### SENIORS AND AOD TREATMENT

Approximately 3 million older adults in America abuse drugs and alcohol Carol Colleran, CAP, ICADC director of Older Adult Services at Hanley-Hazelden in West Palm Beach, Florida.

Developed for CAARR by: Mary Jane Harper, MS, MA

# California Association of Addiction Recovery Resources

2400 Marconi Ave Sacramento, CA 95821 916.338.9460

www.caarr.org

This training is made possible through the State of California

Department of Alcohol and Drug Programs

#### SENIORS AND ALCOHOL

- ➤ The group of people categorized as "ELDERLY" spans 4 decades. There are over 35 million people over the age of 65; that number is expected to rise to 53 million by 2020.
- ➤ One study found that 30% of 5,600 elderly patients with alcoholism had a concurrent psychiatric disorder.
- Those 65 and older with alcoholism are approximately 3x more likely to exhibit major depressive disorder than those with out alcoholism.
- ➤ The suicide rate of those 65 or older accounts for 25% of the national suicide rate with moderate to heavy drinkers 65 or older 16 x more likely to die of suicide than non-drinkers.
- For both women and men, drinking after age 59 is most common among those who say they are healthy. Mature women who say their health is excellent or very good are almost eight times likelier to drink than those who say their health is fair or poor (38.7 percent vs. 5.2 percent).
- ➤ The National Institute on Alcohol Abuse and Alcoholism (NIAAA) generally recommends that women have no more than one drink a day and men have no more than two drinks a day; □□it also recommends that men over age 65 reduce their alcohol consumption to one drink a day.
- > Surveys of elderly patients admitted to hospitals have found the following:
  - o 6-11% in general hospitals exhibit symptoms of alcoholism;
  - 20% in psychiatric wards exhibit symptoms of alcoholism;
  - 14% in emergency rooms exhibit symptoms of alcoholism;
  - In acute-care hospitals the rates for alcoholism equals that of heart attacks; and
  - Some studies indicate that up to 49% of those in nursing homes may be there for alcoholism (indicative of the fact that nursing homes are often used for short term alcoholism rehabilitation).
  - Hospital staff is less likely to recognize substance problems in the elderly than in younger populations.
- Acute alcohol withdrawal syndrome is more protracted and severe in older adults than in younger adults. Detoxification may take several weeks or even months.

#### SENIORS AND OTHER DRUGS

- Only 3.8 percent of mature women and 7.6 percent of mature men say they have even tried illegal drugs
- ➤ The elderly the largest consumers of legal drugs in the United States, with 83% taking prescription medications, 50% of this group take sedatives or some sort of prescriptions that are addictive.
- Although they comprise 11 percent of the population at this time (and this figure will rise rapidly as baby boomers age), older adults take 36 percent of all of the prescriptions written, as much as 15 prescriptions per year per older adult.
- Mature adults--and especially mature women--need to take less of a drug than do younger adults to get the same effect, and some drugs are unsafe at any level.
- Women of any age appear to be more sensitive to the effects of psychoactive drugs. For reasons that are not yet clear, some benzodiazepines, antipsychotics, analgesics and anti-depressants appear to have a greater impact on women than on men.
- Drugs that dissolve in water have a more potent effect on mature adults because the total volume of body water decreases with age.35 and medications that dissolve in fat stay longer in the bodies of mature adults, who tend to have more fat than do younger adults.
- ➤ There are some reports of a positive correlation between the use of benzodiazepines and confusion, falls, and hip fractures.
- ➤ The number of prescriptions for benzodiazepines has gone down in all age groups except in older adults.
- The symptoms of alcohol abuse or misuse by the elderly may mimic conditions that come with age—memory loss, trouble sleeping, fragility, falls and injuries. The symptoms of psychoactive prescription drug abuse may mimic the complaints that triggered the initial prescription-- anxiety, depression, and trouble sleeping.
- Physicians appear to focus on individual symptoms, such as stomach upset, anxiety or loss of energy, and come up with a narrow diagnosis that would not be surprising in a mature adult, such as an ulcer or depression.
- Among mature alcoholics, about a third became dependent after age 59. A study of mature adults (mostly women) who were dependent on psychoactive prescription drugs also found that a third (35 percent) had developed the problem after age 59.

## ADDING OVER-THE-COUNTER DRUGS TO THE MIX

- Many older adults do not consider over-the-counter drugs or herbs as medicine and do not report using them to physicians. In a survey of patients with cancer at the Moffitt Cancer Center, 47% of the older adults were taking non-prescription drugs, but did not report them as medications.
- Older adults are seven times more likely to use over-the-counter medications than the general population, and at least half of these medications are analgesics.
- Forty percent of people over age 60 use over-the-counter medications every day and 80% of these use alcohol, prescription drugs, or both.

