonist.
- C. The presence of a positive family history for alcohol problems predicts better outcome with naltrexone treatment of older adults.
- D. Antipsychotic treatment has not been shown effective in reducing alcohol addiction in the elderly.
- E. Chronic benzodiazepine treatment has not been shown effective in reducing alcohol addiction in the elderly.

Major Points

- At-risk drinking is common and under-recognized in the elderly. Chronic benzodiazepine use (>3 months of daily use) is estimated at 12% in elderly primary care patients.
- Alcohol consumption above 1 drinks per day is considered excessive in elderly.
- Treatment of alcohol or sedative hypnotic addiction in the elderly must address age-specific needs and presence of depression.
- Both psychosocial and pharmacologic interventions are available.

Major Points

- At-risk drinking is common and under-recognized in the elderly. Chronic benzodiazepine use (>3 months of daily use) is estimated at 12% in the elderly.
- Alcohol consumption above 7 drinks per week is considered excessive in elderly.
- Treatment of alcohol or sedative hypnotic addiction in the elderly must address age-specific needs and presence of depression.
- Both psychosocial and pharmacologic interventions are available.

Self-Assessment Question 1

Which of the following is true about alcoholism in the elderly?

- A. It is more frequently seen in community-dwelling elderly than in primary care setting populations.
- B. It is less prevalent in the elderly than cocaine or hallucinogen addictions.
- C. Heavy drinking is associated with suicide risk to the same degree or greater than is depression.
- D. All of the above
- E. None of the above

Self-Assessment Question 2 Which of the following contains the greatest amount of ethanol?

- A. 12 oz of beer
- B. 10 oz of wine
- C. 4 oz of sherry
- D. 1.5 oz of vodka
- E. Each contains an equal amount of alcohol

Self-Assessment Question 3 Which of the following is a benefit of moderate alcohol use?

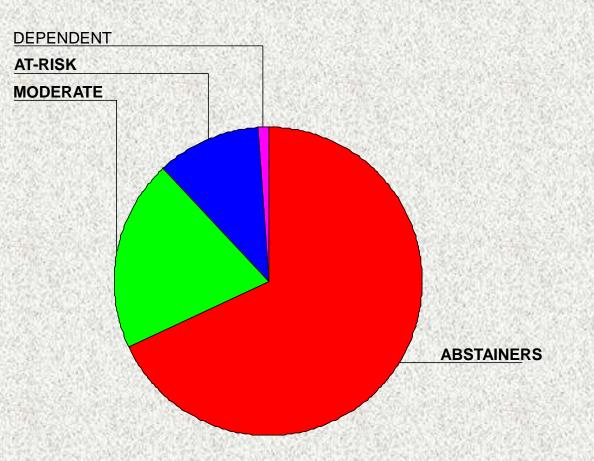
- A. Reduced cardiovascular risk
- B. Decreased risk of fractures
- C. Increased risk of suicide
- D. Improved cognitive functioning in men
- E. None of the above

Self-Assessment Question 4

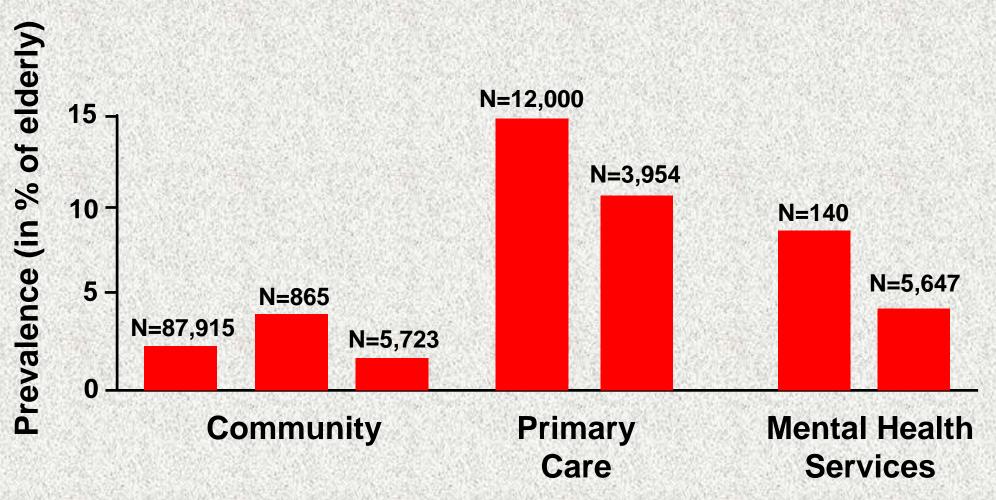
Which of the following is a treatment approach for alcohol addiction in the elderly?

