A GENERATION AT RISK...

CONSIDER THESE FACTS...

- *Seniors are less than 15 percent of the population, but they receive 60 percent of the psychoactive prescriptions.*
- *A dose of valium which clears the system in 24 hours in a younger adult may take three times as long in an older adult.*
- *As people age, they have less lean muscle mass and proportionately more fat. They also have less water. Thus, the same amount of alcohol has a greater effect on the old than it does on the young.*

by Michael R. Levenson, PhD, and Carolyn M. Aldwin, PhD

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Tactics (tak'tiks) *n.* **1.** a plan for promoting a desired end. **2.** the art of the possible.

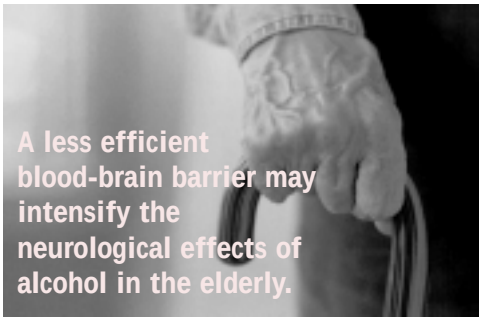
Applying Prevention Concepts to the Elderly

Who's old? Well, it depends. We have a rather arbitrary cut-off of 65 to denote the beginning of old age. But a 65-year-old may be very healthy and vastly different from someone who is 90 or 100. Gerontologists distinguish between the "young–old" (65–79), the old–old (80–99), and the oldest –old, or centenarians (100+). Young-olds tend to be healthy and active, and a lot of the frailties we associate with old age actually aren't showing up until people reach their 80s or 90s.

We typically think of drug abusers as young people, but elders can also run into problems with alcohol and drugs, especially prescription drugs. Some people have lifelong problems, but others start taking medications for pain or sleep problems later in life. Although elders constitute only about 15 percent of the population, they receive over half of the prescriptions for psychotropic (mind-affecting) medications. In this issue, we will focus primarily on alcohol and aging, as more is known about that topic, and touch upon other drugs as well.

Aging and Alcohol

WITH AGE, our bodies change. We have less lean muscle mass and proportionately more fat. We also have less water. Fat doesn't absorb alcohol very well, and less water means more concentrated alcohol. Thus, the same amount of alcohol has a greater effect on the old than it does on the young. Alcohol may also interact with common medications, such as anti-hypertensives and tranquilizers. That means that old people may have a problem without realizing it, because their bodies have changed and they may have new health problems.



A less efficient blood-brain barrier may intensify the neurological effects of alcohol in the elderly.

Many elderly give up drinking altogether, but the ones who don't often continue to drink the same amount that they always did. While prevalence estimates are widely varied, the National Institute on Alcohol Abuse and Alcoholism estimates that 10 percent of older men and 2 percent of older women are heavy or problem drinkers. However, this doesn't take into account problems with prescription drugs, and how alcohol interacts with them, nor does it examine the difference between young-old and old-old.

Risk Factors. Two studies of women over the age of 85 have suggested nearly all have problems sleeping. The pain associated with chronic health problems such as arthritis and osteoporosis can make sleeping difficult. Two-thirds of the women self-medicated using alcohol and/or prescription drugs to try to get some sleep. Older people are also at much higher risk for experiencing bereavement of spouses and siblings. People who had alcohol problems early in life may turn to alcohol again when they've lost a loved one. Thus, old people may drink for very different reasons than younger people. Alcoholism in young adulthood tends to be associated with excess social drinking, Alcoholism in late life tends to be associated with solitary drinking and may represent attempts to cope with loneliness, anxiety, or pain.

Mental health problems are also associated with problem drinking in late life. We used the Minnesota Multiphasic Personality Inventory (MMPI) to examine the mental health characteristics of problem drinkers. Older men with MMPI code types 7 and 8 (psychasthenia* and schizophrenia) were more likely to report problem drinking. In other words, elders who feel depressed, worried, tense and inadequate may be at greater risk for alcohol abuse. We do not know if these factors cause long-term problem drinking or reflect the neurotoxic* effects of alcohol.

The consequences of drinking may be very different for the old than for the young. Elderly drinkers are at greater risk for malnutrition and cardiac muscle damage. A less efficient blood-brain barrier may intensify the neurological effects of alcohol, and elders are also at greater risk for memory and balance problems, as well as alcoholic psychosis.

Assessing Problem Drinking. There are simple questionnaires to assess problem drinking in late life, such as the CAGE (four items) or the Geriatric Michigan Alcohol Screening Test (MAST). CAGE is an acronym for the key concepts in the four questions: felt need to **CUT DOWN** on alcohol, felt **ANNOYED** by criticism, felt **GUILTY** about drinking, and had a morning "**EYE OPENER**") However, the current generation of elders may be unwilling to disclose problems, or may not even be aware that their memory problems or falls may be due to alcohol.

