Polypharmacy and Older Adults: A Role for Psychology and Psychologists

Merla Arnold
Huntington Station, New York

The literature and clinical experience confirm polypharmacy as an important contributor to avoidable morbidity and mortality among older adults. Sociocultural factors, along with the interplay among aging, physiology, chronic disease, and the medicines that seniors take play important roles in clinical presentations, conclusions drawn, interventions planned and implemented, and health care outcomes. Knowledgeable psychologists can help reduce the number and severity of common geriatric syndromes (e.g., falls and mental status changes) that our nation’s elders suffer due to inappropriate polypharmacy. Providing high quality psychological services includes developing collaborative relationships with medication prescribers and participating in interdisciplinary teams, even if loosely defined (as is often the case at the community-based, independent practitioner level of care). Informed psychological interventions (including dynamic, cognitive, and/or behavioral) can effectively modify many older adults’ medical and other health concerns, reducing the need for and risks associated with taking multiple medications. Participating in research, public education, and advocacy efforts in order to enhance the quality and effectiveness of the health care and services that older adults receive are also vital roles for psychology and psychologists.

Keywords: psychologists, older adults, polypharmacy, psychopharmacology

The reader might think, “I see only a few older people, if that. What does this have to do with me?” Regardless of theoretical orientation or approach to care and services, every psychologist can play a key role in preventing or minimizing the unintended consequences many older adults suffer due to inappropriate polypharmacy. Nowhere does the knowledge of mind and body relationships become more germane than in work with older adults. At some point, practicing psychologists will likely have an older adult present for services. It is also likely that this older adult will have at least one chronic illness and be taking several medications. Considering the mind–body relationship, it should not come as a surprise to know that polypharmacy can seriously affect an older person’s clinical presentation and all that follows.

It would do well for psychologists working with older adults to know about the special issues and concerns facing them. Older adults are a diverse group with common factors that put our nation’s seniors at greater risk for harm. Psychologists can help detect even subtle changes in a person’s presentation and can work to initiate a change in approach when warranted. Sometimes, a talk with your client or, with authorization, a call to the prescribing practitioner or a conversation with caregivers can serve to shift the approach to care, improving the overall quality of services and experienced well-being.

The first order of business is to know, not only about the pharmaceuticals taken by older adults (there are handy web-based reference programs, e.g., Epocrates), but also about how those drugs interact with the aging person (not to mention how the drugs interact with each other). This way, when the call is made or the conversation had, it can be said with confidence (not arrogance), “I’m working with [insert name/relationship here] and I’ve noticed [she/he] is taking [insert medications here] and wonder if this can be responsible for [insert effect(s) and concern(s) here]. I’m also wondering if [insert your alternative idea here, as an educational opportunity] might be of benefit to [person].” If talking with clients and/or family members or caregivers, it can be useful to suggest they have similar conversations with their prescribers.

To effectively assess, plan, and influence the provision of care and services, as members of our clients’ interdisciplinary health care teams (even if loosely defined for the community-based, independently practicing psychologist), psychologists would do well to be armed with information about the special needs of older adults. Psychologists have a legitimate voice and skills to bring to bear, increasing the likelihood of achieving hoped-for outcomes.

Empirical studies (e.g., Esponio et al., 2006; Goulding, 2004; Straand et al., 2006) and literature reviews (e.g., Monane, Monane, & Semla, 1997; Rollason & Vogt, 2003; Westin & Heath, 2005; Williams, 2002) document the potentially serious and sometimes disastrous consequences of polypharmacy in older adults. Untoward outcomes include problematic change(s) in clinical presentation, the risk of misdiagnosis or misinterpretation of signs and symptoms, mistreatment, need for hospitalization, admittance into a nursing home, unnecessary health care costs and service utiliza-

MERLA ARNOLD received her PhD from Columbia University. As a licensed psychologist, she maintains an independent practice focused on the needs of older adults living in assisted living communities in Western Suffolk/Eastern Nassau Counties, New York. In addition, she is a licensed, registered nurse with board certification and over ten years’ experience in quality and utilization review, assessment, and improvement of health care services in major metropolitan hospitals. In addition to aging, areas of interest include end of life, attachment/loss, advocacy, education and training and mind–body relationships as they pertain to health and well-being.