- A. Psychoeducation
- B. 12-step groups
- C. Telephone disease management
- D. Pharmacotherapy
- E. All of the above

What is the Extent of this Problem In Community-Dwelling Elderly?



Prevalence of "Alcoholism"



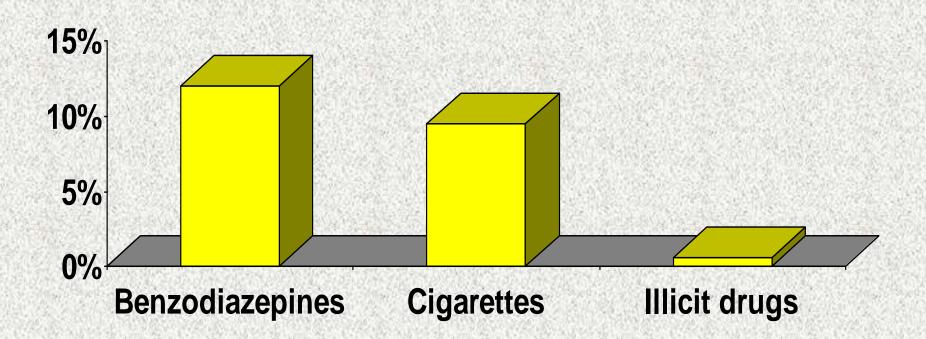
Liberto JG, Oslin DW, Ruskin PE. Alcoholism in older persons: a review of the literature. Hosp Comm Psychiatry. 1992;43(10):975-984 (Review)

Baby Boomers Aging

| Age Range | 1991 – 1992 | 2001 – 2002 | Percent Increase |
|-----------|-------------|-------------|---------------------|
| 18-29 | 6.5% | 7.0% | 8% |
| 30-44 | 3.0% | 6.0% | 100% |
| 45–64 | 1.4% | 3.5% | 150% |
| 65+ | 0.3% | 1.2% | 300% |

Grant, et. al. Drug and Alcohol Dependence 2004

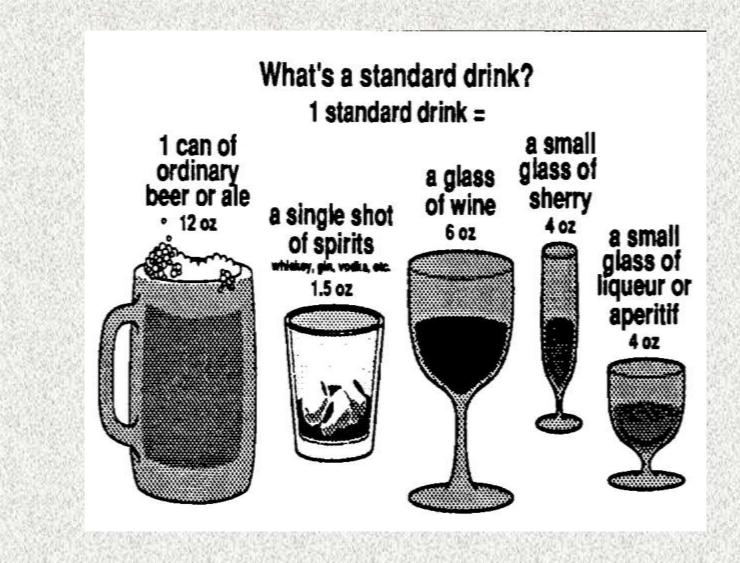
Prevalence of Addiction in Late Life



How Much Alcohol is Too Much in Late Life?

- Drinking no more than an average of 1 drinks per day
- No binge drinking (4 + drinks in one day) episodes
- No drinking while taking certain medications or in patients with certain illnesses

What is a Standard Drink?



