# Potentially Inappropriate Meds Prescribed for 39% of Elderly

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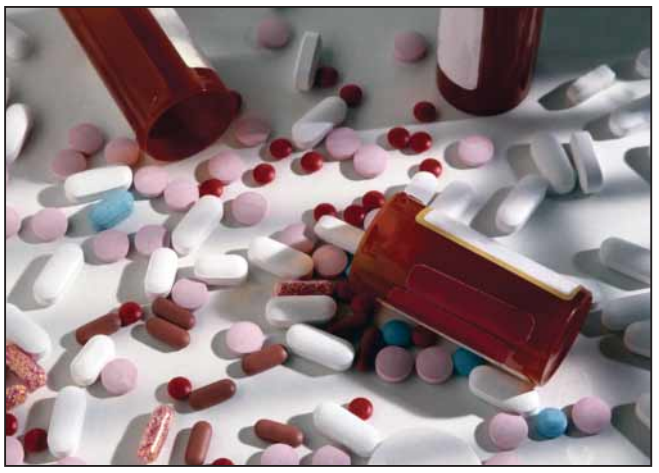
ORLANDO — Up to 39% of geriatric patients are taking potentially inappropriate medications, and this trend is associated with increased drug-related problems and health care costs, according to a new study.

The findings should encourage physicians to be more critical in their prescribing decisions, said Diane M. Spokus, one of the authors of the study, which was presented as a poster at the annual meeting of the Gerontological Society of America.

The retrospective examination of medication use among 17,971 managed-care patients aged 65 or older found that 6,875 (39%) were using at least one potentially inappropriate medication (PIM), including 13% who were using two or more PIMs.

PIMs were defined by the revised Beers criteria (Arch. Intern. Med. 2003;163:2716-24) as either "medications or medication classes that should generally be avoided in persons 65 years or older because they are either ineffective, or they pose unnecessarily high risk for older persons, and a safer alternative is available."



**Patients who took at least one potentially inappropriate medication showed a 14% rate of drug-related problems.**

The finding of a 39% rate of PIM prescriptions is higher than what has been previously reported, "but we attributed that to the fact that we included oral estrogen as a PIM, and that accounted for almost 10%," Ms. Spokus said in an interview.

After estrogen, the two most commonly prescribed PIMs were propoxyphene and combination products, as well as short-acting benzodiazepines (7% each), followed by digoxin (4.7%) and long-term, nonsteroidal anti-inflammatories (4.6%), according to the findings.

By using principal and secondary discharge diagnoses occurring within 30 days of the medication prescription, the study found a nearly threefold higher rate of drug-related problems among patients taking at least one PIM, compared with those not taking such medications (14% vs. 5%).

The most common drug-related problems were syncope (3.6%), malaise and fatigue (3.5%), dehydration (1.8%), sleep disturbances (1.5%), and any cognitive impairment (1.5%).

PIMs were associated with increased costs, including facility-paid, provider-paid, and prescription costs (about $2,250 per patient over 6 months), compared with patients who were not taking the medications (about $1,000), with patients taking more than one PIM accounting for the highest costs.

A larger, prospective study is needed to determine which drugs are associated with the most problems, Ms. Spokus said.

The researchers also noted that their measures were limited in their ability to infer causality. ■

# *Alcohol-Interactive Meds Tend Not to Deter Drinking*

ORLANDO — Elderly people tend to quit drinking alcohol as their health declines, but their medications play little role in this decision, according to a new study.

"We found no increased likelihood of drinking cessation among people taking alcohol-interactive medications, as opposed to those taking nonalcohol-interactive medications," said Kristine E. Pringle, Ph.D., who presented that study in a poster at the annual meeting of the Gerontological Society of America.

"Our study really underscores the importance of physicians warning patients about alcohol-interactive drugs and the fact that they can produce serious, even fatal, reactions when mixed with alcohol," she said in an interview.

The retrospective study included 8,883 subjects in Pennsylvania's Pharmaceutical Assistance Contract for the Elderly (PACE) program who reported using alcohol in a 2000 survey. Survey data were then linked to prescription drug claims to examine which medications and health factors were associated with drinking cessation over the next 2 years.