CORRESPONDENCE CONCERNING THIS ARTICLE should be addressed to Merla Arnold, 13 Bennett Avenue, Huntington Station, NY 11746. E-mail: ma159@columbia.edu
tion, poor health outcomes, loss of independent living, diminution in quality of life, and even death.

The American Psychological Association’s Guidelines for Practice with Older Adults (2004) underscores an important call to any psychologist working with older adults, not just the geropsychologist. It treats psychologists be “familiar with current information about biological and health-related aspects of aging” (p. 237). According to the American Psychological Association (n.d., p. 1), competence in clinical geropsychology requires “distinctive knowledge in the... biological aspects of aging including chronic illness, terminal disease, falls... nutrition, exercise, sensory changes, [and] pharmacology (e.g., pharmacodynamic changes tied to aging and problems stemming from multiple medications).”

It would do well, however, for all psychologists working with older adults to understand these relationships, as they have a role in what and how the client presents. How we understand these relationships more fully informs the assessment process and can serve to help guide our work.

Knowing the benefits and risks of the medications older adults take can inform psychologists’ interventions. Older adults present with unique differences and risks for harm. Those who work with an older adult have a pressing need for information about these differences and are called to consider them in their work. For example, all memory complaints are not equal, nor are all depressive complaints. While some issues are indeed age related, there are many modifiable contributing factors to anxiety, depression, or cognitive (mental status) changes, to name a few. Inappropriate medication regimens rank high among them.

Not surprisingly, polypharmacy was among the top training interests identified by a group of psychologists attending continuing education workshops on geropsychological issues (Norman, Ishler, Ashcraft, & Patterson, 2001). This article addresses some of these learning needs and interests by focusing on older adults and the risks of polypharmacy.

Background

A forum of 13 federal agencies and departments (Federal Interagency Forum on Aging Related Statistics, 2006) collects and provides data on aging, using key indicators of well-being for people age 65 and over (hereafter referred to as older adults). According to the agency, in 1900 there were 3.1 million older adults. In 2000, that number grew to 35 million. Projections for 2010 estimate that there will be as many as 40.2 million older adults, and, for 2050, the population of older adults is projected grow to 86.7 million! In addition to having greater numbers, the population will grow more diverse. This requires psychologists to provide care and services with an understanding of how sociocultural factors and differences in heritage and experience affect an older person’s presentation, needs, and responses to care and services (American Psychological Association, 2004). A full discussion of this warrants its own article or special edition and is, regrettably, beyond the scope of this work.

In 1995, older adults comprised 13% of the population and accounted for 35% of the $310 billion spent on health care, with substantially higher costs for future medical expenditures projected (Centers for Disease Control and Prevention, 1999). Important contributors to these cost projections are the higher risks older adults face because of the serious untoward effects that medicines can have. For example, in a review of preventable medical injuries among older adults (Rothschild, Bates, & Leape, 2000), congestive heart failure, the most common reason for hospitalization of older adults, was associated with inappropriate use of drugs known to have higher mortality rates in this age group. Hanlon, Schmader, Ruby, and Weinberger (2001) reported that hospitalization due to inappropriate prescribing for older people can cost as much as $20 billion annually.

Polypharmacy

Polypharmacy is a major factor in avoidable morbidity and mortality (e.g., Ebbesen et al., 2001; Goulding, 2004). Depending on the setting, a psychologist may be the person with the most consistent contact of any health care professional working with an older adult. The psychologist has a unique if not integral role on any health care team, including assessment, monitoring, collaborating, planning, and directly intervening; addressing the etiology of problems noted; and evaluating the response(s) to the care and services that older adults receive. This remains true even when one is defining team loosely, as is often the case at the community-based, independent practice level of care. Collaborative relationships with medication prescribers can be particularly critical when a given prescriber has limited knowledge of biopsychosocial aspects of aging and associated needs, interventions, treatments, and responses.

There is a need for psychologists to develop a knowledge base that considers “the needs of the populations they serve . . . ” (American Society for the Advancement of Pharmacotherapy, n.d., p. 9). Psychologists can begin and continue the work of integrating care by talking knowledgeably about the effects that pharmaceuticals can have on the older adults we work with physically, mentally, emotionally, and/or behaviorally. Psychologists have an opportunity to educate the health care community and the public at large about the safe and effective options that psychologists offer, helping to reduce the risks associated with polypharmacy.

