

DOCUMENT RESUME

ED 363 780

CE 065 093

TITLE Self Care. Preventing Misuse of Medication and Alcohol in an Aging Society. Pharmacists and Prevention Specialists Working Together.

INSTITUTION Illinois Pharmacy Foundation, Springfield.; Illinois State Dept. of Alcohol and Substance Abuse, Springfield.; Illinois State Dept. on Aging, Springfield.; Illinois State Office of the Lieutenant Governor, Springfield.

PUB DATE [93]

NOTE 109p.

PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC05 Plus Postage.

DESCRIPTORS *Alcohol Abuse; *Alcohol Education; Community Programs; *Drug Abuse; *Drug Education; Health Promotion; Instructional Materials; *Older Adults; Outreach Programs; Patient Education; Pharmacology; *Prevention; Program Development; Program Implementation; Records (Forms)

IDENTIFIERS Illinois

ABSTRACT

This manual, which was originally developed to supplement a corresponding continuing education program offered by the Illinois Pharmacy Foundation and Illinois Pharmacists Association, is intended as a resource for pharmacists and other health care professionals who work to prevent alcohol and drug misuse/abuse in older patients. Discussed in sections 1 and 2 are the following aspects of the pharmacology and prevention perspectives on the problem: misuse and abuse of medication, body changes in aging, procedures to follow when misuse/abuse is detected, suggestions for talking to older persons, the Illinois Prevention System, prevention programs and agencies, and services offered by the Prevention Resource Center. Section 3 outlines the steps in developing community outreach programs and presents program ideas and sample programs for pharmacists and prevention specialists. Section 4 contains reprints of 6 published articles on drug and alcohol abuse and a 15-item bibliography. Included in Section 5 are a series of self-care handouts for older adults, fact sheets on drug/alcohol misuse/abuse in older adults, and handouts to assist in conducting a medicine review and counseling older adults. Section 6 contains a clearinghouse order form, patient consent form, and sample presentation agreement. (MN)

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Self Care

Preventing Misuse of Medication and Alcohol
 in an Aging Society
 Pharmacists and Prevention Specialists Working Together

Published by
 The Office of the Lieutenant Governor
 Illinois Department of Alcoholism and Substance Abuse
 Illinois Department on Aging
 Illinois Pharmacy Foundation

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Preface

The *Self Care* manual was developed as a resource for pharmacists and other healthcare professionals interacting with older patients. The materials contained or referenced in this manual are intended to supplement a corresponding continuing education program offered by the Illinois Pharmacy Foundation and the Illinois Pharmacists Association. However, those who have not had the benefit of this continuing education program should still find the manual quite useful.

The reader is encouraged to pursue the references pooled in this manual to deepen one's knowledge of the direct and related problems of medication and alcohol use among older persons. For convenience, some of the relevant articles have been reprinted here to alert the reader to some of the prevalent social and health issues surfacing in popular and academic literature. Additional references, handouts, and resources are provided to help facilitate community outreach programs by pharmacists and prevention specialists attempting to address these issues.

Thanks to the Office of Lieutenant Governor Bob Kustra, development of the continuing education program and the *Self Care* manual was made possible. Because of the support of Lieutenant Governor Kustra, a dynamic collaboration ensued involving the Illinois Department of Alcoholism and Substance Abuse (DASA), the Illinois Department on Aging, and the Illinois Pharmacy Foundation. This was an historic collaboration of agencies and one that resulted in an informal but important public health coalition in the State of Illinois.

Self Care was principally authored by consultant pharmacist Linda Esposito, R.Ph., of Weber Medical Systems in close association with Jo Warfield, DASA communications director, and prevention specialist Suzanne Chisum, M.S. Additional support and counsel came from Mike Stehlin, Chief of Training and Special Projects with the Department on Aging; Todd Semla, Pharm.D., of the University of Illinois College of Pharmacy; and Monica Mueller, Lieutenant Governor Kustra's executive assistant. This impressive roster of collaborators are to be thanked, not only for their hard work, but for the high level of cooperation and information-sharing making this manual possible.

Thanks and gratitude are also extended to Lieutenant Governor Kustra for recognizing medication misuse and abuse as a problem in need of immediate attention. Further thanks to Julie Filip and Janice Ball from the Office of the Lieutenant Governor for their help in coordinating this

project and keeping everyone on track. Appreciation is also extended to the National Council on Patient Information and Education for their help and permission to share the Brown Bag Medicine Review materials with literally hundreds of pharmacists throughout the State of Illinois.

On behalf of all the collaborating agencies, I'd like to thank the authors and providers of materials from the American Medical Association, Human Support Services, the Illinois Prevention Resource Center, the Illinois State Council of Senior Citizens, the San Francisco Study Center, and Pat Smith for editing and preparing the final manuscript.

Marjorie Jaski, Director
Illinois Pharmacy Foundation

Introduction

Medicines can help restore health and comfort to patients of all ages. Alcohol is a pleasant part of culture and tradition for many people.

But alcohol and medications (prescription and non-prescription) both have potential for misuse. The results can be health and family problems, unnecessary health expense, and ruined lives.

Our efforts to prevent the abuse of alcohol and other drugs have generally been focused on young people, but older adults are at risk too.

A recent study in the *Journal of the American Medical Association* found that hospitalization among people over 65 is greater for alcohol-related problems than for heart attacks, and the cost to taxpayers for care of these older persons is more than \$233 million annually. The researchers reported that concern for this population has been muted by long-held beliefs that drinking and drinking problems decline in old age.

The most recent National Household Survey found that almost 12 million Americans abuse prescription drugs. There has been a recent increase in awareness that prescription medicines can be misused or abused by older adults—with dangerous results. Health care providers, caretakers, and older adults themselves must understand the risks.

Older persons are at risk for several reasons. As our bodies change with age, we often see a slower metabolism and a diminished tolerance for alcohol and some medicines. Some prescription drugs may intensify the older person's response to alcohol, leading to more rapid intoxication.

Often older persons are using more prescription drugs than they ever have before, and more than one physician may prescribe medicines for them. These factors increase the risk of drug interaction.

Lower levels of effort or productivity may be tolerated—or even expected—by the older adult's employer, friends and family as retirement age approaches.

Changes in the older person's social life are taking place, including more time spent alone.

Older persons are less likely than their younger peers to be confronted by law enforcement agencies about their alcohol or drug problems (DUI charges, for example).

Alcoholism and other addictions begin with misuse. Addiction is a disease process in which a body undergoes changes resulting in the loss of control over consumption of alcohol or other drugs. Not everyone who uses a drug (legal or illegal) becomes addicted at the same rate; research suggests that there are both hereditary and use factors related to the onset of addiction.

Addiction—including alcoholism—is a progressive and often fatal disease process characterized by impaired control, compulsive use of the drug despite adverse consequences, and distortions in thinking, most notably denial.

Just as the disease process of alcoholism begins with misuse of alcohol (a legal drug), addiction to some therapeutic medications can occur, and it begins first with misuse and then abuse.

Several misconceptions stand in the way of giving older abusers the help they may need to maintain or regain health. Symptoms and behaviors which would clearly spell substance abuse or mental illness when observed in a younger person may be mistaken for "signs of old age" by family members and friends of an older person. The older abuser's spouse may fear a change in roles and responsibilities or a reduction in financial security if the substance abuse is exposed.

Some people wrongly assume that the addictions of older persons are incurable, or that they aren't harmful to the person.

"I saw my grandfather sent off to a state hospital, and he never returned! I won't do that to my husband. We'll just live with his alcoholism."

"After all that Dad's been through, he has earned some relief. If he gets pleasure from drinking heavily, he's entitled to it."

Older persons often have strong emotional reactions to the labels we use to describe chemical dependency. Society has only recently accepted the disease concept of alcoholism, and this understanding contradicts beliefs that were popularly held by prior generations.

... to label my mother "addicted" is, for her, to be emotionally assigned to the criminal element. To label my father "alcoholic" means, to him, that he belongs to a weak-willed, sinful element.

Fr. Philip Kraft, M.H.S., S.C.A.C.
From a chapter in *Chemically Dependent
Older Adults*

Published by Hazelden Foundation

Here are some important things to remember:

- Substance abuse is harmful and progressive. It destroys health, changes behavior, and tears relationships apart.
- Alcoholism and other addictions are not enjoyable. The addict consumes the drug

in ever larger quantities in the attempt to feel "normal." But that attempt is futile.

- Today's substance abuse treatment methods work to return the substance abuser to health and a normal lifestyle.
- The best way to reduce the pain of substance abuse in older persons is to *prevent it from occurring!*

Partners in Community Prevention: Pharmacists and Prevention Specialists

Pharmacists are an important contact with the health care system for many older persons. New laws have reinforced the pharmacist's responsibility to counsel patients about appropriate medication use. Some pharmacists conduct outreach programs to older audiences in their communities, carrying messages about safe use of medicines and reminding older adults about the risks associated with alcohol, too. One popular outreach technique is the "brown bag" medicine review, in which a pharmacist reviews each older participant's personal medicine regimen, with medicines brought to the review site in a paper bag.

Community prevention programs in the Illinois InTouch Network reach out to their communities to share information and skill-building around healthy lifestyles, with an emphasis on reducing the risks of alcohol and other drug abuse. Some of their efforts are already aimed at seniors, but many community prevention agencies are looking for new resources to use with this audience.

The Office of the Lieutenant Governor, the Department of Alcoholism and Substance Abuse, the Department on Aging, and the Illinois Pharmacy Foundation are bringing pharmacists and prevention specialists together to share information about reaching out to older audiences to prevent the abuse of alcohol

and other drugs—including prescription and over-the-counter medications.

Pharmacists and prevention specialists can cooperate in a number of ways:

- When pharmacists conduct brown bag medicine reviews at senior program sites in their communities, they may invite a prevention specialist to attend and introduce prevention messages aimed at helping older persons maintain a healthy lifestyle free of the abuse of alcohol and other drugs.
- Pharmacists can get information and materials from local community prevention programs or from the Prevention Resource Center for use in their presentations to senior groups about the safe use of medications. Inclusion of information about risks related to alcohol is especially important.
- Prevention specialists may want to initiate a regular senior health outreach program. Inviting a pharmacist to talk about safe medicine use or to conduct a Brown Bag

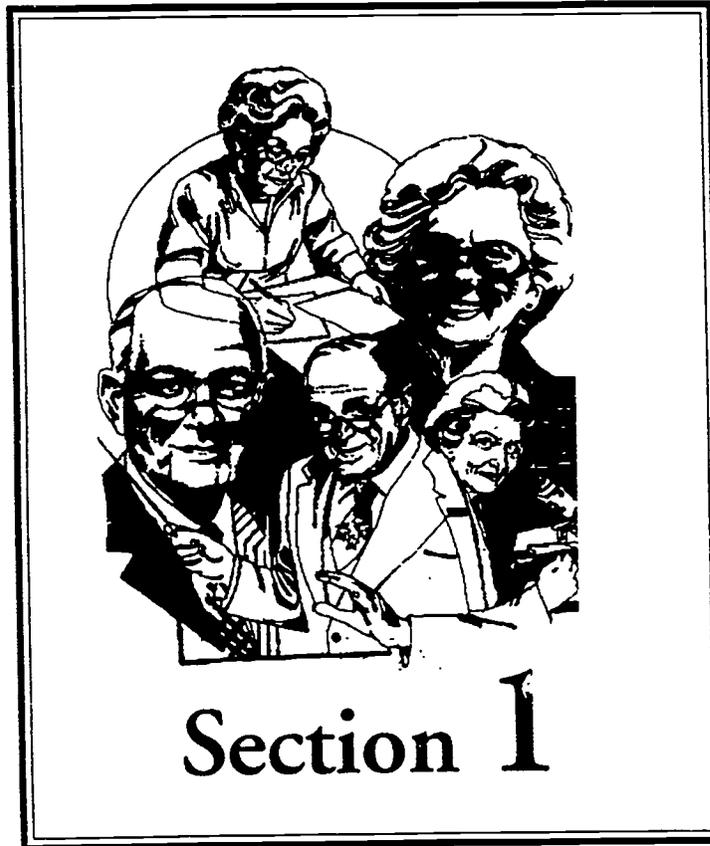
Medicine Review would enhance that program and lend credibility to the information shared with the older audience.

This training is aimed at helping community pharmacists and prevention specialists in their efforts on behalf of older people.

We have focused on the special needs of older persons, their physical characteristics, and their attitudes and beliefs. At the end of the training, you should be better prepared to help seniors avoid the problems that can accompany inappropriate use of medicines and/or alcohol.

The Department on Aging, through its network of funded Senior Centers, senior advocacy groups and other targeted programs, will schedule presentations for pharmacists and prevention specialists across Illinois. Where a pharmacist and prevention specialist can be identified to work as a team, these might combine a brown bag review with a senior health talk.

To indicate your willingness to participate in this outreach to older Illinoisans, please return the form that appears in the last section of this manual.



The Pharmacology Perspective

- 1. Misuse and Abuse of Medication**
- 2. Body Changes in Aging**
- 3. What to Do When Misuse/Abuse
Is Detected**

Misuse and Abuse of Medication

In order to realize the impact of medication misuse/abuse on older people, we need to understand the demographics, the patterns of drug use, the nature of chronic disease facing older people, and the psycho-social and physical changes which occur, all of which affect how medications are perceived and used by older people. All these factors put them at risk for misuse and/or abuse of medications, as well as increasing the potential for adverse drug reactions.

The effects on morbidity and mortality are significant. Estimates range from 30,000 to 70,000 older persons dying each year from medication abuse and misuse. Accurate numbers are difficult to ascertain, since the death of an older person is often attributed to an existing disease state, and medication problems can be overlooked.

Older persons comprise 12 to 14 percent of the current U.S. population; approximately 34 million American citizens are 65 years old or older. This subsection of the population buys and uses 25 to 30 percent of all over-the-counter (OTC) and prescription drugs.

The comparatively high use of medications by older persons reflects the chronic nature of diseases and conditions associated with aging: diabetes, glaucoma, gastrointestinal and respiratory disorders, osteoarthritis, and cardiovascular diseases (HTN, MI, CHF, stroke).

The older population is often subdivided into three groups by age, including

- The *young-old*, 65 to 74 years old, which includes many who are still in vigorous

health and remain largely active and untouched by advancing age,

- The *middle-old*, age 75 to 84, a group which includes many who are fit and active, and
- The *old-old*, age 85 and older, who often experience the debilitating and degenerative diseases associated with very advanced age.

We must remember, of course, that to categorize people by age, without considering their individual differences, can be a dangerous oversimplification. We are dealing with human beings and must therefore take each person as an individual, dealing with the questions and problems of each one. Aging is a process of change, and there are many physically and mentally active people in all three age groups.

At present only 4 to 5 percent of all older persons reside in nursing homes, but there is a shortage of beds for the existing need. This shortage will be felt more and more in the future. By the year 2000, some 40 million people will be 65 or older; by 2030, the number will be 55 million. And the fastest growing segment of the older population is 85 and older, requiring a greater expansion of both outpatient and inpatient health care.

About 95 percent of older persons are ambulatory and live in a home environment. Of these, some 75 percent are taking one or more prescription medications; estimates of the number of medications run as high as six to ten. Most older persons

in a home environment do not have professional supervision of their medications, and many cannot manage their medications appropriately, for a wide variety of reasons. It is estimated that more than 10 percent of hospital admissions of older persons are the result of adverse drug reactions and mismanagement of drug therapy for chronic conditions.

Although the typical "drug abuser" tends to be depicted as a member of the younger generation, the abuse of medications is a growing problem among older persons.

Non-prescription drugs are part of the lives of some 70 percent of older persons who live in a home environment. This is self-medication resulting from self-diagnosis and usually involves little or no input from a physician or pharmacist. Because older persons tend to be intensive users, the possibility exists for misuse and abuse of both non-prescription and prescription drugs.

The words "misuse" and "abuse" are often used interchangeably, but there is a difference. *Misuse* includes over-medicating, self-prescribing, lack of compliance, drug sharing, and indiscriminate refilling of prescription medications. Misuse is often caused by a lack of information about medications and perhaps also about the disease state being treated. There are three patterns of misuse:

1. **Overuse** can stem from a patient's impression that taking more of a medication will relieve symptoms faster, or from a patient's forgetting that the appropriate dose has already been taken. The latter situation is often called "remedication."
2. **Underuse** can happen when a patient is taking several medications and becomes confused with his or her complex dosing regimens. The cost of medications also figures here; a patient may try to conserve medications, hoping to save money. Adverse and/or side effects may also cause a patient to stop taking a medication; for example, HTN medications can make a

person feel worse than before they were taken.

3. **Erratic use** can be caused by poly-pharmacy, complex drug regimens, and forgetfulness. With multiple and complex schedules, it is easy for a dose to be missed. The patient may try to compensate by increasing and or skipping doses. Or a patient may stop taking a certain medication because their illness or symptoms have subsided—but the patient still hoards the medication for possible future use.

Abuse, on the other hand, constitutes the intentional alteration of a prescribed course of therapy or taking a drug for other than therapeutic reasons. With older persons, the risk of abuse lies primarily with prescription medications, including sedative-hypnotics, antianxiety, antidepressants, antipsychotic agents, and analgesics.

The abuse of alcohol is also a problem. From 2 to 10 percent of older persons (some estimates are higher) drink alcohol to the point that it interferes with their health and lives. Alcohol combined with even appropriately used medications can have serious consequences for older people.

Because of physical changes which occur with aging, the combination of as little as two ounces of alcohol with medication taken on a regular basis (such as cardiovascular, seizure, NSAID, and drugs affecting the central nervous system) can cause adverse reactions and accidents to occur.

Alcohol consumption among older persons is under-recognized by both families and health professionals. We become enablers when we ignore the possibility that alcohol can contribute to an older person's health problems.

Other factors including diminished vision, hearing impairment, and loss of memory pose problems in older people's ability to use medications properly; also, psycho-social factors play a role in the development of drug and alcohol abuse and misuse. Physical changes and how they are dealt with by the individual, retirement, or the

death of a spouse or friends affect how a person uses medications. For many older patients, loss of independence or perceived loss of control over their lives may be devastating.

When inappropriate use is suspected, the physician or pharmacist must determine if the problem is misuse or abuse. Misuse can be easily determined by careful questioning of the individual. At that point a determination of fault (physician, pharmacist, or patient) must be made and the fault corrected.

Abuse, on the other hand, may be more difficult to determine. Health problems such as malnutrition, depression, decreases in cognitive function, and adverse drug reactions can interfere with proper diagnosis, since confusion is a major symptom of all the above—including alcohol abuse. It is most important, once abuse is suspected, to determine the substance in question and to take steps to wean the patient away from the substance of abuse.

Other complicating health problems may cause difficulties in the weaning process. It can take twice as long to detoxify an older patient as it does a younger one, and the process often will not be completely covered by health plans. There is a widespread belief that older persons do not respond well to the changes required to detoxify their bodies and to maintain a substance-free life. This belief is incorrect; in fact, older persons respond better to dependency programs than younger persons, once they are diagnosed and accept treatment.

The abuse of alcohol and drugs is a growing problem among older persons, and we as health care and service providers need to be able to recognize and respond to the problem. But we must remember to treat the whole person and not only a set of symptoms or individual disease states.

The most common causes of death among older persons include some conditions which may be chronic for years before death occurs: heart disease (8 percent), cancer (10 percent), atherosclerosis (4 percent), and other conditions with a sudden onset, such as pneumonia and influenza (5.5 percent) and cerebrovascular disease or stroke (14 percent).

Many of these conditions can be managed only by drug therapy; glaucoma is one example. Other conditions may respond to lifestyle changes; osteoarthritis, for example, may often be managed with a weight loss and exercise program, with little or no drug therapy.

Drug therapy is used to help young and old patients maintain active lives and to reduce the possibility and/or severity of complications arising from certain chronic disease states. Without such therapy, HTN can lead to stroke or MI, and diabetes to glaucoma, peripheral neuropathy, or renal disease.

For older persons, drug therapy must be monitored and reevaluated on a regular basis. Unnecessary and inappropriate drugs should be discontinued and other changes made, depending upon the needs of the individual patient.

Body Changes in Aging

Change is a constant. As we grow older, our bodies do not function as efficiently as they did when we were younger. The changes which come with age affect the way our bodies respond to different disease states and stress, and they may also affect how our bodies absorb, distribute, metabolize, and excrete drugs. These changes put the older person at risk for an increase in adverse drug reactions.

Physiologic Changes

Physiologic changes which affect the pharmacokinetics of drugs include the following:

1. Gastrointestinal tract changes, which may affect drug absorption.
 - a. Decrease in basal cell acid output, leading to increased gastric PH. Absorption can be increased or decreased.
 - b. Slower gastric emptying time, causing a decrease in absorption.
 - c. Slower intestinal motility, which can either increase or decrease absorption.
 - d. Reduced blood flow, decreasing absorption.
 - e. A decrease in the number of absorbing cells, causing a corresponding decrease in absorption.

Studies to date reveal little or no age-related changes in the extent of absorption, though many

clinicians speculate that the following factors do increase or decrease absorption, depending on the drug and its physical and chemical properties.

2. Drug distribution.
 - a. Decline in total body size.
 - b. Decrease in total body water, which may cause the following with water-soluble drugs:
 - i. Smaller volume of distribution.
 - ii. Higher blood concentrations.
 - iii. Requirement of smaller doses.
 - iv. Increased effect.
 - c. Decrease in serum albumin, which may cause an increase in free (active) concentration of extensively bound drugs.
 - d. Decrease in lean body mass.
 - e. Increase in body fat, which may cause the following:
 - i. Larger volume of distribution of lipid-soluble drugs.
 - ii. Less intense onset of action, with longer plasma half-life.
 - iii. Requirement of smaller doses.
3. Hepatic changes.
 - a. Decreased liver weight.
 - b. Decrease in hepatic perfusion, caused by a decrease in cardiac output.
 - c. Decrease in the number of functioning hepatic cells.

- d. Possible decrease in some hepatic enzyme systems—microsomal oxidation and liver enzyme induction.
4. Renal excretion.
- a. Histologic changes.
 - b. Decrease in renal blood flow.
 - c. Decrease in glomerular filtration rate.
 - d. Decrease in tubular secretion and reabsorption function.

Most older people do not have normal renal function; by age 80 we lose approximately 40 percent of our kidneys' ability to filter no matter how healthy we are, although serum creatinine levels may appear to be normal. Dosage adjustments need to be made for those drugs excreted primarily by the kidneys. The above changes can

cause drug accumulation leading to negative clinical outcomes.

Other physical changes which affect the body's response to drugs:

- Red blood cell binding is reduced for some drugs, causing higher blood levels.
- Reduced baroreceptor reflexes can increase the risk of orthostatic hypotension—dizziness with risk of falling and fracture.
- Impaired thermoregulation may mean failure to respond to shivering, rise in metabolic rate, or vasoconstriction.

These physical changes in most cases have a direct effect on the way our bodies absorb, metabolize, distribute and excrete drugs, all of which puts the older patient at greater risk for side effects and adverse reactions to occur.

What to Do When Misuse/Abuse Is Detected

When misuse is detected, you need to determine what type of misuse is occurring and then offer corrective measures:

Overuse

1. If the person believes that taking more of the medication will relieve symptoms faster, explain the dangers of increasing dosage or frequency of use, depending upon the drug or drugs involved. This situation is very common with over-the-counter medications. Most people perceive them as safe, with little or no danger associated with their use, because they can be purchased without a prescription.
2. If the person re-medicates because of forgetting whether a dose was taken, explain that, instead of re-medication, the patient should wait until the next scheduled dose and start again. Offer suggestions to help the person remember to take the medication correctly. Here are some suggestions:
 - Medication containers marked with the days of the week or other designations to make remembering easier.
 - Using small paper cups to set up daily medications.
 - Involvement of family members (this is useful when there are persistent problems in remembering, but every effort should be made to allow the person as much sense of independence as possible).

Underuse

1. If the person is confused by complex dosing schedules, missed doses may be a result. The strategies in the previous section can also be used here.
2. If the person tries to save money by taking medication less often than the prescription directs, explain the increased health risk which results; he or she may need to be hospitalized because the disease has worsened. Some suggestions for controlling costs:
 - Talking to the physician; there may be another, less expensive medication which will also have the desired result.

- Asking the pharmacist if there is a generic equivalent available.

3. If adverse and/or side effects cause the person to decrease or even stop the medication, determine which has occurred, an adverse effect or a side effect. Depending upon the medication, some side effects are minor or subside with time, and you can explain this. If symptoms persist, however, the person will need to contact the physician.

Erratic Use

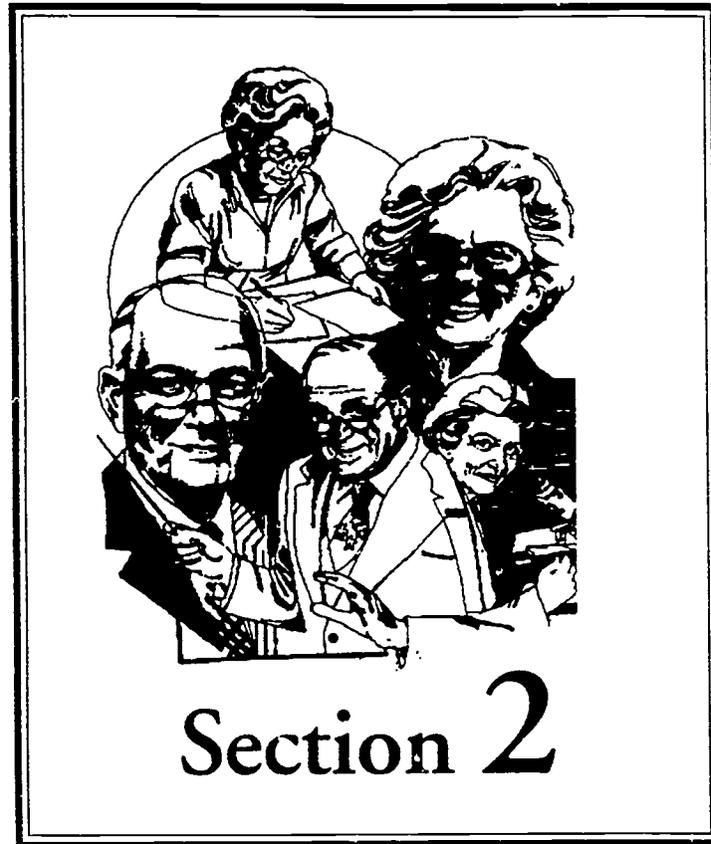
1. Poly-pharmacy, complex drug regimens and forgetfulness all can contribute to increasing and/or skipping doses. The same strategies for correcting overuse can be appropriate here. Take time to explain each drug and its directions and precautions.
2. Saving medication for later use may be a problem. Explain that the practice can lead to accidents. For example, if a person gets up at night to take medication, such factors as the late hour, poor lighting, and unwellness may combine to cause the person to pick up the wrong container and take an incorrect medication. Disposing of any medications the patient is no longer using will decrease this risk.