#### ALCOHOL AND DRUG ISSUES SPECIFIC TO OLDER WOMEN

- > 58%, or 25.6 million, of people over 59 are women by 2020 that number should reach 40.1 million, or 60%. 72% of those over 85 are women.
- Women are less likely than men to enter the "elderly decades" as problem drinkers.
- Women at any age are affected more than men by alcohol and psychoactive drugs.
- ➤ Differences in body weight, body water and less of the stomach enzymes that metabolize alcohol before it reaches the blood of women mean that, from the same drink, more alcohol reaches the blood stream of women than men.
- Mature women are less likely to drink than are mature men; one out of four mature women (25.2 percent) and one out of two mature men (52.0 percent) report themselves as current drinkers.
- Women are more likely to become late onset alcoholics than are men. Roughly half of all cases of alcoholism among mature women begin after age 59, while among mature men, only a quarter of all cases do.
- Women are more likely than men to misuse prescription drugs

- Mature women experience problems related to alcohol and psychoactive prescription drugs and get addicted faster and by consuming smaller amounts than any other group.
- ➤ Because the alcohol industry has worked hard to make drinking women socially acceptable, today's mature women may be the last generation to grow up hearing that nice girls don't drink--or at least don't get drunk.
- ➤ The advent of feminism in the 1960s has contributed to the fact that women have begun to drink like men. The gender gap among teenagers is almost gone; 16.7 percent of girls and 18.9 percent of boys are current drinkers.
- Mature women are likely to believe that addiction is a moral flaw, rather than a disease. They feel ashamed of their drinking problem because they grew up learning that getting drunk would destroy a good reputation and replace it with one of sexual promiscuity.
- Substance abuse and addiction among mature women has many faces: women may abuse alcohol, psychoactive prescription drugs, mood-altering over-thecounter (OTC) drugs, smoke cigarettes, or do a combination of each.

#### DEFINING ALCOHOLISM IN OLDER ADULTS

Most formal assessment tools for alcohol problems generally ignore the common symptoms of alcohol problems among mature adults, such as depression, irritability, stomach upset, malnutrition, weight loss, memory loss, self-neglect, insomnia and frequent accidents.

The American Society of Addiction Medicine defines alcoholism as "characterized by impaired control over drinking, preoccupation with the drug alcohol, use of alcohol despite adverse consequences and distortions in thinking, most notably denial." *The American Medical Association recommends adding to this definition for the elderly:* 

"The onset or continuation of drinking behavior that becomes problematic because of physiological and psychosocial changes that occur with aging, including increased sensitivity to alcohol effects."

--AMA. (1995). Alcoholism in the elderly: Diagnosis, treatment and prevention: Guidelines for primary care physicians. Chicago, IL: AMA.