Alcohol: Risks vs. Benefits

| | Risks | Benefits |
|------------|--|--|
| Abstinence | *Cardiovascular | *Social |
| Moderate | Medication interactions | Social Cardiovascular |
| At-Risk | Psychological distress Suicide risk Fractures Adherence | *Social |
| Abuse | ♦Social♦Legal | *None |
| Dependence | All aspects of health / functioning | *None |

<u>Suicide</u>

- Highest rates of suicide occur in late life among men.
- Depression causes a 5.8 fold increase in risk of suicide compared to death from other causes
- Heavy drinking (3+ drinks/day) causes a 8.9 fold increase in risk of suicide compared to death from other causes
- At-Risk drinking (1-2 drinks/day) causes a 10.6 fold increase in risk of suicide compared to death from other causes

Past History of Heavy drinking/alcoholism

- * Many older adults especially those of the "Woodstock" generation will enter late life with a past history of alcohol or drug abuse
- 5 fold increase in late life mental disorders (depression and dementia)
- Treatment of late life depression (3-5 yr outcomes)
 - *88% of those without an alcohol history significantly improved
 - 57% of those with an alcohol history significantly improved

What Harm is a Few Drinks?

- Epidemiologic data suggests moderate drinking can be beneficial for
 - Heart disease
 - Possibly preventing neurocognitive disorders
 - Social aspects
- Potential confounds
 - Sample selection (fit elders with healthy lifestyles)
 Surrogate for something else (nutrition, exercise)
 No clinical trials data

Examples of Screening Instruments

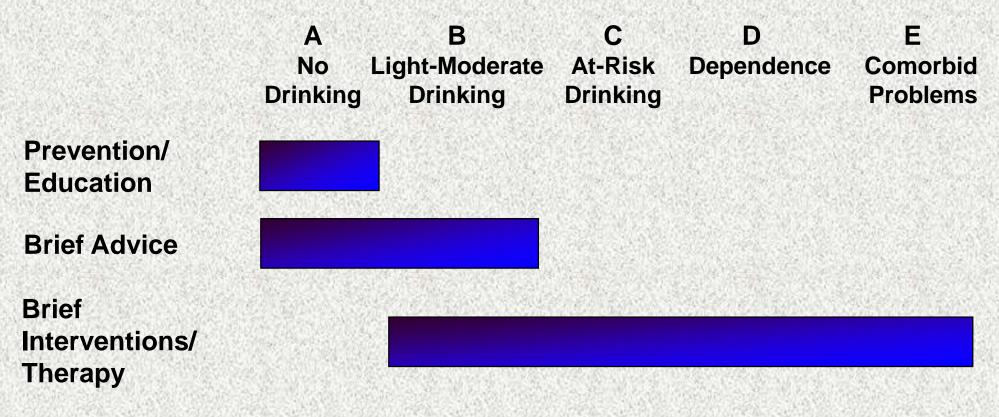
Michigan Alcoholism Screening Test-Geriatric Version (MAST-G)

Health Screening Survey (including other health behaviors, e.g. nutrition, exercise, smoking, depressed feelings)

CAGE (<u>Cut down</u>, <u>Annoyed by others</u>, feel <u>Guilty</u>, need '<u>Eye-opener</u>')

AUDIT-C – 3 questions related to quantity and frequency

The Spectrum of Interventions



Formal Specialized Treatments



Barriers to Recognition and Treatment

Patient factors
Health professional factors
Healthcare system factors
Society factors
Treatment factors

Brief Intervention

* Definition

Time-limited (5 – 20 minutes in up to 5 brief sessions) and targets a specific health behavior

*Goals

Facilitate treatment entry

Reduce alcohol consumption

Key Components of Alcohol Brief Interventions

- Screening
- *Feedback
- Motivation to change
- Strategies for change
- Behavioral contract
- Follow-up

Who Can Conduct Brief Alcohol Interventions?

- Physicians
- Nurses/Nurse Practitioners
- Physician Assistants
- **Social Workers**
- Psychologists
- Health Educators
- ***Home Health Workers**
- ***Other Allied Health Providers**