The best way to assess whether or not an older person has an alcohol problem is to do an in-home assessment. Problem drinking indicators in late life include a history of falls, bruises at the level of furniture, poor grooming, odors in

* *See definitions on page 8.*

the household, tremors, and incontinence. These behaviors may also indicate dementia or depression, so extensive cognitive and mental health testing may be needed to identify their source.

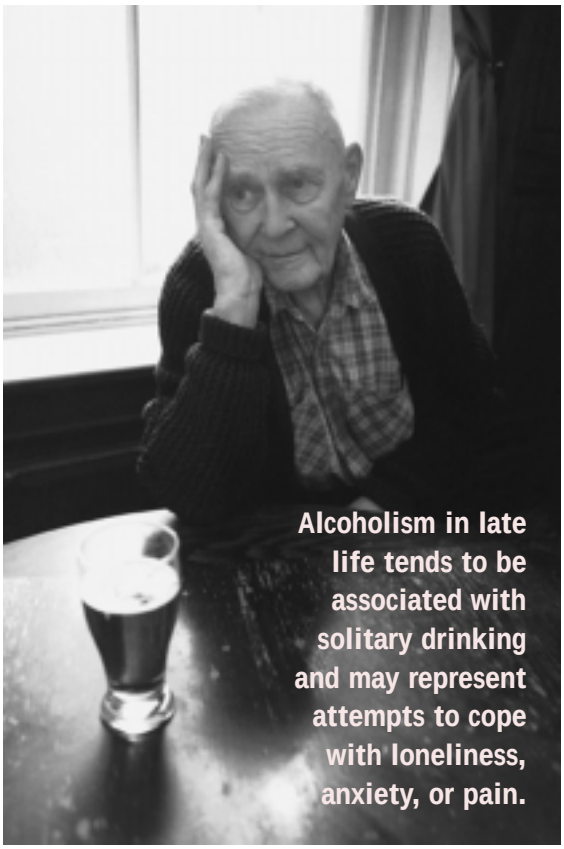
Intervention and Treatment. Does this mean that the elderly shouldn't drink? No, not unless they have specific medical reasons for quitting. For men, a drink a day helps to lower cholesterol, especially the "bad" kind (LDLs), and may ease some of the aches and pains associated with old age. Alcohol may also facilitate social behavior and, in small quantities, may improve appetite. For women, however, daily alcohol use can be associated with increased risk for breast cancer, and thus should be used more sparingly.

If a treatment provider believes an older person is severely abusing alcohol, a medical exam should conducted as soon as possible, including liver enzymes and cardiac function. Rapid withdrawal should not be attempted, as withdrawal symptoms may overwhelm an already stressed heart. While some psychiatrists recommend the use of Antabuse, this drug, if combined with alcohol, can cause sudden death. Older people are very sensitive to electrolyte imbalances, and the vomiting induced by a combination of Antabuse (disulfiram) and alcohol may put an elder at grave risk for dehydration.

Alcohol treatments often substitute psychoactive medications to compensate for withdrawal symptoms. However, the rates at which certain medications clear the system may be much slower in the elderly. For example, a dose of valium which clears the system in 24 hours in a younger adult may take three times as long in an older adult. Thus, it is easy for blood levels to be higher than intended for elders. Extreme care and monitoring should be used when prescribing psychoactive medications to treat withdrawal symptoms.

For outpatient treatments, older people tend to do better with elderly peers rather than mixed aged groups. As mentioned earlier, younger and older problem drinkers tend to have different reasons for their alcohol abuse. Older clients may feel especially threatened if the younger men have tendencies toward violence.

As a group, the elderly tend to be more different from each other than are younger adults. Older adults differ markedly in their physical and mental health, as well as cognitive functioning. Intervention programs should be tailored to specific subsets of elders. Long-term alcohol abusers may be difficult to treat and may require very intensive treatments. Among late life onset drinkers, spontaneous remission is common, but among those hospitalized, recidivism rates tend to be a little higher than younger individuals. Elders with cognitive impairment may be particularly at risk, and may not respond well to treatments which rely heavily on abstract thinking.



Alcoholism in late life tends to be associated with solitary drinking and may represent attempts to cope with loneliness, anxiety, or pain.

Aging and Substance Abuse

ABUSE OF STREET DRUGS among the elderly is very rare. This reflects both aging effects (experimentation with drugs peaks in the late teens and drops off dramatically in the late twenties) and cohort effects — experimentation on a large scale with illegal drugs did not happen until the late 1960s. Thus, the "drug of choice" for the current cohort of seniors is alcohol. Lack of heroin, cocaine, or methamphetamine abuse may reflect survivor effects — individuals with serious drug problems tend not to survive to late life. One study found that alcohol abusers in their 50s and 60s had a mortality rate 2.64 times higher than expected.