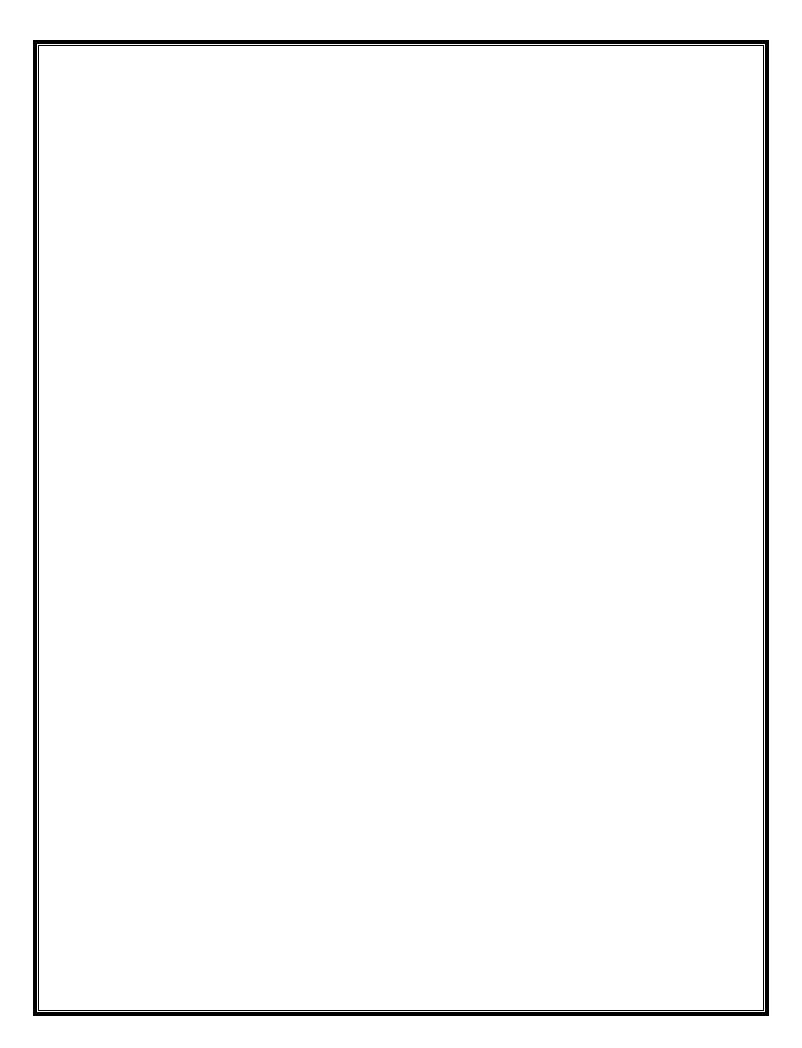
### APPLYING DSM-IV DIAGNOSTIC CRITERIA TO OLDER ADULTS WITH ALCOHOL PROBLEMS

Diagnostic criteria for alcohol dependence are subsumed within the DSM-IV's general criteria for substance dependence. Dependence is defined as a "maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at any time in the same 12-month period" (American Psychiatric Association, 1994, p. 181). There are special considerations when applying DSM-IV criteria to older adults with alcohol problems.

Criteria	Special Considerations for Older Adults
Tolerance	May have problems with even low intake due to increased sensitivity to alcohol and higher blood alcohol levels
Withdrawal	Many late onset alcoholics do not develop physiological dependence
Taking larger amounts or over a longer period than was intended	Increased cognitive impairment can interfere with self- monitoring; drinking can exacerbate cognitive impairment and monitoring
Unsuccessful efforts to cut down or control use	Same issues across life span
Spending much time to obtain and use alcohol and to recover from effects	Negative effects can occur with relatively low use
Giving up activities due to use	May have fewer activities, making detection of problems more difficult
Continuing use despite physical or psychological problem caused by use	May not know or understand that problems are related to use, even after medical advice

#### **EARLY VS. LATE ONSET**

- Early onset patients experience more emotional problems and drop out of treatment at a higher rate.
- Individuals in the early-onset group consist of older, chronic cases, usually alone and in need of more intensive care. They have multiple health problems such as liver disease, complications due to malnutrition, and more.
- When an individual has relied on alcohol to resolve their problems in the past, stresses at later life (for example, the loss of a spouse, a job, or professional status) and poor social support can make them more vulnerable to misuse in the present.
- Late onset patients tend to be more psychologically stable, remain in treatment longer, and have their problem resolve spontaneously without treatment.
- While there is less use of illicit drugs among seniors, there is a greater incidence of unintentional misuse of drugs due to memory loss, misunderstanding of doctor's instruction, or improper dosing.



### **Clinical Characteristics of Early and Late Onset Problem Drinkers**

Variable	Early Onset	Late Onset
Age at onset	Various, e.g., < 25, 40, 45	Various, e.g., > 55, 60, 65
Gender	Higher proportion of men than women	Higher proportion of women than men
Socioeconomic status	Tends to be lower	Tends to be higher
Drinking in response to stressors	Common	Common
Family history of alcoholism	More prevalent	Less prevalent
Extent and severity of alcohol problems	More psychosocial, legal problems, greater severity	Fewer psychosocial, legal problems, lesser severity
Alcohol-related chronic illness (e.g., cirrhosis, pancreatitis, cancers)	More common	Less common
Psychiatric comorbidities	Cognitive loss more severe, less reversible	Cognitive loss less severe, more reversible
Age-associated medical problems aggravated by alcohol (e.g., hypertension, diabetes mellitus, drug-alcohol interactions)	Common	Common
Treatment compliance and outcome	Possibly less compliant; Relapse rates do not vary by age of onset (Atkinson et al., 1990; Blow et al., 1997; Schonfeld and Dupree, 1991)	Possibly more compliant; Relapse rates do not vary by age of onset (Atkinson et al., 1990; Blow et al., 1997; Schonfeld and Dupree, 1991)

## WHY AND HOW DOES AGING INCREASE THE RISKS OF SUBSTANCE ABUSE?

- There is an age related decrease in lean body mass and body water and an increase of percentage of body fat.
- ➤ There are changes in digestion, liver, and kidney function slowing the metabolism and elimination of alcohol and drugs.
- ➤ Each dose of alcohol results in a higher BAC and there is greater impairment at a given BAC.
- There is a decrease in the body's ability to develop tolerance.
- Drinking patterns that do not meet traditional abuse definitions can lead to higher BAC, chronic illness, and poor nutrition.
- ➤ There are age related changes in the volume of the cerebellum the part of the brain that is involved in regulating balance and posture increasing the risk of falls and disability related to balance.
- There are interactive effects of alcohol, chronic illness, and medication.
- Alcohol can speed up the normal decline of functioning and trigger or worsen certain medical conditions (for example: heart disease, diabetes, sexual functioning, sleep disturbances).
- There is an increased risk of short-term memory loss and resulting misuse of medication.
- Loss (for example: of spouse, friends, family, driver's license, retirement, mobility, independence, sensory defects, sleep) can lead to loneliness, boredom, and depression.
- ➤ There is an increased risk of self medication for stress caused by financial, health, housing, self-care issues, and for chronic pain.
- Adults aged 50-59 are 33% more likely to experience adverse drug reactions than those 40 to 49. Over 59 years of age, the risk level increases to two or three times as great for younger populations.
- ➤ FDA data indicate a rate of 8.5 adverse drug reactions per 100,000 people in the general population, and 16.0 per 100,000 in individuals over 65.