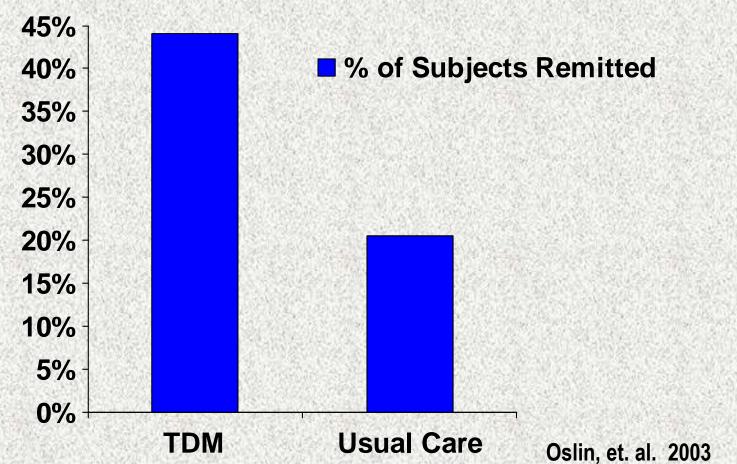
<u>Confrontation vs. Motivational</u> Interviewing or Brief Interventions

| Confrontational Approach | Motivational Interviewing Approach / Brief Intervention |
|---|--|
| •Accept self as alcoholic | •De-emphasis on labels |
| •Personal pathology - reduces personal choice, judgment, control | •Emphasis on personal choice and responsibility |
| •Present evidence of problems | •Elicit concern/evidence |
| •Resistance = "denial" | •Resistance influenced/induced by interviewer |
| •Meet resistance with argumentation and correction | •Meet Resistance with Reflection |
| •Goals and strategies prescribed | •Goals and Strategies negotiated - involvement and acceptance of goals are vital |

Empirical Support for Brief Interventions for Older adults

- One study (Project GOAL) focused on physician advice for older adult at-risk drinkers: Physician advice led to reduced consumption at 12 months
- Health Profile Project: Findings indicate that an elder-specific motivational enhancement session reduced at-risk drinking at 12 months

Improvements with TDM



31

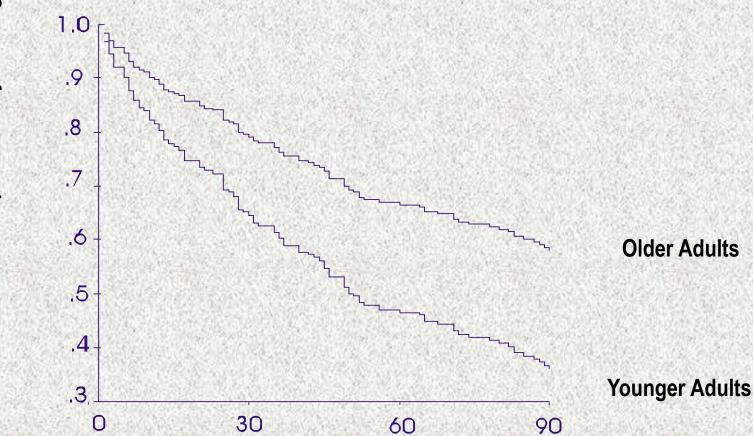
Specialty Addiction Services

- Compliance with treatment is greater in older adults compared to younger adults particularly if care is individualized
- Age specific programming (groups, individual treatment, etc) appears to have an impact on outcome in 1 randomized study and several observational studies
- Cognitive Behavioral Therapy has efficacy over vocational and relationship enhancement therapy

<u>Use of 12 Step Group Oriented</u> <u>Treatment by Elderly vs Middle-Aged</u> <u>Adults after Rehab Program</u>

| | Elderly Subjects | Middle Aged | Р |
|-----------|---------------------|----------------|-------|
| Attend AA | 81.2% | 91.1% | 0.372 |
| Have a | 54.6% | 64.7% | 0.076 |
| sponsor | | | |
| Attend | 31.2% | 56.4% | 0.039 |
| Aftercare | | | |
| Abstinent | 84.0% | 85.1% | 0.133 |

Relapse Reduction in Elderly vs Younger Adults Treated with Naltrexone



Cumulative rates of relapse to heavy drinking

Oslin et al. 2003

Pharmacotherapy – a real option for treatment

- Alcohol dependence
 - Naltrexone
 - Acamprosate
 - Antabuse
 - Unapproved medications with very limited evidence to support use (SSRIs, mood stabilizers, antipsychotics)
- Opioids
 - Buprenorphine
 - Methadone
- Cocaine (no specific pharmacotherapy available)
- Nicotine
 - Nicotine replacement
 - Bupropion

Naltrexone

- FDA approved for the treatment of alcohol dependence
- Functions as an opioid receptor antagonist (mu >> delta or kappa)
- Development was an example of bench to bedside translational science (opioid effects on reward pathways)
- Naltrexone is safe for older adults and may work best is those with a positive family history of problems.

