

MEDICATION ADHERENCE AND OLDER ADULTS

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BACKGROUND

Medications are one of the most important tools that health care professionals use to prevent illness and disability within the older adult population. There is no doubt that, when used correctly, prescribed and over the counter medications can greatly improve the health and well-being of older adults; yet, there is increasing recognition in the clinical literature, the popular press, and within health policy circles that problems related to medication adherence within the older population represent a critical care issue. Sometimes referred to as “the nation’s other drug problem,” medication misuse among older adults is one of the fastest growing health problems facing our country (Hayden & Safford, 1997).

According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2002), 17 percent of older adults experience problems managing their prescription drugs. Older Americans are hospitalized six times more than the general population due to adverse drug reactions (MetLife, 2003). Adverse drug reactions rank fifth among the greatest and most preventable health threats to older Americans, after congestive heart failure, breast cancer, hypertension, and pneumonia (Geriatric Times, 2004).

People age 65 and older consume more prescription and over the counter medicines than any other age group, with many taking several medications **daily** for multiple chronic conditions (National Institute on Aging, 2000). The majority of older persons take at least one medication, with the average being 4.5 prescription medications and two over the counter medications. Older Americans make up less than 13 percent of the population,

but receive between 25 and 30 percent of all prescriptions, and consume approximately 24 percent of over the counter drugs (Alliance for Aging Research, 1998). The fact that the older population is living with multiple chronic medical conditions—and taking more medications than ever before—is a compelling reason for social workers to take a closer look at the issue of medication adherence.

Although social workers cannot directly prescribe medications for clients, they play key roles in detecting problems, communicating their observations to other health care providers, educating older clients and their caregivers, monitoring the effects of medications, and detecting when physical and emotional changes in clients may be a result of medications. As care providers to older adults, social workers see firsthand both the positive and the negative effects of medications and effective medication management. Because social workers have knowledge of clients’ histories, personal preferences, attitudes, and environments, they can readily suggest changes in medication regimens that would better suit their clients’ needs, and which would help increase compliance and minimize errors (Hayden & Safford, 1997).

CHALLENGES TO ADHERENCE

Adherence refers to the ability to take medications as prescribed, and is influenced by a variety of behavioral, physical, social, and environmental factors. Although problems with adherence occur in all age groups, older adults are particularly vulnerable, because they are more prone to the physical and cognitive changes that are associated with aging. Adhering to a prescribed medication regimen is difficult to do even in the best of

circumstances, but poses even more of a challenge for older persons because of multiple medications, varied dosing requirements, unpleasant side effects, and changes in body composition and physiology. Psychosocial factors such as mental health, economic status, and limited social supports can further exacerbate the challenge of medication adherence in older adults.

Factors that influence medication adherence within the older adult population:

- Chronicity of illness
- Adverse drug reactions
- Side effects of medications
- Frequency of dosing schedule
- Number of medications prescribed
- Complex medication regimens
- Isolation
- Mental health or substance abuse history
- Cognitive impairment
- Auditory problems
- Impaired vision
- Diminishing physical abilities
- Costs of medications
- Health literacy
- Access to transportation
- Social supports
- Client/health care provider relationship
- Life stressors
- Perceived efficacy of drugs

The escalating cost of prescription medications poses one of the most significant challenges to adherence. Because many older adults have limited incomes, or do not have prescription drug coverage, they may attempt to make a prescription last longer. It is not uncommon for older adults to take less medication than the amount prescribed; skip recommended doses; delay having medications refilled; or fail to have their prescriptions filled entirely. Borrowing or saving medications can further add to the problem resulting in taking outdated medications or taking drugs that may be contraindicated.

The physiology of aging poses an additional challenge to adherence. Experts agree that age related changes in the human body can cause differences in the way the body responds to medications (MetLife, 2003). Older adults often

lack the ability to eliminate medications from their systems as efficiently as younger persons, due to decreased liver and kidney function. Because older adults are more sensitive to the effects of medications, they are not necessarily able to tolerate usual adult dosages (Alliance for Aging Research, 1998). While older adults' bodies handle drugs differently than younger people, drug dosages and warnings are usually optimized for middle-aged adults who are more apt to participate in clinical research trials.

Mental health issues—such as attitude toward treatment, depression, dementia, and Alzheimer's disease—are other key aspects of adherence. There can be significant problems to adherence if an older person forgets to take her or his medications, or becomes confused about the medication schedule. In addition, many of the reactions to medications that occur in older adults may be overlooked because they can be a result of other physical or mental health conditions, including, confusion, forgetfulness, depression, anxiety, and lethargy (Hayden & Safford, 1997).

Polypharmacy—the concurrent use of several drugs—is not an uncommon occurrence in the older population. For many older persons, using multiple medications at the same time is a necessary part of their care. Since older persons tend to use more medications than younger people, and often require multiple medications, they have a greater risk potential for adverse reactions, drug interactions, and errors with self-medication. The U.S. Food and Drug Administration (2003) cautions that when two or more drugs are mixed in the body, they may interact with each other and produce dangerous side effects. Of all the problems older adults face when taking medication, drug interactions are probably the most dangerous.