Polypharmacy is the concomitant use of multiple medications. Inappropriate polypharmacy occurs when older adults receive more drugs than necessary, which multiplies the risk of adverse events. Polypharmacy is particularly harmful when the patient receives too many medications for too long, in too high a dose, or when the medications are not clinically indicated or are duplicative. Some risk factors such as older age and gender are immutable. Some risk factors are more readily modifiable, including health condition, type of health care problem, number of and type of health care visits, access to care and services, knowledge level, prescriber characteristics, and prescribing patterns (e.g., Goulding, 2004; Hanlon et al., 2001; Monane et al., 1997; Rollason & Vogt, 2003; Williams, 2002).

Schmader et al. (2004) found that 74% of the 1,644 drugs prescribed for 208 older ambulatory patients with polypharmacy had one or more prescribing problems, including unnecessary or inappropriately prescribed medications, with adverse reactions ranging from diarrhea to renal (kidney) insufficiency. The most commonly occurring serious consequences of unnecessary or inappropriate drugs included hypoglycemia (low blood sugar) and renal failure. There are clear opportunities for improvement. An expanded discussion of problematic prescribing practices follows.
Empirical studies (e.g., Zhan et al., 2001) and literature reviews (e.g., Ginsberg, Hattis, Russ, & Sonawane, 2005; Kennerfalk, Ruigomez, Wallander, Wilhelmsen, & Johansson, 2002) have demonstrated that older adults are more likely to be in poor health and use more, even a disproportionate number, of self-administered and prescribed medications for multiple reasons and conditions. Family and general practitioners, in particular, can use the help of psychologists who know about the special problems older adults face. Goulding (2004) found the odds of inappropriate prescribing higher in visits to family and general practitioners than to other physicians, with the odds of an older adult receiving an inappropriate prescription rising with each additional prescribed drug. Further, as the number of medications rises, the likelihood of an untoward event increases (e.g., Flaherty, Perry, Lynchard, & Morley, 2000; Zhan et al., 2005). According to Delafuente's (2003) review, there is a probability of over 50% for having a drug interaction occur when an older adult takes five medications, with the probability increasing to 100% when taking seven drugs.

Polypharmacy and subsequent drug–drug, drug–body, and/or drug–disease interactions, discussed in more detail below, can precipitate secondary pharmacological actions and effects, as does not taking a medicine as prescribed. These effects can be misconstrued for an additional or worsening disease, or a dosing problem. Such misattributions contribute to untoward geriatric syndromes such as confusion, falls, and incontinence, all risking treatment and prescription cascades. Cascade effects add to the risk of serious untoward events and unnecessary health care utilization and costs (e.g., Delafuente, 2003; Monane et al., 1997; Williams, 2002). The cascade effect is responsible for multiple medical complications, particularly in older adults. For example, medications with anticholinergic side effects, including sedation and mental status changes, can lead to a fall, a broken hip, hospitalization, and rehabilitation, among other things. A prescribing cascade occurs when a medication is added to treat the side effects of a drug that is already on board, adding to the risk for harm. These are potential prevention opportunities for psychology and psychologists.

**Physiology**

When one is working with older adults, it is particularly important to understand the interplay of aging, physiology, chronic disease(s), and drugs as each (independently and in combination) plays an important role in the consequences of inappropriate or unnecessary polypharmacy. Pharmacodynamic interactions (i.e., the body’s drug sensitivity) affect both a drug’s action and its clinical manifestation (i.e., drug–body interaction). Further, drugs interact with diseases. Disease can interfere with the body's absorption, distribution, metabolism, and/or excretion of a drug. That is, disease and chronic illness can influence a drug's pharmacokinetics (University of Nottingham School of Nursing Educational Technology Group [UNSNET], n.d.). Drugs also interact with other drugs, foods, and supplements. These interactions can be responsible for serious, even devastating outcomes among older adults. Further discussion of these interactions follows.

Medications have inherent risks for older adults, especially given the probability of diminished physical reserves (e.g., cognitive, hepatic/liver, renal). Age-related physiologic changes, changing pharmacodynamics, altered pharmacokinetics, and comorbid chronic disease could alter a drug's bioavailability, that is, how much of the drug reaches circulation. For example, age-related body weight and composition changes (e.g., decreased lean muscle mass, increased fat mass, and decreased total body water) affect a drug’s distribution and clearance (e.g., UNSNET, n.d.). These drug–body interactions can alter, for example, expected drug levels building up or circulating the body and a drug’s action and effects.