Abuse

Abuse is difficult to determine in outreach programs like Brown Bag or You and Your Medicine. What can be found is types of medications with the potential for abuse. Once these are identified, you can counsel the older person on the risk of these substances. Look for the following:

- Analgesics
- Sedative hypnotics
- Antianxiety medications
- Antidepressants
- Antipsychotic agents

It is easier to determine abuse in the pharmacological practice setting by carefully monitoring refills of drugs which offer the greatest risk and by informing physicians when problems occur.



The Prevention Perspective

1. The Health Approach to Prevention
2. Talking to Older Persons
3. The Illinois Prevention System
4. Prevention Programs and Agencies
5. Prevention Resource Center

The Health Approach to Prevention

Prevention is a relatively young field. The basic principles for preventing alcohol and other drug abuse also apply to such areas as teen pregnancy prevention, gang and violence prevention, and, for the elderly, illness and disease prevention. Simply trying to stop something from happening, however, is a reactive stance. Prevention can work much more effectively and can be more acceptable to individuals and communities when it is thought of as holistic health building instead of a reaction to a traumatic event.

The Illinois Prevention Resource Center defines prevention as an “interactive process which builds the capacities of individuals and systems to promote healthy environments, lifestyles and behaviors.” This definition is based on the premise that people can impact the environments in which they live in a positive way. People who live healthy lives will ensure not only their own health but that of their families and communities as well.

The state of Illinois uses five primary prevention strategies:

- **Information**—to raise awareness of and knowledge about the nature of alcohol and other drug use, abuse and addiction; their effects; and prevention and treatment services.
- **Education**—to build life and social skills that help people cope without the use of alcohol and other drugs, including decision making, assertiveness, resistance, stress management, problem solving, judgment, and communications.

- **Community and Professional Mobilization**—to build networks, increase community empowerment and collaboration, and strengthen planning and strategies.
- **Alternatives**—to make activities available that will meet the needs otherwise filled by alcohol and other drugs, and give people opportunities for practicing life and social skills.
- **Social Policy and Environmental Change**—to establish or change community standards and attitudes, and to address environmental conditions which increase alcohol and other drug abuse.

These five areas are useful in examining the impact on older persons of over-the-counter and prescription medications.

To take medication properly, people need **information**: When is the proper time to take the medication? What are the side effects? When can I stop taking the medication? These and other questions need to be answered. Currently, the State of Illinois requires pharmacists to counsel each Medicaid prescription recipient on matters which the pharmacist deems significant.

According to the Omnibus Budget Social Security Act (OBRA90), a pharmacist must offer counseling to a customer when a prescription is initially filled. The customer has the option to refuse counseling. Out of this law, Illinois has formed the Drug Use Review (DUR) Program and Bond. The review includes screening for potential drug therapy problems due to therapeutic duplica-

tion, drug-disease contraindication, drug-drug interaction, incorrect dosage or duration of drug treatment, drug allergy interaction, and clinical abuse/misuse.

Because of this law, pharmacists are increasing the counseling they provide, not just for Medicaid recipients but as a general rule. Research has shown a radical increase in compliance with medication instructions with only a minimal amount of counseling from the pharmacist.

Unfortunately, information about possible interactions of over-the-counter drugs is often neglected. Older persons take on the average at least one over-the-counter medication daily. Preparations for gastrointestinal upset are particularly worrisome because they affect the absorption rate of other medication.

Education is essential to understanding how medications can be used most effectively. Since older persons, who make up 12 percent of the population, are consuming *some 30 percent* of prescription drugs, they need to develop coping skills to deal with the regimen of their medications.

Community and professional mobilization is accomplished through increased communication among health care professionals, senior networks, prevention and treatment professionals, and the community. Organizations such as AARP and the Illinois Pharmacy Foundation can work together to bring educational programs to communities. This will increase the understanding and scope of the problem, as well as providing much-needed services to older citizens of these communities.

Although **alternatives** are a strategy usually targeted to youth, they are important to older persons as well. One study found that loneliness is the primary indicator for alcohol overuse and drug misuse in the elderly. Keeping older adults involved in their lives, their families and their communities to prevent loneliness is a key. This involvement may be volunteerism for some; for others it may mean attending senior centers or nutrition sites. If an individual becomes mentally impaired and

cannot remember to take medications, an older adult day care program may be appropriate.

Social policy and environmental change is both the easiest and the hardest strategy to accomplish. It is easy to write and pass a law that will encourage education for all people who receive a prescription. It is difficult to change habits and norms that have evolved over the years; someone may say, "I always take my medication before I eat, because I'll remember it," when in reality the medication should be taken an hour before meals to be most effective.

Change is difficult. It is especially hard for older persons to keep track of all their medications and when they are to be taken during the day. The Diffusion of Innovation theory demonstrates how a new idea or concept is introduced to an individual, community or organization and then how it can be acted upon. (See Diffusion of Innovations on the opposite page.)

Time is an important element in reaching more people. As an example, we will follow the situation of "Patricia."

Phase I: Awareness. Patricia, 65 years old, goes to the doctor for her yearly physical examination. Although Patricia's blood pressure has always been borderline-high, until this visit it was controlled through diet and exercise. Now, however, Patricia's doctor prescribes a medication for and gives her a brochure on high blood pressure.

Phase II: Getting the Facts. Patricia goes to the pharmacy and fills her prescription. The pharmacist spends a few minutes explaining the proper use of the medication. The pharmacist also gives her a computer printout of helpful information about taking the drug.

Phase III: Getting Ready to Make a Decision. Patricia begins taking the medication. She is not convinced that it is helping her, since she feels much the same as she did before she started taking the medication. She reads the information that the physician and pharmacist gave her.

Phase IV: Understanding the Social Implications. The information convinces Patricia that her medication is necessary to prevent possible heart attack and stroke. Patricia has looked forward to retirement and feels that her health is important to her and her family.

Phase V: Adopting the Behavior. Patricia takes her medication on a regular basis.

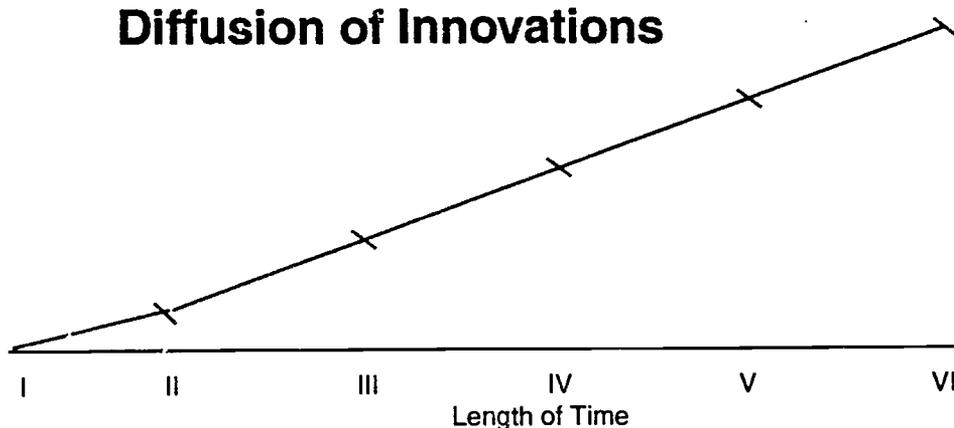
Phase VI: Practicing a Long-Term Commitment to the Idea. In addition to taking her medication, Patricia talks to friends about the importance of taking their medication for high blood pressure.

Although many people understand the information a physician gives them, there still is a decision-making process on how well they will comply with what their physician recommends.

Prevention professionals and pharmacists can help older persons make informed decisions by providing information and education. One method of disseminating this information is through Brown Bag Seminars. Another is through an ongoing holistic health education program such as the Senior Wellness Series.

Diffusion of Innovations

Number
of
People



This theory has been used to demonstrate how new concepts and new products are introduced into society, considered, and then acted upon.

- Phase I Awareness: The audience is learning about a new idea.
- Phase II Getting the Facts: The audience is learning about the problem, developing interest, and seeing possibilities for programs.
- Phase III Getting Ready to Make a Decision: People are starting to analyze the situation and weigh the alternatives.
- Phase IV Understanding the Social Implications: The audience is understanding the social acceptability or social rejection of their decision; they are internalizing their choices.
- Phase V Adopting the Behavior: The audience starts to adopt the innovative idea and acts upon it.
- Phase VI Practicing a Long-Term Commitment to the Idea.

Source: Everett Rogers, *Diffusion of Innovations*. New York: Free Press, 1983.

Talking to Older Persons

The term "older person" can be used to describe anyone from a person aged 50 who has taken early retirement to someone over 100 years old. Obviously the needs of a 50-year-old person and one who is 100 years old will differ. Needs differ in persons of the same age as well. Despite the diversity of members of this group, however, some common occurrences are almost a universal part of the aging process: sensory, physical, and mental changes. These changes will affect the presenter's methods. The recommendations which follow are based on the experiences of prevention specialists conducting the Senior Wellness Series.

Sensory Changes

Vision: The majority of older adults have good to adequate vision, with varying amounts of decrease in acuity. That is, objects do not look as clear to an older person as to a younger person. There are a number of ways for the presenter to help compensate for these losses:

- Use good contrast between the background and lettering of printed materials.
- Paper for handouts and visual aids should have a dull finish, rather than a shiny one.
- Use relatively large lettering. Increase "white space"—places where there is no printing.
- Schedule programs during the daylight hours. Many older persons do not have good night vision and do not feel confident driving after dark.

Hearing: Often the person with hearing loss is the last to recognize the problem. This sensory loss affects more people than any other chronic condition. It is estimated that 30 to 50 percent of all older persons suffer a significant hearing loss that affects their communication skills. This causes difficulties for a presenter who is addressing a large group of people. Some methods to help compensate for this loss include the following:

- Speak clearly.
- Do not shout.
- Lower the tone of your voice, particularly if it is high pitched.
- Make good visual contact.
- Use facial expressions, gestures, and objects to further illustrate the verbal message.
- Do not over-exaggerate articulation.
- Decrease background noise.

Taste, Smell, and Touch: The remaining three senses also lose sharpness in the aging process. Although such changes usually do not have a direct effect on a presentation, audience reaction to material that is being present may be less than expected. Depending on the material to be covered, the presenter should be aware that these senses are not as acute as in younger individuals.

Physical Changes

Most older persons have adequate mobility. Many, however, are not as active as they used to be. Chronic illnesses such as arthritis and osteoporosis

can limit the range of motion. These considerations are extremely important when choosing a location. Is there adequate parking? Are there steps? How far is it to the meeting room? Where are the restrooms located? These changes are also important for the length of the presentation. Are there adequate breaks? Do participants have the opportunity to get up and stretch?

Mental Changes

The saying "You can't teach an old dog new tricks" does not apply to humans. Although thought processes may be slower, learning continues throughout life. Research has found that after age 80 there is normally some amount of intellectual decline. Older people perform best when they work with familiar information and/or materials in familiar ways. Some hints to help deal with these changes are to:

- allow more time for absorption of new material.
- give an overview of the content you wish to cover, then break into smaller pieces with many examples and illustrations.

As with any presentation, there are many factors to consider about the audience, particularly educational level, ethnic background, economic situation, and life stage.

A presenter needs certain qualities to be effective with the audience: credibility, good preparation, honesty, communication/facilitation skills, comfort with materials and audiences, a supportive attitude, appropriate behavior and social skills, and the ability to address different learning modalities—visual, auditory, and kinesthetic.¹

Ten Golden Rules for Presentations

1. **Start where the audience is.** If the audience is not interested in learning ways to deal with an issue, even if the presenter decides it is a need of the community, start with awareness and *then* tackle the problem.

2. **Be sincere and personal.** Talk to the audience as if you wish to build a relationship with each individual in that audience. Don't be afraid to use examples from your experience. You will make the subject easier to understand, and the audience will relate to you as a person, not just an expert who doesn't understand the common person.

3. **Be consistent.** If you and the audience are comfortable with a certain format, stick to it. Don't give a presentation to a senior nutrition site one time before lunch, one time after lunch and one time during lunch. This causes confusion.

4. **Smile. Enjoy yourself.** Your audience will know immediately if you are not interested in being there. Use the time on the way to the presentation to give yourself a pep talk. Expect to feel enthusiastic and confident, and you will.

5. **Talk clearly and distinctly.** No matter what group you talk to, each word must be understandable. If you find that the audience didn't follow your last sentence, rephrase the point you were making and restate it. Discover the audience's "delay time" by asking everyone to do something, for example, to "Turn to the second page of the handout." How long does it take the audience to comply? This will give a sense of the time needed between the presenter giving information and the participant hearing, processing and then acting on that information.

6. **Use visuals.** Use something to illustrate your points. A simple outline of the information being presented is a good way to focus the attention of the individual while reinforcing key ideas.

7. **Trust comes slowly.** A presenter needs to build the confidence level of the audience over time. A presentation that deals with personal information such as drug or alcohol usage could be threatening to the members of the audience. It is important to know that some issues will be better received after the participants feel comfortable and confident about the presenter.

8. Audience participation is slow. If the presentation includes a section where the audience is to participate, plan on doubling the amount of time you had originally planned to spend. If discussion is important, give enough time after asking a question for the participants to process the question and formulate a reply. There is nothing more discouraging to a presenter—or an audience—than asking a question and not waiting for the reply. **Warning:** If you use questions as part of your presentation format, expect the audience to answer the question. Don't ask rhetorical questions unless you want an answer to them.

9. Don't stereotype. Each person in your audience is an individual; everyone is not at the same place. If you want to say something to an older audience like "Everyone over the age of 50 needs to wear bifocals," rephrase it to something less threatening: "Have you ever noticed in the past few years that your arms are not long enough to

read the newspaper?" Although the point is being made that nearsightedness is common in the aging population, it is being made in the question format, so individual participants can answer for themselves.

10. Your audience is your best resource. Use your audience to direct your presentation. Accomplished presenters report that they have never given the same presentation twice, even though they have used identical outline, handouts and content for more than 50 presentations. The audience's needs and experiences add a large and varying amount of resources.

Or, to put it briefly, know where you're going, where you've been, and why you're here.

Note

1. Bonnie Benard, "Characteristics of Effective Prevention Programs," *Prevention Forum*, 1986.

The Illinois Prevention System

Illinois has a system of statewide and local prevention resources to help you conduct prevention activities in your community.

There is no single solution to alcohol and other drug problems, no "one-size-fits-all" program, curriculum, or speaker that can prevent abuse and addiction. But communities can use a variety of strategies to support individuals, families, schools and organizations in creating healthy environments, lifestyles and behaviors.

Funding provided by the Illinois Department of Alcoholism and Substance Abuse (DASA) helps each community identify and reduce the risk factors related to alcohol and other drug abuse, and enhance their community's strengths. Nearly 130 different programs receive DASA funding for prevention activities.

Community Prevention Grants go to approximately 100 community-based agencies.

Special Initiative Grants target high-risk areas. In communities with high infant mortality rates, special services are aimed at pregnant women. Public housing authorities receive grants to address risks to youth. Culturally sensitive services are targeted to Chicago's Hispanic communities.

Statewide Services grants support projects with statewide impact.

Prevention Resource Center (PRC) serves as a clearinghouse for information and training. The center's mission is to help people develop strengths and tools to improve their lives and keep themselves healthy. Resources include library services; publications, research, and communication services;

services to people of color; and training, education and consultation services.

With offices in Springfield and Chicago, PRC resources are available to all prevention programs, schools, community groups and individuals by calling 1-800-252-8951 (TDD: 217-525-7192).

Illinois Drug Education Alliance (IDEA) links parent groups statewide with an annual conference, a newsletter and public awareness events like the "Red Ribbon Campaign."

Illinois Teenage Institute provides leadership development training to more than 1000 high school students each summer.

Operation Snowball provides youth leadership activities on a local level.

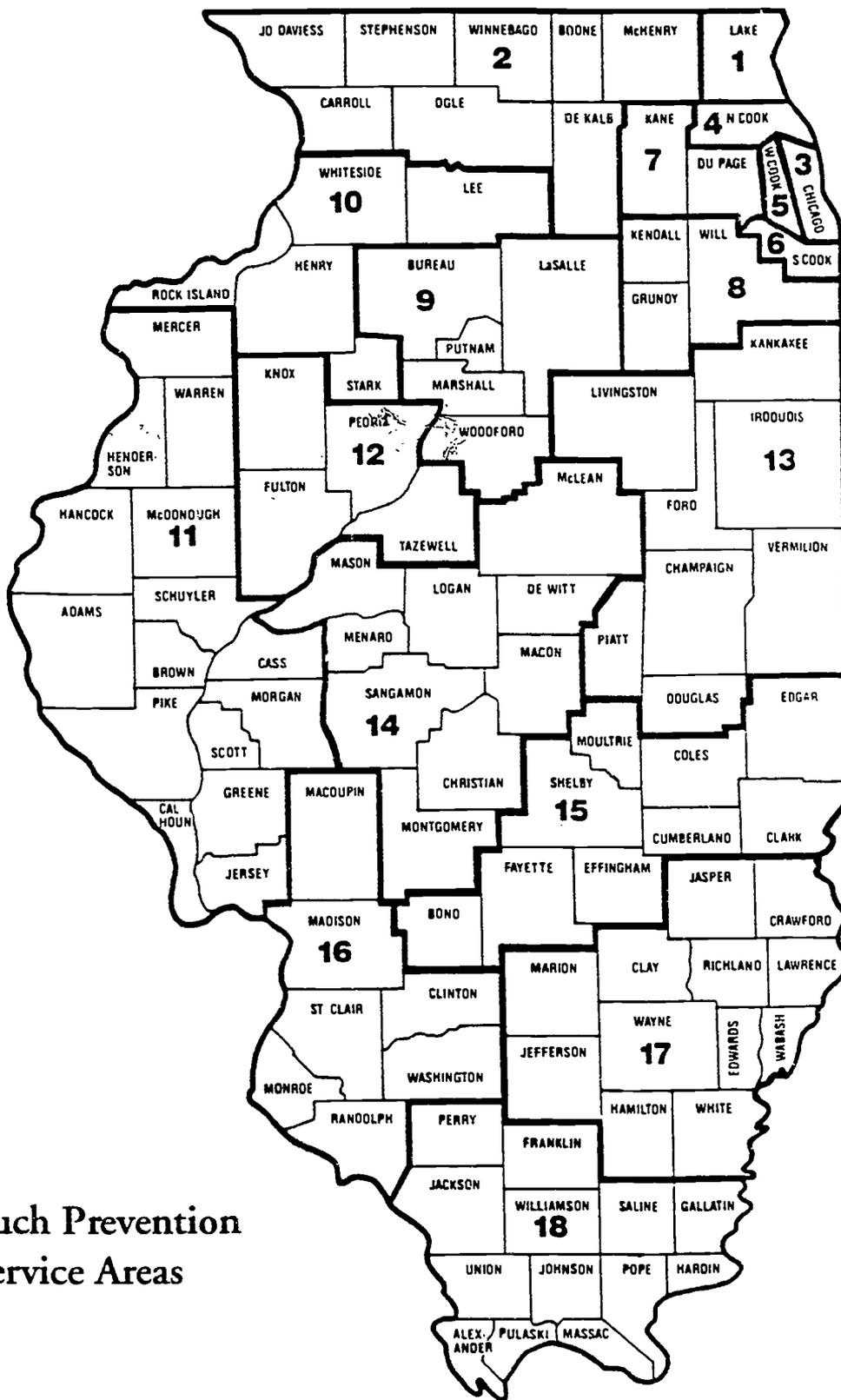
The University of Illinois Center for Prevention Research and Development evaluates prevention programs for DASA, helping to create models for successful prevention activities.

InTouch

InTouch (the Illinois Network To Organize the Understanding of Community Health) leads the DASA-funded prevention system and coordinates the prevention efforts of communities, service agencies, schools and other organizations.

The InTouch network serves 18 Prevention Service Areas which coincide with the Illinois State Board of Education's Educational Service Areas. InTouch efforts help maximize prevention services with Drug-Free Schools money.

InTouch coordinating offices facilitate communication and cooperation, help with needs as-



InTouch Prevention
Service Areas

assessments, provide technical assistance, and offer help with program delivery based on research-proven, effective models. InTouch also facilitates regional prevention groups where citizen leaders plan community activities to create a positive, healthy environment.

The InTouch prevention professionals raise public awareness and understanding of alcohol, tobacco and other drug issues through communication with the local news media.

Let InTouch help you when you need:

To explain the risks of alcohol, tobacco and other drugs

To convene training events

To reach key people in schools, churches and civic organizations

To organize youth activities that are positive and health-oriented

To reach media outlets in your community

Chicago's *Prevention Service Area 3* is subdivided into nine areas, each with CEPADA grant dollars from DASA and the City of Chicago to perform functions similar to InTouch.

CEPADA—Communities Empowered to Prevent Alcohol and Drug Abuse—is:

- A nonprofit multicultural grassroots organization devoted to the prevention of alcohol, tobacco and other drug problems.
- A support network connecting people to resources and others who share a common vision: healthy families, healthy communities.
- A collaborative partnership of community organizations, businesses, government, and residents actively involved in improving their communities through a broad-based coalition.
- Sponsored jointly by Chicago Department of Health, DASA and CSAP.

InTouch Coordinating Offices

Prevention Service Area 1

Consortia of: Lake County Health Department, Northern Illinois Council on Alcoholism and Substance Abuse, and College of Lake County
1113 Greenwood Avenue, Waukegan, IL 60087
(708) 263-0800

Prevention Service Area 2

Jane Addams Mental Health Center
1133 West Stephenson Street, Freeport, IL 61032
(815) 232-4183

Prevention Service Area 4

Kenneth W. Young Centers
1001 Rohlwing Road, Elk Grove Village, IL 60007
(708) 529-8800

Prevention Service Area 5

Cook County Sheriff's Youth Dept.
1401 South Maybrook Drive, Maywood, IL 60153
(708) 865-2900

Prevention Service Area 6

Foundation I Center for Human Development
17084 Winchester, Hazel Crest, IL 60429
(708) 335-2197

Prevention Service Area 7

Breaking Free
250 West Downer Place, Aurora, IL 60506
(708) 859-0670

Prevention Service Area 8

Tri-County InTouch
Grundy County Courthouse Room 26
Morris, IL 60450
(815) 942-9024 x231

Prevention Service Area 9

LaSalle County Council on Addiction
776 Centennial Drive, P.O. Box D
Ottawa, IL 61350
(815) 434-1134

Prevention Service Area 10

Rock Island County Council on Addiction
Route 2, Box 288, East Moline, IL 61244
(309) 792-0292

Prevention Service 11

Regional Superintendent of Schools
237 North Sixth Street, Quincy, IL 62301
(217) 223-6300 x336

Prevention Service Area 12

Spoon River Center
2323 Windish Drive, P.O. Box 1447
Galesburg, IL 61401
(309) 344-4222

Prevention Service Area 13

Kankakee County Regional—Education
470 East Merchant Street, Kankakee, IL 60901
(815) 933-3400 or (815) 937-2950

Prevention Service Area 14

Chestnut Health Systems
702 West Chestnut, Bloomington, IL 61701
(309) 827-6026

Prevention Service Area 15

Central East Alcohol & Drug Council
416 North 19th Street, Mattoon, IL 61938
(217) 258-2968

Prevention Service Area 16

Regional Education Service Center
500 Wilshire Drive, Belleville, IL 62223
(618) 398-5280

Prevention Service Area 17

Community Resource Center
101 South Locust, Centralia, IL 62801
(618) 533-2030

Prevention Service Area 18

Egyptian Educational Service Center
1006 D North Carbon, Marion, IL 62959
(618) 993-2696

**Prevention Service Area 3
CEPADA Area Coordinators**

Area 1 (North Shore)

Community Counseling Centers of Chicago, Inc.
4740 North Clark Street, Chicago, IL 60640
(312) 769-0205

Area 2 (Northwest)

Youth Outreach Services

6415 West Irving Park Road, Chicago, IL 60634
(312) 202-1973

Area 3 (Mid-North)

Youth Service Project
3942 West North Avenue, Chicago, IL 60647
(312) 772-6270

Area 4 (West Side)

Prevention Partnership
133 South Central Avenue, Chicago, IL 60644
(312) 261-1421

Area 5 (South Shore)

BRASS Foundation
8659 South Ingleside, Chicago, IL 60619
(312) 602-2032

Area 6 (Near South)

Healthcare Alternative Systems
1736 West 17th Street, Chicago, IL 60609
(312) 579-4669

Area 7 (Mid-South)

Chicago Commons Association
1335 West 51st Street, Chicago, IL 60609
(312) 376-5242

Area 8 (Southeast)

SEADAC
9101 South Exchange Avenue, Chicago, IL 60617
(312) 731-9100

Area 9 (Southwest)

Southwest Community Congress
2832 West 63rd Street, Chicago, IL 60629
(312) 436-6150

Additional:

Archdiocese of Chicago
Office of Catholic Education
155 East Superior Street, Chicago, IL 60601
(312) 751-5243

Prevention Programs and Agencies

Here is a list of the agencies in Illinois which organize and carry out prevention activities in their communities. All of these programs are part of the InTouch Prevention Network of the Illinois Department of Alcoholism and Substance Abuse.

If your county is not listed, please call the InTouch coordinator for your area (see preceding list). Many of these agencies serve more than one county.