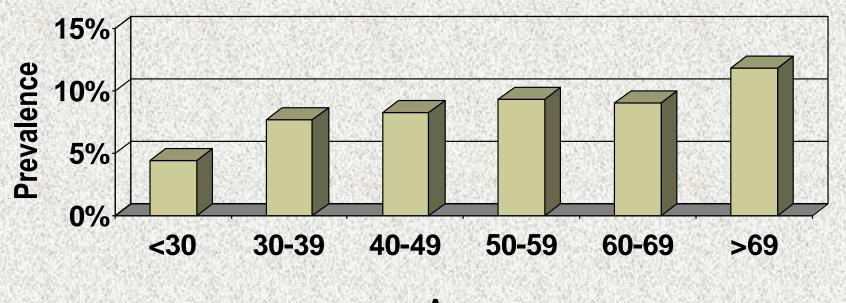
Acamprosate

- FDA approved for alcohol dependence based on experience mostly from Europe
- Primary action unknown
- Promotes abstinence
- No studies conducted specifically in older adults but there is no reason to believe there are age specific problems with use.

<u>Comorbidity of Alcohol Use with</u> <u>other Mental Health Problems</u>

- Concurrent alcohol use and depression may be more common in late life than in younger adults
- Concurrent moderate or at-risk use may be a much greater problem than dependence
- Fragmented care is particularly problematic in late life

Prevalence of Major Depression Among Alcohol Dependent Subjects



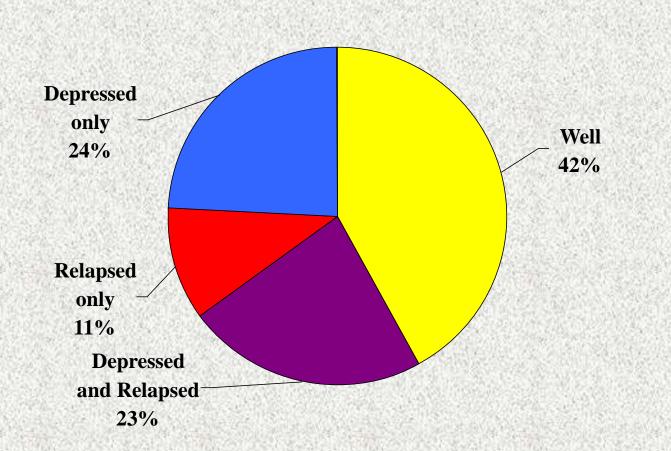
Age

Blow et al 1992 ₃₀

Concurrent Treatment of Depression Complicated by Alcohol Dependence

- Current depressive syndrome
- Current alcohol dependence
- * Age 55 and over
- * 10 sessions of compliance enhancement therapy
- 1/2 of subjects are randomly assigned to receive naltrexone 50 mg
- **All subjects receive sertraline 100 mg**
- Outcomes at 3 months

Treating alcoholism is necessary but not sufficient



Relationship between drinking during the trial and depression <u>outcomes</u>

No Relapse Relapsed p value

| Completed | 83.7% | 84.0% | 0.997 |
|------------------------|-------------|-----------------|-------|
| Depression Remitted | 68.0% | 32.0% | 0.012 |
| HDRS – end of trial | 8.8% (6.7%) | 12.7% (8.2%) | 0.013 |

Relapse is defined as drinking 5 or more standard drinks in a day

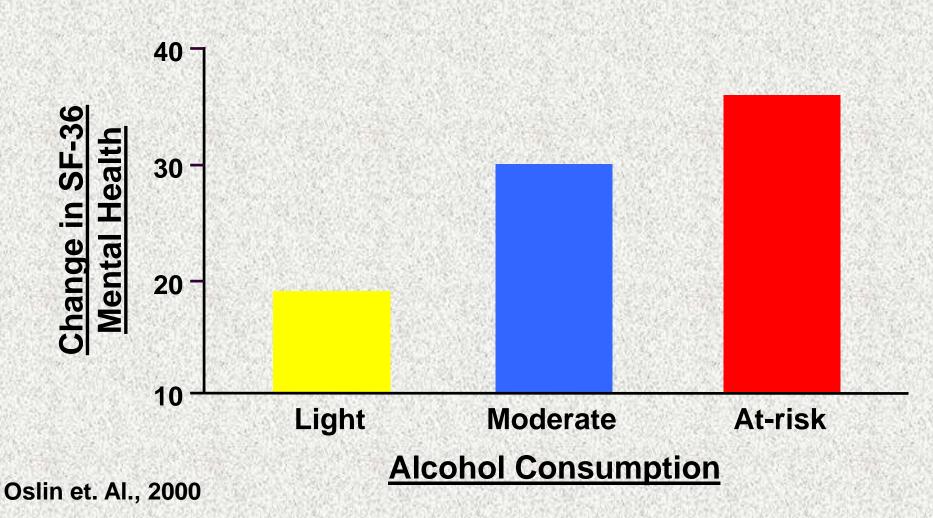
What about moderate or abusive drinking (non-dependent drinking)