Because of a combination of aging-related pharmacokinetic and pharmacodynamic effects, complete elimination of a drug from the brain and body tissues can take weeks. These changes can increase the risk of toxicity and drug–drug interactions that can lead to, for example, central nervous system changes, risking delirium or other mental status changes. For example, because of diminished hepatic and renal functioning, older adults have trouble clearing diazepam/Valium. This can lead to toxicity, causing such serious adverse events as confusion, lethargy, acute delirium, weight loss, and falls (Delafuente, 2003; McLean & Le Couteur, 2004; Rothschild et al., 2000; Straand et al., 2006; UNSNET, n.d.; Williams, 2002). Mental status change is an important presenting concern for many older adults and caregivers. Psychologists can offer safe and effective approaches to the care and treatment of many chronic conditions that older adults suffer, playing an important role in reducing the amount of unnecessary or inappropriate drugs that older adults take.

Incontinence (a common cause for admission into a nursing facility) can be associated with polypharmacy and can be complicated further by age-related changes in the genitourinary system, instructs DuBeau (2006). Older patients often suffer from sleep disturbances not caused only by age-related physical changes but by polypharmacy as well. Avidan (2005) noted in his review that sleep disturbances could result in cognitive changes, confusion, psychomotor retardation, and added risk for injury. Changes in pulmonary (lung) function are also associated with aging. Chronic hypoxic (insufficient oxygen intake) episodes resulting from, for example, sleep apnea or a lung disorder (e.g., chronic obstructive pulmonary disease) are associated with neuropsychological impairment or mental status changes. Difficulty breathing is also associated with anxiety. An older adult is particularly susceptible to orthostatic hypotension (precipitous lowering of blood pressure upon standing), a common precipitant of falls, because of age-related changes. Antihypertensive medicines and many other drugs can magnify this risk (e.g., Jasniowski, 2006).

Drug–drug and drug–disease interactions are more likely occurrences with older adults simply due to the numbers of medications that they use (e.g., Monane et al., 1997). With respect to drug–drug interactions, several common medication classes affect urine elimination, including for example, diuretics, medications with anticholinergic effects, and benzodiazepines. Drugs from many classes can cause orthostatic hypotension, including anticholinergics, antidepressants, anti-Parkinsonian agents, antipsychotics, opioids, and skeletal muscle relaxants, increasing the risk for falls and other serious adverse events (e.g., Jasniowski, 2006). Additionally, one medication can have more than one effect on an organ or organ system, causing multiple adverse reactions (drug–body interaction).

Psychologists can learn to distinguish between dynamic and physically (i.e., biologically, chemically) related contributors to a person’s presentation and experience. If, for example, the likely explanation for changes in mental status (gradual or acute) is
medication related, it would do well to know how to spot this possibility and, as suggested earlier, engage in open discussions with the prescriber, the client, and, with permission and when appropriate, the advocate and/or caregiver(s). Prescription practices are high among the modifiable causes of many important clinical problems that older adults suffer.

Loftis and Salinsky (2006) reported that Medicare beneficiaries have three of the most commonly experienced mental disorders, namely, anxiety, cognitive impairment, and depression. Older adults also have higher rates of diabetes, heart disease, cerebrovascular disease, and cancer (leading causes of death from chronic disease). Psychologists know that sometimes one disease process can be responsible for both mental and physical symptoms. Other times, the underlying mental state undermines healthy lifestyle choices, influencing the onset and management of some chronic diseases. In other cases, preexisting physical disorders can impair functioning, increase social isolation, and trigger mental health complications (e.g., Centers for Disease Control and Prevention, n.d.; Federal Interagency Forum on Aging Related Statistics, 2006). In many cases, there is a dynamic interaction. Add to this the differential effects of multiple medications or of drugs prescribed in too high a dose or continued for too long.

In their review, Hanlon et al. (2001) called attention to associations between diminished physical and instrumental activities of daily living and the number of prescription medications among community-dwelling women. Absent chronic conditions, the number of prescriptions that older adults fill averages 10.9 annually; with one or two chronic conditions, this increases to 24.6 prescriptions; with three to four chronic conditions, the number of filled prescriptions averages 44.0 per year. If the older adult has five or more chronic conditions, the number of filled prescriptions averages 60.6 per year (Federal Interagency Forum on Aging Related Statistics, 2006).