Adams County

Great River Recovery Resources, Inc.
428 South 36th Street
Quincy, IL 62301-5924
(217) 224-6300

Bond County

Bond County Health Department
503 South Prairie Street
Greenville, IL 62246
(618) 664-1442

Cass County

Cass County Mental Health Association
121 East 2nd Street, P.O. Box 30
Beardstown, IL 62618
(217) 323-2980

Champaign County

Prairie Center for Substance Abuse
718 Killarney Avenue
Urbana, IL 61801
(217) 328-4500

Cook County

Alexian Brothers Medical Center
800 Biesterfield Road

Elk Grove Village, IL 60007
(708) 437-5500

Alternative Schools Network
1807 West Sunnyside
Chicago, IL 60640
(312) 728-4030

Alternatives, Inc.
1128 West Granville
Chicago, IL 60660
(312) 973-5400

Aunt Martha's Youth Services
C.A.S.T.
224 Blackhawk
Park Forest, IL 60466
(708) 747-2701

B.R.A.S.S. Foundation, Inc.
950 East 61st Street
Chicago, IL 60637-2644
(312) 488-6600

Bobby Wright Comprehensive Community
Mental Health Center
9 South Kedzie
Chicago, IL 60612
(312) 722-7900

Bremen Youth Services
15350 South Oak Park Avenue, P.O. Box
627

Oak Forest, IL 60452
(708) 687-9200

Bridge Youth and Family Services
721 South Quintin Road
Palatine, IL 60067-6760
(708) 359-7490

Center for the Rehabilitation & Training of
Persons with Disabilities, The
2001 North Clybourn
Chicago, IL 60614
(312) 973-7900

Central States Institute of Addictions
721 North LaSalle Street
Chicago, IL 60610
(312) 266-1056

Chicago Commons Association
915 North Wolcott Avenue
Chicago, IL 60622
(312) 342-5330

Chicagoland Chamber of Commerce
Foundation
200 North LaSalle, 6th Floor
Chicago, IL 60601

City of Calumet City, The
145 167th Street
Calumet City, IL 60409
(708) 891-8100

Comprand Youth Services
6857 South Halsted
Chicago, IL 60621
(312) 487-9200

Demico Youth Services
825 North Hudson
Chicago, IL 60610
(312) 337-2723

Des Plaines Valley Community Center
7355 West Archer Avenue, Box 10
Summit, IL 60501
(708) 458-6920

Developing Communities Project
Project Impact
212 East 95th Street
Chicago, IL 60619
(312) 928-2500

Englewood Community Health Organiza-
tion
945 West 69th Street
Chicago, IL 60621
(312) 962-5600

F.O.R.U.M.
Don't Hang with Gangs
7510 South Saginaw
Chicago, IL 60649
(312) 933-5700

Family Services & Mental Health Center of
Oak Park & River Forest
120 South Marion
Oak Park, IL 60302
(708) 383-7500

Foundation I
17084 Winchester
Harvey, IL 60426
(708) 339-8861

Gateway Foundation
819 South Wabash Avenue, Suite 300
Chicago, IL 60605
(312) 663-1130

Healthcare Alternative Systems
4344 West 26th Street
Chicago, IL 60623
(312) 252-3100

Human Resources Development Institute
Inner City Youth Leadership Institute
12257 South Emerald Avenue
Chicago, IL 60628
(312) 441-9009

Lakeside Community Committee
4414 South Cottage Grove

Chicago, IL 60653
(312) 924-4154

Latino Youth, Inc.
2200 South Marshall Boulevard
Chicago, IL 60623
(312) 277-0400

Logan Square Neighborhood Association
Project COMP
3321 West Wrightwood
Chicago, IL 60647
(312) 384-4370

Marcy-Newberry Association
1073 West Maxwell Street
Chicago, IL 60608
(312) 829-7555

Mayor's Office of People With Disabilities
AIDS Prevention for Hearing Impaired
2102 West Ogden
Chicago, IL 60612
(312) 744-2205

Mexican Community Committee
Project Friend
2939 East 91st Street
Chicago, IL 60617
(312) 978-6441

National Training Information Center
810 North Milwaukee Avenue
Chicago, IL 60622
(312) 243-3035

Near Westside Community Commission
1044 West Taylor
Chicago, IL 60607
(312) 666-8444

OMNI Youth Services
1111 West Lake Cook Road
Buffalo Grove, IL 60089
(708) 537-9079

Peer Services, Inc.
2010 Dewey

Evanston, IL 60201
(708) 492-1778

Pilsen Little Village Community Mental
Health Center
2635 West 23rd Street
Chicago, IL 60608
(312) 762-8899

Prevention Partnership
5938 West Lake Street
Chicago, IL 60644
(312) 378-4195

Response Center
9304 Skokie Boulevard
Skokie, IL 60077
(708) 676-0078

Safer Foundation
571 West Jackson Boulevard, Suite 2
Chicago, IL 60661
(312) 922-2200

South Side Help Center
10420 South Halsted
Chicago, IL 60643

Southwest YMCA
13040 South Pulaski Road
Alsip, IL 60658
(708) 385-6700

Travelers and Immigrants Aid
4750 North Sheridan
Chicago, IL 60640
(312) 435-4500

YMCA of Metropolitan Chicago/New City
1515 North Halsted Street
Chicago, IL 60622
(312) 266-1242

Youth Outreach Services
6417 West Irving Park Road
Chicago, IL 60634
(312) 777-7112

Youth Service Project, Inc.
3942 West North Avenue
Chicago, IL 60647
(312) 772-6270

Christian County

Christian County Mental Health Association
730 North Pawnee, P.O. Box 438
Taylorville, IL 62568
(217) 824-9675

Coles County

Central East Alcohol & Drug Council
521 North 13th Street
Mattoon, IL 61938
(217) 348-8108

DeKalb County

Ben Gordon Mental Health Center
12 Health Services Drive
DeKalb, IL 60115
(815) 756-4875

DeWitt County

DeWitt County Human Resource Center
1150 Route 54 West, P.O. Box 616
Clinton, IL 61727
(217) 935-9496

DuPage County

Bloomington Township Committee on Youth
123 North Rosedale Road, Suite 100
Bloomington, IL 60108-1094
(708) 529-7715

City of Naperville
400 South Eagle Street, Box 3020
Naperville, IL 60566-7020
(708) 420-6111

Downers Grove Township
4340 Prince Street, P.O. Box 548
Downers Grove, IL 60515
(708) 968-0451

Life Education Center Foundation
180 West Park Avenue, Suite 160
Elmhurst, IL 60126-2127
(312) 530-8999

Outreach Community Ministries, Inc.
122 West Liberty Drive
Wheaton, IL 60187-5124
(708) 682-1910

Edgar County

Human Resource Center of Edgar and Clark Counties
210 East Court Street, Box 1118
Paris, IL 61944
(217) 465-4118

Effingham County

Heartland Human Services
1108 South Willow, P.O. Box 1047
Effingham, IL 62401
(217) 347-7179

Fulton County

Community Mental Health Center of Fulton/McDonough Counties
229 Martin Avenue
Canton, IL 61520-2588
(309) 647-1349

Grundy County

Grundy-Kendall Educational Services Region
111 East Washington Street, Courthouse Room 26
Morris, IL 60450
(815) 941-3231

Hancock County

Hancock County Mental Health Center
607 Buchanan
Carthage, IL 62321
(217) 357-3178

Jackson County

Jackson County Community Mental
Health Center
ADAPT
604 East College
Carbondale, IL 62901
(618) 457-6703

Jefferson County

Jefferson County Comprehensive Services
Route 37 North, P.O. Box 428
Mt. Vernon, IL 62864
(618) 242-1510

Kane County

Breaking Free
250 West Downer Place
Aurora, IL 60506
(708) 859-0670

Renz Addiction Counseling Center
77 Riverside Drive
Elgin, IL 60120
(708) 697-5565

Kankakee County

Kankakee County Educational Services
Region
189 East Court Street, Suite 400
Kankakee, IL 60901
(815) 937-3940

Knox County

Spoon River Center, Inc.
2323 Windish Drive, Box 1452

Galesburg, IL 61402-1452
(309) 344-2323

Lake County

Lake County Health Department
19361 West Washington
Grayslake, IL 60030
(708) 360-6729

Lake County Community Action Project
Project Family Tree
106 South Sheridan
Waukegan, IL 60085
(708) 249-4330

Northern Illinois Council on Alcohol &
Substance Abuse
31979 North Fishlake Road
Round Lake, IL 60073
(708) 546-6450

LaSalle County

LaSalle County Council for Alcohol &
Drug Abuse
P.O. Box D, 776 Centennial Drive
Ottawa, IL 61350
(815) 434-1293

Lee County

Sinnissippi Center, Inc.
325 Illinois Route 2
Dixon, IL 61021
(815) 284-6611

Livingston County

Institute for Human Resources
310 East Torrance, Box 768
Pontiac, IL 61724
(815) 844-6109

Logan County

Abraham Lincoln Memorial Hospital
304 Eighth Street

Lincoln, IL 62656
(217) 732-2161

Macon County

Decatur Mental Health Center
242 East North Street
Decatur, IL 62523
(217) 877-8613

Macoupin County

Macoupin County Mental Health Center
100 North Side Square
Carlinville, IL 62626
(217) 854-3166

Madison County

Piasa Health Care
1315 Vandalia
Collinsville, IL 62234
(618) 288-4004

Marion County

Community Resource Center
101 South Locust Street
Centralia, IL 62801
(618) 533-1391

McHenry County

Family Service & Community Mental
Health Center for McHenry County
145 South Virginia
Crystal Lake, IL 60014
(815) 385-6400

McLean County

Project Oz
502 South Morris
Bloomington, IL 61701
(309) 827-0377

Monroe County

Human Support Services
988 North Market
Waterloo, IL 62298
(618) 939-8644

Morgan County

Wells Center, The
1300 Lincoln Avenue
Jacksonville, IL 62650
(217) 243-1871

Montgomery County

Montgomery County Counseling Center
Route 185, P.O. Box 128
Hillsboro, IL 62049
(217) 532-2001

Peoria County

Human Service Center/Fayette Companies
3420 North Rochelle
Peoria, IL 61604
(309) 671-8000

Perry County

Perry County Counseling Center, Inc.
Route 1, Box 143
DuQuoin, IL 62832
(618) 542-4357

Piatt County

Piatt County Mental Health Center
125 West Lafayette Street
Monticello, IL 61856
(217) 762-5371

Pike County

Counseling Center of Pike County
121 South Madison Avenue, P.O. Box 502
Pittsfield, IL 62363
(217) 285-4436

Richland County

Southeastern Illinois Counseling Centers,
Inc.
4 Micah Drive, P.O. Drawer M
Olney, IL 62450
(618) 395-4306

Rock Island County

Rock Island County Council on Addictions
2905 Nineteenth Street
East Moline, IL 61244
(309) 792-0292

St. Clair County

Belleville Mental Health Center
200 North Illinois
Belleville, IL 62220-1398
(618) 235-0330

Gateway East Health Services
327 Missouri Avenue, Room 420
East St. Louis, IL 62201
(618) 874-0095

Saline County

Egyptian Public & Mental Health Department
R.R. 3, Box 90-A
Eldorado, IL 62930
(618) 273-3326

Sangamon County

Triangle Center
1001 Clocktower

Springfield, IL 62704
(217) 544-9858

Schuyler County

Schuyler County Counseling & Health Services
127 South Liberty, P.O. Box 320
Rushville, IL 62681
(217) 322-4373

Stephenson County

Jane Addams Community Mental Health Center
1133 West Stephenson, Suite 401
Freeport, IL 61032
(815) 232-4183

Martin Luther King, Jr. Community Center
511 South Liberty
Freeport, IL 61032
(815) 233-9915

Tazewell County

Tazewell County Health Department
21306 IL Route 9
Tremont, IL 61568-9252
(309) 925-5511

Tazewood Mental Health Center
1421 Valle Vista Boulevard
Pekin, IL 61554-6217
(309) 347-5576

Union County

Fellowship House
800 North Main, P.O. Box 682
Anna, IL 62906
(618) 833-4456

Williamson County

Franklin-Williamson Human Services
1307 West Main
Marion, IL 62959
(618) 937-6483

Winnebago County

City of Rockford, Mayor's Office
Spread the Word
1201 Broadway
Rockford, IL 61104-1068
(815) 987-5590

Rosecrance Center
1505 North Alpine Road

Rockford, IL 61107
(815) 399-5351

Winnebago County Health Department
401 Division Street
Rockford, IL 61104
(815) 962-5092



In fulfilling its mission to help people develop strengths and tools to improve their lives and keep themselves healthy, Prevention Resource Center's Springfield and Chicago offices provide the following free services and products throughout the state.

Library Services

- Lending libraries in the Springfield and Chicago offices carry an extensive collection of current books, videos, curricula and periodicals to assist communities, programs and individuals. In addition to general alcohol and other drug information, the collection also includes materials on related social issues; organizational development; topics specific to women, people of color, and children; and many other subjects.
- A clearinghouse, located in the Springfield office, provides state and national pamphlets, posters and brochures—for individual or bulk distribution.

Publications, Research and Communication Services

- Two nationally distributed newsletters—the quarterly *Prevention Forum* and the twice-yearly *FAS and Other Drugs Update*—provide up-to-the-minute data and program models for prevention providers, medical personnel, educators and other prevention related professionals. Other published products include the *Common Ground* journal, a prevention newspaper for adolescents, and various manuals and research summaries.
- An electronic bulletin board system allows subscribers to access national networks and to communicate immediately with each other.

Services to People of Color

- One of the main goals of this effort is to provide opportunities for communities and neighborhoods to mobilize their own resources against environmental

conditions. A Leadership Initiative helps individuals realize what they can do to improve their communities from the inside, and to take an active role in accessing the roots and traditions that can help their communities.

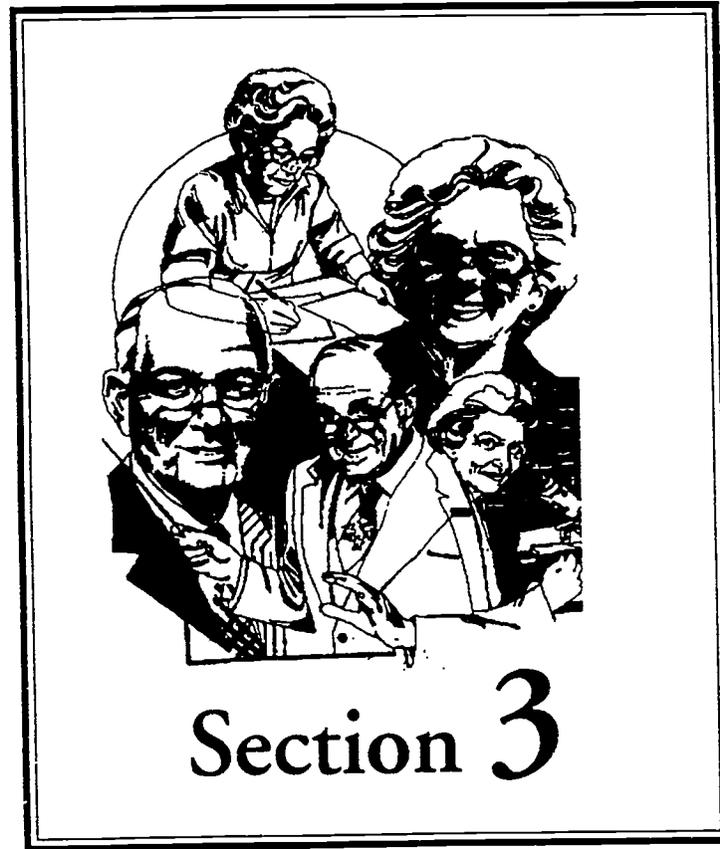
- The Maternal and Child Health project works to break the chain of alcohol and other drug abuse by pregnant women and girls. This is accomplished through a specialized statewide prevention network, conferences, information dissemination, and assistance to new health initiatives.

Training, Education and Consultation Services

- A comprehensive training schedule provides the opportunity for participants to learn and incorporate the latest information and strategies into their programs. Topics may range from alcohol and other drug abuse prevention, to parenting, to community planning and mobilization, to program development, to violence prevention, to service learning.
- A consultation services component provides assistance to participants in integrating the training information into their specific prevention efforts.

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Springfield, IL 62704
217-525-3456
800-252-8951
Facsimile 217-789-4388
TDD 217-525-7192

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Section 3

Community Outreach Programs

1. Arranging Community Outreach Programs
2. Program Ideas for Pharmacists
3. "Your Medicine and You": A Sample Program for Pharmacists
4. The Brown Bag Medicine Review: A Sample Program for Pharmacists
5. Program Ideas for Prevention Specialists
6. "Using Your Medicine Safely": A Sample Program for Prevention Specialists

Arranging Community Outreach Programs

Presentations, whether to a group or an individual, take a commitment of time to get organized. This guide has been designed to help you organize your presentation and provide some sample resources and handouts which you can incorporate.

Now that you are ready to present, where do you do it? How do you get the word out? And how many people can you anticipate showing up?

We want to make this part simple for you. The Illinois Department on Aging will coordinate with Aging groups in your community to:

- Locate sites
- Market dates and times
- Assure adequate attendance

Aging groups may be local AARP chapters, organized groups of retirees, or individuals frequenting senior centers and congregate meal sites. Your presentation may fit into part of their regular programming or may need to be specially scheduled.

If you want to provide a presentation, the first step is to fill out the Presentation Agreement in Section 6 (Forms) of this guide. Turn in the form after the training, or send it to:

The Illinois Department on Aging
Self Care Program
421 East Capitol
Springfield, Illinois 62701

Once your form is received, the Illinois Department on Aging (IDoA) will contact you to get additional information, such as what type of presentation you would like to do, and when and where would be convenient for you. IDoA will then contact a senior group in your community whose members would like to host your presentation. IDoA will give you information about the local contact person and the site; the local contact person will call to discuss details of the presentation.

During this process, if you have any questions, you may call IDoA's toll-free number, 1-800-252-8966.

Program Ideas for Pharmacists

Recognizing the problem of medication misuse/abuse and its consequences is only a start. We as pharmacists provide a vital link in the health care system; we are the keepers of drug information and as such have a unique opportunity to make a difference through community-based educational outreach programs geared toward the elderly.

Two such programs can be used by any pharmacist, working with prevention (InTouch) groups in local communities, to bring information and service to those who are at risk from medication misuse and abuse.

The first is a general information program, *Your Medicine and You*. A pharmacist speaks to different senior groups about such topics as the following:

- Changes which occur with age and how they affect the body's use of medication
- Side effects of different medications
- Questions to ask both physicians and pharmacists
- Proper use and storage of medication
- Potential for misuse and/or abuse of medication

The pharmacist also offers to answer questions, both from the group as a whole and on a one-to-one basis. The program is designed to include audience participation to help open lines of communication and to reinforce information provided elsewhere in the program. Included as part of this manual is the basic format for the program, which the pharma-

cist can modify depending upon available time and characteristics of individual groups.

The other outreach program is the **Brown Bag Medicine Review**. It is designed to allow pharmacists and older people to interact one on one. The program opens lines of communication about the proper use of medication and can prevent medication misuse and abuse from occurring.

Brown Bag Medicine Reviews get their name from the paper bags distributed to group members; we ask those who participate to put all their medications, prescription and non-prescription in the bag and bring them to the program. A health professional then review each participant's medications with the individual, looking for medically significant side effects, adverse reactions, duplications, and outdated medications.

The health professional reviews with each individual the proper use of medications and helps set up drug regimen schedules which will make it easier to remember to take medications. The program allows older persons to ask questions and allows the pharmacist to provide information and a specific course of action the individual can take to insure the safe and effective use of medications.

It is important to tell groups of older people that medication is used to help improve and extend their lives—but it should not *rule* their lives. Then, using *Your Medicine and You* presentations before groups and *Brown Bag Medicine Reviews* with individuals, make sure the point has been understood.

Another important factor in these presentations is recognition of the person who is "doing it right." Positive feedback is an excellent way to ensure continued compliance with medication regimens.

In close to ten years of providing these outreach programs in Illinois, we have discovered that most medication problems experienced by older persons are due to lack of knowledge *and* the impression that health professionals do not have time to give

information, so the individual does not ask.

Each group is different. You may need to change your approach with some of them. You may also find yourself competing with other activities scheduled for the time of your presentation, but the majority of older persons will listen and appreciate the information you give to them. Older persons have a great respect for pharmacists and the role we can play in helping them understand and use their medication wisely.

“Your Medicine and You”: A Sample Program for Pharmacists

Introduction: Greet and welcome participants. Explain that you are there to give information about their medicine and answer any questions they may have.

Begin by explaining that aging is not a disease but a process of change that everyone goes through. Give examples by asking the group, “Could you still run for a bus or a train?” and “Could you eat the same foods in the same quantity as you did at age 20 or 25?” Reinforce the concept that these are normal changes which will require doing things differently from when we were younger.

Explain: When a drug acts as it is expected to, the result is called a therapeutic effect. We will use aspirin as an example.

Ask: When you take an aspirin tablet, what are you expecting it to do for you? Wait for response; then add and explain any of the following not given by the group:

- relieve pain
- relieve fever
- reduce inflammation (arthritis)
- thin blood (helping to prevent blood clots, thus reducing a person’s risk of heart attack and stroke)

Ask: What if any side effects have you experienced for aspirin? Wait for response; then add and explain any of the following not given by the group:

- upset stomach
- rash
- blood thinning effect (too much for some individuals)

- ringing in the ears
- stomach ulcers (including perforated ulcers that are life-threatening and can occur with no signs or symptoms)

Explain: Most people do not even think of aspirin as a drug. Since aspirin can be bought anywhere, even at gas stations, the assumption arises that there is no risk involved in taking it. Make sure everyone understands that even something as simple as an aspirin can have both wanted and unwanted effects—and that for some individuals the unwanted effects can be serious.

We have a habit of thinking that the only medicines which can cause problems are the ones which we take by mouth and which go to our stomach. We must remember that, no matter how we use medicine, side effects can occur. For example, eye drops can cause a dry mouth, which makes swallowing difficult. Suppositories can cause drowsiness.

If you think that you are experiencing a side effect, you must contact your physician or pharmacist, who will ask you questions in order to determine if your medicine is causing the problem or if there is something else going on.

Other Problems with Medication

Ask: How much fluid do you drink with your medication? Wait for audience response.

Explain: Most people do not drink enough fluid with medications. We need to drink a full glass (6-8 ounces) of fluid to prevent minor irritations of the throat and esophagus, which can cause

major health problems. Also, many use the wrong type of fluid with medications. We tend to take medication with whatever happens to be in front of us (coffee, orange juice, soft drinks, etc.), which can cause problems. Most medications can irritate the stomach; combine them with fluids such as coffee or orange juice, which can also irritate the stomach, and we increase the risk of developing stomach problems. Water is the fluid of choice unless instructions for the medication specify that it is to be taken with food or milk.

If a medication seems to be lodged in your throat, you can eat a small piece of soft bread or banana to help it down.

Ask: Have you ever tried to take a pill or capsule and discovered that it was too large to swallow?

Explain: If this happens, you need to contact your pharmacist. Most of the time you can crush the tablet or open the capsule and take it that way, but certain medications (long-acting and film-coated) cannot be crushed or opened. Explain why this is so.

There are several other problems which people have when taking medications:

1. *Being able to read prescription labels on medication bottles.* Give several reasons: small print, light printing, vision problems. Explain that pharmacists, on request, can print directions on a sheet of paper large enough to read.
2. *Understanding directions.* **Ask:** "How would you take your medication if the directions on the bottle said three times a day?" Wait for response. **Explain:** Directions need to be clarified for each individual's specific health condition and may also be determined by other medications that person is taking.
3. *Taking medications on a regular schedule.* **Explain:** Medication schedules need to be set within the framework of the person's normal day. The more the person departs

from normal, the harder it is to remember to take medication. Unless the person's health condition is very serious, this can be done with help from the pharmacist or physician.

4. *Dangers of trying to conserve on medication.* **Explain:** Medication is expensive, but when we do not take medication as prescribed we risk additional health care cost because the condition being treated can become more serious, possibly creating life-threatening problems. Examples include HTN and heart disease. If cost is a problem, the physician needs to know. Some physicians may not know how much each medication costs, or that generic versions are available for most medications.
5. *Dangers of drug sharing.* **Explain:** Sharing medications can lead to two problems. First, the person you are sharing with will put off seeing a physician because they think your medication will work for them. This may not be the case. Second, the person you share medication with can experience a serious side effect to the medication, even if you have no problem with it.
6. *The potential for abuse.* **Explain:** Certain disease states and medications can lead to abuse, which usually is not intentional. Diseases which cause chronic pain (such as arthritis), disturbances in sleep, or depression can cause a person to overuse medications, as can psycho-social changes such as the loss of spouse or friends, retirement, or perceived loss of control over one's life. **Examples** of medications with a greater risk of abuse than others:
 - Pain medications—Tylenol with Codeine, Vicodin
 - Sedatives/hypnotics—Dalmane, Restoril, Halcion
 - Antianxiety medications—Valium, Librium, Zanax, Ativan

- Antidepressants—Elavil, Norpramin, Pamelor/Aventyl
- Antipsychotic agents—Haldol, Mellaril, Stelazine

Overuse/abuse of medications by older persons is extremely dangerous, not only because their bodies have changed and no longer handle medications in the same way, but also because older persons tend to have more medication to take because they have more than one disease. This situation increases the risk of serious health problems, both physical and psychological.

Physical addiction occurs when a medication alters certain body chemistry, and the person's body depends on the medication to function, particularly in the case of antidepressants and antipsychotics. *Psychological* addiction occurs when the person perceives that a certain medication is "making things right" whether or not this is so, and therefore the person continues or increases the prescribed dose. This can happen with pain medications, sedatives/hypnotics, and anti-anxiety drugs, for example.

The potential for abuse is always present, and we must all be aware that we are at risk for abuse. If you think that you or someone you know may have a problem, you must seek medical help.

Explain the increased risk of combining as little as two ounces of alcohol with medications—or in the presence of certain disease states.

Body Changes

As we age, our bodies change. These changes can have a direct effect on the way our bodies use and eliminate medications:

Liver changes: The liver breaks medicine down into the form in which it will be used. As we get older it doesn't perform so well; medications can break down more slowly, and active forms of medication can stay in the body longer, causing side effects and/or adverse reactions to occur.

Kidney changes: A major change occurs in the kidneys, which are the filter for our bodies.

Most substances, including most medications, are eliminated from the body through the kidneys. As we age, the ability to filter decreases, causing medications to build up, again leading to side effects and/or adverse reactions.

Ask: Besides dry mouth and drowsiness, what other side effects have you experienced from your medications? Wait for answers, which can include:

nausea	impotence
vomiting	dizziness
constipation	vision changes
diarrhea	sleep changes
rash	confusion
incontinence	memory loss

Explain: These are all potential side effects. If confusion or memory loss occurs, do not panic. These things can happen at any age, but if they persist or become worse it is time to seek help. Older persons will need to have a physical examination to rule out any correctable organic problems, but they should understand that medications can be a major cause of confusion. Because of body changes which alter the way we metabolize, distribute and eliminate drugs, we can experience confusion and/or memory loss resulting from certain medications at what is considered normal doses. Give **examples:** H₂ antagonists (Tagamet, Zantac, etc.), pain medication containing codeine and codeine derivatives (Tylenol/Empirin with Codeine, Vicodin, etc.), cardiac glycosides (Digoxin).

Certain medications can have opposite effects to the desired ones in older persons, due to changes which have occurred with age. Give **examples:** sleep medications can keep one up all night; medications used for anxiety and nervousness, instead of calming older persons, can increase their anxiety and nervousness. If these problems occur, the physician must be told.

Ask: How many see more than one physician? Wait for response. You will find only a few will respond.

How many see a dentist, foot or eye doctor? Wait again. Responses will increase.