Prescription Drugs. However, elders can and do use prescription psychoactive medications for problems such as pain or insomnia. Indeed, although seniors are less than 15 percent of the population, they receive 60 percent of the

Hollywood glamorized smoking during when the current generation of elderly were young.

Old people now have the lowest rates of smoking — due partly to the fact that smokers are more likely to die prematurely.

Smoking in the Elderly

SMOKING IS the leading preventable cause of death in the United States, and thus is the most dangerous form of substance abuse in America. Because the effects of smoking are cumulative, older people are much more likely to die from smoking-related illnesses.

About a quarter of all adults smoke, and this percentage has remained stable for the last ten years. Old people have the lowest rates of smoking of any demographic group — only 10 percent of older men and 11 percent of older women smoke. Sadly, some of this is due to survivor effects — smokers, especially heavy smokers, are more likely to die prematurely.

Those seniors who are still smoking are less likely to try to quit smoking than younger people, but when they do try, they are more likely to succeed. Many older people have quit, and thereby have decreased their risks, especially for heart disease.

psychoactive prescriptions. Nearly 25 percent of community-dwelling elderly persons are using some sort of psychoactive drug.

Older persons may not consider themselves as "abusing" drugs if they are prescribed by their physicians. Unfortunately there is no good way of assessing the dependence on prescription tranquilizers unless they display withdrawal symptoms, such as extreme anxiety and irritability. Women are more likely to abuse tranquilizers than are men. However, there are no good statistics on rates of drug abuse in the elderly.

As with alcohol, long-term tranquilizer use may be associated with memory and balance problems in the elderly. However, these signs of toxicity may easily be mistaken for other disorders.

Two studies indicate that elderly women in particular self-medicate with alcohol and/or prescription drugs to relieve chronic pain and insomnia.

Over-Medication. In nursing homes, psychoactive medications may be extensively used to control behavior. Some studies have indicated that elderly in-patients and even those residing in intermediate care facilities may be receiving drugs that are either not recommended at all for elderly persons or inappropriately high doses of drugs such as benzodiazepines (Valium). Thus, elders may be being over-medicated by their caregivers. Over-medication is a form of elder abuse.

Alcohol interacts with many medications commonly prescribed for the elderly, including anti-hypertensives and tranquilizers.

Baby Boomers

ALCOHOL CONSUMPTION does not necessarily decline with age, and there may be cohort differences both in the amount and type of substances. Further, there are also historical or period effects, in which the society as a whole increases or decreases how much alcohol is consumed. For example, we conducted a longitudinal study in which we found that all of the cohorts studied increased alcohol consumption in the 1970s and then decreased in the 1980s. Regardless, the younger cohorts appeared to drink more alcohol than the older cohorts. Further, they were more likely to report problem drinking even when they didn't seem to be drinking that much more than the older cohorts. We believe that this trend will be even more pronounced among the baby boomers.

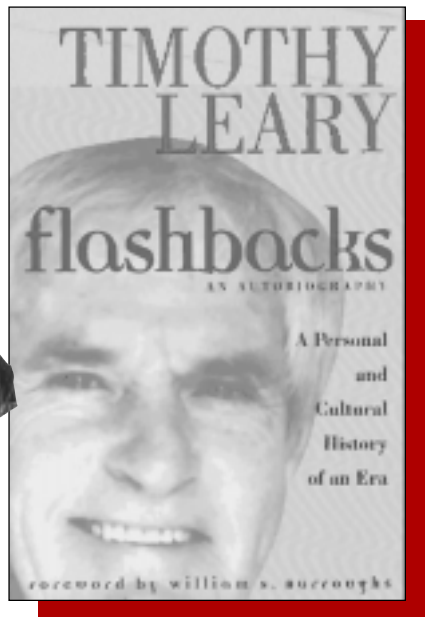
Aging baby boomers raise a new set of questions about drugs and the elderly.

More Research Needed. There is surprisingly little data that specifically looks at alcohol and drug use among baby boomers. In their national surveys, National Institute on Drug Abuse simply groups together everyone over the age of 35. Patterson and Jeste (1999) reanalyzed some of this data and found that in 1979, 27 percent of baby boomers had used an illicit drug in the past months. This percentage decreased sharply when the baby boomers reached age 30, but leveled off at a higher rate of use than previous cohorts.

They suspect, and we concur, that baby boomers also consume more alcohol, but more data is needed to verify this. Further, we have very little data on what the long-term effects of illicit use are. One study suggested that weekly marijuana users had poorer memories in later life than less-frequent users. We have no idea what long-term effects, if any, hallucinogens such as LSD have on the aging brain. Certainly amphetamines may have long-term adverse effects on the cardiovascular system, and may accelerate the aging process.