There is need for vigilant attention when one is working with older adults taking multiple medications, particularly in the community setting, where follow-up may be sporadic or intermittent. Older adults taking five or more medications are more likely to have inappropriate prescriptions (Steinman et al., 2006), with the frequency rising sharply as the number of medications taken rises. Older adults take three times as many prescription medications as do younger persons, mainly because of the increased prevalence of chronic medical conditions (Monane et al., 1997). Interestingly, but not surprisingly, age is a less important predictor or independent risk factor for adverse events than are medical comorbidities and functional status (e.g., Rothschild et al., 2000). So, age must be considered along with other important factors.

A fall, for example, is a high-risk event among older adults that can result in serious health consequences (e.g., fracture or intracranial hemorrhage). The high prevalence of comorbid diseases (e.g., osteoporosis) and age-related physiological decline (e.g., slower reflexes; weakening muscles secondary to decreases in muscle mass) often seen in older adults can turn even a relatively mild fall into a dangerous event. The probability of using a drug with a high fall risk increases relative to the number of medications taken, even after adjusting for comorbid conditions and disability (American Geriatrics Society, 2001; Flaherty et al., 2000; Jasenwski, 2006; Lawlor, Patel, & Ebrahim, 2003; Paniagua, Maphurs, & Phelan, 2006; Zieme et al., 2006). As many as 28 drugs have been associated with falling (Zieme et al., 2006), including antidepressants, antiepileptics, anti-Parkinson’s, anxiolytics, benzodiazepines, diuretics, hypnotics, neuroleptics, opioids, and sedatives that often affect the cardiovascular, central nervous, or the musculoskeletal systems (Delafuente, 2003; Ginsberg et al., 2005; Monane et al., 1997; Williams, 2002; Zhan et al., 2001, 2005).

Risky Medications

While drugs can be problematic under certain conditions (Rothschild et al., 2000) there are drugs that are frequently associated with adverse outcomes among older adults independent of diagnosis. Medicines considered inappropriate for use with older adults, regardless of medical diagnosis, fall into three categories, namely, those that must always be avoided, those that are rarely appropriate, and those that have some indication but are often misused (e.g., Zhan et al., 2001, 2005). Older adults taking more than the median number of prescriptions (14 prescriptions per year) can be three times more likely to receive potentially inappropriate medications in any of the three categories and almost two times more likely to receive a drug that should always be avoided by older adults (Zhan et al., 2001, 2005).

Older adult women are more likely to receive inappropriate medications, including antidepressants, antianxiety medications, and sedative/hypnotics, while Whites are more likely than Blacks and other minorities to receive one of the 33 higher risk medications (Goulding, 2004; Zhan et al., 2001, 2005). Prescription patterns, differential risks, and attitudes about taking medications among varied ethnicities, cultures, and so forth are worthy of more complete review and discussion but are, regrettably, beyond the scope of this article.

Psychotropics

Broadly defined, psychotropic drugs include any chemical substance that alters brain function. Those that are longer acting (i.e., stay in the body longer) can be the cause of serious consequences for older adults, including sedation, balance problems, impaired judgment, motor deficits, behavior changes, and sleep disturbances (e.g., Jasniewski, 2006; Loftis & Salinsky, 2006). Psychotropic medications commonly used to treat mental disorders include antidepressants, antipsychotics, anxiolytics, and stimulants. Many psychotropic medications have anticholinergic effects, including blurry vision, decreased gut motility (slowed peristalsis) causing constipation, dry mouth, orthostatic hypotension, sedation, voiding problems such as urinary retention and loss of bladder control from bladder hypotonia (low muscle tone), lightheadedness, postural instability, confusion, delirium, and behavioral disturbances.