Explain: All these doctors can write prescriptions. They must let every doctor they see know what they are getting from every other doctor, for the following reasons:

- Many drugs are made by more than one company, with each company giving a drug its own name, size, shape, and color. There is potential risk that two doctors will prescribe the same medication under different names, resulting in the hazard of over-medication.
- Physicians may prescribe medications which can interact with one another if they do not have knowledge of what the person is already taking, especially from dentists and eye and foot doctors. People compartmentalize their bodies and don't realize that medicine taken for a toothache or a fungal infection of their feet can interfere with other regularly prescribed medications.

Explain: Patients need to ask questions of their doctor, to take time before the appointment to write their questions down. Most physicians will answer questions if they know we have them. If we say nothing, they assume that everything is all right. Make sure you understand the answers. If you do not, say so and ask for more detailed information so that you can make informed decisions about your health care.

When given a new medication, you need to ask your doctor or pharmacist:

1. What is this medication for? How long will I have to take it?
2. How can I expect to feel when I start taking this medication?
3. Can I expect side effects? If so, what type?
4. Do I need to take special precautions when I take this medication?

Explain to the group as a whole the use of the medication record cards/sheets, their importance in a medical emergency, and that they should be presented each time they visit their doctor (*any* doctor). If you are conducting the Brown Bag program that day or in the near future, explain that you will help them fill it out. Stress the fact that it needs to be filled out and kept on their person even if they do not participate in the Brown Bag program.

Explain the importance of using only one pharmacy. Most pharmacies have medication profile systems which they check—every time a prescription is filled—for duplication, possible drug interactions, changes in dosing, and other potential problems. The check helps prevent problems from occurring. As well as conducting a medication profile check, the pharmacist should also take time to answer a patient's questions and explain medications as necessary. Be sure all members of the group understand that pharmacists are required by our state's standard of practice to offer patient counseling.

At this point, you can conclude your presentation with a question and answer session. Or you may add other topics, including:

- Proper storage of medication
- How long medications should be kept
- Dangers of saving medications that are no longer being used
- Vitamins: myth vs. truth
- New medical fads: who to believe and where to get good information
- Advertising geared toward the elderly, particularly for such items as anti-aging products, rejuvenating vitamins, and arthritis remedies (the last has become a multi-billion-dollar quack medicine business to exploit people's pain).

These and other relevant topics can be added to or subtracted from a program, depending on the audience and their time constraints.

The Brown Bag Medicine Review: A Sample Program for Pharmacists

The Brown Bag Medicine Review program, with its one-on-one design, offers the pharmacist a way to have a direct impact on the health of older persons in their communities.

Setting up a brown bag review takes planning. A major resource for access to the groups in your community that will benefit from the program may be found in the staff of local InTouch agencies, as well as area agencies on aging and senior centers.

Your first concern, in setting up a program, is assembling materials for the review. The following are essential:

- Brown paper bags with instructions, so that participants will understand that they need to put all their medications, prescription and non-prescription, in the bag for the review.
- Publicity materials—posters, newspaper releases, etc.
- Medication record cards or sheets to use in individual assessments.

Materials need not be expensive. Brown bags may be found in the paper section (lunch bags) of many of our own pharmacies. Posters can be designed by you or by members of the community group, or they can be ordered for a small fee from the National Council of Patient Information and Education (NCPIE) National Brown Bag Medicine Review program. You will need to prepare a basic news release sheet with blank spaces for time, date,

and place, so you can use the same format for different meetings. A prepared medication record card or sheet will help ensure that you collect all necessary information; the Illinois Pharmacy Foundation has a medication record sheet available.

Once materials have been collected, you are ready to set a date and place for the program. You will need to be sure each meeting includes a special area for individual reviews which will offer appropriate privacy and is set up with table and chairs. If the size of the group will necessitate more than one interviewer—you should expect to take 15 to 20 minutes per review—you may need an appointment schedule and one or more additional pharmacists.

There may be communications barriers to overcome, including language, poor vision, hearing impairment, or decreased cognitive function, as well as some older persons' preconceived ideas about their disease states or medications.

There are questions that the interviewers will need to ask, both as general information and about each medication. General questions include the following:

- *Do you have any allergies?* You may need to distinguish between true allergic reactions and side effects.
- *What health conditions are you being treated for?* You need to know about conditions which at present may not be treated with medication.
- *How long has it been since you last saw your doctor?*

- *Do you see more than one doctor?* Be sure that the individual understands that dentists, eye doctors, etc., must be included.

For each medication:

- *What are you taking this medication for?*
- *Are you still taking this medication?*
- *What did your doctor tell you about this medication?*
- *How long have you been taking this medication?*
- *How are you supposed to take this medication?*
- *Have you experienced or are you experiencing any side effects from this medication?*

As you ask these questions, you will fill out a medication record card or sheet for the individual, explaining that the record should be kept on his or her person; in an emergency, specific medical information will be available to medical personnel. Also, every time the individual sees any doctor, the record should be presented and reviewed by the patient and doctor together.

Most problems which are detected will require you only to reinforce proper use of the drug in question and to offer information which will allow a better understanding of the medication or disease state. This type of intervention with information

has been shown to increase compliance with drug schedules, as well as preventing medication misuse or abuse from occurring.

When a potentially significant problem is detected, be careful not to overly alarm the older person. We need to maintain individuals' faith in their physicians, not to find fault. It is important to recognize that in this situation you do not have all the clinical information which was available to the prescriber when making the original decision. Explain to the older person that follow-up with the physician is necessary. The individual may prefer to do this, or he or she may ask you, the pharmacist, to do it. If you are asked to talk to the physician, it is a good idea to get a signed consent form from the individual.

In Section 4, the Sample Resources section of this manual, we have included an in-depth NCPIE paper on how to conduct a Medicine Review. The dual purpose of these reviews is to prevent problems from occurring and to give older persons the opportunity to ask questions they may not have asked of health professionals in other situations. You can conduct very basic reviews or develop a more complete clinical program based on your own background, relationship to other health professionals in your community, and specific needs of groups in your community.

Program Ideas for Prevention Specialists

Prevention specialists in the Illinois InTouch system find many ways to bring messages about the prevention of substance abuse to individuals, families, and communities.

One of these is the Senior Wellness Series, which is offered to older adults at nutrition program sites in Monroe and Randolph counties by Human Support Services. Since it began in July 1991, this series of short presentations about health and self-care has reached more than 3,000 older persons—some 25 percent of the older population in the two counties. Prevention Specialist Suzanne Chisum developed and delivers the series.

Experience has shown that older adults respond more positively to topics presented under the “wellness” designation than under a “drugs and

alcohol” title. Discussions about using medicine safely and recognizing alcohol risks are a vital part of the series, but the information must be presented sensitively.

Prevention specialists already know the techniques for planning and delivering community outreach programs. You may want to collaborate with pharmacists in your community to reach the older audience if you are not doing so already.

What follows is an outline of the presentation Chisum delivers on safe medicine use. Handouts entitled “Using Your Medicine Wisely,” “Hints for Taking Medication Effectively,” and “What to Do When a Friend Has a Problem with Alcohol” are included at the end of this section and in Section 5.

Using Your Medicine Safely: A Sample Program for Prevention Specialists

Welcome the participants.

Introduce yourself and tell about your work as a prevention specialist.

Explain why you are here today and how much time you will take.

Start with attention-getters like these:

- Older Americans make up 12 percent of the population and consume 30 percent of prescription drugs.
- By some estimates, older people consume half the over-the-counter drugs sold each year in this country.
- Medicine is the second largest out-of-pocket expense for older adults, according to the Department of Aging.

- Older adults experience 50 percent of drug reactions that are reported to doctors and hospitals.

Use handouts like "Using Your Medicine Safely," "When a Friend Has a Problem With Alcohol," and "Hints for Taking Medication Effectively" (see following pages) and discuss its contents.

Be sure to include personal stories or anecdotes that will make the information more pertinent to the older audience.

The best time to discuss alcohol risks may be after you have explained that the physiological changes which accompany aging can alter the body's response to any drug.

Ask for and answer questions when your presentation is complete.



Self Care

Using Your Medicine Safely . . .

Older Americans consume more prescription and over-the-counter drugs than any other segment of the population. Older Americans also have half of all reported drug reactions. Most of the drug reactions are due to misuse. Learning to take your medications properly will help eliminate drug reactions.

Drugs affect older people differently because of—

- Body composition changes (decreased muscle, increased fat, decreased body water)
- Heart and blood vessel changes (increased heart size, diminished elasticity of blood vessels, decreased oxygen to kidneys, brain, muscles and liver)
- Digestion changes (stomach empties more slowly, decreased acid secretion and absorption)
- Nervous system changes (decreased tolerance for depressant medications, decreased coordination and short-term memory, slowed reflexes)

Causes of Misuse

- Sharing medication
- Drug interactions (with other prescription or over-the-counter medications)
- Overdose
- Self-medication
- Medication omission
- Poly drug use
- Outdated medications
- Automatic refills
- Drug-taking errors or confusion
- Cost
- Tamper-proof packaging



Self Care

When a Friend Has a Problem with Alcohol . . .

Facts About Alcohol

- Alcohol is a drug.
- Alcohol is the most used drug in the United States.
- One beer has as much alcohol content as one “shot.”
- One out of four people is affected by alcohol abuse.
- Liver cirrhosis, often caused by drinking, is the ninth leading cause of death.
- Women become intoxicated more quickly than men.
- People who eat poorly are more prone to physical problems related to alcohol.

If You Suspect Alcohol Abuse

- Be understanding of possible physical and emotional pain.
- Never preach.
- Gather facts; look for clues without being obvious.
- Share your concern with your friend in a caring, non-judgmental way—while he or she is sober!
- Initiate *general* discussion about drinking—mention you went to this workshop.
- Provide pamphlets or reading material about the disease of alcoholism and help that is available.
- When sharing concerns, offer to get someone to come and talk with or to take your friend to help—do it immediately.
- Don't enable.

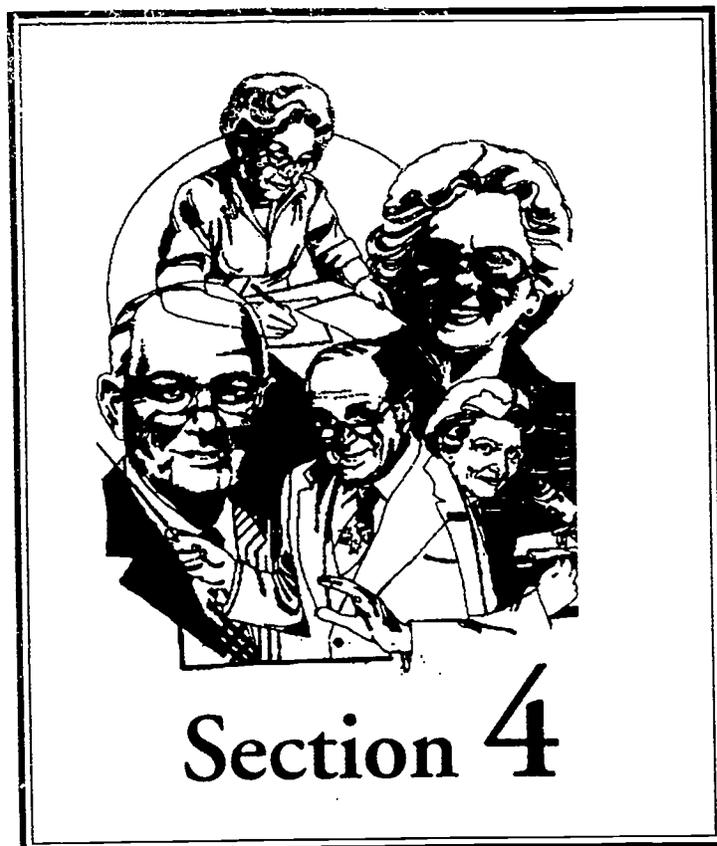
1993



Self Care

Hints for Taking Medication Effectively . . .

- Take exactly the amount of drug prescribed.
- Remember that medicines do not produce the same effects in all people.
- Always tell your doctor about past problems you've had with drugs.
- Keep a daily record of the drugs you are taking.
- Ask your pharmacist for easy-to-open containers if childproof containers are hard for you to open.
- Make sure that you understand the directions printed on the drug container and that the name of the medicine is clearly printed on the label.
- Discard old medicines.
- Ask about side effects that the drug may cause.
- Always call your doctor promptly if you notice unusual reactions.
- Review with your doctor the need for each medicine.



Resources

1. Reprinted Articles
2. Additional References

'There is so
much help
out there...'
—Betty
Ford



DON FERDIE

We interviewed Betty Ford in a tiny office in the heart of the Betty Ford Center in Rancho Mirage, California. These days it's the nucleus of her very active life—a life that requires several staff members to keep details in order. Yet there was a time when the former First Lady's dependency on prescription drugs and alcohol was so advanced she is sure that, without her family's intervention, it would have "progressed to the point where one morning I wouldn't have awakened." The story of her acceptance of her disease and continuing recovery ("it will be going on as long as I live") is one she's told many times. Yet each telling is a new opportunity for insight and discovery, for both her and her audience.

Q. What was your life like just before your family's intervention?

A. We had just left Washington. The children were all living away from home. I was suffering from depression, a lot of it, and I was very lethargic because I was on so much medication. I was continuing to use alcohol in combination with prescription drugs for arthritis pain and to sleep. It's a miracle that combination didn't kill me. I didn't really learn how lethal it was until I was actually in treatment at the Long Beach (California) Naval Hospital (in 1978).

Q. You were under a physician's care. What did he say?

A. I saw my physician every week because of pain from my arthritis. He was unaware or didn't want to recognize my dependency on the drugs. I don't think he knew anything about my use of alcohol. He didn't question that. Unfortunately there are a lot of doctors who either are not well informed about the disease of alcoholism or choose not to recognize it.

Q. What went through your mind during the intervention?

A. Before the family intervention my daughter, Susan, and our gynecologist tried to do a small intervention. I practically threw them out of the house. Fortunately, they were not deterred—they went back and got the troops.

The second intervention involved my whole family plus two physicians. It was very hard for me to buck. First, I was very glad to see all my family, delighted they were paying some attention to me. When I realized they were addressing the fact that I had a problem with alcohol and drugs, I became very angry. Finally, I began to painfully realize that I had failed as the wife and mother of this family. I had let them down. Yet I kept hearing them say they loved me too much to let me go. And then I began to see the sunlight.

Q. Was anyone in particular besides your family really helpful during your recovery?

A. Yes, there were some women [peer counselors] who were especially helpful early on in the treatment. Through them I was finally able to accept the fact that women could be alcoholics, and yes, I could be an alcoholic.

Q. How did you relate to your family after you came out of the hospital?

A. When I was a practicing alcoholic, my family—especially the children—were very able to manipulate me. I'd say yes to practically anything. After I got into recovery I took control of my life. At first there was a lot of resentment that I suddenly wanted to be in charge again. They had to realize this was a healthy person and this was what recovery was all about.

Q. How do you relax after a busy day?

A. I find tea or a cup of coffee sort of relaxing. If I'm really tired I go swimming in our pool. I exercise. And I have some meditation books I use to regroup my thoughts. It's a matter of balance.

Q. What advice would you give the older woman who feels herself slipping into addiction? And her family?

A. I would hope she would ask for help. There is so much help out there. Family members should try to see their own roles as enablers or co-dependents and they can best do that by going to Al-Anon. They should also find out about professional intervention.

We have both interventionists and family treatment here at the Betty Ford Center. And we believe in the holistic approach to treatment—everything from nutrition to physical activity to spiritual renewal.

Q. If you could change one thing about your recovery, what would it be?

A. That it wouldn't have taken so long. I didn't want to be an alcoholic. But as a recovering one, this is probably the best time of my life. I would have missed a very beautiful period in my life had my family and I not had this experience.

—Karen Westerberg Reyes

Caring for Aging Parents

Includes excerpts from *Chemical Use Among Older Adults: Risks, Reactions and Concerns* by Phillip J. Levine, Ph.D.

Many people are caught in the middle of caring for their young families and their aging parents. These "sandwich generation" caregivers are often overwhelmed with the task before them. At a time when they wish their parents could just be mobile, happy grandparents, these adults often are faced instead with

anxieties about their mom's or dad's deteriorating sense of judgment, minor mishaps at home, broken hips, or general confusion.

One of the contributing factors to an older person's declining health may be their mismanagement of the prescription drugs they receive. Each year, a disproportionate number of older adults are hospitalized for adverse drug reactions, with more than 160,000 experiencing serious mental impairment due to chemical use. Four out of five older adults take at least one prescription drug each day and most of them do not understand why the drug is being prescribed. Furthermore, they often do not follow directions in taking the drugs, and fail to understand the effect of mixing drugs with certain foods or with other substances.

When you're caring for aging parents, you must take into consideration your parents' lifestyle and habits, what drugs they commonly use, and the risks and reactions they face because they are older and often have stronger reactions to drugs. Remember that complete, accurate drug records are essential because older adults using drugs may be

misdiagnosed. Consider the following scenario:

Helen is a 72-year-old who has enjoyed a busy, healthy, and normal life. She raised three children, operated a business, and had many friends. Her family and friends knew her as a quiet, unassuming, nonburdensome person.

While she and her husband were planning to sell the business and retire, he died suddenly. Shortly thereafter, Helen became despondent. She lost her appetite, complained of constipation, could not sleep, and often drank herself to sleep with vodka. Lacking the energy to complete the sale of the business, she asked her out-of-town son to help.

Shocked by the change in his mother, the son discussed the situation with a local doctor, who prescribed a sleeping pill, multivitamins with minerals, and an antidepressant drug. Within two weeks Helen could barely move about her house. She spent the morning in bed, and much of the day she was disheveled and groggy. When her son approached her about this, she became argumentative and combative. Because of her sudden change in mental status, her son and

the doctor placed her in a nursing facility. Her medications were continued at the previous level.

In the nursing home Helen's life was slow and boring. She watched TV, dozed during the day, and had problems sleeping at night. Then she'd wander about, argue, watch late-night TV, and play her flute, disturbing the other residents. The staff requested that she be given another sleeping pill and an anti-anxiety drug.

Helen's early problem was grief over the death of her husband, complicated by drinking herself to sleep. Her situation was further aggravated by her son who overreacted to her sorrow and a doctor who prescribed two drugs to an older woman who was trying to put her life in order. The drugs may have placated her children but did little to improve Helen's condition. The nursing staff complicated her drug use by requesting two more medications, apparently in an attempt to make Helen fit the mode of the home.

The staff should have requested detailed drug use data before suggesting the need for other drugs. If they had, they might very well have recommended a drug "holi-

day" or a gradual dose reduction. Drug accumulation would then have been minimized and Helen would have been in a better position to recover from her losses, leave the nursing home and adjust to her new life as a widow.

Four out of five older adults take at least one prescription drug each day.

Caring for aging parents can be a rewarding experience if caregivers are aware of the various parameters involved. Because older adults often receive prescription drugs from several sources, it's imperative that both you and they stay abreast of what drugs are prescribed and why. Through adult education programs or personal reading, both caregivers and older adults can foresee and avoid some problems related to drug use. Additionally, evaluating individual circumstances will go a long way in assisting our elders to remain ambulatory, active, and healthy members of society.

Hidden legacies

By Michael Tennesen

At a convention of recovering alcoholics held last year in Torrance, California, the speaker at a luncheon attended by more than 100 people asked his audience: "If you had one parent who was alcoholic raise one hand; if you had two alcoholic parents raise both hands." More than 70 percent of the people in the room raised one hand; many raised both. "Who says this disease is not genetic?" the speaker challenged.

Scientists have been vigorously investigating the genetic aspect of alcoholism for some time, and though they bicker over whether psychology or biology is more critical to the development of the malady, few deny the biological component exists and many feel it is genetically influenced. And now, with exciting first discoveries of alcoholism's genetic make-up, scientists are anticipating a time when genetic therapies may serve as valuable adjuncts to treatment programs.

In the early 1970s there was an escalated interest in alcoholism as an inheritable disorder. In 1972 Marc A. Schuckit, M.D., a psychiatrist now at the VA Hospital

and University of California at San Diego, studied the offspring of alcoholic parents in his famous adoption-type study. "The result," says Schuckit, "showed a four-times-greater incidence of alcoholism among children of alcoholics, even if they were raised by non-alcoholics."

Alcohol affects the central nervous system and it's here that the alcoholic's problems first develop. In their book *Alcoholism and the Addictive Brain* (Free Press/Macmillan, 1991), Kenneth Blum, chief of the Division of Addictive Diseases at the University of Texas in San Antonio and James Payne, executive director of the National Foundation for Addictive Diseases, describe alcohol's effects on neurotransmitters, the chemicals that allow one nerve cell to communicate with another.

Under normal circumstances, according to the authors, the balance of these chemicals is such that a person at rest has a feeling of calm and well-being. But in a person genetically predisposed to alcoholism the balance is off, with a significant lack of dopamine, the nervous system's natural tranquilizer. Thus, even at rest, that person may feel anxious, angry or depressed. Alcohol and many drugs stimulate the production of dopamine, which makes a normal person feel "high" but a genetically predisposed person merely "normal." Says Raymond Anderson, M.D., former medical director of Arms Acres, an alcohol and drug rehabilitation hospital in Carmel, New York: "Most alcoholics I know claim they

drank because they were uncomfortable and that their first drinks made them feel right with the world for the first time."

Initially, children of alcoholics suffer fewer negative effects from alcohol. They are less likely to feel drunk, nauseous or uncoordinated. They are the ones who claim they can "hold their liquor."

This is not to say that only the genetically predisposed become alcoholics. "Alcohol is an inherently addictive substance," says Ernest Noble, Ph.D., M.D., director of the Alcohol Research Center at UCLA. "If you put enough in your system, you will become addicted."

Feelings of depression, loneliness and grief can start the addictive cycle and may be even greater motivating factors for those who develop a drinking problem in later life. Still, Blum does not discount genetics as a factor in the older drinker: "Many times there has been a suppression of the desire to drink. They want to be good parents or grandparents. But when the kids leave and they're all alone, the defective gene may take over, and they use alcohol or other drugs to offset their negative feelings."

In April 1990 Blum and Noble reported the results of their hunt for the elusive "alco-gene." Studying brain tissue from 70 people, half of whom had died of severe alcoholism, they found one gene—the A1 allele—that was present in the majority of the alcoholics but missing in the majority of the non-alcoholics. That stirred a lot of controversy, and in October 1991 David Comings, M.D.,

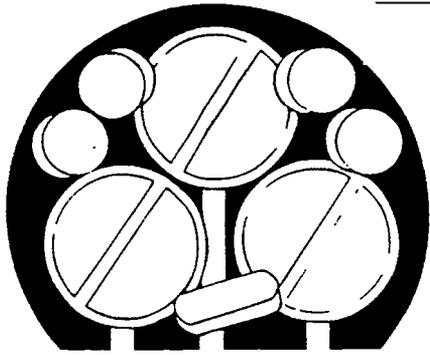
director of the Department of Medical Genetics at the City of Hope in Duarte, California, countered that the A1 gene wasn't the principal cause, but rather a "modifying" gene that somehow increases the effects of the yet unidentified "real" alco-gene. "We've found the trunk of the elephant," says Comings. "We still have to find the body."

Geneticists hope to develop a test that will determine genetic predisposition to alcohol or drug abuse. It could be a blood or brain-wave test that would alert such people to their danger of addiction. Blood tests may reveal gene defects; brain-wave tests may reveal differences in brain function. Scientists have shown, for example, that sons of alcoholics have certain brain-wave patterns that differ markedly from those of sons of non-alcoholics.

Scientists may also be able to regulate nervous-system imbalances with drugs or nutritional formulas. Blum and Payne have developed a protein compound that has been used by alcoholics to ease the pain of withdrawal.

Genetic engineers may eventually be able to alter the alco-gene early in fetal development. A vaccine against alcoholism may even develop antibodies to alcohol that could reverse its effects—changing, so to speak, the wine back into water. ■

Michael Tennesen is a regular contributor to Modern Maturity, Audubon and Playboy. His book The Flight of the Falcon (Key Porter Books) is due out this spring.



Redefining "Alcoholism" and "Substance Abuse" for Patients 65 and Older

by Marilyn Jess RPh, PharmD candidate

Estimates on the incidence of alcoholism and chemical dependency in the elderly population have varied among investigators, with estimates ranging from three or four percent all the way to 25 percent of all persons aged 55 or older. Most agree, however, that the problem often goes unrecognized, and substance abuse in the elderly is often unrecognized for a number of reasons.

Medically, the alcoholic elderly may not present to physicians in the same way younger alcoholics do, so misdiagnoses are common. Psychologically, people sometimes "allow" an elderly person to use prescription drugs or alcohol in addictive ways because they feel the elderly person has "earned" the privilege of drug abuse. Another misconception is that there are few other perceived pleasures late in life, so why deprive the elderly of their "occasional" drink. Socially, the elderly are often isolated because retired people obviously are not taking their personal problems to the job, many do not drive, so alcoholism is hidden from local authorities who detect problem drinking by way of drunk driving arrests, and with families grown and living on their own, families are often unaware of drinking patterns.

All of these situations can result in unnecessary hospitalizations and a decreased quality of life for people who could have many years of active living to look forward to.

Pathophysiology

Age related changes in pharmacokinetics, in combination with the certain symptoms of chronic diseases which mimic intoxication can make diagnosis of substance abuse extremely difficult for the practitioner.

Absorption, distribution, metabolism and excretion of drugs tend to change during the normal course of an individual's lifetime. Absorption of drugs, for example, often changes with age because of changes in pH along the length of the GI tract, changes in active transport mechanisms, decreased efficiency of liver enzymes which in turn affect first-pass metabolism, and changes in GI transit time. Concomitant disease states like bowel resections, inflammation or exocrine insufficiency which are all more common in elderly patients also have their affect on drug or alcohol absorption. The net result is a relatively unpredictable degree of absorption of alcohol and other drugs, which

may play a significant role in overall blood levels obtained from each dose.

Changes in drug distribution can also have a clinically significant effect on serum drug or alcohol levels in relation to the amount of substance ingested. Percentages of body fat and water in relation to total body mass change throughout life. Newborns have a much higher percentage of body water and a lower percentage of body fat than do older children, young adults and elderly adults. Young adults, in turn, have less percent fat and a higher percent water in their total body mass than do elderly adults. Because of this, water soluble and lipid soluble drugs often distribute differently for different age groups in addition to any changes in drug distribution which may occur secondary to obesity.

Malnutrition, with its accompanying decrease in serum proteins and protein binding, also has to be included in the scenario whenever malnutrition exists. All of these factors affect a drug's half-life, volume of distribution and serum levels. Aging also affects the blood-brain barrier in such a way that more substances, including normally innocuous drugs like propranolol and cimetidine along with alcohol and benzodiazepines, seem to penetrate the CNS more easily in the elderly than they do in younger people. A greater percentage of a dose of normally CNS active drugs may also enter the cerebrospinal fluid. The consequence of increased CNS penetration is that a lower blood level may produce the same CNS effect one would normally see in a more typical young adult therapeutic range. Because of these differences in serum levels, an elderly person can possibly become intoxicated on a much smaller amount of alcohol than a younger adult would.