- ➤ 17.5% of the 30 million Medicare recipients are prescribed medications generally unsuitable for their age group because of lack of awareness or inadequate options.
- For individuals 85 years of age and older, 35% of visits to the physician resulted in prescriptions for three or more medications
- ➤ The U S. Department of Health and Human Services reports 32,000 deaths annually from falls of older adults are drug induced.

#### WHY IS SENIOR SUBSTANCE ABUSE UNDERDETECTED?

Indicators for abuse that are appropriate for younger patients are not necessarily relevant to older adults.

- There are rarely social problems because so many live alone and have decreased social life.
- There are rarely work related problems since so many are retired.
- There are less likely to be DUI incidents because so many no longer drive or do not drive at night.

Many of the signs of a substance problem are often attributed to the "normal aging" process, for example: falls, forgetfulness, depressed mood, incontinence, and social withdrawal.

Family, care givers, and physicians often deny the problem (not my mother, not that extremely nice old lady), feel the individual is too old to change behavior, or they feel that there are so few pleasures and time left so why do anything about it.

#### **CLUES OF POSSIBLE SUBSTANCE ABUSE**

- ➤ Self neglect poor hygiene, malnutrition, incontinence, or financial problems.
- Repeated accidents automobile, burns, falls, fractures, or other trauma, or indications of diminished proprioception.
- ➤ Behavioral indications social withdrawal, personality changes, sleep disorders, depression, irritability, impotence, leaving the hospital AMA.
- Physical/health problems cardiomyopathy, treatment resistant HTN, esophageal/gastric varices, gastritis and ulcers, cirrhosis, pancreatitis, abnormal liver function/ hematology, peripheral neuropathy, dementia/amnestic disorders, seizure disorder, sexual dysfunction, sleep problems, flushed and florid features, susceptibility to infections, psoriasis and signs of immuno-deficient disorders, electrolyte imbalance.

#### **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 lack of coordination, shuffling gait
- Frequent falls and unexplained bruising

#### THE MOST COMMON PSYCHIATRIC COMORBIDITIES SEEN IN SENIORS ARE:

- Depression (20-30%)
- ➤ Cognitive loss (10-40%)
- > Anxiety disorders (10-20%)

#### TREATMENT GOALS

- > There are many options for addiction treatment.
- Older adults tend to be more compliant in treatment than younger adults.
- Although abstinence is the traditional goal of treatment, it is not the only goal.
- ➤ With late onset substance abuse patients, after any necessary detoxification has occurred, harm reduction may be the first consideration closely followed by strengthening the patient's social support system.
- Such things as the general health, mobility, transportation access, housing, social support, and financial situation of the patient must be taken into consideration when establishing outcome goals.

#### TREATMENT OPTIONS

- > The least intensive and confrontive treatment options should be explored first with senior substance abusers/misusers.
- > Three approaches are recommended which can function as either pretreatment strategy or treatment itself.
  - Brief interventions
  - Intervention
  - Motivational counseling
- Detoxification some will need to be detoxified in a hospital setting.
- Recommended treatment settings (TIP 26)
  - Patients who are frail, acutely suicidal, or medically unstable, or who need constant one-on-one monitoring should receive 24-hour primary medical/psychiatric/ nursing inpatient care in medically managed and monitored intensive treatment settings.
  - The client's physician should be included in the treatment planning process for outpatient clients and should be a part of the recovery network.
  - Programs need to be flexible, with staff accepting and knowledgeable about the need for psychoactive prescription drugs

## RECOMMENDED TREATMENT FEATURES AND PRINCIPLES

The following six features should be incorporated into treatment for older adults:

- Develop supportive and non-confrontational age-specific group treatment with the aim of building or rebuilding self-esteem;
- Focus on developing coping skills for depression, loneliness, and loss;
- Focus on rebuilding the social support network;
- Set an appropriate pace and content of the treatment;
- Have experienced staff members who are interested in working with older adults; and
- Establish links with medical services, services for the aging, and institutional settings for referral into and out of treatment, as well as for case management.

Treatment programs for the older adult should adhere to the following principles:

- Treat older people in age-specific settings where feasible;
- Create a culture of respect for older clients;
- Take a broad, holistic approach to treatment that emphasizes age-specific psychological, social, and health problems;
- Keep the treatment program flexible; and
- Adapt treatment as needed in response to clients' gender.