First-generation antipsychotics (e.g., chlorpromazine/Thorazine and chlorprothixene/Nevan) have strong anticholinergic effects, sedative properties, and risk for extrapyramidal symptoms (Parkinsonian-like symptoms) and orthostatic hypotension that can lead to, among other things, falls, hip fractures, confusion, disability, and worse. The newer, so called atypical antipsychotics (e.g., quetiapine/Seroquel, olanzapine/Zyprexa, and risperidone/Risperdal) can also be problematic for the older adult. Some augment the effects of antihypertensive medications, exaggerating the risk for orthostatic hypotension (e.g., drug–drug interaction). Some oppose seizure medications, lowering the seizure threshold. Others cause glucose intolerance (e.g., drug–body and drug–disease interactions), affecting diabetes treatment (Straand et al.,
Psychotropic and cardiac drug interactions can result in serious and potentially life-threatening adverse effects such as arrhythmias (irregular heart rhythms). Combining diuretics and lithium can result in lithium toxicity and so on. These are clear arguments for applying effective psychological interventions (e.g., dynamic, cognitive and/or behavioral) to help address many of the problems that older adults suffer secondary to inappropriate polypharmacy.

Benzodiazepines (e.g., diazepam/Valium and alprazolam/Xanax), used to treat anxiety, have exaggerated actions in older people, increasing risk for serious adverse outcomes including drug dependence and sedation. Benzodiazepines can cause behavior changes, confusion, agitation, and hallucinations. They work on the central nervous system, having additive effects when taken in combination with other drugs that affect the central nervous system, including antihistamines, sleep medications, tranquilizers, and some pain relievers. Given this, anxiety and skeletal muscle relaxant agents are rarely appropriate for the older adult. Psychologists understand that a drug prescription is not the only, or always the best, way to address anxiety, among many other illnesses and conditions.

Tricyclic antidepressants (e.g., imipramine/Tofranil, nortriptyline/Pamelor, doxepin/Sinequan), while sometimes indicated, are drugs to avoid whenever possible (e.g., Zhan et al., 2001, 2005). They are highly anticholinergic and sedating, increasing the risk for impaired cognitive functioning (e.g., confusion), urinary retention in males, constipation, impaired vision, and falls.

As a group, barbiturates (sedative/hypnotics) are highly addictive and are drugs to avoid whenever possible (e.g., pentobarbital/Nembutal, secobarbital/Seconal). They can lead to excessive sedation, cognitive impairment, confusion, behavioral problems, and gait disturbances and impaired psychomotor performance leading to falls and fractures. The newer, short-acting hypnotics (e.g., zolpidem/Ambien) do not have the same side effects as do the longer acting ones and may be safer for older adults if taken on a short-term, intermittent basis.

Pain management with medication can be a particular challenge as narcotics are addictive and can lead to constipation, sedation, hallucinations, and confusion. Nonsteroidal anti-inflammatory drugs or NSAIDs (e.g., ibuprofen/Motrin; celecoxib/Celebrex) can cause serious problems, including central nervous system effects, bone marrow suppression, upper gastrointestinal bleeding, heart attack, and stroke. Television announcements now alert the public about the potentially dangerous consequences of NSAIDs. This is relevant to older adults, many of whom suffer with arthritis and other sources of pain (chronic and acute).

Antihistamines can cause extrapyramidal symptoms. The antihistamine diphenhydramine/Benadryl can counteract the effects of acetylcholinesterase inhibitors (e.g., donepezil/Aricept), used to treat Alzheimer’s disease. Importantly, antihistamines have potent anticholinergic properties, putting the older adult at high risk for confusion, delirium, and behavior disturbances.

Opportunities to Improve Care and Services

Psychologists can play a key role in preventing or minimizing geriatric syndromes and the other adverse events that older adults suffer due to inappropriate polypharmacy. Efforts to reduce such inappropriate drug use are not only possible, they can have a substantial impact on reducing medication-related morbidity and mortality (e.g., Flaherty et al., 2000; Zhan et al., 2001). As noted, older adults often endure complex treatment regimens (Hanlon et al., 2001). Acknowledging that differences in potential for prevention (Centers for Disease Control and Prevention, 1999) exist, large numbers of older adults can benefit from interventions that can serve to reduce the incidence of inappropriate polypharmacy. Psychologically based interventions may also prevent the need to increase doses of necessary albeit risky medications.

Primary care physicians prescribe 67% of psychopharmacological drugs (Finch & Phillips, 2005, as cited in Loftis & Salinsky, 2006). Of note, primary care physicians may not be board certified in geriatric medicine, yet treat and prescribe medications for many older adults. The number of geriatric psychiatrists is insufficient, especially in long-term care settings (American Geriatrics Society, 2003). And though there are as many as 50 prescribing psychologists in Louisiana, New Mexico, Guam, and the military, with bills for prescription privileges for psychologists currently being considered in nine states (e.g., LeVine, 2007), there remains much to do to adequately meet the present and growing needs of the older adult population.