Metabolism and excretion of drugs are also affected by the aging process. As we age we tend to lose about one percent of our renal function per year once we pass the age of thirty, and liver enzymes tend to become less efficient. Not only are target drugs affected by these changes, but active metabolites may change their elimination half-lives as well. Besides an intrinsic inability to metabolize alcohol and other drugs as efficiently as younger adults, the elderly tend to have a higher incidence of multiple medical conditions which require polypharmacy, so the probability of drug-alcohol and drug-drug interactions also increases significantly.

If a frail eighty-five year old, for example, who takes



three or four medications daily, who has a decreased cardiac output which decreases circulation to the brain, and who has a mild degree of dementia were to drink one glass of wine each evening, he or she could conceivably be experiencing the same subjective degree of intoxication that a thirty year old would who drinks a pint of liquor per day.

Furthermore, if that eighty-five year old were to experience ataxia, fall and break a hip, the alcohol usage might not be included as a causative factor if the patient does not have an obvious odor of alcohol on his or her breath. Alcohol, recall, is excreted partly in the lungs and blood alcohol levels are proportional enough to levels of alcohol in exhaled air to justify quantitative breath analysis. A person who is experiencing a drug-alcohol interaction plus delayed renal excretion plus a mild degree of hypoxia from decreased cardiac output may not need a significant blood alcohol concentration in order to experience adverse effects from alcohol intake.

Age related changes in pharmacokinetic parameters are not totally predictable, but are instead influenced by each individual's heredity, lifetime exposure to toxins, inherited or acquired diseases, physical injuries, personal habits and nutritional status. Another complicating factor, therefore, in prescribing for the elderly is that we cannot claim that all eighty-five year olds will react to a certain dose of a certain drug in a certain predictable way. This fact is important to remember when trying to define doses of drugs which constitute abuse versus doses of drugs which may be pharmacologically necessary to treat a specific patient's medical condition. Analgesics necessary to treat chronic pain are an example of this problem; many analgesics are abusable, pain is subjective and can be exaggerated, yet it is inhumane to deny a suffering patient adequate analgesia simply because other patients have abused the drug which is about to be prescribed.

Many other medical problems can complicate the diagnosis of substance abuse in the geriatric population. An elderly person who comes to a physician with confusion and disorientation could indeed be experiencing a drug or alcohol toxicity, or that person could be suffering from depression or dementia, or the patient might be experiencing any of a number of medical conditions which present atypically in the elderly. It is not uncommon for a seventy, eighty or ninety year old to demonstrate confusion and disorientation as the first symptom of a nutritional deficiency, a transient ischemic attack, electrolyte imbalances, a 'symptomless' MI or embolism, or an acute infection.

Compare these symptoms with some rather unexpected symptoms of geriatric alcoholism as described by Bierenfeld; self-neglect, falls, injuries, confusion, lability, depression, unusual behavior, incontinence, diarrhea, malnutrition, myopathy and hypothermia. Probably moreso in the elderly than in younger people, a careful differential diagnosis which includes physical and psychological assessment plus lab work is necessary before medical treatment can be initiated.

Patterns of Alcohol Use in the Elderly

The wide variation in estimates of the magnitude of alcohol abuse among the elderly may be due to the difficulty of using standardized diagnostic criteria in this age group. The Michigan survey which is frequently used to diagnose younger alcoholics contains many questions relating to arrests, job difficulties and marital or family problems that may not pertain to an older individual. Most elderly alcoholics are retired, their families are grown and the spouse may be deceased.

Many of these individuals do not get out often enough to get arrested for anything and they may even have their alcohol brought to them by family enablers. Attempts have been made to redo the Michigan survey with more age-specific questions. Also noted is the importance of distinguishing between alcohol abuse (the "regular or escalating drinking pattern accompanied by adverse consequences in health or psychosocial functioning") and alcohol dependence ("an addiction to alcohol which includes the physiologic symptoms of tolerance and withdrawal"). The differential diagnosis is important because of the different prognoses and the different treatment approaches needed.

Drinking habits and patterns of alcohol abuse tend to change in the course of the aging process. This, too, makes diagnosis difficult. Some researchers have explored the greater complexity of alcohol abuse patterns in this age group and have divided elderly alcoholics into three categories. "Survivors," which comprise about two-thirds of elderly alcoholics, are those people whose alcoholic drinking started during their younger years and who have beaten the odds by living to old age. These people have multiple medical problems and have the highest incidence of Laennec's cirrhosis of any other patient population.

The next largest group of elderly drinkers are the "reactors" who experienced a late onset of alcoholic drinking. Their drinking appears to be more of a reaction to stress than the drinking patterns within the "survivor" group. Their's is a more difficult type of alcoholism to diagnose because they experience fewer health related consequences of drinking and suffer fewer lifestyle disruptions than the former group. Demographically, these alcoholics are more commonly female (although the male to female ratio of all elderly alcoholics remains about 5:1), they come from a higher socioeconomic group than do the "survivors," they have more education and are likely to be single or widowed.

The third group are the "intermittent drinkers." They are occasional binge drinkers who may drink more in response to stress. Little has been written about this subset. Overall, widowed and single elderly, those with criminal records, blue collar retirees, and those elderly living in disadvantaged areas seem to be at highest risk for alcoholism.

Both non-alcoholics and alcoholics seem to demonstrate different drinking behavior than do younger drinkers. According to Ruben, most people begin to

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decrease their consumption of alcohol as they get older because of the increased effects of the drug in their systems. Older people usually drink smaller quantities of alcohol at one time, but they drink more frequently than younger people. Additionally, the elderly may not exhibit the obnoxious and intoxicated behaviors which people associate with drunkenness, thereby allowing their alcohol problem to be overlooked more easily.

Ticehurst, in the Australian study, confirms this pattern and adds that the elderly tend to drink for different reasons than younger people. Whereas younger alcoholics frequently drink to help themselves cope with social situations, the elderly tend to drink to improve their mood, or they drink because of multiple social losses, changed social roles, lowered self esteem, or the awareness of their own deaths. Scott concurs and adds that the decrease in the overall quantity of alcohol consumed by the elderly may also reflect fewer social drinking opportunities, less money to pay for alcohol, and ill health which creates more dysphoric reactions to alcohol. He also alludes to the fact that younger drinkers are more visible, therefore their drinking problems receive more attention.

Alcohol use in the elderly does not have to be excessive, or reflect the more classic patterns of alcoholism in order for it to present major problems. Already discussed are the physiological changes affecting blood levels which may become proportionately higher and in turn increase the central nervous system effects of the substance.

Alcohol abuse can lead to atrophy of the cerebral cortex. Cognitive impairments are seen in abstract reasoning, hearing and visual perception, and memory. Verbalization, word definition and judgement in social situations tend to remain largely unaffected, which reflects greater impairment to the right hemisphere of the brain than the left. In addition, alcohol use tends to decrease respiratory drive which can impair the amount of oxygen going to the brain. Confusion and disorientation can result. Alcohol decreases coordination, and falls can be a very painful and medically expensive complication of alcohol use. It also increases the amount of free fatty acids and lipids in the blood which affects serum cholesterol and triglyceride levels.

Alcohol increases the risk of hypothermia - a major concern for people living in the northern states - and it can exacerbate gouty arthritis because of its tendency to increase serum uric acid levels. Anginal pain can be masked while a heart patient is intoxicated, thus deadening the primary warning signal of an impending heart attack. Hypertensive drinkers may exhibit more difficulty in controlling their blood pressures and moderate long-term use of alcohol increases the risk of hemorrhagic stroke along with increases in blood pressure. Diabetics may have difficulty controlling their blood sugar because alcohol is a potent source of non-nutritive calories at 7 Kcal per gram of ethanol (as compared with 3.4 Kcal per gram of dextrose). Alcohol's effect on mood, sociability, behavior and relationships



may partially account for the 12 percent geriatric admissions to a psychiatric emergency department described by Puryear et al.

The dollar costs to society by preventable hospital admissions are presumably considerable. Any patient, for example, who breaks a hip because of unsteadiness secondary to moderate alcohol intake would require emergency room treatment and triage, surgery to reset or pin the broken bones, weeks of inpatient bed rest with or without complications arising from emboli, plus several weeks of physical therapy.

An elderly individual who attempts to drive while under the influence spreads the cost of alcohol-related medical care to anyone he or she may injure in a motor vehicle accident, just as a younger drinker would, except that the older person may also be dealing with decreased visual and auditory acuity along with the increased sensitivity to alcohol which was previously described. Multiply these medical expenses by the number of early onset alcoholics who survive long enough to develop chronic liver disease, GI and renal complications and Wernicke-Korsakoff dementia, and the need to recognize and treat suspected cases of alcoholism becomes apparent.

Alcoholism treatment in this age group, if targeted toward the special needs of the elderly, tends to have a high success rate. Those who believe that no harm can come from letting an elderly person indulge in addictive drug or alcohol use are mistaken; aggressive efforts to control the problem should be addressed.

Illicit Drug Use in the Elderly

Compared with alcohol use, there are not a lot of references which address the use of marijuana, cocaine, heroin or other illicit drugs among people aged 55 and older. Of the literature which did address illicit drug use, some interesting although statistically untested trends were discovered.

A few writers described a "maturing out" phenomenon among aging heroin addicts. That is, as opiate addicts in particular get older, they tend to wean themselves off their drug of abuse. The same phenomenon was found in elderly alcoholics, although the decrease in drinking was attributed by most to a decreased physical tolerance to the amount of alcohol that had been consumed in the past. In the articles referenced there were only hints that elderly drug abusers may not like the effects of marijuana and other street drugs. None of them offered possible explanations. One of those references was an article which was actually about cannabis derivatives used to control nausea in cancer patients; it did not specifically address illicit drug use in the elderly. Even that article cited conflicting reports about elderly cancer patients experiencing unpleasant dysphoria which precluded the use of cannabis-derived anti-nausea drugs.

Glantz, et al and Gottheil, et al did describe in some depth the characteristics of those opiate addicts who successfully survived to old age. There were five factors

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that seemed to be a common survival tool in this group:

1) The opiate addicts who survived to old age had parents who also survived to old age, indicating favorable genetic characteristics.

2) Contrary to researchers' expectations, the survivors had been able to obtain constant supplies of good quality narcotics throughout their lives, thereby avoiding the physical stress of withdrawal and relapse.

3) Addiction survivors were able to avoid the violence normally present in street life. They did this largely by finding non-violent ways to acquire drugs and drug money.

4) Surviving drug addicts aged 55 and older were scrupulously conscientious about using clean needles.

And 5) the availability of methadone was credited with prolonging the lives of many unrehabilitated addicts.

It can probably be safely deduced that this area needs to be researched further.

Prescription and OTC Drug Abuse

A great deal has been written about the overprescribing and overutilization of prescription drugs in the elderly; the topic requires an entire article by itself. Therefore, only a few statistics will be presented here.

Miller, et al estimated that 25 percent of all people

late physicians by inventing or exaggerating symptoms, or the patient may visit numerous physicians and have their prescriptions filled at a number of different pharmacies thereby making it difficult for professionals to get an accurate picture of total drug use. Since symptoms such as pain, anxiety, insomnia and depression are subjective, it is extremely difficult for a physician to gauge the intensity of the patient's suffering by relying on physical examinations or laboratory testing for these particular complaints. Both the physician and pharmacist are in the difficult position of having to differentiate genuine physical or psychological distress from manipulative addictive behavior. In addition to prescription medications, OTC's may account for up to 40 percent of drug use by ambulatory elderly people, and about half of these over-the-counter medications are analgesics.

Questioning all prescriptions for controlled substances which are written for elderly patients is not a rational response to this problem because of the medical necessity of many of these drugs. For example hypnotic agents may be required on occasion because sleeping patterns become disrupted as part of the normal aging process. According to Zarit, the amount of deep, refreshing Stage IV sleep experienced nightly tends to decrease by up to 50 percent as people get older, and there is also a decrease in the amount of REM sleep. Antidepressant and anti-anxiety agents cannot be completely replaced by biofeedback, psychotherapy and

aged 55 and older use psychoactive drugs and are at risk for developing drug dependence. They went on to state that fifty percent of nursing home patients use psychotropic drugs, especially minor tranquilizers, antipsychotic drugs, hypnotics and other sedatives. Thirty three percent of chronic daily users of benzodiazepines are over 55 years of age. Twenty six percent of these benzodiazepines for anxiety and forty percent of hypnotics for inducing sleep are given to people aged 65 and older. Some sources, therefore, have asserted that prescription drug abuse is a much more prevalent problem than is illicit drug use, or even alcohol use.

Moreover, the problem of prescription and OTC drug abuse is one which cannot be solved with simplistic recommendations. As stated above, many elderly have multiple medical problems which require many medications. In spite of the fact that these complicated medication regimens increase the likelihood of drug-drug interactions, the physician may have no choice but to prescribe a lot of drugs to certain patients. Also included among the difficulties in differentiating medically necessary prescriptions from potentially abusable prescriptions are the characteristics of drug dependent people themselves. Chemically dependent people tend to have a considerable degree of denial, so when questioned by their physician or pharmacist about quantities of drugs taken, the patient may understate his or her drug usage. Also, in attempting to procure drugs, a chemically dependent person of any age may manipu-

relaxation techniques because a biochemically based depression which requires drug therapy and/or electroconvulsive therapy is a significant problem for the elderly, and suicide is a very real danger for an untreated depressed patient. Of all persons who successfully completed suicide attempts in 1970, for example, 31.5 percent were over the age of 65. Finally, some of the ethical dilemmas concerning the prescribing of potentially abusable analgesics has already been discussed in this paper.

The complicated issues of multiple medical problems in the elderly which require medication, characteristics of drug abusers themselves, inability of prescribers to supervise a patient's OTC drug or alcohol use outside of the hospital or nursing home, and the social stress-related motivating factors which promote sedative abuse in a population which is prone to many social losses, present a very difficult situation for the medical community. Practitioners who specialize in alcoholism and substance abuse may have to readjust diagnostic criteria when dealing with elderly subjects.

References available on request.

The Intimate Enemy

Will that friendly drink betray you?

by Nan Robertson

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My 50th birthday was one of the happiest I ever knew. Yet I was alone and a widow. I had lost my beloved husband five years before; I had been demoted from a prestigious job as a foreign correspondent in Paris to reporter on my newspaper's women's page; my closest friend of recent years was gone.

My friend was the bottle. My employer had summoned me home to New York in 1975 because I seemed to be on the verge of a nervous breakdown. The truth was, my heavy drinking was finally beginning to damage my life and my work. But as I turned 50 the following year, I was thankful for a magnificent gift. It was nothing less than a renewed capacity for hope and joy. I had been treated for alcoholism and sober for eight months. After a long period of self-destructive drinking, dramatically accelerated by my husband's death, I had finally decided to be present at and accountable for my own life.

Now I am 65. I am retired. I am still living alone. I am still sober. And I can look back on the 15 years since I marked my own half-century and say honestly—despite struggle and serious illness and vanished friends—that these have been my quality years.

To be an alcoholic at *any* age is a torment. Every one of us who escaped that misery remembers how isolated we were, how duplicitous, how secretly full of shame and guilt. And so I get angry when I hear, "It's the only pleasure Mom/Dad has left. Why deprive her/him of a little nip?"

I am not speaking of social drinking here. I am speaking of alcoholism: problem drinking that distorts the lives of an estimated two-and-a-half million to three-and-a-half million older Americans, estranging them from family and friends and trapping them in a fog of blurred reactions. Cantankerousness, confusion, memory gaps, depression, anxiety—all too often, both doctors and kin dismiss these afflictions as a "natural part of growing old." It is just as likely that alcohol is to blame, or, at the very least, has made the conditions worse.

To the "Why deprive them" question adult children of older alcoholics often ask, Daniel J. Anderson, Ph.D., president emeritus of Minnesota's Hazelden Foundation—the granddaddy of all alcoholism rehabilitation centers—answers: "You're an enabler by making up excuses for the drinking. You've given up on them; you've already got them in a casket. Take a

chance on treatment. If you love your parents, you owe them that."

"The rationale is that they haven't got long to live," says Edith Lisansky Gomberg, Ph.D., a University of Michigan psychologist who has been studying alcoholics for more than 40 years and is a nationally known authority on drinking in old age. "But alcoholism is not a pleasure—it's weird to think it is. The consequences both medically and in interpersonal relationships are terrible."

Studies have estimated that 10 to 15 percent of all Americans over age 60 suffer from alcoholism—about the same percentage as the general population. This is true even though many older people drink less or abstain altogether, usually because drinking complicates their medical problems or simply makes them feel bad.

How do you tell who is an alcoholic? One of the best answers comes from Alcoholics Anonymous—the oldest, most famous and arguably the most successful program devised to arrest the disease. AA gives this definition of alcoholism in *Time to Start Living*, a pamphlet for older people:

"Whether or not you are an alcoholic is not determined by where you drink, when you started drinking, how long you've been drinking, . . . what, or even how much. The true test is the answer to this question: What has alcohol done to you? If it has affected your relationships; if it has influenced the way you schedule your days; if it has affected your health, . . . if you are in any way preoccupied with alcohol—then the likelihood is that you have a problem."

And remember, tolerance decreases with age because older bodies detoxify alcohol more slowly. What could be moderate drinking in a young-

Nan Robertson, a recovering alcoholic and the author of Getting Better: Inside Alcoholics Anonymous (Ballantine/Fawcett-Crest) was a Pulitzer Prize-winning reporter for The New York Times.

ger person—say, two drinks a day—can be dangerous in an older one.

Older alcoholics are divided into two groups. About two-thirds are "early-onset" drinkers who have abused alcohol much of their lives and have survived into an unhealthy, unhappy old age. The second group—about one-third of all drinkers over age 60—is unlike the general alcoholic population. This is the "late-onset" group, which has an excellent chance for recovery.

"They are not as impaired physically, emotionally or cognitively as the early-onset drinkers," says Renee Zito, treatment director of the respected Smithers Alcoholism Rehabilitation Center in New York City. "With abstinence, proper diet and time, recovery can be complete."

Heavy drinking in the late-onset group is usually triggered by traumatic loss. The deterioration is very rapid, covering in a year or two the progres-

sion seen in alcoholics who have been drinking for 20 to 40 years. They hit the bottle because their spouses have died, their children have moved far away, they have retired from their jobs, their health is not as robust as it once was. They are bored, lonely, invariably depressed. Alcohol takes the edge off those negative feelings—for a little while. But there is always the morning after, with remorse adding its sting to every bad emotion.

LeClair Bissell, M.D., the founding director of Smithers and a recovered alcoholic who has been sober for nearly 40 years, says it best: "There are no long-term chemical answers to life."

For many years alcoholism experts believed that isolated older adults were usually the problem drinkers. Then came a 1988 study of alcohol use in three retirement communities in the West. The study found that drinking was part of the communities' lifestyle, with 45 percent of the residents drinking on a regular basis and 27 percent of the heavy drinkers having increased their intake after moving there. While drinking was primarily social, the study found that those who drank socially also drank more when alone.

Older alcoholics are often hard to spot. Detecting the problem is difficult because the signs by which society and the law identify younger drinkers are usually not there. These include arrests for drunk driving (many older people have stopped driving), warnings from employers about tardiness, waning productivity, etc.

How, then, can you tell when something is wrong?

"You can't say the problem is definitely alcohol-related unless you have an eyewitness, the patient admits to it, or his or her physical condition has deteriorated noticeably," says Larry W. Dupree, Ph.D., clinical psychologist and associate research professor in the Department of Aging and Mental Health at the Florida Mental Health Institute, University of South Florida at Tampa.

If you are a friend, helper or relative

of an older person, you might suspect alcohol abuse if you notice *any* of the following signs. (With the exception of bottle stashes, these could also indicate prescription drug abuse; in any event, the person demonstrating such symptoms is in trouble.)

- Abrupt or significant changes in behavior: hostility, paranoia, disorientation, forgetfulness, unsteady gait, slurred speech or trembling hands.

- Previously controlled (via medication) conditions now out of control (e.g., diabetes, hypertension).

- Complaints of insomnia; frequent napping; an absence of restful sleep.

- Deterioration in grooming, housekeeping and eating habits.

- Falls, broken bones, bruises or burns.

- Bottles stashed in the home. ("Home health aides report many bottles in homes visited," says Dupree.)

Once alcoholism is suspected, how do you get an older person to seek treatment? Alcoholics of all ages deny they have a drinking problem.

"There is a tremendous amount of guilt and embarrassment among older people about the 'stigma' of alcoholism," says Jean Dunlop, R.N., M.A., and a certified chemical dependency counselor who runs an outpatient program for older alcoholics at St. Vincent Hospital in Portland, Oregon. "The disease concept of alcoholism was accepted by the American Medical Association back in 1956, but these people have never heard of it. When *they* were growing up, alcoholics were skid-row bums; immoral, weak people. You show them films and bring them to lectures and they say, 'Well, it's very interesting, but I still think I was at fault: I had no will-power.'"

Dunlop and others feel the number-one motivator that gets an older person into treatment is a doctor who points out the medical problems drinking is creating. Zito and still oth-

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ers think the family network can best bring the older alcoholic into recovery. It is highly unlikely that older alcoholics will reach out for help on their own.

"Most of them weren't brought up to deal with their emotional problems, and they often view alcoholism as a sin," says Zito. To overcome this, intervention becomes necessary.

"Intervention involves presenting the facts about the alcoholism to the drinker in a tone that is nonjudgmental and shows concern," Zito explains. "Ideally, all persons who are meaningful to the alcoholic, such as family, friends, neighbors, religious adviser, physician, should make clear and spe-

cific lists about events caused by the drinking. The goal of intervention is to get the alcoholic to acknowledge the need for help, however reluctantly."

The suggested approach is to be loving and gentle. The use of words like "drunk," "drunkard" or "alcoholic" should be avoided. Those who treat older patients agree that the confrontational approach, though it often works well with younger patients, is absolutely wrong for older people. It is essential, says Zito, that the intervention be coordinated and conducted by a trained professional.

Once into treatment, the late-onset drinker usually responds well. But

should the patient receive therapy in groups of only older people? Or are mixed-aged groups better?

Those who vote for segregated age groups say that many older people are offended by and cannot identify with the younger people now pouring into treatment. The profanity, the talk about abuse of illegal street drugs that often accompanies alcoholism in the young, the horror stories told in gory detail—all of this turns off the older person, some experts say.

Dan Anderson of Hazelden is in the middle. "It depends on how dominant the young people are in the group," he

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The intimate enemy

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says. "It is the duty of older people to defend the traditional culture and the duty of the young to tear it down. On the other hand, a lot of folks just don't want to be in a group where everybody else is also 70 years old."

Zito believes that after the initial shock, older patients are stimulated by daily contact with young alcoholics. She spoke of Virginia, a woman who came into treatment in her mid-70s after an intervention by her 45-year-old son. Virginia had been drinking almost suicidally since the death of her husband three years before. She immediately complained that she was older than the other patients and no one could understand what she was going through. Soon, however, the person she became closest to was a 21-year-old male patient, with whom she spent many hours talking.

Virginia was strongly encouraged to attend Alcoholics Anonymous meetings regularly after her discharge from Smithers. The comment of John T. Schwarzlose, executive vice president of the Betty Ford Center in Ran-

cho Mirage, California, is typical: "Patients ask how important it is to go to AA after they're through here. I say, 'I can give you a guarantee: When you leave here, if you *don't* go to AA, you won't make it.'"

Eleven years later, Virginia is still going to AA. She reconnected with her son and grandchildren; she made many new friends in AA and became a mentor to newcomers, particularly the young; she reached out to old friends from whom she had isolated herself after her husband's death. She occasionally dropped by the Smithers rehab center to report her progress.

Says Zito, "As the years went by Virginia seemed to get younger and appeared to become a stronger and more vital person. She found a place for herself and contributed to the world." At last, Virginia—now in her late 80s—was enjoying the "golden years" she'd been promised.

I know how Virginia feels. I've been there. ■

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Alcohol-Related Hospitalizations of Elderly People

Prevalence and Geographic Variation in the United States

Wendy L. Adams, MD, MPH; Zhong Yuan, MD, MS; Joseph J. Barboriak, ScD; Alfred A. Rimm, PhD

Objective.—To determine the prevalence, geographic variation, and charges to Medicare of alcohol-related hospitalizations among elderly people in the United States.

Design.—A cross-sectional prevalence study using 1989 hospital claims data from the Health Care Financing Administration (HCFA). Rates were determined using (1) hospital claims records from the HCFA's Medicare Provider Analysis and Review Record (MEDPAR) database for all Medicare Part A beneficiaries aged 65 years and older; (2) county population estimates for 1985 from the Bureau of the Census; and (3) per capita consumption of alcohol by state in 1989 as estimated by the US Department of Health and Human Services.

Setting.—Data include all hospital inpatient Medicare Part A beneficiaries aged 65 years and older in the United States in 1989.

Results.—The prevalence of alcohol-related hospitalizations among people aged 65 years and older nationally in 1989 was 54.7 per 10 000 population for men and 14.8 per 10 000 for women. Comparison with hospital records showed that MEDPAR data had a sensitivity of 77% to detect alcohol-related hospitalizations. There was considerable geographic variation; prevalence ranged from 18.9 per 10 000 in Arkansas to 77.0 per 10 000 in Alaska. A strong correlation existed between alcohol-related hospitalizations and per capita consumption of alcohol by state (Spearman correlation coefficient, .64; $P < .0001$). In 1989, the hospital-associated charges to Medicare for all admissions where the primary diagnosis was alcohol related (N=33 039) totaled \$233 543 500. Median charge per hospital stay was \$4514.

Conclusions.—Alcohol-related hospitalizations among elderly people are common; rates were similar to those for myocardial infarction as detected by the same method. The charges to Medicare for this preventable problem are considerable. Ecological analysis suggests that per capita consumption in the total US population predicts alcohol-related hospitalizations in the elderly population.

(JAMA. 1993;270:1222-1225)

HOSPITALIZATION for alcoholism and alcohol-related problems among elderly people is an important but little-studied phenomenon. Interview studies have estimated the prevalence of alcoholism among elderly inpatients to be between 11% and 20% in acute care hospitals.¹⁻³ Using hospital discharge diag-

noses as a measure of alcohol-related problems, the National Hospital Discharge Survey found a rate of 65.1 per 10 000 population of alcohol-related diagnoses among hospitalized elderly people higher than expected.⁴ To date, no national data have been published to confirm or refute this high frequency of alcohol-related hospitalizations in the elderly population.