- Most common pattern of drinking among those with depression
- May be beneficial for heart disease
- Safety concerns may be less with newer medications (SSRIs) than older meds (TCAs)

Concurrent Reduction of Moderate Drinking and Treatment Depression

- 2666 patients received inpatient treatment for major depression
- Assessed at entry into hospital and 3 months post discharge
- Alcohol used defined as
 - Light (0-1 drink per week, n=2088)
 - Moderate (2-6 drinks per week, n=32)
 - At-risk (7 or more drinks per week, n=84)

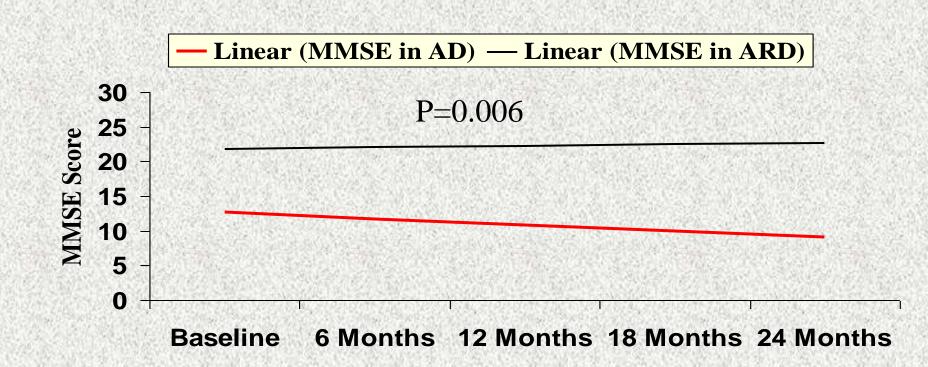
Improvement in Mental Health



Alcohol Related Dementia

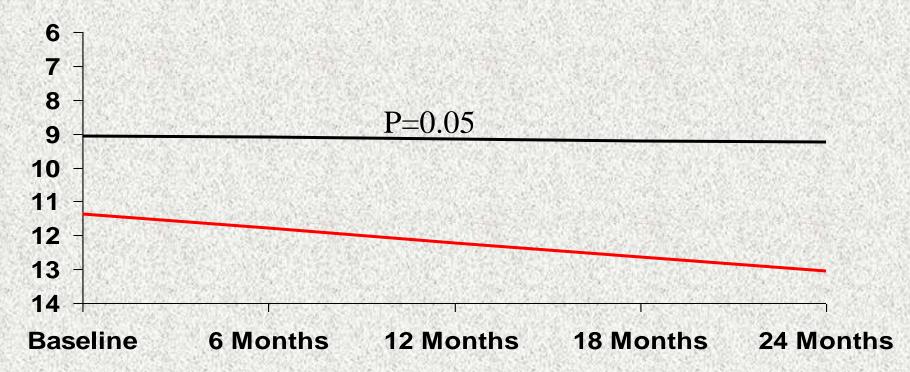
- Longitudinal study of nursing home residents with Alcohol related dementia (n=16) or Alzheimer's Disease (n=26).
- Subjects identified from consecutive nursing home admissions (n=212) evaluated for cognition, disability, addiction history
- **Subjects followed every 6 months for 2 years.**

