National Institute on Alcohol Abuse and Alcoholism:

Educating Older Adults and Physicians about Alcohol Risks

The project involves a unique approach in which brief advice will be provided both to older patients and their physicians who identify them as "at-risk drinkers" (e.g., a single risk comprising drinking and using benzodiazepines, or multiple risks comprising drinking and using narcotics, drinking and having depression, etc.).

Lead Agency:

National Institute on Alcohol Abuse and Alcoholism (NIAAA)/ National Institutes of Health (NIH)

Agency Mission:

NIAAA provides leadership in the national effort to reduce alcohol-related problems by:

- Conducting and supporting research in a wide range of scientific areas including genetics, neuroscience, epidemiology, health risks and benefits of alcohol consumption, prevention, and treatment;
- Coordinating and collaborating with other research institutes and Federal Programs on alcohol-related issues;
- Collaborating with international, national, state, and local institutions, organizations, agencies, and programs engaged in alcohol-related work;
- Translating and disseminating research findings to health care providers, researchers, policymakers, and the public.

Principal Investigator:

Alison Moore, M.D. University Of California, Los Angeles School of Medicine Division of Geriatrics 10945 Le Conte Avenue, Suite 2339 Los Angeles, CA 90095-1687

General Description:

Educating Older Adults and Physicians about Alcohol Risks

Older adults have risks associated with alcohol use that differ from those among younger persons. This increased risk is due to physiological changes with aging that increase the effects of a given dose of alcohol as well as age-associated increases in comorbid illnesses (e.g., hypertension, gastroesophageal reflux disease, impairments in gait and cognition) and medication use (e.g., sedatives, selected antihypertensives, analgesics). The occurrence of these conditions may cause adverse effects in individuals even when small amounts of alcohol are consumed. Clinical guidelines for alcohol use disorders in

the elderly released by the American Geriatrics Society and the American Medical Association are targeted toward identification and management of those who drink above low risk drinking limits or who have symptoms of alcohol abuse and dependence. However, they do not specifically address risks associated with small amounts of alcohol in combination with other illness or disorders or medication use.

In a current study, NIH-supported researchers are examining the effects of educating physicians and older at-risk drinkers about these risks. Although many older persons who drink alcohol may be at risk for adverse consequences, clinicians rarely ask questions about alcohol use in their older patients. Nor do they recognize many older persons who may be having alcohol related problems. The primary aims of the study are to reduce the risks of drinking (e.g., the amount of drinking, and associated problems) among older drinkers through screening and brief advice by their primary care providers. Findings indicate that these measures identify not only those older persons who are abusing or dependent on alcohol but also those persons whose moderate use of alcohol may be risky or causing harm.

Excellence: What makes this project exceptional?

Other studies of community-based samples in primary care have demonstrated the efficacy of providers' use of screening protocols to identify older adults at risk for alcohol problems and reduction in at-risk drinking following brief motivational interventions. However, current measures are not designed to identify older persons whose use of alcohol, in conjunction with their chronic conditions, medications and functional status, places them at risk or may be causing them harm. Because existing screening instruments are less relevant to the elderly, this project developed two new measures, the Alcohol-Related Problems Survey (ARPS), and its shorter version (shARPS), that identify older drinkers whose use of alcohol alone, or in combination may be placing them at risk for harm.

Significance: How is this research relevant to older persons, populations and/or an aging society?

Older persons differ biologically, psychologically and socially from younger people, resulting in different health needs and health care utilization patterns. Older men (and women of all ages) have a smaller volume of total body water than younger men; therefore, they attain a higher blood alcohol concentration from a given dose. The greater vulnerability of older persons to the effects of alcohol may be augmented by age-related changes in functional status, nutritional status, and psychological and cognitive status. Body composition continues to change with age; therefore an 85 year old may be more vulnerable to alcohol's effects than a 65 year old.

While only 2 to 4 percent of persons aged 65 or older meet criteria for a diagnosis of alcohol abuse and dependence, some studies have reported that up to 10 percent of older people have other serious problems related to alcohol (e.g., hospitalizations, falls, insomnia, confusion and drug-alcohol interactions). In primary care settings, up to 15 percent of older persons have reported exceeding recommended drinking limits.

Effectiveness: What is the impact and/or application of this research to older persons?

Up to 40 percent of older drinkers may be at risk for negative consequences either due to drinking above recommended limits or by experiencing illness or symptoms that could be worsened by alcohol use or use of medication that may negatively interact with alcohol. Alcohol also may affect the health of an older person by exacerbating sleep problems, elevating blood pressure, and negatively affecting bone mineral metabolism. Alcohol use in older adults is also associated with hip fractures due to falls and other unintentional injuries including automobile crashes. The increased risk of hemorrhagic stroke seen in the general population may be especially important in this age group. Consumption of over one to two drinks a day poses significant risks for cancer, liver cirrhosis, brain damage, and unintentional injuries.

This study is the first to assess a preventive intervention among older adults in primary care aimed to reduce risks of alcohol use alone, or in conjunction with comorbid illness or medication use. Thus, at-risk status, as indicated by the screening instrument examined in this study, rather than alcohol consumption alone, may be the most relevant indicator of this intervention's success.

Innovativeness: Why is this research exciting or newsworthy?

The majority of older persons take medications, and alcohol interacts adversely with many prescription and over-the-counter drugs. Studies indicate that between 60 to 90 percent of elderly persons use some form of medication, often more than one at a time. Medications that have a high potential for a negative reaction with alcohol, and commonly are taken by older people, include: analgesics, antihypertensives, anticoagulants, diuretics, antiarthritics and psychoactive agents.

Successful completion of this project can provide a valuable model for translation of alcohol-related screening and brief intervention conducted among older adults by community-based, primary care physicians. The most innovative feature of the study is the use of a new instrument to both determine risk and evaluate changes in risk. Through feedback from physicians, investigators have streamlined the screening process (e.g., via telephone rather than in-person), thereby creating greater efficiency to conduct brief interventions.