Population-based studies have shown considerable geographic variation in the prevalence of alcohol abuse and alcoholism. Using the Diagnostic Interview Schedule to diagnose active alcohol abuse or dependence, the Epidemiologic Catchment Area study found that the prevalence among elderly people in four US

survey areas ranged from 1.4% in North Carolina to 3.7% in Baltimore, Md.^{5,6} Other population-based studies of older adults, using various methods of detecting alcohol-related problems in diverse locations estimated prevalence from 2% to 22%.⁷⁻¹² The geographic distribution of hospitalizations for alcohol-related problems among elderly people has not been described.

To determine the extent and geographic variation of hospitalizations for alcohol-related problems among elderly people, we used data from the Health Care Financing Administration (HCFA) to describe the prevalence of such hospitalizations, nationally and by state, among people 65 years of age and older in 1989. For hospitalizations in which the alcohol-related diagnosis was the primary diagnosis, we also determined the charges to Medicare.

METHODS

Database

The HCFA maintains a computerized database of all hospital discharges for persons covered by Part A of the Medicare program. Approximately 96% of people aged 65 years and older in the United States are covered by this program, which pays for a portion of inpatient hospitalizations. These data are derived from a standardized billing form (HCFA Form 1450, UB-82). The information collected is combined annually into a file known as the Medicare Provider Analysis and Review Record (MEDPAR). This record provides a principal diagnosis and up to four additional diagnoses, coded according to the *International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)*,¹³ for each hospitalization. The file also includes records of medical procedures, hospital charges for various services, and demographic information, including age, race, sex, place of residence by ZIP code, and the dates of hospital admission and discharge.

From the Departments of Medicine (Dr Adams) and Pharmacology (Dr Barboriak) and Division of Biostatistics and Clinical Epidemiology (Drs Yuan and Rimm), Medical College of Wisconsin, Milwaukee. Drs Yuan and Rimm are now with the Division of Biostatistics and Epidemiology, Case Western Reserve University, Cleveland, Ohio.

Reprint requests to Division of Geriatrics, Milwaukee VA Medical Center, 5000 W National Ave 111P, Milwaukee, WI 53295-1000 (Dr Adams).

Table 1.—Distribution of Alcohol-Related Disorders

ICD-9-CM Diagnosis, Code*	Primary Alcohol Diagnosis			Comorbid Alcohol Diagnosis†		
	Men	Women	Total	Men	Women	Total
Alcohol dependence,‡ 303.00-303.99	11 941	4899	16 840	24 970	9343	34 313
Alcoholic liver disease,§ 571.00-571.39	4876	2376	7252	10 197	4693	14 890
Alcoholic psychoses, 291.0-291.9	4487	1582	6069	6918	3270	12 188
Alcohol abuse, 305.00	805	444	1249	6232	2671	8903
Alcoholic cardiomyopathy, 425.5	340	49	389	1888	324	2212
Alcoholic gastritis, 535.3	696	300	996	668	301	969
Alcoholic polyneuropathy, 357.5	178	53	231	603	176	779
Excess blood level of alcohol, 790.3	4	4	8	49	48	97
Alcohol poisoning, E860-860.1	2	1	3	55	32	87
Pellagra, 265.2	3	2	5	8	15	23

*ICD-9-CM indicates International Classification of Diseases, Ninth Revision, Clinical Modification.

†One patient may have more than one alcohol-related comorbid diagnosis.

‡Includes acute alcohol intoxication (in alcoholism) and other and unspecified alcohol dependence.

§Includes alcoholic fatty liver, acute alcoholic cirrhosis, and alcoholic liver damage, unspecified.

||Includes alcohol withdrawal delirium, alcohol amnestic syndrome, other alcoholic dementia, alcohol withdrawal hallucinosis, idiosyncratic alcohol intoxication, alcohol jealousy, and other specified and unspecified alcoholic psychoses.

Validation

To assess the validity of the MEDPAR data, we obtained hospital-compiled discharge diagnoses for all patients 65 years of age and older admitted to a local teaching hospital (Froedtert Memorial Lutheran Hospital, Milwaukee, Wis) for a 6-month period in 1989. Using the hospital data as the criterion standard, we determined the sensitivity and specificity of the HCFA file for a diagnosis of alcohol-related problems.

Hospitalization Rates

We defined alcohol-related hospitalizations as those with the ICD-9-CM codes listed in Table 1. All such hospitalizations were identified in the MEDPAR file for persons aged 65 years and older in 1989. The prevalence of alcohol-related hospitalizations was determined by state, using only the first primary or secondary alcohol-related diagnosis in the year for each patient. Age- and sex-adjusted rates by county were computed by the direct method, standardized to the entire US population aged 65 years and older. Denominators used were from county population estimates for 1985 from the Bureau of the Census,¹⁴ which are provided in 5-year age groups. Calculation of total charges to Medicare included all admissions where the principal diagnosis was alcohol related; there were multiple admissions for some patients. Data on total per capita consumption of alcohol by state from the US Department of Health and Human Services, Washington, DC,¹⁵ were used to determine the correlation

of alcohol-related hospitalizations with per capita consumption.

RESULTS

There were 87 147 alcohol-related hospitalizations among elderly Medicare beneficiaries in 1989, which accounted for 1.1% of all hospitalizations in that age group. In 33 039 cases (38%), an alcohol-related diagnosis was the primary diagnosis listed. Table 1 shows the number of patients hospitalized with each category of alcohol-related diagnosis as the primary diagnosis or as a comorbidity. All diagnoses were reported more frequently among men than women. Alcohol dependence was the diagnosis most frequently listed, and alcoholic liver disease was the most common alcohol-related medical problem.

For admissions where the primary diagnosis was alcohol related, the total hospital-associated charges to Medicare were \$233 543 500. Median charge per hospitalization was \$4514. Figure 1 shows the distribution of charges. Four hundred sixty-six admissions (1.4%) had charges greater than \$39 000. Of these, 52.4% had a primary diagnosis of alcoholic liver cirrhosis.

Table 2 shows prevalence categorized by age and sex. For persons with more than one alcohol-related hospitalization, these figures include only the first such hospitalization in the year. The national prevalence of alcohol-related hospitalizations in 1989 was 48.2 per 10 000 population (54.7 for men and 14.8 for women). The prevalence declined with age for both men and women.

Table 2.—Prevalence of Alcohol-Related Hospitalizations by Age and Sex*

Age, y	Men	Women	Total
All patients ≥65	54.7	14.8	48.2
65-69	64.0	19.4	39.2
70-74	58.1	17.0	34.4
75-79	51.8	13.6	28.4
80-84	39.6	9.6	20.0
≥85	21.3	4.9	9.6

*Numbers represent prevalence per 10 000 population.

There was considerable geographic variation in the prevalence of alcohol-related hospitalizations, as shown in Fig 2. Alaska had the highest rate (77.0/10 000), and Arkansas had the lowest (18.9/10 000). Rates tended to be highest in northern states and lowest in the lower midwest. Rates were higher for men than women in every state (data not shown).

Figure 3 shows the correlation of rates of alcohol-related hospitalizations with per capita consumption of alcohol by state for the whole population. Spearman correlation coefficient for the relationship was .64 ($P < .0001$).

The sensitivity and specificity analysis was based on discharge diagnoses obtained from medical records at Froedtert Memorial Lutheran Hospital for all patients aged 65 years and older for a 6-month period ($n=670$). This criterion standard revealed 44 patients with one or more alcohol-related hospitalizations. Thirty-four of these patients were identified in the HCFA database as having alcohol-related hospitalizations (sensitivity, 77%). We also examined the records of the patients admitted immediately before and after each alcohol-related admission (non-alcohol-related admissions; $n=88$). None were reported to have alcohol-related admissions in the MEDPAR database (specificity, 100%). Overall accuracy was 85.6% ($(34+88)/132$). Of the 10 alcohol-related admissions not listed in the HCFA database, seven were listed on the hospital discharge summary as diagnosis No. 6 or greater. Since the MEDPAR database contains only five diagnoses, it would not have been able to detect these patients. These results suggest that if additional comorbidities were listed on the billing form, sensitivity for this diagnosis could have been as high as 93%.

COMMENT

Researchers and clinicians have minimized the importance of alcohol-related problems in elderly people because the prevalence of alcohol use and abuse appear to decline in old age.^{8,9,11,16-18} A previous report using the National Hospital Discharge Survey, however, found that rates of alcohol-related diagnoses among hospitalized individuals remain

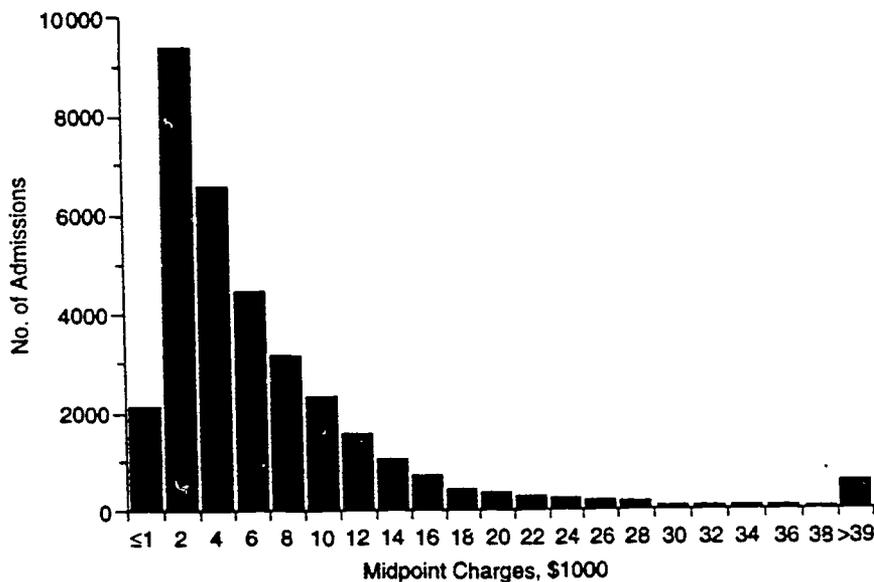


Fig 1.—Distribution of hospital-associated charges for alcohol-related admissions.

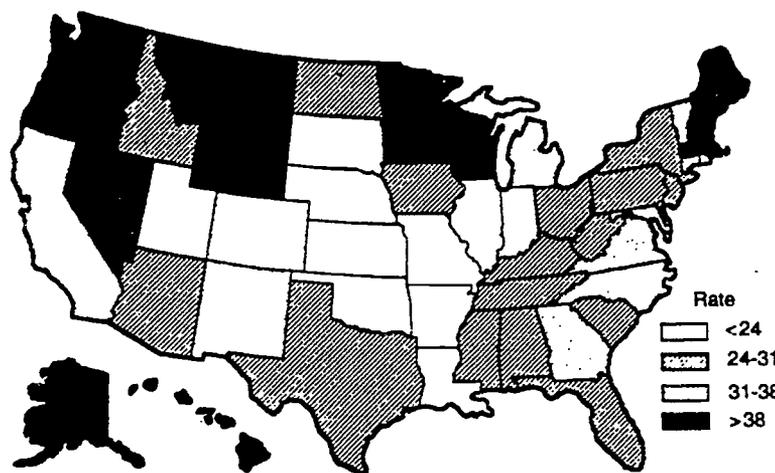


Fig 2.—Alcohol-related admissions (all diagnoses) in 1989 for Medicare population aged 65 years and older (age-, race-, and sex-adjusted rate per 10 000 population).

high in the elderly age group. In that study, although the highest rate of such diagnoses occurred in the 45- to 64-year-old age group at 94.8 per 10 000 population, the second highest rate was in those older than 65 years of age, at 65.1 per 10 000. Those 25 to 44 years old had a rate of 60.4 per 10 000 population.⁴ Our study confirms a high rate of hospitalizations for alcohol-related problems among elderly people but shows considerable geographic variation: the prevalence ranged by state from 18.9 to 77.0 per 10 000 population. Using the same method of detection, the prevalence range by state of hospitalizations for myocardial infarction, which is widely acknowledged to be an important prob-

lem in this age group, was only 16.9 to 44.1 per 10 000.¹⁹

Although this is a national population-based study, it has limitations. Our prevalence data almost certainly underestimate alcohol-related problems in the elderly. First, not all individuals with such problems are hospitalized. Of those who are, many do not report their drinking habits accurately. In addition, physicians are known to underdiagnose alcohol problems in their patients. The medical record has been shown to identify a maximum of 50% of alcoholics when compared with structured interviews.^{12,20-22} In our study, alcohol-related problems reported in the medical record were included only if they were among

the first five discharge diagnoses, which further decreased the sensitivity of this method of detection. In some cases, illnesses are reported only in the Medicare Part B files, even though they have required hospitalization.²³ Also, our data do not include hospitalizations in Veterans Affairs facilities, where there is a particularly high prevalence of alcoholism.²⁴

Another limitation of this study is the accuracy of Medicare claims data. There is variability among hospitals and from state to state in the accuracy of diagnostic coding, which affects the quality of the claims data.^{23,25} This may have affected the accuracy of our geographic distribution. Fisher et al²⁶ compared claims data from many hospitals with chart abstraction. In that study, sensitivity ranged from 58% to 97% for various diagnoses. Specificity was generally more than 99%. Alcohol-related diagnoses were not examined in that study, however. Our comparison with hospital records shows a sensitivity of 77%. Of the cases missed by the MEDPAR data in our sensitivity analysis, 70% were missed because they were not listed among the first five diagnoses. If space for listing additional comorbidities were available on the billing forms, sensitivity could be as high as 93%. Problems with the quality of the data are also reflected by the inclusion of three cases with primary diagnoses of alcohol poisoning (ICD-9-CM codes E860 and E860.1). Since the coding rules dictate that codes beginning with the letter *E* not be listed as primary diagnoses, this demonstrates inaccuracies, although minor, in the process of coding and entry into the large MEDPAR data set.

Some patients may have had alcohol problems listed among the first five diagnoses when the primary reason for hospitalization was not, in fact, alcohol related. However, this possibility is almost certainly outweighed by the many possibilities for underdetection of alcohol-related problems just enumerated. For all these reasons, we assume that we would have underestimated the prevalence of hospitalizations for alcohol-related problems in the elderly by this method.

The prevalence of alcohol-related hospitalizations was well correlated with per capita consumption of alcohol by state. Since several studies²⁷⁻²⁹ have shown a correlation between per capita consumption and alcohol-related morbidity, the correlation supports our description of the geographic variation of alcohol-related hospitalizations. The high correlation was unexpected, however, because the alcohol consumption was measured for the total population in each state, whereas the hospitalizations were

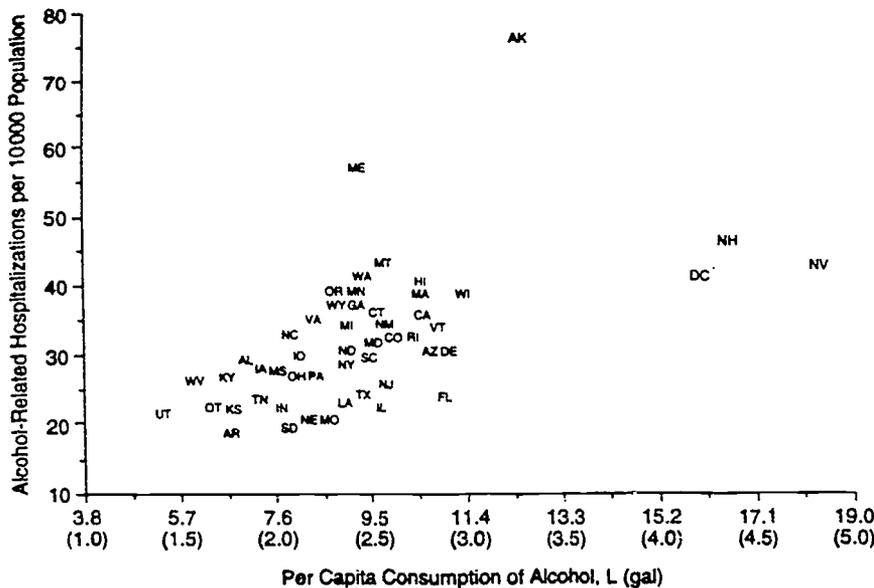


Fig 3.—Correlation of rates of alcohol-related hospitalizations (per 10 000 population) with per capita consumption of alcohol by state for the whole population.

measured for the elderly population.

The wide range of charges to Medicare for alcohol-related diagnoses reflects the range of morbidity alcohol can cause. Since only admissions with a primary alcohol-related diagnosis were

considered, these figures clearly underestimate the costs to Medicare for alcohol-related problems. For example, a gastrointestinal hemorrhage caused by heavy alcohol use would probably not have been included, even if alcohol use

was recognized and documented by the physician as the cause. Cirrhosis not specified as alcoholic was not included, even if alcoholism was listed as a comorbidity. Also, charges for Medicare enrollees treated under health maintenance organization capitation plans are incomplete in the MEDPAR files, causing further underestimation of the cost of alcohol-related hospitalizations. Although the charges for most hospitalizations were between \$2000 and \$10 000, a cluster of admissions had charges greater than \$39 000. Not surprisingly, more than half of these had alcoholic cirrhosis as the primary diagnosis.

Despite its limitations, this study reveals important results. Since approximately 96% of people aged 65 years and older are covered by Medicare Part A,²³ our sample probably is as representative as possible of the entire US elderly population. We have almost certainly underestimated alcohol-related problems in this population but have nonetheless found a high prevalence similar to that of myocardial infarction, which is widely accepted as an important health problem. As the population ages, a potentially preventable problem of this magnitude among elderly people should be addressed by clinicians and researchers alike.

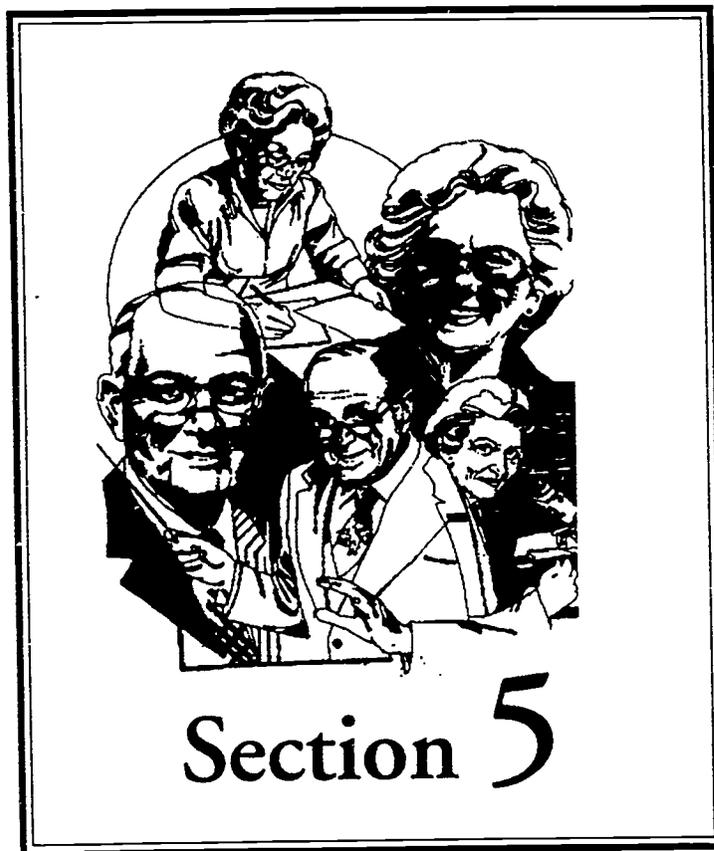
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Handouts

1. Self Care Handouts
2. Age Pages
3. How to Conduct a Medicine Review (NCPIE)
4. The Senior Wellness Series (Human Support Services)



Self Care

How to Choose and Use Your Pharmacist . . .

- Is the pharmacist available to answer your questions? Does he or she answer questions and explain things in a way that you understand?
- Does the pharmacist have a records system that is easily searched, and that keeps track of drug interactions, duplications, and any changes you need to know about?
- Does the pharmacist fill your prescriptions quickly and correctly?
- Does the pharmacist explain medications, their names, what they are used for, how your doctor wants you to take them, and any possible precautions or side effects?
- Does the pharmacist help you choose over-the-counter medications that won't interfere with your prescription medicine and any special condition being treated by your doctor?

Remember, your pharmacist is a resource on medications. Use him or her whenever you have a question about your medication, as well as any new therapies you may hear or read about.

And use the same pharmacy for ALL your prescriptions, so that potential problems can be avoided!



Self Care

How to Help Your Physician Help You . . .

Number One: Ask Questions.

- What is this medicine for?
- How long will I have to take it?
- How can I expect to feel when I begin taking it?
- Can I expect any side effects?
- If yest, what might they be?
- What special precautions should I take when I use this medication?

Number Two: Talk to the Physician.

- Tell the physician ALL your symptoms.
- Tell the physician ALL the medications you take—
Prescription AND over-the-counter drugs.
This doctor's prescriptions AND those from
other doctors.



Self Care

How to Talk to Your Physician . . .

- **MAKE A LIST BEFORE YOU VISIT THE DOCTOR.** Before the day of your appointment, make a list of things you want to discuss with your doctor. Include any concerns you may have about your mental or emotional state as well as physical complaints.
- **TELL THE DOCTOR EXACTLY HOW YOU FEEL.** Be specific. Where does it hurt? When do you feel the most discomfort? What seems to trigger symptoms? Give all the details you can.
- **PROVIDE A MEDICAL HISTORY.** Make sure your doctor has your complete medical history, including a general overview of your family's tendencies. Include information on allergies and common ailments.
- **ASK QUESTIONS.** Don't leave the doctor's office with more questions than you came in with. Patients have a right to full information about diagnosis and recommended treatment as well as x-ray findings. The final decision to accept or reject treatment is yours.
- **KEEP A MEDICAL DIARY.** Jot down all tests, medications and procedures you undergo. This proves especially useful if you are seeing more than one doctor—or travel often.
- **TELL THE DOCTOR ABOUT OTHER MEDICATIONS.** Make sure your doctor knows all about the other drugs you are taking whenever he starts to write a new prescription for you. This includes over-the-counter drugs, too. In addition, inform him of your drinking habits—not only alcohol but coffee, tea, and other caffeine drinks as well.
- **CHECK YOUR BILLS.** Question your bill whenever you're not satisfied that the amount is correct. Mistakes occur in any business. Be sure that what you or your insurer are billed for matches up with your own records.
- **OBTAIN A SECOND OPINION.** This is especially important when surgery is recommended. Medicare medical insurance (Part B) will help pay for a second opinion in the same way it pays for other services by doctors. Ask your own doctor to make a referral, or call Medicare's Second Opinion Referral Center for the name of a physician in your area. The toll-free number is 1-800-638-6833.

Provided by the Illinois State Council of Senior Citizens



Self Care

Ask Your Physician About Generics

The high cost of brand-name prescription drugs has led to the growing popularity of generics, especially among older people who have a greater need for prescribed medicine than any other age group. Living on fixed incomes, retirees are looking for ways to cut costs without risking their health, and, more and more, they are asking their physicians to prescribe a low-cost generic equivalent, wherever possible, for the particular brand-name drug usually recommended.

According to the Food and Drug Administration, any given generic drug must be essentially equivalent to its brand-name counterpart—that is, it must contain the same chemical ingredients and produce the same therapeutic results. The reason it's cheaper is because, unlike the commercial brands, there are no built-in costs to cover expensive advertising and promotion. Frequently, large manufacturers of advertised brand-name drugs will produce their generic versions for distribution to pharmacy chains, where customers are encouraged to “purchase generic substitutes and save money.”

As with all health-related matters, the use of generic drugs should be discussed with your doctor. Most physicians will be happy to prescribe generically where a generic substitute is available for the brand-name required. Health writer Dr. Jay Siwek, who advises that “you can rely on generic drugs to be similar in quality and effectiveness to their brand-name counterparts,” cautions, however, that, because of differences in the way they're made, which brand you take does make a difference. He says this is especially true for medications that people take for months at a time or longer, such as thyroid supplements, heart medications like digoxin, or anti-seizure drugs.

Dr. Siwek says that any switching—whether it's from one brand to another or from a brand to a generic—can change the levels of the drug in your bloodstream and is potentially dangerous. That's why it's important to talk over any medication changes with your doctor. If he approves the generic versions, ask your pharmacist to fill your prescription with the same generic version each time, rather than switching among different generic products.

Comparison Shopping Saves Money

Members of the National Council of Senior Citizens in nine major cities recently checked area pharmacies for prices charged for three major brand-name drugs. Not only did they find that in every case the generic equivalent was much cheaper, but they also discovered substantial price differences among the pharmacies for the same brand-name drug. In New York City, for example, the price charged for Dyazide ranged from a high of \$42 in one store to a low of \$29.40 in another. The conclusion: comparison shopping saves money.

Provided by the Illinois State Council of Senior Citizens



Self Care

Myths: Alcohol and Aging

Wrong: Older people have acquired a tolerance for alcohol.

Right: Physically, the human body develops less tolerance for alcohol with aging.

Wrong: Older alcoholics are happy that way!

Right: Like others who are addicted to alcohol, older people are desperate, alienated, and physically and mentally sick.

Wrong: If they've been drinking for 40 years, they're not going to stop now.

Right: With proper treatment and aftercare, recovery rates for older alcoholics are at least as good as for others.

Wrong: "Oh, he has always drunk like that; he's just old and getting senile."

Right: Senility is often misdiagnosed; if incorrectly diagnosed, the older problem drinker may be subjected to inappropriate treatment, or alcoholism may not be diagnosed at all.

Wrong: Older problem drinkers often lack financial resources to pay for treatment.

Right: They may be unaware that alcoholism is reimbursable under Medicare and Medicaid and that publicly supported treatment facilities exist in many communities.

Wrong: "We've always dealt with our own family problems; we don't need outsiders to help."

Right: Alcoholism is a disease and responds best to educated, trained professionals in that field and the self-help group of Alcoholics Anonymous.

