Adherence Issues in Elderly Patients

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Older patients often find medication adherence difficult, as the use of multiple medications create challenges. Pharmacists can help in a variety of ways to identify the problem and implement corrective action.

Increasing medication use with age is common to address specific symptoms, improve or extend quantity of life, or heal curable conditions. Almost 20% of community-dwelling elders (65 years or older) take 10 or more medications.[1] For some elders, underlying conditions require multiple drugs from different classes, but for others this polypharmacy is unnecessary and unfortunate.[2] Sadly, multiple medication use creates and contributes to adherence challenges in the aging population.

Identifying Adherence Issues

Approximately one half of elders who take at least 1 medication find adherence challenging. They may be adherent to some of their medications and nonadherent to others.[3,4] Average adherence decreases from approximately 80% in patients taking medication once daily to 50% in those taking medications 4 times a day.[5,6]

Clinicians often fail to identify nonadherence

ask about medication adherence, and do so using nonjudgmental, open-ended questions. Starting with an empathetic statement such as, “Many people find it hard to take all their medications every day,” and progressing to an open-ended question such as, “How often do you miss doses?” can identify patients who are challenged by their regimen.[3,8] Most of the time, nonadherent patients will divulge 1 of the reasons listed in Table 1.

Table 1

COMMON REASONS FOR NONADHERENCE IN ELDERLY PATIENTS

Reason for Nonadherence	Comment
Patients' assessment of the risk and benefit	Patients may perceive the treatment benefit to be small compared with its cost.
Potential side effects	Elderly patients frequently worry about or experience sedation, constipation, sexual problems, or other adverse events.
Cost	Treatment costs and prescriptions can be burdensome for uninsured or marginally insured individuals. In a survey of 875 older adults, 19% said they had cut back on their medication use in the past year because of cost.[9] In the US, 2 million elderly Medicare beneficiaries do not adhere to medicines, citing cost as the reason.[10]
Regimen complexity	Patients prefer simple, easily remembered medication regimens; once-daily, transdermal, or other convenient dosing formulations enhance adherence with chronic drug therapy.
Fear of addiction	Many patients avoid pain medication or reduce the dose, believing that all pain medications are addictive. In a survey of 324 patients, more than one third believed that prescribed analgesics had dependence risks or unwanted long-term effects. Those with the strongest belief were the least adherent.[11]
Cognitive decline	Lack of understanding increases risk of nonadherence.

Adapted from references 3, 8-13.

Pharmacists have several tools at their disposal to identify problems early and implement corrective action. The traditional “brown bag” review with elders of all their medicines—prescription and over-the-counter medicines, vitamins, supplements, and herbal preparations—is an effective way to start a dialogue. Most

me what this is for and how you take it." Using pharmacy records—the patient's profile and refill records—and pill counts in the bottles, pharmacists can develop a fairly accurate idea of the patient's adherence pattern. [3,8,12] Pharmacists can determine what category the elder's medication nonadherence falls into (Table 2).

Table 2

TYPES OF NONADHERENCE
Hesitance to Initiate Therapy: The elder may hesitate to visit a physician or to start a prescribed regimen.
Skipped Doses: The elder legitimately forgets medications or skips doses because it is inconvenient (eg, the medication must be taken mid-day and the patient is usually away from home).
Medication Discontinuation: The elder doesn't understand how or how soon a medication should work or when the symptoms resolve; perceiving the medication is not working or the problem is resolved, the patient stops taking it.
Dose Self-Adjustment: Elders may decrease doses to save money or avoid side effects.
Over-adherence: Elders may take more medication than prescribed if symptoms continue or worsen, or an abuse or addiction problem is present.
Inappropriate Drug Administration: This occurs when patients ignore specific guidelines and instructions, or misuse, and sometimes abuse, their prescribed medication.[14]

Addressing Nonadherence

Older patients may perceive the treatment benefit to be small compared with its cost, so clear communication is imperative. Pharmacists should anticipate elders' conflicting beliefs. Helping patients improve their adherence requires knowledge about their current medication use, reasons for nonadherence, and personal health goals.

Many elders are not interested in increasing their longevity if it detracts from quality of life. Additionally, elders often rely on family members and trusted caregivers to help them identify,

chronic illness or terminal condition. For this reason, hospice providers will often discontinue all medications except those for current problems.[15-17]

Pharmacists need to ask patients what their expectations are (longer life, reducing symptoms, reducing pill burden, avoiding adverse effects, reducing cost) and correct any misperceptions. Patients may be over-adherent to analgesics, for example, because they want to be pain free. Helping them understand that freedom from all pain is an unrealistic expectation can improve adherence.[18]

Next, pharmacists can help elders by ensuring that all medications have a current indication. Often, medications languish on the patient's profile long after a condition or symptom has been addressed and an alternate drug has been added. Some drugs, especially benzodiazepines, antidepressants, and beta-blockers, may need to be tapered. Drugs can usually be tapered down at the same rate at which they are titrated up at the initiation of drug therapy.[19] Contacting the prescriber(s) is wise in these cases. A large study of ambulatory older patients found that 26% of drug discontinuations exacerbated the underlying condition and 4% led to physiologic withdrawal reactions. [20] Conversely, some elders may need a potentially beneficial medication (eg, antidepressants, analgesics, or laxatives) and adding these may help them be more adherent.[21-23] Dosing frequencies should be questioned, and decreasing the number of doses is a good recommendation. Using long-acting medications and dosing different drugs at the same time is

Other Barriers

If an adverse effect (AE) is contributing to nonadherence, the pharmacist can try to determine if the AE is truly associated with the drug the elder attributes it to or something else. Anticholinergic AEs can be particularly troublesome in the elderly. Nonspecific AEs often mimic disease processes. Pharmacists should contact the prescriber with concerns, and suggest that the medication be stopped temporarily to see whether the symptoms improve.[24,25]

Patients may be embarrassed if cost is a barrier, so pharmacists need to ask gently whether this is the case. Recommending lower cost generic alternatives is helpful when possible.[26]

While discussing medications with elders, pharmacists should educate the patient or caregiver. Oral counseling is imperative but insufficient. Elders also need written information in a readable font and patient-friendly language, especially if changes are being made. Asking the elder or caregiver to describe the drug's purpose, its use instructions, and its potential side effects (called "back teaching") can identify knowledge gaps.[27,28]

Finally, with increasing age, subjects tend to have compromised physical dexterity, cognitive skill, and memory. The inability to open a child-safety cap or raise the arms above the head is a significant adherence barrier for taking oral or ophthalmic medications.[6]

Conclusion

responsibilities following the patient-centered medical home model of care.[29] Using combinations of approaches and augmenting clinical intervention with adherence tools (eg, cues, medication organizers, packaging) will be necessary for most elderly patients. Many patients will need a combination of approaches, and creativity is the order of the day.

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Specialty Pharmaceuticals: Therapy Class Review: Blood Modifiers

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The blood modifier category of drugs works stimulating bone marrow to produce more cells and they affect certain diseases such as cancer and chronic kidney failure.

Disease Overview

In reviewing the therapeutic category of blood modifiers, there are 3 areas of focus: red blood cells (erythropoiesis growth factors, ie, Procrit, Epogen); white blood cells (myeloid growth factors, ie, Neupogen, Leukine, Neulasta); and platelets (thrombopoietic growth factors, ie, Neumega). All of these products work by stimulating bone marrow to produce more cells.

Anemia is a condition that occurs when the blood does not contain enough red blood cells that carry oxygen