Overall, 3.9% (347) of subjects quit drinking during the study period. The most common reason was entry into a nursing home (odds ratio 4.5), followed by the addition of antipsychotic medications (OR 2.9) and antineoplastic agents (OR 2.67). A decline in self-reported health increased the likelihood of quitting (OR 1.55), as did a fall in the previous year (OR 1.28).

But the addition of alcohol-interactive medications was not significantly more likely than the addition of nonalcohol-interactive medications to result in alcohol cessation (OR 1.8 vs. 1.78 respectively), said Dr. Pringle, a research specialist at First Health Services Corporation, in Harrisburg, Pa.

"In many medication classes, 100% of the drugs interacted with alcohol, such as some of the cardiovascular classes or the central nervous system agents. And people who initiated those classes between baseline and follow-up were no likelier to quit drinking," she said.

"It's not clear if maybe the physician did warn them, but they disregarded the warning, or possibly they did not receive the warning. The prescription bottle itself would have the warning, but sometimes it's printed so small that they might have trouble reading it or they don't understand it. So verbal warnings are of paramount importance."

Dr. Pringle said there were certain classes of drugs that were the least predictive of alcohol cessation, possibly because of the underlying conditions they were treating. These classes included anxiolytics and narcotic analgesics.

Several previous cross-sectional studies have linked poorer health in the elderly to former drinking, rather than current drinking, suggesting that the decision to quit was motivated by declining health. But this is the first longitudinal study to examine the associations with alcohol cessation, Dr. Pringle said.

# Hearing Loss Factors Heavily Into Seniors' Quality of Life

ORLANDO — Elderly persons with hearing loss are more likely to describe themselves as aging unsuccessfully, compared with their peers who hear well, despite the absence of any other chronic conditions, according to a study presented as a poster at the annual meeting of the Gerontological Society of America.

But this impairment to healthy aging is often underappreciated by physicians, said the lead investigator, Margaret Wallhagen, Ph.D., R.N.

"Hearing loss is strongly linked to depression," she said in an interview. "It makes people feel isolated and left out, and they may feel bad or embarrassed because they can misinterpret things."

The study used data from the Alameda County (Calif.) Study, a longitudinal study on aging that began in 1965.

A total of 899 subjects aged at least 65 years were identified and asked to evaluate their own aging as successful or unsuccessful. The presence and number of chronic conditions was recorded, and hearing capability was also assessed with questions about hearing difficulties—even with hearing aids—in three settings: normal conversation, over the telephone, and in a noisy room.

Half the subjects described themselves as aging "successfully," and half deemed their aging "unsuccessful." But although the number of chronic conditions was a significant predictor of successful aging, one-third of those with no chronic conditions still described themselves as not aging successfully. Conversely, one-third of subjects with two or more chronic conditions described themselves as aging well.

This inconsistency between subjects' physical health and their self-rated successful aging can be partly explained by their hearing, said Dr. Wallhagen, a professor in the department of physiological nursing at the University of California, San Francisco.

Subjects rating themselves as not aging successfully had significantly more hearing loss (a score of 2.26 on the hearing loss scale) than did subjects who said they were aging well (a score of 1.57), even in the absence of any chronic conditions.

And even among those with two or more chronic conditions, subjects who described themselves as aging successfully had less hearing loss (score of 2.13), compared with those who said they were not aging well (score of 3.22).

"Our data support the importance of hearing in the aging experience," Dr. Wallhagen said. "I wish physicians would pay more attention to hearing loss in their patients, and if they find it, they can send them for an evaluation." Other research by her group has shown that more than 80% of elderly people never have their hearing impairment addressed by their primary care practitioner. "[Physicians] have a time limitation, so they focus on things they think are critical. And [hearing loss is] not something people die of, so that's why it is often ignored," she said.

Additionally, another of her studies has found that spousal hearing loss is a significant predictor of unsuccessful aging in the partner.

Dr. Wallhagen said that while it is often assumed the adjustment to hearing aids may be too difficult for many aging adults, most can be coached through the transition period.

"In truth, I think we as primary care practitioners can help people with their expectations. In other words, they need to know that they have to work at wearing hearing aids. You can't just put them on like glasses. But many people—if they are given the coaching and if they are instructed to understand that their brain has to relearn how to listen—they can get used to them."

In another study she is doing, many subjects with newly acquired hearing aids are surprised at the number of sounds they did not even know they were missing. ■