Source: Prevention Forum, Illinois Prevention Resource Center,
Volume 12, Issue 1, Summer/Fall 1991, page 4



Self Care

How Alcohol Reacts with Medications

Alcohol combined with . . .	can cause . . .
sleeping medications (barbiturates, <i>Dalmane</i> , chloral hydrate and others) tranquilizers (<i>Valium</i> , <i>Librium</i> , <i>Mellaril</i> , <i>Thorazine</i> , <i>Vistaril</i> and others) anti-depressants (<i>Elavil</i> , <i>Sinequan</i> , <i>Tofranil</i> and others) pain relievers (codeine, <i>Darvon</i> , <i>Percodan</i> and others) some muscle relaxants (<i>Rela</i> , <i>Soma</i> , <i>Robaxin</i> and others) antihistamines (<i>Chlortrimeton</i> , <i>Benadryl</i> and others) motion sickness pills (<i>Bonine</i> , <i>Marezine</i> , <i>Dramamine</i> and others) allergy medications (<i>Contac</i> , <i>Dristan</i> and others) some cough/cold products some high blood pressure medications (<i>Aldomet</i> , <i>Catapres</i> , <i>Serpasil</i>)	excessive drowsiness, impaired coordination, mental confusion, rapid intoxication, loss of consciousness, impaired breathing; can be fatal
anti-anginal medication (nitroglycerine, <i>Isordil</i> and others) some high blood pressure medications (diuretics, <i>Minipress</i> , <i>Apresoline</i> and others)	dizziness, fainting, lightheadedness, loss of consciousness, falls which could result in physical injury
aspirin anti-arthritic medications (<i>Naprosyn</i> , <i>Indocin</i> , <i>Motrin</i> and others) potassium tablets blood thinners (<i>Coumadin</i> and others)	increase in stomach irritation, possible increase in stomach bleeding
<i>Flagyl</i> oral anti-diabetic medications some anti-fungal and antibiotics agents (<i>Chloromycetin</i> , <i>graeofulvin</i> and others)	increase in reactions such as weakness, headache, nausea/vomiting, flushing, rapid heartbeats, difficulty breathing
blood thinners (<i>Coumadin</i> and others) anti-diabetic medications (<i>Orinase</i> , insulin, <i>Diabinese</i> and others) epilepsy medication (<i>Dilantin</i>) gout medication (<i>Zyloprim</i>)	interference with the control of certain medical conditions (diabetes, epilepsy, gout) or can cause change in the effectiveness of their drug treatments. Please consult your physician or pharmacist if you have questions.

SR Developed by the SRx Program, San Francisco Study Center,
 1095 Market St., Suite 602, San Francisco, CA 94103
 Additional materials available; call 1-800-484-4173, ext. 1073.



Self Care

When a Friend Has a Problem with Alcohol . . .

Facts About Alcohol

- Alcohol is a drug.
- Alcohol is the most used drug in the United States.
- One beer has as much alcohol content as one “shot.”
- One out of four people is affected by alcohol abuse.
- Liver cirrhosis, often caused by drinking, is the ninth leading cause of death.
- Women become intoxicated more quickly than men.
- People who eat poorly are more prone to physical problems related to alcohol.

If You Suspect Alcohol Abuse

- Be understanding of possible physical and emotional pain.
- Never preach.
- Gather facts; look for clues without being obvious.
- Share your concern with your friend in a caring, non-judgmental way—while he or she is sober!
- Initiate *general* discussion about drinking—mention you went to this workshop.
- Provide pamphlets or reading material about the disease of alcoholism and help that is available.
- When sharing concerns, offer to get someone to come and talk with or to take your friend to help—do it immediately.
- Don't enable.

1993



Self Care

Using Your Medicine Safely . . .

Older Americans consume more prescription and over-the-counter drugs than any other segment of the population. Older Americans also have half of all reported drug reactions. Most of the drug reactions are due to misuse. Learning to take your medications properly will help eliminate drug reactions.

Drugs affect older people differently because of—

- Body composition changes (decreased muscle, increased fat, decreased body water)
- Heart and blood vessel changes (increased heart size, diminished elasticity of blood vessels, decreased oxygen to kidneys, brain, muscles and liver)
- Digestion changes (stomach empties more slowly, decreased acid secretion and absorption)
- Nervous system changes (decreased tolerance for depressant medications, decreased coordination and short-term memory, slowed reflexes)

Causes of Misuse

- Sharing medication
- Drug interactions (with other prescription or over-the-counter medications)
- Overdose
- Self-medication
- Medication omission
- Poly drug use
- Outdated medications
- Automatic refills
- Drug-taking errors or confusion
- Cost
- Tamper-proof packaging



The Illinois
Department
on Aging

National Institute on Aging
Food and Drug Administration

DASA
Illinois Department of
Alcoholism and Substance Abuse

For information or assistance, call:
1-800-252-8951

Age Page

Safe Use of Medicines by Older People

Drugs can be wonderful tools for the care of patients of all ages. In fact, the growth of our population over the age of 65 can be attributed at least in part to the availability of effective medicines and vaccines. But in older adults drug use may have greater risks, especially when several drugs are taken at one time.

People over 65 make up 11 percent of the American population, yet they take 25 percent of all prescription drugs sold in this country. As a group, older people tend to have more long-term illnesses—such as arthritis, diabetes, high blood pressure, and heart disease—than younger people. And because they often have a number of diseases or disabilities at the same time, it is very common for them to be taking many different drugs.

In general, drugs taken by older people act differently from the way they do in young or middle-aged people. This is probably the result of the normal changes in body makeup that occur with age. For example, as the body grows older, the percent of water and lean tissue (mainly muscle) decreases, while the percent of fat tissue increases. These changes can affect the length of time a drug stays in the body and the amount absorbed by body tissues.

The kidneys and the liver are two important organs responsible for breaking down and removing most drugs from the body.

With age, these organs begin to function less efficiently, and thus drugs leave the body more slowly. This may account for the fact that older people tend to have more undesirable reactions to drugs than do younger people.

It is important to remember that “drugs” include not only prescription medicines (those ordered by a doctor and dispensed by a pharmacist) but over-the-counter (OTC) medicines as well (those bought and used without a prescription). Drugs prescribed by a doctor are usually more powerful and have more side effects than OTC medicines. Yet many OTC drugs contain strong agents, and when large quantities are taken, they can equal a dose that would normally only be available by prescription.

Some substances, including vitamins, laxatives, cold remedies, antacids, and alcohol, can also lead to serious problems if used too often or in combination with certain other drugs.

There is much that you and your family can do to reduce the risks of drug use. By learning about the drugs you take and their possible side effects, you can help bring about safer and faster treatment results. Some basic rules for safe drug use are as follows:

1. Take exactly the amount of drug prescribed by your doctor and follow the

(over, please)

- dosage schedule as closely as possible. If you have trouble or questions, call your doctor or pharmacist.
2. Medicines do not produce the same effects in all people. Never take drugs prescribed for a friend or relative, even though your symptoms may be the same.
 3. Always tell your doctor about past problems you have had with drugs (such as rashes, indigestion, dizziness, or lack of appetite). When your doctor prescribes a new drug, be sure to mention *all* other medicines you are currently taking—including those prescribed by another doctor and those you buy without a prescription.
 4. Keep a daily record of the drugs you are taking, especially if your treatment schedule is complicated or you are taking more than one drug at a time. The record should show the name of the drug, the doctor who prescribed it, the amount you take, and the times of day for taking it. Include a space to check off each dose as you take it. Keep a copy in your medicine cabinet and one in your wallet or pocketbook.
 5. If child-proof containers are hard for you to handle, ask your pharmacist for easy-to-open containers. Always be sure, however, that they are out of the reach of children.
 6. Make sure you understand the directions printed on the drug container and that the name of the medicine is clearly printed on the label. Ask your pharmacist to use large type on the label if you find the regular labels hard to read.
 7. Discard old medicines; many drugs lose their effectiveness over time.
 8. When you start taking a new drug, ask your doctor or pharmacist about side effects that may occur, about special rules for storage, and about foods or beverages, if any, to avoid. Pharmacists are drug specialists and are able to answer most questions about drug use.
 9. Always call your doctor promptly if you notice unusual reactions.
 10. New information about drugs and about how they affect the older user is coming to light daily. You should occasionally review with your doctor the need for each medicine.

Remember that a chemical agent strong enough to cure an ailment is also strong enough to cause harm if it's not used wisely. Although you should never stop taking medicines without medical advice, if you feel any drug is doing more harm than good, don't be afraid to discuss the matter with your doctor. He or she may be able to substitute another medicine that will be effective.



Age Page

Aging and Alcohol Abuse

Alcohol abuse among older men and women is a more serious problem than people generally realize. Until recently, older problem drinkers tended to be ignored by both health professionals and the general public. The neglect occurred for several reasons: our elderly population was small and few were identified as alcoholics; chronic problem drinkers (those who abused alcohol off and on for most of their lives) often died before old age; and, because they are often retired or have fewer social contacts, older people have often been able to hide drinking problems.

Some families may unthinkingly "encourage" drinking in older family members if they have the attitude that drinking should be tolerated because older people have only a limited time left and therefore should be allowed to "enjoy" themselves.

As more people learn that alcohol problems can be successfully treated at any age, more are willing to seek help to stop drinking.

Physical Effects of Alcohol

Alcohol slows down brain activity. It impairs mental alertness, judgment, physical coordination, and reaction time—increasing the risk of falls and accidents.

Over time, heavy drinking can cause permanent damage to the brain and central nervous system, as well as to the liver, heart, kidneys, and stomach.

Alcohol can affect the body in unusual ways, making certain medical problems difficult to diagnose. For example, the effects of

alcohol on the cardiovascular system (the heart and blood vessels) can mask pain, which may otherwise serve as a warning sign of heart attack. Alcoholism can also produce symptoms similar to those of dementia—forgetfulness, reduced attention, confusion. If incorrectly identified, such symptoms may lead to unnecessary institutionalization.

Alcohol, itself a drug, mixes unfavorably with many other drugs, including those sold by prescription and those bought over-the-counter. In addition, use of prescription drugs may intensify the older person's reaction to alcohol, leading to more rapid intoxication. Alcohol can dangerously slow down performance skills (driving, walking, etc.), impair judgment, and reduce alertness when taken with drugs such as:

- *"Minor" tranquilizers:* Valium (diazepam), Librium (chlordiazepoxide), Miltown (meprobamate), and others.
- *"Major" tranquilizers:* Thorazine (chlorpromazine), Mellaril (thioridazine), and others.
- *Barbiturates:* Luminal (phenobarbital), and others.
- *Pain killers:* Darvon (propoxyphene), Demerol (meperidine), and others.
- *Antihistamines* (both prescription and over-the-counter forms found in cold remedies).

Use of alcohol can cause other drugs to be metabolized more rapidly, producing exaggerated responses. Such drugs include: *anti-convulsants* (Dilantin), *anticoagulants* (Coumadin), and *antidiabetes* drugs (Orinase).

(over, please)

In some people, *aspirin* can cause bleeding in the stomach and intestines. Alcohol also irritates the stomach and can aggravate this bleeding. The combination of alcohol and *diuretics* can reduce blood pressure in some individuals, producing dizziness.

Anyone who drinks—even moderately—should check with a doctor or pharmacist about possible drug interactions.

Who Becomes a Problem Drinker?

In old age, problem drinkers seem to be one of two types. The first are chronic abusers, those who have used alcohol heavily throughout life. Although most chronic abusers die by middle age, some survive into old age. Approximately two-thirds of older alcoholics are in this group.

The second type begins excessive drinking late in life, often in response to “situational” factors—retirement, lowered income, declining health, and the deaths of friends and loved ones. In these cases, alcohol is first used for temporary relief but later becomes a problem.

Detecting Drinking Problems

Not everyone who drinks regularly or heavily is an alcohol abuser, but the following symptoms frequently indicate a problem:

- Drinking to calm nerves, forget worries, or reduce depression
- loss of interest in food
- gulping drinks and drinking too fast
- lying about drinking habits
- drinking alone with increasing frequency
- injuring oneself, or someone else, while intoxicated
- getting drunk often (more than three or four times in the past year)

- needing to drink increasing amounts of alcohol to get the desired effect
- frequently acting irritable, resentful, or unreasonable during nondrinking periods
- experiencing medical, social, or financial problems that are caused by drinking.

Getting Help

Older problem drinkers and alcoholics have an unusually good chance for recovery because they tend to stay with treatment programs for the duration.

Getting help can begin with a family doctor or member of the clergy, through a local health department or social services agency, or with one of the following organizations:

Alcoholics Anonymous (AA) is a voluntary fellowship of alcoholics whose purpose is to help themselves and each other get—and stay—sober. For information about their programs, call your local chapter or write to the national office at P.O. Box 459, Grand Central Station, New York, NY 10163. They can also send you a free pamphlet on alcoholism and older people entitled *Time to Start Living*.

National Clearinghouse for Alcohol Information is a Federal information service that answers public inquiries, distributes written materials, and conducts literature searches. For information, write to P.O. Box 2345, Rockville, MD 20852.

National Council on Alcoholism distributes literature and can refer you to treatment services in your area. Call your local office (if listed in the telephone book) or write to the national headquarters at 733 3rd Ave., New York, NY 10017.

Reprinted September 1987

SECTION 4: HOW TO CONDUCT A MEDICINE REVIEW

This section of the manual contains suggestions for the health professionals who conduct brown bag medicine reviews and instructions for the volunteer staff who provide services during Brown Bag clinic events. It includes detailed information for filling in and using the Medicine Review Record (MRR) form to conduct the interview; instructions for using the "Advice for Using Your Medicines" form to provide patient counseling and action steps; and suggestions for constructive follow-up with the patient's health care providers.

Each brown bag interview with a patient takes about 20 - 30 minutes per participant. The more medicines the patient takes, the longer the encounter is likely to last. The interview itself involves three steps:

- Welcome and orientation to the review
- Assessing the medicines and their use
- Counseling patients for proper medicine use

Step 1: Welcome and Orientation

The first step in the medication review process involves orienting the patient to the brown bag process, obtaining patient consent, and collecting basic information about each prescription medicine in the patient's brown bag.

Support staff, either the receptionists at a brown bag community clinic, nurses in a clinic, hospital, or physician's office, or pharmacy students or pharmacy clerks can perform this step. They should:

1. Welcome and Orient the patient.
 - Reiterate the purpose of the brown bag review
 - Ask the patient to read and sign the patient consent form (See page 28)
 - Answer questions

If the patient has questions you cannot answer, ask the site coordinator or a health professional in your setting.

2. Catalogue Medicines on the Medicine Review Record (MRR).
 - Enter the patient's name, telephone number, and today's date, circle the patient's gender and proper age category.

- Look at the medicines the patient has brought in, and fill in the sections that record the drug name, dose, prescription, (Rx) number, SIG on label (instructions for how much and how often to take the medicine), the physician's name and phone number, the pharmacy name and phone and the expiration date. These are Parts 1b-g of the Medicine Review Record.

There is space for five separate records. If the patient has more than five medicines, use a second form, and be sure to fill in the patient's name and that it is page 2 of his/her record.

3. Check each medicine to determine whether it is still in the original container. It's strongly recommended that evaluations take place *only* when medicines are in their original containers. It is sometimes difficult to make reliable assessments of medicines brought in other containers. When the label and the patient's understanding of the medicine are not the same, it's impossible to determine the correct information about the medication and the recommended dosage. Reception staff should remind the patients in this situation about the instructions to bring medicines in their original containers and try to reschedule the appointment.

Patient-Professional Interview

The patient-professional encounter begins with the professional's introducing him/herself to the participant. Address participants using Mr., Mrs., or Ms. and their last name, unless the patient requests otherwise. Older people usually feel more comfortable with a respectful form of address.

Sample Introduction:

"Good morning, Mrs. X. My name is Chris Brown, and I'm a pharmacist from the [Name of Organization] As you know, today we're conducting a brown bag medicine review clinic. In the next 20 minutes I will review your medications with you. I'll ask you some questions, such as why you're taking a medicine and what instructions you follow in using it. We'll also talk about any side effects you might be having and discuss other problems or questions about your prescription and nonprescription medicines."

Both the reception's and the professional's goal is to put the patient at ease and review the purpose and steps of the medication review. Many patients may be concerned that they will be rebuked or made to feel incompetent if their medication practices are imperfect. Reassurance about the constructive nature of the process and its potential benefits sets a positive tone for the encounter.

Interviewing participants in a medicine review is very similar to taking a medication history in an ambulatory care setting or providing discharge medication counseling to hospital patients. Good communication skills are as important as technical expertise, and the professional needs to make a rapid assessment of possible communication barriers with each patient, such as:

- Ability to speak and understand English?
- Education level?
- Communication skills?
- Disabilities such as poor hearing or eyesight?
- Feelings of anxiety, discomfort, or illness?

PATIENT CONSENT FORM

During the brown bag medicine review, a health professional will check your prescription and non-prescription medicines for problems, offer tips for safe and effective medicine use, and answer your questions. The health professional may also follow-up with your doctor or pharmacist if necessary to discuss findings. No one else will be told about your results. They may be entered (without your name) into a national file on medicine use.

Talking to your doctors and pharmacists about the medicines you use is critical to taking them safely and effectively. While this review will give you much important information about your medicines, it should not take the place of regular discussions between you and your doctors and pharmacists.

I understand the above information, and I consent to participate in this process. In consideration for this free service, I release any claim against any party in connection with this medicine review.

Signature: _____

Date: _____

Participant's Name (print): _____

Address: _____

Telephone Number: _____

Name of Primary Physician: _____

Telephone Number: _____

Name of Primary Pharmacy: _____

Telephone Number: _____ 80

Step 2: Assessing the Medicines and Their Use

The Medication Review Record (MRR) (See page 36 for a copy of the form) provides an easy structure for discussing all relevant issues with the patient and recording the interviewer's findings. Obtaining this information on each medicine the patient has brought helps the professional assess the patient's understanding of the medicine regimen and provides input to the professional's definition of problems and solutions. While pharmacists and physicians who conduct reviews on regular patients may be familiar with the patient's background, they may also learn about additional conditions being treated by other physicians and about medicines being obtained at other pharmacies.

The following sections present suggestions for some of the questions interviewers can ask patients during the medicine review. They correspond to sections of the MRR, where responses can be recorded. The interviewer should ask each question in Part 2 about each prescription medicine the patient has brought. This part of the interview should always be conducted by a health professional. Reviewers should also ask any other questions that come to mind.

Do you have any medicine allergies? (Part 1a of MRR)

Patients who have medicine allergies are almost twice as likely as patients who do not to have medication compliance problems. It is also important to ask about allergies because many patients report allergic reactions that are in fact medication side effects.

Patients can be a good source of information about their allergies, but their lack of familiarity with technical terms can be a barrier. Professionals who conduct brown bag programs have found that patients need very specific questions to provide complete information about their medicine allergies.

Suggested talking points:

- *Are you allergic to any medicines, such as penicillin, sulfa, or aspirin?*
- *What kind of allergic reaction do you have to the medicine?*
- *Did your doctor ever tell you there were medicines you shouldn't take?*

What medical problem you are treating with this medicine? (Part 1h of MRR)

Obtaining this information for each medicine listed on the MRR will help the professional analyze the prescription information and determine whether the patient understands the purpose of his/her prescriptions. Certain medical problems are more likely to be associated with compliance problems. An interviewer should pay special

attention to patients with respiratory, oncologic, and psychiatric problems, because regimen complexity is often a barrier to adherence.

Some patients will know the reasons they are taking all their medicines, and others will not. As in taking a medication history, professionals may need to probe for information when the patient does not volunteer it or cannot express problems precisely or in medical terms. They may, for example, say the medicine is "for my heart," rather than for congestive heart disease.

Some patients may offer incorrect responses. The interviewer should avoid arguing with the patient's description of a medical problem, even when it is clearly invalid. This is still important information for the professional's assessment.

Suggested talking points:

- *What condition does this medicine treat?*
- *Do you have arthritis (high blood pressure, heart problems, etc.)?*
- *What did the doctor tell you when he/she gave you this medicine?*

How long have you been taking the medicine? (Part 2a of MRR)

The patient needs to provide this information, because the date on the prescription label may only indicate when a long-term medication was last refilled. While patients may not remember exact time frames, the interviewer should direct them to estimate in weeks, months, or years.

The length of time a patient has been taking a medicine is often related to compliance. Those taking medicines for longer than a year are more likely to experience compliance problems.

Are you currently taking the medicine? (Part 2b of MRR)

Some of the medicines listed may be discontinued prescriptions that the patient has kept, a few capsules left over from an earlier course of treatment, or a medicine that the patient uses occasionally. It is important to review the patient's "self-medication" habits to determine the potential for hazardous use of medicines in the cabinet that are not currently being taken. A medicine chest full of outdated or unneeded medicines can also increase the danger of accidental poisoning, especially if the patient has visits from young children.

Safe disposal of unneeded or outdated medicines is desirable. Interviewers should tell patients how to dispose of unneeded medicine safely and legally. Consider providing a safe disposal container at the site, but emphasize the importance of having the patient actually complete the disposal.

How long has it been since you visited the prescribing physician? (Part 2c of MRR)

Many medicines need careful monitoring and adjustments for best results. Others need regular review to confirm their continued necessity; this can be a particular issue for older patients, whom studies show may inadvertently be taking medicines they no longer need. Interviewers should get the patient's best recollection of the month and year of the last physician visit related to each prescription in their bag. The greater the time between visits, the greater the probability of overuse or underuse of a medicine.

What is the purpose of this medicine? (Part 2d of MRR)

The patient began to display his or her understanding of each medicine's purpose when discussing the medical problem it treated. This question probes the issue in greater depth, determining whether the patient knows how the medicine works to relieve his/her problem. The University of Rhode Island found that almost 20% of patients reviewed in their program did not understand why they were on a particular therapy or how their treatment worked. Patients who did not understand how therapy worked overall had a 10 times greater likelihood of non-compliance.

If the patient does not know or cannot fully articulate the proper action, the interviewer should educate him/her using concrete, specific concepts. In the example below, the patient has a sketchy idea but does not fully understand until after the interviewer explains.

Example

"You told me before that you take this medicine for your high blood pressure, Mrs. William. Can you tell me how the medicine works or what it's supposed to do?"

"I guess it brings my pressure down. I know it's all right now."

"Do you know how it lowers your blood pressure?"

"Well, it's a water pill, isn't it?"

"Yes. Hydrochlorothiazide is a diuretic that works on the kidney. As it rids the body of salt and water, your blood pressure goes down."

"So having less fluids lowers blood pressure? I didn't realize the kidney was involved."

"Yes. The kidney helps regulate fluid levels. The medicine also helps the kidney eliminate salt from your body. This is important, because salt causes some people to retain water, which can increase your blood pressure. Your doctor may have told you to limit the amount of salt you eat, too."

"Yes, he did. I guess otherwise I'd be working against my medicine."

"That's a good point. It shows why it's important to follow all the doctor's advice to help your medicines work their best."

***How are you supposed to take this medicine—how much, how often and at what times?
(Part 2e of MRR)***

This question helps the interviewer determine if the patient understands the instructions for each medicine's use. By comparing responses to the instructions on the Rx label, the interviewer can pick up important patient misunderstandings that could affect dose taken, timing, and indications for use. In addition to directions for use, the interviewer should ask the patient about precautions and contraindications such as food, beverages, and other medicines to avoid while taking the product. It is also important to find out how long the patient believes he or she should continue taking the medicine.

This question and the one that follows are critical to identifying and correcting compliance problems. It is important to probe for specific information to determine what gaps counseling should address. For example, in the University of Rhode Island program, people who did not understand directions for use had about a 3-times greater risk of non-compliance.

Some discrepancies between a patient's account of instructions and those that appear on the Rx container may be a result of the physician's having verbally changed a regimen between refills or without instructing the pharmacy to change the refill's label. The interviewer may want to verify the correct instructions with the prescriber as part of follow-up. Interviewers should record a known or suspected change in the SIG in part 3d of the MRR as a cue for patient counseling and/or follow-up.

Tell me about taking this medicine. What's your daily routine? (Part 2f of MRR)

This question addresses whether the patient follows the correct regimen. Naturally, patients who cannot correctly state directions for use are unlikely to be taking the proper actions. Even for those who do understand all or part of their instructions, it is important to evaluate various aspects of compliance (see talking points below). A non-threatening approach is valuable in probing compliance issues to promote a frank patient response. Patients need to feel comfortable about discussing problems they may be experiencing and about admitting that they have (purposely or unknowingly) deviated from the physician's advice. Some patients will willingly discuss their reasons for "adjusting" the regimen on their own (usually decreasing dose or frequency or unilaterally discontinuing the medicine). This feedback can help the prescriber better tailor a therapy to the patient's needs or experiences.

Some patients will describe one set of instructions in answer to the previous question, but offer a different version at this point. Before evaluating compliance, it is important to have these patients reiterate the instructions and state definitively what they believe they are *supposed* to do as well as what they do.

Suggested talking points

- Are you always able to take the medicine according to the instructions you just described?
- How many capsules do you take each time you take this medicine?
- Do you ever take more of the medicine for one dose or over the course of a day?
- Do you have any problem in remembering to take all the doses at the right times?
- Do you ever skip a dose for some reason?
- Some people tell us they sometimes take short "holidays" from their medicines and then go back to the routine. Have you ever done this?
- Do you take this medicine with food or on an empty stomach?
- Do you follow the instructions on the label for avoiding certain foods or beverages?
- Do you store this medicine as indicated on the label?
- Do you consult the doctor or pharmacist with any questions and before making any changes in the routine?

If this discussion uncovers errors in the way patients administer medicines or a trend toward under- or over-utilization, the interviewer should note these problems in Parts 3e and 3f of the MRR. These points are important to discuss with the patient during counseling and may be important to pass on to his or her health care providers during follow-up (see Step 4 - Follow-up with Patient's Physician and/or Pharmacist).

Do you have any side effects from this medicine? (Part 2g of MRR)

Many side effects will be minor. This question can help the interviewer spot serious adverse medicine reactions or interactions that may require a change in therapy. This is particularly important with older patients, who may attribute medicine side effects to "old age" or to one of their illnesses. The interviewer may need to explain what a side effect is and probe to determine whether a symptom may be medicine-related. The following symptoms in an older patient should receive special attention, because they are often the result of adverse medicine reactions or interactions in this population.

- **Mental effects:** depression, hallucinations, confusion, delirium, memory loss, impaired thinking

- **Nervous system effects:** parkinsonism, dizziness on standing or falls (which sometimes result in hip fractures), chronic movement disorders (e.g., tardive dyskinesia)
- **Gastrointestinal effects:** loss of appetite, nausea, vomiting, abdominal pain, bleeding, constipation, diarrhea
- **Urinary effects:** difficulty urinating and incontinence

What non-prescription medicines do you take? (Part 2h of MRR)

It is also important to find out what non-prescription medicines patients are taking, both because of the potential for interaction with prescription medicines and to be sure patients are correctly following directions for use. The interviewer may also uncover other problems or contraindications for use.

In discussing these products with patients, the interviewer should find out the specific brands taken and the amount taken whenever possible to allow counseling to be specific. There is room for five non-prescription medicines on each MRR form.

Reviewing the Patient's Prescriptions

The final part of the medicine assessment involves reviewing the prescription for the problems listed in Part 3 of the MRR prior to discussing action steps with the patient. Problems commonly encountered during brown bag reviews include:

Duplication of Medicines (Part 3a, MRR)

Many patients take the same product under more than one name. This may be a result of multiple prescribers or of the substitution laws that many states have. Eliminating duplication is one of the most valuable purposes of a hands-on medicine review. Most patients taking duplicate medicines will experience marked side effects that may range from serious to annoying.