Disability and cognition



Disability and cognition





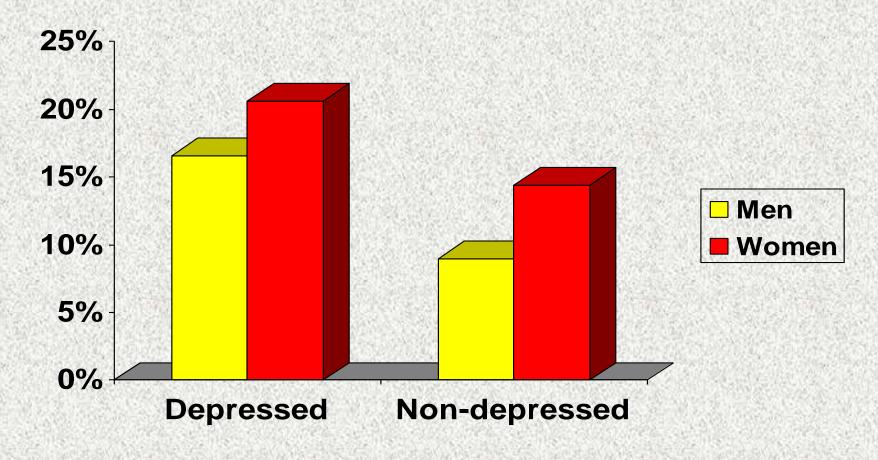
Is Sedative/Hypnotic Use a Co-Occurring Problem?

- Associated with falls
- Associated with memory impairment
- Possibly associated with poor treatment response for depression

How to Define Inappropriate Benzodiazepine Use

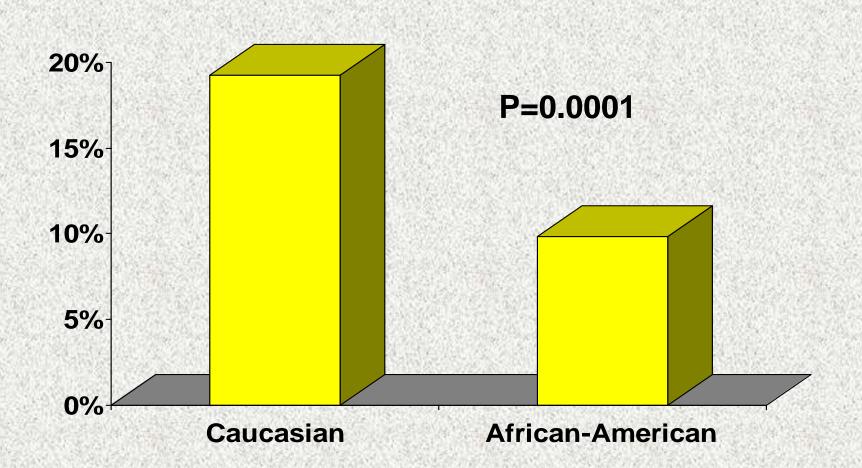
- Chronic Use (>3 months)
- Use of long-acting agents
- Undocumented response
- Lowest effective dose (harm reduction)

Sedative/Hypnotic Use: A Diminishing Problem?



M:W p= 0.0393, Positive: Negative p=0.002

Sedative/Hypnotic use by Race

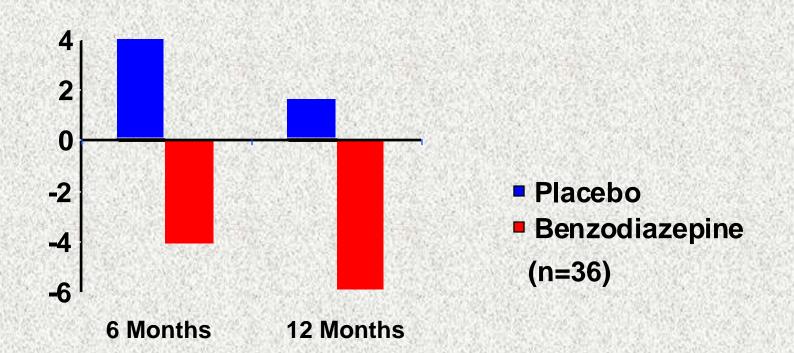


Types of Sedative/Hypnotics

Used

| | Percent of Subjects Using | |
|------------------|------------------------------|--|
| Alprazolam | 32.7% | |
| Lorazepam | 24.1% | |
| Temazepam | 13.1% | |
| Clonazepam | 11.1% | |
| Diazepam | 10.6% | |
| Chlordiazepoxide | 6.0% | |
| Clorazepate | 4.5% | |
| Barbituates | 2.0% | |
| Oxazepam | 2.0% | |
| Flurazepam | 1.0% | |

Benzodiazepine Discontinuation



Caveats About Treatment

- Addiction treatment is not one size fits all. There are many options—use them.
- Compliance with treatment is important and tends to be greater in older adults compared to younger adults. Continually support treatment.
- Treatment is not a "carve out" available only in select settings.
- *****While abstinence is often the goal, it is not the only goal.