#### TREATMENT APPROACHES

- Cognitive-behavioral approaches
- Group-based approaches
  - Socialization groups
  - Therapy groups
  - Educational groups

- Alcoholics Anonymous and other self-help groups
- Educational groups
- Individual counseling
- Medical/psychiatric approaches
- Marital and family involvement/family therapy
- Case management, community-linked services, and outreach

#### **OTHER TREATMENT ISSUES**

- > Spirituality
- > Discharge Plans and Aftercare
  - Standard features of most discharge plans for older adults include:
    - Age-appropriate Alcoholics Anonymous, Pills Anonymous, Rational Recovery, women's or other support groups
    - Ancillary services needed to maintain independence in the community
    - Ongoing medical monitoring
    - Involvement of an appropriate case manager if needed to advocate for the client and ensure needed services are provided.

## SPECIALIZED TREATMENT ISSUES FOR PERSCRIPTION DRUG ABUSE/MISUSE

- A large number of the problems seniors have with prescription drug abuse arose from unintentional misuse.
- Multiple causes of misuse by the patient
- > There are many forms of medication noncompliance.

#### PROGRAM STAFFING CONSIDERATIONS

- > Staff trained in gerontology and who like working with older adults.
- Train all staff who will interact with clients.
- Credentials.
- Professionals available through linkages.

"We should expunge the word retirement and replace it with reflection. Imagine what a different perspective advanced years would bring to society if, instead of saying we were looking forward to retirement, we said we were eager to begin our years of reflection, eager to sort the truth of our experience from society's fictions."

**Charles Hayes** 

Beyond the American Dream: Lifelong Learning and the Search for Meaning in a Postmodern World

#### TREATMENT OBJECTIVES AND APPROACHES

General Objectives/ Examples	General Approaches/Examples
Eliminate or reduce substance abuse	Cognitive-behavioral (group or individual) Alcohol (drug) effects Relapse prevention Stress management Group approaches Alcohol (drug) effects education Medical Naltrexone, acamprosate (alcohol)
Safely manage intoxication episodes during treatment	Medical Remove patient from activities and observe Link and refer to detoxification program
Enhance relationships	Cognitive-behavioral (group or individual) Social skills and network building Group approaches Social support Socialization skill education Gender-specific issues Marital and family approaches Spouse counseling Marital therapy Family therapy Case management Linkage to community social programs Home visitation Individual counseling Focus on psychodynamic issues in relationships
Promote health Improve sleep habits Improve nutrition Increase exercise Reduce tobacco use Reduce stress	Medical Provide primary medical care Cognitive-behavioral (group or individual) Self-management skills training Group approaches Health education Education on nutrition, diet, cooking, shopping Sleep hygiene
Stabilize and resolve comorbidities Medical Psychiatric (e.g., depression, anxiety) Sensory deficits	Medical Consultation and special assessments, including medication assessment Primary and specialized medical care Psychiatric care for chronic mental disorders (by geriatric psychiatrist, if possible) Pain management for chronic pain disorders Antidepressants, antianxiety medication Cognitive-behavioral (group or individual) Relaxation training Depression

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

,		
After drinking have you ever noticed an increase in your heart rate or beating in your chest?	YES	NO
When talking with others, do you ever underestimate how much you actually drink?	YES	NO
Does alcohol make you sleepy so that you often fall asleep in your chair?	YES	NO
After a few drinks, have you sometimes not eaten or been able to skip a meal because you didn't feel hungry?	YES	NO
Does having a few drinks help decrease your shakiness or tremors?	YES	NO
Does alcohol sometimes make it hard for you to remember parts of the day or night?	YES	NO
Do you have rules for yourself that you won't drink before a certain time of the day?	YES	NO
Have you lost interest in hobbies or activities you used to enjoy?	YES	NO
When you wake up in the morning, do you ever have trouble remembering part of the night before?	YES	NO
Does having a drink help you sleep?	YES	NO
Do you hide your alcohol bottles from family members?	YES	NO
After a social gathering, have you ever felt embarrassed because you drank too much?	YES	NO
Have you ever been concerned that drinking might be harmful to your health?	YES	NO
Do you like to end an evening with a nightcap?	YES	NO
Did you find your drinking increased after someone close to you died?	YES	NO
In general, would you prefer to have a few drinks at home rather than go out to social events?	YES	NO
Are you drinking more now than in the past?	YES	NO
Do you usually take a drink to relax or calm your nerves?	YES	NO
Do you drink to take your mind off your problems?	YES	NO
Have you ever increased your drinking after experiencing a loss in your life?	YES	NO
Do you sometimes drive when you have had too much to drink?	YES	NO
Has a doctor or nurse ever said they were worried or concerned about your drinking?	YES	NO
Have you ever made rules to manage your drinking?	YES	NO
When you feel lonely, does having a drink help?	YES	NO

Scoring: Five or more "yes" responses are indicative of an alcohol problem. For further information, contact Frederic C. Blow, Ph.D., at University of Michigan Alcohol Research Center, 400 E. Eisenhower Parkway, Suite A, Ann Arbor, MI 48108; (734) 998-7952. *Source:* 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* 16:372, 1992. © The Regents of the University of Michigan, 1991.