Example: A 21-year-old man, who complained of an ulcer and a high pulse rate, gave the interviewer four prescriptions. Three of the four were for theophylline under three different brand names.

Contraindications and Drug Interactions (Part 3b, MRR)

These problems are frequently the most serious that the interviewer will encounter, and it is important to assess the possibility for adverse results by reviewing the patient's medicine allergies, reported side effects, and the potential for interaction among all the prescription and non-prescription medicines listed on the MRR.

Problems found will range from unimportant to clinically significant. The University of Rhode Island found that about 6% of problems were serious enough to require follow-up with the prescribing physician and/or dispensing pharmacist (see Section 4 on Follow-up).

Example: A patient taking warfarin had been told by her physician not to use any medicine containing aspirin. However, at a later date the physician prescribed another medication that contained aspirin.

Drug Names That Sound Alike (Part 3c, MRR)

When patients are taking multiple medicines, it can be easy for them to mix up the technical names of products that start with the same letter or have a similar ending. This can cause a variety of problems, from following the wrong set of instructions for use to not taking some of the medicines at all.

If the interviewer finds that the names of some of the medicines listed on the MRR do sound alike, it is important to verify that the patient knows the difference among them, especially if that patient had not shown a good understanding of their purpose or instructions for use.

Example: A patient taking 13 prescription medicines had two products beginning with the letter "A." Although the names of the medicines were on the prescription label, the patient thought they were the same product—and combined the tablets in one container. When it came time for a refill, she obtained only the medicine in the one container she used.

SIG change; Improper Administration; Over/Under-Utilization (Part 3d, e, f of MRR)

The interviewer will have already identified and noted on the MRR problems in any of these areas, during the preceding discussions with the patient about his or her understanding of and compliance with the SIG.

Expired Medicines (Part 3g of MRR)

Patients who don't complete a course of therapy frequently hold onto the remainder for "the next time"; others who have a prescription for occasional use may not empty a container even after several years of periodic administration. A patient may also keep a prescription that has not expired but that the physician has discontinued.

The interviewer can review section 1g of the MRR to determine expiration dates. When the prescription label does not contain an expiration date, assume it will expire about a year after its date of issue. It is also important to verify that the patient is still under doctor's advice to continue taking each medicine listed.

MEDICATION REVIEW RECORD

Date: _____

Patient Name: _____

Gender: M F Age: 18-54 55-64 65-74 75-84 85+

Telephone Number: _____

Education: Grade School High School College or More

1a. Reported Medicine Allergies: _____

Reviewer Name: _____

	Medicine #1	Medicine #2	Medicine #3	Medicine #4	Medicine #5
Drug Name					
1b Dose					
1c Rx No.					
1d SIG on label					
1e MD name/phone					
1f Pharmacy name/phone					
1g Exp. date					
1h Reported medical problem					
2a How long taken?					
2b Still taken?	Yes No				
2c Date of last MD visit					
2d Patient knows purpose?	Yes No				
2e Patient understands SIG?	Yes No				
2f Compliance with SIG?	Yes No Partial				
2g Side effects?					
2h OTC's					
3a Duplication?	Yes No				
3b Contraindications and interactions?					
3c Drugs that sound alike?	Yes No				
3d SIG changes?	Yes No				
3e Improper Administration?	Yes No				
3f Over/under use?	Yes No				
3g Expired?	Yes No				
3h Follow-up needed?	Yes No				
Other significant information					

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Step 3: Counseling Patients for Proper Medicine Use

Once the medicine assessment is complete, interviewers must determine the type of action required. As one example of the levels of response that may be appropriate, the University of Rhode Island has defined five levels of intervention that may result from a medicine review.

1. **None.** No significant problems in the patient's medicine-taking were detected. About 15% of patients in the University of Rhode Island's projects required no further action.
2. **Reinforcement.** When the patient is properly following treatment, especially for a long-term medicine or chronic condition, positive feedback has proven very valuable in supporting continued compliance. The changes patients make to accommodate a regimen can be substantial, and they will appreciate the acknowledgment of their "good work."
3. **Clarification.** This type of intervention is appropriate when a patient has good overall understanding and compliance, but he or she needs a little more information or instruction to correct identified problems. For example, clarification may be needed when a patient has an incomplete appreciation of the medicine's purpose or is taking the right number of doses at the wrong intervals. Some patients may just need a caution on medicine storage or on the inadvisability of sharing medicines.
4. **Education.** Patients need this more comprehensive level of intervention for major problems in understanding and complying with a regimen. Patients who confuse their medicines, have difficulty following a complex multiple medicine regimen, or are intentional non-compliers will require more intense counseling.

The form "Advice for Using Your Medicine," which appears on page 39, may be useful in either clarification or education. By circling or checking appropriate spots and filling in the blanks, the interviewer can use the form to guide discussion of instructions, contraindications, and/or precautions depending on a patient's needs. When one or more parts are filled in, it provides a personalized educational prescription, with concrete action steps for improving medicine use.

The last suggestion on the form, "Keep an updated medicine record and show it to your physician and pharmacist," is an important safety recommendation for all older patients and others taking multiple medications.

5. Follow-up with the prescribing physician and/or dispensing pharmacist. When a medicine review is conducted by anyone other than the patient's personal physician, the interviewer should ordinarily contact the patient's existing health care providers to address any significant problems that appear to exist. According to a University of Rhode Island study, about 6 percent of problems require action from the patient's health care providers to resolve. These include:

- a potential for (or evidence of) clinically significant reactions or interactions
- overdoses or incorrect doses
- incorrect medications prescribed for a problem.

ADVICE FOR USING YOUR MEDICINE

Name of Medicine: _____

Follow these instructions:

Take:

one pill

two pills

_____ Other

with food or beverage

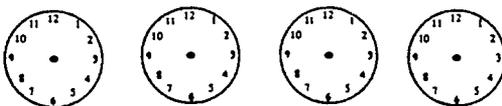
on an empty stomach

once a day

twice a day

3X

4X

At: 

clocks to be filled in by interviewer

everyday

only as needed for _____

for ___ more days until advised by MD to stop

Avoid combining this medicine with:

Other Rx medicines

Laxatives, antacids, aspirin, other OTC's (interviewer will circle the right one, or write it in)

Food or beverages: _____

For your safety:

- _____ Never take more than the recommended dose
- _____ Don't use medicines prescribed for others
- _____ Never stop taking this medicine or skip doses without talking to your doctor
- _____ Keep this medicine in its original container

Other:

Step 4: Follow-up with Patient's Physician and/or Pharmacist

When problems are detected requiring follow-up, care should be taken not to alarm the patient, not to improperly criticize the prescriber or dispenser, and to acknowledge that they may have had additional information in their prescribing/dispensing decision. When the interviewer determines that follow-up is needed, action should be taken after the consultation. It is a good idea to note the need for follow-up on the MRR (Part 3h) to facilitate efficient post-interview action. **Be sure the patient has signed the consent form before you make contact with the prescribing physician or dispensing pharmacist.**

Follow-up may require several action steps of the interviewer. These steps can be sensitive and will vary in different communities based on the health care delivery systems, customs, and individuals involved.

Conducting a Senior Outreach Program: The Senior Wellness Series

Suzanne Chisum, M.S.
Human Support Services, Waterloo, Illinois

ABSTRACT: The Senior Wellness Series is a program provided to the senior citizens who attend the Senior Nutrition Sites in Monroe and Randolph counties. The Senior Wellness Series consists of an informative presentation which is presented on a monthly basis. Supporting educational handouts are provided. The program is planned, implemented and evaluated by the Prevention Specialist at Human Support Services with the assistance of the Senior Nutrition Site Directors. Since July, 1991, a total of 3,001 seniors have been presented twenty-one different programs in the Wellness Series. All of the senior nutrition site directors evaluated reported that they would recommend the Senior Wellness Series to other senior nutrition site directors. Fifty percent of the directors reported the overall program as excellent with twenty-five percent reporting the program as very good and the remaining twenty-five percent reporting it as good. The goal of the program is to provide accurate and up-to-date information to seniors in the areas of mental and physical health with the hope of changing attitudes of the seniors and the whole community. Alcohol and illegal drug use is addressed either directly or indirectly in each of the presentations. The Senior Wellness Series is modeled after Rogers' "Diffusion of Innovation" model (1983).

PROGRAM NARRATIVE

A. Philosophy

Human Support Services is a comprehensive community mental health agency serving Monroe

County. The prevention programs also serve Randolph County. Human Support Services currently provides programming in the following areas: substance abuse out-patient, substance abuse prevention, out-patient psychiatric, developmentally disabled, respite care and residential. It is because we provide both treatment and prevention services that we have become acutely aware of the need for prevention programs for senior citizens. This perceived need resulted in our action to develop the Senior Wellness Series.

Human Support Services bases all prevention programs on the five Federal Prevention Strategies/Activities which encompass information, education, community mobilization, alternatives, and social policy. This framework is based on the Diffusion of Innovation Model which states that before there is any attitudinal change, there must be an awareness of the problem followed by education (Rogers, 1983).

This program also follows the guidelines researched by the Minnesota Department of Education, Community Education (1992) which identifies Promising Prevention Strategies outlined in a book by the same title. The Minnesota Department of Education did a systematic review of the evaluative literature coupled with interviews with national prevention experts which led to the identification of 26 specific prevention strategies. Each of these strategies has supporting empirical data. The Senior Wellness Series falls under the heading of "Promote the Skills, Knowledge, and Values of Individuals" through the use of Social

Competencies, Information/Knowledge, Person Development, and Positive Values. All of these concepts are integrated into the Senior Wellness Series.

This program, as do all of the prevention programs, strongly reflects no illegal or high risk use of alcohol and other drugs.

1B. Background and Need (Program Planning)

The population in general is aging. This is also true for Monroe and Randolph counties, as shown by the following information from the United States Bureau of the Census.

Residents Sixty Years of Age and Older			
	1970	1980	1990
Monroe County	2,995	3,606	5,791
Randolph County	5,826	6,762	6,847

In the past few years, the senior population has grown considerably, as Saken (1991) points out:

Eleven percent of our national population is now 60 or older. It is estimated by the year 2010, one out of four Illinois residents will be in this age group. This dramatic change in population represents a challenge for Illinois' Health and Social Service System, including those in the substance abuse, prevention, and treatment field. Even at only 11% of the population, persons over 60 consume 25% of all drug prescriptions and 70% of all drugs purchased over-the-counter. Eighty-five percent of all senior citizens take at least one prescription drug daily, while hospitalized seniors take an average of 10! There are 25 million senior citizens in the United States and an estimated 2.4 to 3.67 million are ... addicted to alcohol. (p. 11)

Prevention programs for senior citizens are rare. Prevention programs are traditionally aimed at youth. There are many reasons that youth are targeted as the appropriate audience for prevention programs. Youth are thought to be easier to influence than adults because their attitudes are not set as firmly. Also, youth are an easy group to access since they are required by law to attend school. Prevention programs for senior citizens are a challenge. It is more difficult to affect the attitudes and behaviors of adults. The senior population is not in any particular place at any given time. The programs also have to be appealing to the needs and wants of the seniors, or they will not participate.

Human Support Services has a strong commitment to the mental health needs of all people in the area. This program is especially pertinent to the senior citizen population since it impacts the community in a multiplicity of ways. The first way is that it educates an individual within the community. The second is that through this education, these individuals are able to impact their families and community. The educational role of family members, friends, neighbors and community representatives is a strong reason to invest in changing the attitudes of seniors toward their alcohol and drug use behavior.

The Senior Wellness Series is based upon research stating that one-time contacts are not an effective way to encourage prevention concepts and behaviors in individuals. It was found that on-going programs are much more effective for the long term goal of drug prevention. This program occurs on a monthly basis and each participant is given a handout with information on the topic. Written support and documentation enhances the communication process and increases retention. The handouts provide for individual participant characteristics. Thus, those senior citizens who have hearing or memory retention impairments are accommodated. The potential for educating others beyond those attending the Senior Wellness Series is facilitated by providing written documentation. The validity of the concepts presented

is another focus of the handouts.

An informal needs assessment was conducted in the summer of 1991. Senior nutrition site directors were contacted and asked to identify programming needs. They responded that they would like an on-going educational program for their participants. The directors selected the title of Senior Wellness Series because they felt that the seniors would respond more positively to topics presented under a "wellness" series title than to a "drug and alcohol" prevention title.

The wellness topics change every month and are geared to meet the needs of the seniors at the nutrition sites. Every effort is taken to ensure that the topics are appropriate for the senior nutrition site participants. For instance, the examples used to illustrate points are age specific, with relevance to retirement, geriatric health problems, loneliness and dealing with losses.

3C. Goals and Objectives

The mission of the Senior Wellness Series is to impart correct, up-to-date information on topics that will increase the individual's self-esteem and their overall mental and physical health. Hopefully, the series influences their behavior toward responsible use of legal and prescription drugs and being totally free of illegal drugs.

The mission is accomplished through monthly senior wellness presentations to be held at senior nutrition sites.

The goals and objectives of this program are:

GOAL

I: To inform, educate and develop skills in the areas of personal mental and physical, health and wellness for senior citizens, thereby lowering their susceptibility to alcohol and illegal drug usage.

Objectives

A. Develop and implement presentations to an average of 125 senior

citizens on a monthly basis at an average of four nutrition sites.

B. Develop and distribute at least 125 handouts each month that both support the presentation and are complete enough for those who are hearing or memory retention impaired or absent. Also, encourage the seniors to share the handouts with family members, friends, neighbors and other community members.

GOAL

II: To influence and change the attitudes of the senior citizens to pursue healthier lifestyles, thereby, influencing and bringing about social change for the whole community.

Objectives

A. At least four Senior Site Directors evaluate the program yearly to ascertain if the presentations are making a change in the attitudes of the seniors at their nutrition sites.

B. Informal evaluative feedback is elicited from the participants at each sit.

This program is planned to be ongoing and evolving. As the needs of seniors are met in some areas, it is expected that more Senior Wellness Series presentations will be developed. After approximately 36 presentations (three years), the series will start over. This is because of the ever changing clientele due to the attrition and death at the senior nutrition site. For those who have previously participated in the Senior Wellness Series, it will offer the opportunity for reinforcement.

4D. *Evaluation*

Since the program's inception in July, 1991 through July, 1993, 3,001 seniors have been presented the twenty-one Wellness Series. This averages to 134 seniors a month. The program has been presented at five senior nutrition sites and one presentation was given to a group of seniors who work with frail seniors.

There have been three evaluations of the Senior Wellness Series. The first was at three months and the second a year later. After the first three months, written evaluations were completed by senior nutrition sites directors in November of 1991. The overall rating of the program was good. The information being presented was perceived to be helpful to the senior citizens by the nutrition site directors. The senior nutrition site directors also listed topics that they felt would be of benefit to the seniors at their sites.

A second evaluation was conducted in November, 1992. Evaluations were sent to the four senior nutrition site directors actively receiving the Senior Wellness Series. All of the evaluations were returned. One hundred percent of the respondents reported that the Senior Wellness Series is relevant to the needs of their senior population, that the presentations were well organized, the handouts were appropriate; and the Series is serving the needs of their senior population. Overall, fifty percent felt the program was excellent, twenty-five percent reported it as very good and twenty-five percent reported it as good.

All of the respondents said they would recommend the training to other senior nutrition site directors. One director commented that the same topic could be presented more than one time at the sites, since the clientele at the nutrition site changes daily.

Under "other ideas about the Senior Wellness Series," two of the directors requested more time for individual discussion by the seniors in small groups. This is currently being taken into consideration for future presentations.

In addition to the formal evaluations, a few seniors are asked individually for their response to the program after each presentation by the presenter. This information is used to increase the quality of future presentations.

The third evaluation of the seniors at the nutrition sites was conducted during April, 1993. The results of this survey have not yet been tabulated.

5E. *Population to Be Served*

This program is made available to all of the Senior Nutrition Sites in Monroe and Randolph counties. At this time, Waterloo, Columbia, Red Bud and Chester are getting monthly presentations. The Sparta site receives presentations on a different schedule. The people who attend are senior citizens, age sixty years old and older, and their guests who normally attend the activities at the senior nutrition sites, such as meals, quilting, cards, bingo, and musical performances.

6F. *Activities and Strategies*

The Senior Wellness Series is unique in that it reaches a population, senior citizens, that is often under served and difficult to locate, especially in rural areas. The Senior Wellness Series utilizes state-of-the-art prevention strategies in every presentation. The Senior Wellness Series is offered in a rural, agricultural area where seniors are often viewed with respect and are considered community leaders. Therefore, by making an impression on the seniors, the whole community is impacted.

The Senior Wellness Series uses a holistic approach to wellness. It was determined that if programs were done using the words "Alcohol and Drug Prevention Programs" the attendance would be minimal and the audience would be hostile. Since there is a great deal of denial in the community about alcohol, one of the senior nutrition site directors recommended doing programs that talk about wellness and how that would be a positive

impact on the seniors at their sites. This is how the title Senior Wellness Series was developed.

There have been twenty-one Wellness Series developed to this point. Since there is a new Wellness Series each month, we are constantly adding to the topics available. The titles of these are:

1. Holistic Health
2. Eh, What's That You Say? Dealing with Hearing Loss
3. What to Do When a Friend Has a Problem with Alcohol
4. Are You a Worry Wart?
5. Are You Going to Have Yourself a Merry Christmas or a Blue Christmas? Dealing with Holiday Depression
6. Getting Your Point Across
7. The Ills of Pills: What You Should Know About Prescription Drugs
8. Do You Think You're Losing Your Marbles? Maybe Not: Memory Retention #1
9. Jogging Your Memory: How to Get Your Mind in Shape: Memory Retention #2
10. Change and the Family: How to Handle the Divorce of a Child
11. Keeping Cool in the Good Ole Summertime
12. Growing and Changing: Dealing with Loss
13. Staying Calm When Circumstances Weigh You Down: Stress Management
14. Alcohol and Drugs: They're Everybody's Problem
15. Dealing with Diabetes
16. Winter Scene
17. Senior Sexuality
18. Home Is Where the Health Is
19. Golden Goal Setting
20. Seeing Through the Years: Your Vision Part 1
21. Seeing Through the Years: Your Vision Part 2

The presentations are approximately 20 to 30 minutes in length. The length is short to help keep the interest high among the seniors.

The Senior Wellness Series employ the strategies of Community Health Promotion and Education, Information and Skills Development. These strategies are closely entwined throughout every senior nutrition site presentation. The presentations not only define health problems, but provide resources to obtain help and tips on preventing these problems.

The process to set up a Senior Wellness Series is relatively simple, but requires on-going commitment from the volunteers or staff who implement the program.

Setting up a Senior Wellness Series

- Step 1:** Contact the Senior Nutrition Site Directors and assess program needs and their clientele's needs. Set up dates and times for the presentations.
- Step 2:** Develop a list of topics that are indicated by the informal needs assessment. Research each topic by reading current material available in books and other publications.
- Step 3:** Integrate information into a presentation outline. Use examples to support and illustrate information.
- Step 4:** Develop handouts to accompany each presentation. Make sure that the information in the handouts is complete and useful to the senior population. The font should be clear and easy to read. Formats which are organized and distraction free are recommended.
- Step 5:** At the senior nutrition site, begin by distributing the handouts. Give the presentation in an organized way which is supported by media. Leave time for group questions and for

individuals to approach and ask more personal questions that they may not have wanted to ask in front of the group.

- Step 6:** Evaluate the program after three months, then yearly thereafter. Involve the staff and the clientele in the evaluative processes.

The Senior Wellness Series utilizes approximately .125 FTE (or 1/8 of the prevention specialist's time) to plan, travel, implement and evaluate. Because of the rural area involved, the travel time may be up to two hours for one presentation. Trained volunteers could also be utilized for this program. If this approach is adopted it is essential to closely supervise the volunteers to be positive that the validity of the information is maintained.

The minimum requirements to replicate this program would be staff or volunteers' time, access to typing and copying equipment and permission from the senior nutrition site directors.

St. Clair County is currently replicating the Senior Wellness Series to use with their senior nutrition sites. They are excited about the prospect of starting this new program. They have four alcohol and substance abuse prevention and treatment professionals who will be providing the content of the program to 12 nutrition sites in rural and urban St. Clair County.

Human Support Services, 988 North Market, Waterloo, IL 62298, (618)939-8644 is willing to share outlines and handouts of the Senior Wellness Series with those who request it.

10G. Program Management

The Senior Wellness Series is carried out by the Prevention Specialist. Human Support Services has a contract to provide prevention programs to the people of Monroe and Randolph counties with the Illinois Department of Alcohol and Substance Abuse (DASA). The Senior Wellness Series is part

of the program's responsibility that the prevention specialist meets for the bi-county area. Other programs include student assistance program trainings, basic drug and alcohol prevention trainings, parenting classes, peer helper trainings, drug free party alternative trainings, a quarterly newsletter, and resource development.

The program is supervised by Rob Singer, the Clinical Coordinator at Human Support Services. He holds a master's degree in social work and is licensed in the State of Illinois. He reviews and approves program material for the presentations.

The program was initiated through the efforts of Suzanne Chisum, M.S., Prevention Specialist, who has a strong interest and commitment to serving the needs of senior citizens. Ms. Chisum has completed research related to support networks for rural senior citizens. She has presented her research findings at the National Council on Aging Annual Meeting and at the American Home Economics Association Annual Meeting. She has a master's degree in Home Economics and is a certified Home Economist. She has five years of experience in presenting wellness programs to diversified populations.

The prevention program also has a part-time support staff secretary who helps research the presentations, prepares the handouts, and duplicates materials.

The prevention specialist is expected to attend at least 30 hours of training each year to keep up-to-date on the latest in the prevention field and prevention strategies. Most of the training is provided by the Illinois Prevention Resource Center.

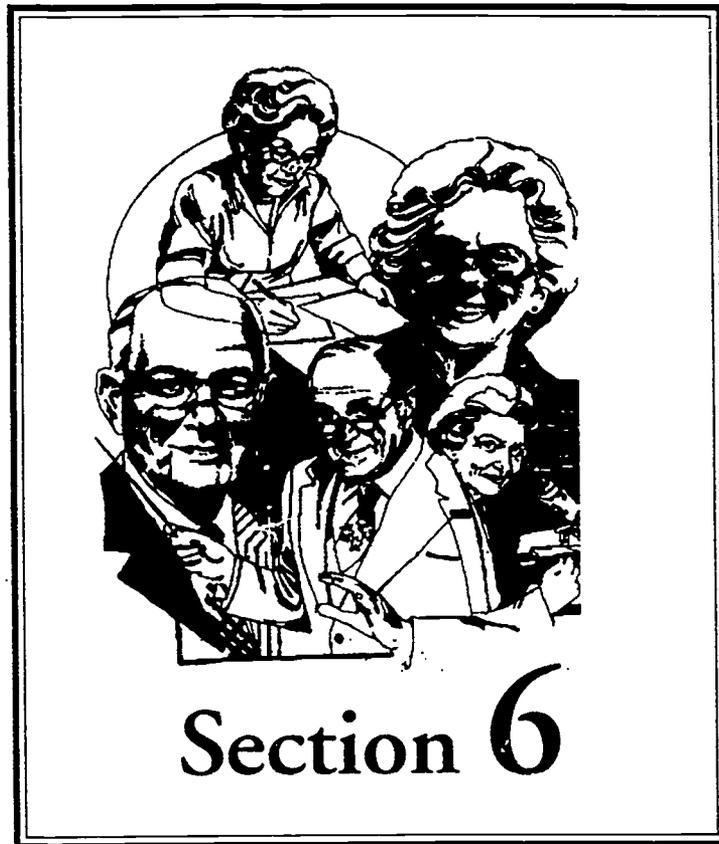
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Forms

1. PRC Clearinghouse Order
2. Patient Consent
3. Pharmaceutical Presentation

Prevention Resource Center

822 South College Street
Springfield, Illinois 62704
(217) 525-3456 or (800) 252-8951
Fax (217) 789-4388
TDD (217) 525-7192

CLEARINGHOUSE ORDER FORM

Date _____

Name _____

Organization _____

Street Address (No P.O. Boxes) _____

City _____ State and Zip _____

Phone () _____ County _____

Please send the following:

QUANTITY

_____ **Using Your Medicines Wisely: A Guide for the Elderly** (brochure)

_____ **Safe Use of Medicines by Older People** (Age Page)

_____ **Aging and Alcohol Abuse** (Age Page)



PATIENT CONSENT FORM

During the brown bag medicine review, a health professional will check your prescription and non-prescription medicines for problems, offer tips for safe and effective medicine use, and answer your questions. The health professional may also follow-up with your doctor or pharmacist if necessary to discuss findings. No one else will be told about your results. They may be entered (without your name) into a national file on medicine use.

Talking to your doctors and pharmacists about the medicines you use is critical to taking them safely and effectively. While this review will give you much important information about your medicines, it should not take the place of regular discussions between you and your doctors and pharmacists.

I understand the above information, and I consent to participate in this process. In consideration for this free service, I release any claim against any party in connection with this medicine review.

Signature: _____

Date: _____

Participant's Name (print): _____

Address: _____

Telephone Number: _____

Name of Primary Physician: _____

Telephone Number: _____

Name of Primary Pharmacy: _____

Telephone Number: _____



Self Care: Preventing Misuse of Medication and Alcohol in an Aging Society
Pharmacists and Prevention Specialists Working Together

Presentation Agreement

_____ Date: _____

Training Site: _____

Yes, I'll help older Illinoisans understand the risks connected to misusing prescription medicines and alcohol.

The Illinois Department on Aging should contact me to participate in the "Self Care" outreach to older adults as my schedule permits. I understand that, wherever possible, the Department will try to link pharmacists and community-based prevention programs.

I am a: (check one)

Pharmacist Professional License Number: _____

Name of Pharmacy: _____

Address: _____ Phone: _____

Prevention Specialist Program Affiliation: _____

Address: _____ Phone: _____

I am willing to provide outreach services to geographic areas which include: (Please name communities, counties, or regions you are willing to serve.)

A joint project of
Illinois Lieutenant Governor Bob Kustra
Illinois Department of Alcoholism and Substance Abuse
Illinois Department on Aging
Illinois Pharmacy Foundation

Mail to Illinois Department on Aging, 421 East Capitol, 1st Floor, Springfield, IL 62701

END

U.S. Dept. of Education

Office of Educational
Research and Improvement (OERI)

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Date Filmed
April 6, 1994



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement (OERI)
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Signature <i>Suzanne Chisum</i>	Position <i>Prevention Specialist</i>
Printed Name <i>Suzanne Chisum</i>	Organization <i>Human Support Services</i>
Address <i>Human Support Services 988N Market PCBm 146 Waterloo, IL 62298</i>	Telephone Number <i>(618) 939-8644</i>
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