In summary, we speculate that baby boomers will drink more and use more drugs than older cohorts. They may also be more likely to report having problems with these substances, and may seek help for them more readily than previous generations.

Experimentation with marijuana and hallucinogens was common among young baby boomers. Little is known about the long-term effects of these drugs on the aging brain.



Next Steps

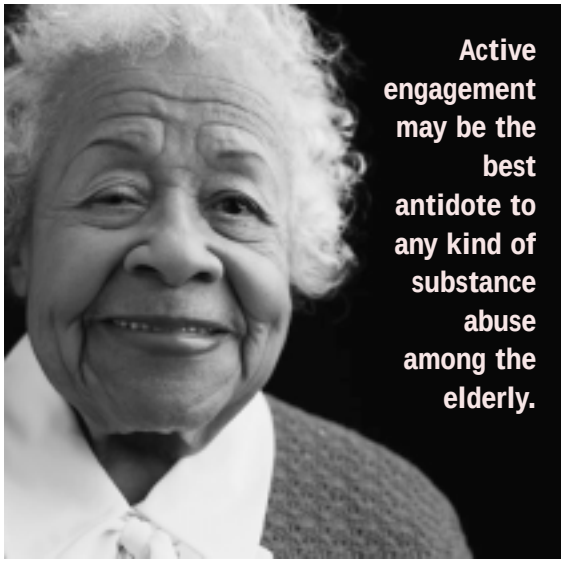
■ **Identify and target risk factors.** Very little data exists on how to prevent alcohol and drug problems in the elderly. Depression and social isolation may be the strongest risk factors for late-life abuse of alcohol. Health care providers need to be sensitive to these risk factors since this may be the only point at which to identify individuals with potential problems.

■ **Educate.** Public health campaigns are exclusively directed at the young. Much more public health information should be presented to elders about the dangers of over-use of prescribed psychoactive drugs. Elders watch more television than any other demographic group, so television-based prevention programs may be more effective for elders. They are also more likely to watch news programs. Many elders are unaware that alcohol and pain medications may create confusional states that are often mistaken for dementia. Many older people are terrified of cognitive impairment — most consider Alzheimer's to be a fate worse than death. A very effective ad campaign could be: "*This is your memory* [solid cheese]. *This is your memory on drugs* [Swiss cheese]."

■ **Focus on community-based approaches.** Seniors helping seniors programs may also be very effective. Most communities have senior centers with outreach programs. However, many elders don't want to be "with the old people" and often reject help they consider patronizing or age-segregated. However, programs such as the Senior Gleaners, which is an elder-run charitable organization, may be particularly effective at integrating isolated elders. Senior Gleaners find and donate thousands of meals every month to food banks that serve all age groups.

■ **Encourage volunteerism.** Elders who volunteer tend to be physically, mentally, and cognitively healthier than individuals who don't. The trick is to get older, depressed individuals to volunteer. Programs such as RSVP (Retired Senior Volunteer Programs) could be more heavily advertised and used as outreach programs. The state of California is currently considering a bill which would set up a statewide elder volunteer service.

■ **Tailor strategies.** Different strategies may be needed for baby boomers. They may be less likely to accept the pronouncements of authority figures at face value, and more likely to seek information and process it. Younger cohorts should be encouraged to think about the effects of very strong substances such as crystal meth on how they age.



Active engagement may be the best antidote to any kind of substance abuse among the elderly.

Summary

OLDER PEOPLE are less likely to abuse substances, except perhaps prescription psychoactive medications. However, aging bodies are more susceptible to the effects of alcohol and other drugs. Very few treatment programs or public health initiatives are directed at older populations, but the evidence suggests that elders benefit just as much if not more than younger people from treatment programs. Certainly more education is needed on the cognitive and physical effects of commonly prescribed medications for seniors — on the part not only of the elders but also of their caregivers and health care providers. Active engagement may be the best antidote to any kind of substance abuse among the elderly.

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RESOURCES

Suggested Readings

Levenson, M. R., Aldwin, C. M., & Spiro, A. III (1998). Age, cohort, and period effects on alcohol consumption and problem drinking: Findings from the Normative Aging Study. Journal of Studies on Alcohol, 59, 712-722.

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Rathbone-McCuan, E., Schiff, S. M., & Resch, J. E. (1987). The aging alcoholic: A summary of the Michigan experiment as a model of outreach and intervention. In G. Lesnoff-Caravaglia (Ed.), Handbook of Applied Gerontology. New York: Human Sciences Press.

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definitions

psychoactive: affecting the mind or behavior.

psychasthenia: a neurotic state characterized especially by phobias, obsessions, or compulsions that one knows are irrational.

psychotropic: acting on the mind, as in *psychotropic* drugs

neurotoxic: toxic to the nerves or nervous tissue.

LET'S HEAR FROM YOU!

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