#### **GERIATRIC DEPRESSION SCALE (GDS) SHORT FORM**

Choose the best answer for how you have felt over the past week:

Are you basically satisfied with your life? YES/NO

Have you dropped many of your activities and interests? YES/NO

Do you feel that your life is empty? YES/NO

Do you often get bored? YES/NO

Are you in good spirits most of the time? YES/NO

Are you afraid that something bad is going to happen to you? YES/NO

Do you feel happy most of the time? YES/NO

Do you often feel helpless? YES/NO

Do you prefer to stay at home, rather than going out and doing new things? **YES/NO** 

Do you feel you have more problems with memory than most? YES/NO

Do you think it is wonderful to be alive now? YES/NO

Do you feel pretty worthless the way you are now? YES/NO

Do you feel full of energy? YES/NO

Do you feel that your situation is hopeless? YES/NO

Do you think that most people are better off than you are? **YES/NO** 

Answers in bold indicate depression, and each answer counts as one point. For clinical purposes, a score greater than 5 suggests depression and warrants a followup interview. Scores greater than 10 are almost always depression.

Source: Sheikh, J.I., and Yesavage, J.A. Geriatric Depression Scale (GDS): Recent evidence and development of a shorter version. *Clinical Gerontologist* 5(1&2):165-173, 1986.

#### The Center for Epidemiologic Studies Depression Scale (CES-D)

For the 20 items below, circle the number next to each item that best reflects how frequently the indicated event was experienced in the past 7 days.

The Center for Epidemiologic Studies Depression Scale (CES-D)

		Rarely or none of the time (Less than 1 Day)	Some or a little of the time (12 days)	Occasionally or a moderate amount of time (34 Days)	Most or all of the time (57 Days)
DUI	RING THE PAST WEEK:				
1.	I was bothered by things that usually don't bother me.	0	1	2	3
2.	I did not feel like eating: my appetite was poor.	0	1	2	3
3.	I felt that I could not shake off the blues even with help from my family or friends.	0	1	2	3
4.	I felt that I was just as good as other people.	0	1	2	3
5.	I had trouble keeping my mind on what I was doing.	0	1	2	3
6.	I felt depressed.	0	1	2	3
7.	I felt that everything I did was an effort.	0	1	2	3
8.	I felt hopeful about the future.	0	1	2	3
9.	I thought my life had been a failure.	0	1	2	3
10.	I felt fearful.	0	1	2	3
11.	My sleep was restless.	0	1	2	3
12.	I was happy.	0	1	2	3
13.	I talked less than usual.	0	1	2	3
14.	I felt lonely.	0	1	2	3
15.	People were unfriendly.	0	1	2	3
16.	I enjoyed life.	0	1	2	3
17.	I had crying spells.	0	1	2	3
18.	I felt sad.	0	1	2	3
19.	I felt that people disliked me.	0	1	2	3
20.	I could not get "going."	0	1	2	3

Scoring: Since items 4, 8, 12, and 16 reflect positive experiences rather than negative ones, the scale should be reversed on these items so that 0 = 3, 1 = 2, 2 = 1, and 3 = 0. To determine the "depression score," add together the number for each answer. The score will be somewhere in the range of 0 to 60. A score of 16 or greater indicates that some depression may have been experienced in the past week. *Source:* Radloff, L.S. The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement* 1(3):385-401, 197

## Comparison of Dementia and Delirium: Characteristics and Causes

NOTE: Patients who have been medically detoxified should not be screened for cognitive dysfunction until several weeks after detoxification is completed, because a patient not fully recovered from detoxification may exhibit some reversible cognitive impairment.

Characteristics			
Dementia	Delirium		
<ul> <li>Impairments in short- and long-term memory, abstract thinking, and judgment</li> <li>Aphasia (language disorder)</li> <li>Apraxia (inability to carry out motor activities despite intact comprehension and motor function)</li> <li>Agnosia (inability to recognize or identify items despite intact sensory function)</li> <li>Constructional difficulty (inability to copy three-dimensional figures, assemble blocks, or arrange sticks in specific designs)</li> <li>Personality change or alteration and accentuation of premorbid traits</li> <li>Mood disturbances</li> <li>Loss of self-care abilities</li> </ul>	<ul> <li>Inability to appreciate and respond normally to the environment, often with altered awareness, disorientation, inability to process visual and auditory stimuli, and other signs of cognitive dysfunction</li> <li>Potentially life-threatening</li> <li>Acute onset</li> <li>Clouding of consciousness</li> <li>Reduced wakefulness</li> <li>Disorientation to time and space</li> <li>Increased motor activity (e.g., restlessness, plucking, picking)</li> <li>Impaired attention and concentration</li> <li>Impaired memory</li> <li>Anxiety, suspicion, and agitation</li> <li>Variability of symptoms over time Misinterpretation, illusions, or hallucinations</li> <li>Disrupted thinking, delusions, speech abnormalities</li> </ul>		
	Causes		
Dementia	Delirium		
Most Common Causes  ➤ Alzheimer's disease  ➤ Vascular dementia  ➤ Alcohol-related dementia  Common Metabolic/Toxic Causes  ➤ Chronic drug-alcohol-nutritional abuse (e.g., Wernicke-Korsakoff syndrome)  ➤ Organ system failure	Common Intracranial Causes  ➤ Infections (e.g., meningitis, encephalitis)  ➤ Seizures  ➤ Stroke  ➤ Subdural hematomas  ➤ Tumors  Common Extracranial Causes  ➤ Anesthesia  ➤ Drug-drug or alcohol-drug interactions		
> Anoxia	Intoxication and/or withdrawal from		