The current state of health care practice also has an impact on medication adherence. There are more time constraints on clinicians, which limits their ability to take into account all current problems and complaints; this can result in under- or over-medicating the older client. The increasing reliance on specialty areas of practice may lead to the presence of multiple clinicians, who may be prescribing medications but not communicating with each other. Many older adults may need increased clinical interventions after being discharged from hospitals, where doctors often change medications.

FACILITATING ADHERENCE

Assessment: Assessing factors that impact medication adherence is critical to the health and well being of older adults. Issues such as general health status, cognitive and mental health status, treatment goals, side-effects, timing and frequency of doses, history of compliance, food restrictions, co-morbidities, barriers to adherence, finances, transportation, family and social supports, health beliefs and cultural background should be considered as part of a comprehensive assessment. When assessing for adherence, it is important to keep in mind that “drugs” are both prescribed *and* over the counter medicines. Over the counter drugs can include vitamins and minerals, herbal and dietary supplements, laxatives, cold medicines, and antacids.

Client Education: A basic understanding of the need for each medication prescribed is an essential part of client education. Self-management of medications requires complex cognitive functioning, the ability to follow prescribers’ directions, and the ability to take medications correctly. The more older adults understand their illness and the implications associated with taking their medications, the more likely they are to adhere to their medication regimens. The therapeutic alliance between health care providers and older adults is a critical aspect of client education. Research has shown that the better the relationship people have with their health care provider, the higher the rate of adherence.

Medication Reminders/Assistive Technology: Older persons might find it helpful to use medication checklists, or pillboxes on which medications and days of the week are clearly marked. Some pharmacies use different colored vial caps to help distinguish medications. Easy open caps are also available for those with arthritis or problems with dexterity. For older persons who have difficulty remembering, cues or reminder aids—such as leaving medications in a designated location, taking them with meals, or using reminders like alarm clocks—can be enormously helpful.

Social & Personal Supports: Support and contact from family and friends is critical to promoting adherence. Family and friends are generally the primary sources of support for older persons; however, the notion of family should be expanded to incorporate the individuals who are most important to older adults. Supports can be formal or informal. Formal supports may include case management services, paid caregivers, psychotherapy, and support groups. Informal supports may include volunteers, friendly visitors, clergy, and neighbors. Support can take the form of

reminding an older person to take his or her medications, getting prescriptions filled, preparing medications in pill dispensers, contacting a health care provider when problems arise, or providing emotional support and encouragement.

Access to Resources: Adherence is not possible without access to medications and without sufficient economic resources. While the addition of a prescription drug benefit to Medicare may help some older adults, there are still many who are not able to afford their medications. Asking a physician for free medication samples or to prescribe generic drugs, comparing prices at pharmacies, looking into state pharmacy assistance programs and subsidies from pharmaceutical manufactures, and contacting the local SHIP program are just some strategies that may help reduce the costs of medications. Other help may be needed in the form of information or supportive services, such as mental health resources or educational and support groups. Concrete resources like transportation to medical appointments and to the pharmacy are also critical factors in improving adherence.

TIPS TO PROMOTE MEDICATION ADHERENCE:

- Ask the pharmacy to use large print on the label.
- Ask the doctor/pharmacist for printed directions on how to administer each medication.
- Use a pharmacy that will deliver medications.
- Ask the pharmacy for easy-to-open medication caps.
- Use a pharmacy that keeps a medication profile on their customers.
- Purchase prescriptions at only one pharmacy.
- Keep a record of both prescription and over the counter medications, and of dates and times they are taken.
- Make sure each doctor is aware of all medications taken.
- Use medication dispensers.
- Have a physician evaluate medication regimen on a regular basis.

FACTS ABOUT MEDICATION NON-ADHERENCE:

- Eighty percent of people over age 65 use at least one prescription and/or over-the-counter drug.
- Twenty-five percent of the older adult population uses four or more prescriptions daily.
- Forty to 55 percent of older adults fail to adhere to medication regimens.
- Ten percent of all hospital admissions are the result of medication non-adherence.
- Twenty-three percent of nursing home admissions are the result of medication non-adherence.
- Medication non-adherence accounts for 125,000 cardiovascular deaths annually.

CONCLUSION

The aging of our population means that the number of older people with medication related problems is on the increase. More social workers are going to be needed, to improve the provision of age appropriate assessments and interventions. Social workers have an important role with regard to medication use and management by older people. Social workers can be excellent resources in assessing for health literacy, uncovering barriers to compliance, and providing information and referrals as needed.

RESOURCES

Administration on Aging (AoA)

www.aoa.gov

This site is maintained by the U.S. Department of Health and Human Services and provides resources, news and developments, and information for older adults and caregivers.

Benefits Check Up Rx

www.benefitscheckuprx.org

The National Council on Aging (NCOA) offers BenefitsCheckupRX, a free, confidential tool that older adults or their families can use to locate programs to help defray the high cost of prescription drugs.

Consumer Information Center

www.pueblo.gsa.gov

The Consumer Information Center is a service of the U.S. General Services Administration. This site provides free online consumer information for the public.

U.S. Food and Drug Administration (FDA)

www.fda.gov

The FDA offers information and resources for consumers on prescription, generic, and over-the-counter drug products and the safe use of medicines.

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