Case Example #1

~ Ms. Smith is a 76 year-old African American female who recently signed on with an HMO Medicare plan that required her to see a new PCP. On her initial visit with her new PCP, she was noted to be taking a temazepam 15 mg each night for insomnia as well as a variety of other medications. Ms. Smith said that she had been taking the temazepam for several years and that it helps to relax her. She denied being depressed or having lost interest in activities. She reports that her energy is good and that she sleeps throughout the night except to urinate. She has never tried to go to sleep without her medication because she knows the importance of taking her medication as prescribed. Her medical problems include chronic obstructive lung disease, arthritis for which she uses a cane, and well-controlled hypertension.

Case Example #2

Mr. Jones is a 72 year-old man seen by his primary care practitioner (PCP) for a routine exam. He reports suffering from some ill-described upper abdominal discomfort, but otherwise has no complaints. He currently lives by himself, does his own housework and shopping, and has a limited circle of friends. Upon asking about general health habits, the PCP learns that Mr. Jones does not smoke but does drink each day at dinner and bedtime. The PCP asks him the CAGE questions, which seem to upset him, but he responds negatively to each question. His PCP makes a comment to be watchful of his drinking, but does not pursue this further.

Six months later, at the urging of his family, the patient undergoes a mental health evaluation. The family is concerned about his ability to live alone and is considering urging him to move into an assisted living situation. During his evaluation, it is learned that he is quite functional, although he is somewhat slowed and rarely travels outside of the house. Cognitively, he shows no signs of dementia, but has some diminution in reaction time and problem solving. It is determined that he routinely drinks one standard drink for dinner and two standard drinks of sherry before bed. This has been his pattern of drinking for 15 years since becoming a widower.

Suggested Readings

- CSAP TIPS Series: <u>http://www.treatment.org/Externals/tips.html</u> and <u>http://www.samhsa.gov</u>
- Bien, Miller, & Tonigan (1993). Brief interventions for alcohol problems: A review. Addiction, 88, 315-336.
- Fleming, Barry, Manwell, Johnson, London (1997). Brief physician advice for problem alcohol drinkers. *Journal of the American Medical Association*, 277, 1039-1080.
- Miller & Rollnick (1991). Motivational Interviewing: Preparing People to Change Addictive Behavior. New York: Guilford Press.
- Barry, Oslin, Blow (2001) Prevention and Management of Alcohol Problems in Older Adults. New York, Springer Publishing.

Self-Assessment Question 1

Which of the following is true about alcoholism in the elderly?

- A. It is more frequently seen in community-dwelling elderly than in primary care setting populations.
- B. It is less prevalent in the elderly than cocaine or hallucinogen addictions.
- C. Heavy drinking is associated with suicide risk to the same degree or greater than is depression.
- D. All of the above
- E. None of the above

Self-Assessment Question 2 Which of the following contains the greatest amount of ethanol?

- A. 12 oz of beer
- B. 10 oz of wine
- C. 4 oz of sherry
- D. 1.5 oz of vodka
- E. Each contains an equal amount of alcohol

Self-Assessment Question 3 Which of the following is a benefit of moderate

- alcohol use?
- A. Reduced cardiovascular risk
- B. Decreased risk of fractures
- C. Increased risk of suicide
- D. Improved cognitive functioning in men
- E. None of the above

Self-Assessment Question 4

Which of the following is a treatment approach for alcohol addiction in the elderly?

- A. Psychoeducation
- B. 12-step groups
- C. Telephone disease management
- D. Pharmacotherapy
- E. All of the above

Self-Assessment Question 5

Which of the following is not true of pharmacotherapy of alcohol addiction in the elderly?

- A. Naltrexone is considered unsafe and ineffective as an agent in treating elderly patients.
- B. Naltrexone is an opioid receptor antagonist.
- C. The presence of a positive family history for alcohol problems predicts better outcome with naltrexone treatment of older adults.
- D. Antipsychotic treatment has not been shown effective in reducing alcohol addiction in the elderly.
- E. Chronic benzodiazepine treatment has not been shown effective in reducing alcohol addiction in the elderly.

Self-Assessment Question Answers

C
 B
 A
 A
 E
 A