alcohol or drugs (particularly

Folic acid deficiency

- Hypothyroidism
- Bromide intoxication
- Hypoglycemia

#### **Common Infectious Causes**

- Neurosyphilis paresis (a syphilitic infection manifested as dementia, seizures, and problems walking and standing)
- AIDS/HIV-related disorders
- Meningitis
- Encephalitis

#### **Other Common Causes**

- Huntington's Chorea
- Parkinson's disease
- Jakob-Creutzfeldt disease
- Lewy body's dementia

- psychoactive drugs)
- Toxic effects of prescribed or over-thecounter drugs
- Giant cell arteritis (a chronic inflammatory process involving the extracranial arteries)
- ➤ Hip fracture
- Hydrocephalus (increased fluid in the brain)
- Hypercapnia (reduced ventilation often associated with chronic obstructive pulmonary disease)
- Infections
- > Dehydration
- Malnutrition
- Metabolic disturbances (e.g., liver or kidney failure, electrolyte disturbances, hyper- or hypoglycemia, diabetes, thyroid disorders)
- Myocardial infarction (heart attack)
- > Sudden environmental changes
- > Depression

### **Commonly Prescribed Sedative/Hypnotics**<sup>a</sup>

Class	Drug	<b>Brand Name</b>	Elimination Half-Life for Older Adults
Benzodiazepines	Flurazepam	Dalmane	72 hours, with short- and long-acting active metabolites
	Prazepam	Centrax	Less than 3 hours, with long-acting active metabolites
	Quazepam	Doral	25-41 hours, with long-acting active metabolites
	Temazepam	Restoril	10-20 hours
	Triazolam	Halcion	2-6 hours, with reports of clinical effects up to 16 hours following a single dose
Imidazopyridine	Zolpidem	Ambien	1.5-4.5 hours (longer in older adults)
Chloral derivatives	Chloral hydrate	Noctec	4-8 hours (loses effect in 2 weeks)
Antihistamines	Hydroxyzine	Atarax	1-3 hours
	Diphen-hydramine	Benadryl (over-the- counter)	8-10 hours
	Doxylamine	Unisom (over-the-counter)	8-10 hours

Refer to product information insert for each drug as to its suitability for use in older adults.

### Commonly Prescribed Opiate/Opioid Analgesics<sup>a</sup>

Class	Drug	Brand Name	Comments
Opiates	Methylmorphine Morphine		Common ingredient of analgesics.
	Codeine	e.g., Tylenol III, Robitussin A-C	Common ingredient of analgesics and antitussives. Can cause sedation and mild, dose-related impairment of psychomotor coordination.
Opioids (synthetic)	Hydrocodone	Lortab	Can produce dose-related respiratory depression and irregular breathing if taken in large amounts.
	Meperidine	Demerol	Contraindicated if patient is taking MAO inhibitors. Can produce psychomimetic effects and impair vision, attention, and motor coordination.
	Oxycodone	Percodan/ Percocet	Can produce substantial impairment of vision, attention, and motor coordination.
	Propoxyphene	Darvon	Can produce sedation and mild, dose-related impairment of psychomotor coordination.
	Pentazocine	Talwin	Age does not appear to increase sedative effects.
<sup>a</sup> Refer to product information insert for each drug as to its suitability for use in older adults.			

#### Effect of Aging on Response to Drug Effect

Drug	Action	Effects of Aging
Analgesics		
Aspirin	Acute gastroduodenal mucosal damage	No change
Morphine	Acute analgesic effect	Increased
Pentazocine	Analgesic effect	Increased
Anticoagulants		
Heparin	Activated partial thromboplastin time	No change
Warfarin	Prothrombin time	Increased
Bronchodilators		
Albuterol	Bronchodilation	No change
Ipratropium	Bronchodilation	No change
Cardiovascular Dr	ugs	
Adenosine	Minute ventilation and heart rate	No change
Diltiazem	Acute antihypertensive effect	Increased
Enalepril	Acute antihypertensive effect	Increased
Isoproterenol	Chronotropic effect	Decreased
Phenylephrine	Acute vasoconstriction	No change
	Acute antihypertensive effect	No change
Prazocin	Chronotropic effect	Decreased
Timolol	Chronotropic effect	No change
Verapamil	Acute antihypertensive effect	Increased
Diuretics		
Furosemide	Latency and size of peak diuretic response	Decreased
Psychotropics		
Diazepam	Acute sedation	Increased
Diphenhydramine	Psychomotor function	No change
Haloperidol	Acute sedation	Decreased
Midazolam	Electroencephalographic activity	Increased
Temazepam	Postural sway, psychomotor effect, and sedation	Increased
Triazolam	Psychomotor activity	Increased
Others		
Levodopa	Dose elimination due to side effects	Increased
Tolbutamide	Acute hypoglycemic effect	Decreased
Source: Adapted f	rom Cusack and Vestal, 1986.	

### **Drug-Alcohol Interactions and Adverse Effects**

Drug	Adverse Effect With Alcohol
Acetaminophen	Severe hepatoxicity with therapeutic doses of acetaminophen in chronic alcoholics
Anticoagulants, oral	Decreased anticoagulant effect with chronic alcohol abuse
Antidepressants, tricyclic	Combined central nervous system depression decreases psychomotor performance, especially in the first week of treatment
Aspirin and other nonsteroidal anti-inflammatory drugs	Increased the possibility of gastritis and gastrointestinal hemorrhage
Barbiturates	Increased central nervous system depression (additive effects)
Benzodiazepines	Increased central nervous system depression (additive effects)
Beta-adrenergic blockers	Masked signs of delirium tremens
Bromocriptine	Combined use increases gastrointestinal side effects
Caffeine	Possible further decreased reaction time
Cephalosporins and Chloramphenicol	Disulfiram-like reaction with some cephalosporins and chloramphenicol
Chloral hydrate	Prolonged hypnotic effect and adverse cardiovascular effects
Cimetidine	Increased central nervous system depressant effect of alcohol
Cycloserine	Increased alcohol effect or convulsions
Digoxin	Decreased digitalis effect
Disulfiram	Abdominal cramps, flushing, vomiting, hypotension, confusion, blurred vision, and psychosis
Guanadrel	Increased sedative effect and orthostatic hypotension
Glutethimide	Additive central nervous system depressant effect
Heparin	Increased bleeding
Hypoglycemics, sulfonylurea	Acutely ingested, alcohol can increase the hypoglycemic effect of sulfonylurea drugs; chronically ingested, it can decrease hypoglycemic effect of these drugs
Tolbutamide, chlorpropamide	Disulfiram-like reaction
Isoniazid	Increased liver toxicity

Ketoconazole, griseofulvin	Disulfiram-like reaction
Lithium	Increased lithium toxicity
Meprobamate	Synergistic central nervous system depression
Methotrexate	Increased hepatic damage in chronic alcoholics
Metronidazole	Disulfiram-like reaction
Nitroglycerin	Possible hypotension
Phenformin	Lactic acidosis (synergism)
Phenothiazines	Additive central nervous system depressant activity
Phenytoin	Acutely ingested, alcohol can increase the toxicity of phenytoin; chronically ingested, it can decrease the anticonvulsant effect of phenytoin
Quinacrine	Disulfiram-like reaction
Tetracyclines	Decreased effect of doxycycline
Source: Korrapati and	l Vestal, 1995.

#### **BIBLIOGRAPHY**

**Aging and Alcohol Abuse,** Eldercare Committee/Human Resources Work and Family Program.

**Aging and Alcoholism: A treatment model for any community,** Aging Today, September-October 2001.

**Alcohol and Aging, National Institute on Alcohol Abuse and Alcoholism.** 

Alcoholism And Women: The background and the psychology – Bauer.

At Any Age, It Does Matter: Substance Abuse and Older Adults (for Professionals), US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Prevention.

**Body and Soul: The other side of illness** – A. Kreinheder.

**Identification and Treatment of Senior Citizens With Addiction Problems –** D. Pinter, Ph.D., Psychological Services Clinic, Sunbury, Pennsylvania.

**In Midlife: A Jngian perspective** – M. Stein.

Intensive Outpatient Treatment For Alcohol and Other Drug Abuse *Treatment Improvement Protocol (TIP) Series 8,* US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.

**Seniors and Substance Abuse,** C. Woolston, Consumer Health Interactive.

Substance Abuse Among Aging Adults: A Literature Review - September 2002, Caliber Associates.

Substance Abuse Among Older Adults *Treatment Improvement Protocol (TIP)*Series 26, US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment.

**Substance Abuse and the Elderly,** M. E. Hettinger, Counselor Magazine Nov./Dec. 2000.