Collaborative relationships with medication prescribers can be particularly critical when a given prescriber has limited knowledge of biopsychosocial aspects of aging and associated needs, effective interventions, and likely responses. Part of providing high-quality services includes understanding the experiences and knowing the side effects that older adults may have with frequently prescribed psychotropic medications and other high-risk medicines.

Interdisciplinary, even multidisciplinary team approaches can be effective in reducing inappropriate polypharmacy and improving health care outcomes (e.g., Cohen et al., 2002; Crotty et al., 2004; Saltvedt, Mo, Fayers, Kaasa, & Sletvold, 2002; Schmader et al., 2004; Williams et al., 2004). Some interdisciplinary work is part of a formal organizational structure and clearly defined. Sometimes, as with many independently practicing psychologists, the “team” structure is more informal but no less significant to the older adult receiving services. Assessment, monitoring, planning, coordinating, recommending discontinuation of risky medications (e.g., Jasniewski, 2006; Schmader et al., 2004; Williams et al., 2004), and initiating effective and safe psychological approaches are appropriate, even vital, roles for psychologists and can be a significant contribution to the well-being of our nation’s elders.

Polypharmacy is an important quality indicator (Espino et al., 2006). The drugs considered inappropriate for older adults can be a screening tool to assess services and responses. For example, an older adult taking potentially problematic medications can be flagged for special review to identify potential or actual medication-related problems (Fick et al., 2003). The screening can take place at any point of treatment, during initial screening and/or periodically thereafter. As Jasniewski (2006) has reminded us, older people may see several health care providers who may be prescribing medications “without being aware of other drugs their patient is taking” (p. 22). Psychologists, too, can verify medications and dosages to help ensure that they are appropriate and, when necessary, help resolve identified problems and answer clients’ questions. We can educate our clients, promote compliance where appropriate, and advocate for simplifying the medication regimen (e.g., Jasniewski, 2006; Monane et al., 1997), in
addition to offering other options for treating or addressing the older adult’s presenting concerns.

A different mind-set for treating common problems affected by lifestyle choices, among other things, can go a long way to reducing unnecessary polypharmacy. Psychological interventions (including dynamic, cognitive and/or behavioral approaches) can prevent or modify many chronic conditions and, as noted by Buelow and Chafetz (1996), are “...rooted in physical and neurochemical processes” (p. 54) in which drugs and psychotherapy can elicit the same neurochemical actions. There are nondrug methods for coping with insomnia, pain, and anxiety, for example, including relaxation techniques and guided imagery. Diet and exercise play major roles in preventing or delaying the onset of heart disease, certain types of cancer, stroke, Type II diabetes, obesity, high blood pressure, and high blood cholesterol, for example (Federal Interagency Forum on Aging Related Statistics, 2006; Jasniewski, 2006). Nonpharmacologic treatment for irritable bowel syndrome includes dietary and lifestyle changes (Ginsberg et al., 2005). Furthermore, pharmacological interventions are most effective when delivered in combination with psychotherapy (World Health Organization, 2001, as cited in Loftis & Salinsky, 2006). However, for nearly half of all patients taking psychotropic drugs, medication is the only form of treatment received (Donohue, 2006, as cited in Loftis & Salinsky, 2006). Even when medication is the necessary treatment, safer alternatives are often available (Zhan et al., 2005).

After educating ourselves, we have a role in educating others about safer prescription strategies, including choice of drugs, possible harmful effects of high-risk medications, specific problematic drug combinations (Straand et al., 2006), and the efficacy of behavioral and other psychologically based interventions either instead of, at times, or concomitant with medicines. Medication bottles must be adequately labeled. Yet, even more fundamentally, we need more studies as to appropriate medication use with older adults, including dose, duration, and the reason(s) the medication was prescribed (e.g., Rothchild et al., 2000; Zhan et al., 2001). Further, psychologists can be advocates. For example, advocacy efforts for Medicare reimbursement of management and evaluation services, performed by doctoral-level psychologists, could address insufficient access to quality health care services.

A culture change is in order. Psychologists are not simply adjuncts to care—psychologists are integral to quality health care and services. Psychologists schooled in the unique biopsychosocial issues facing older adults can modify the risks they face, including the serious consequences of inappropriate polypharmacy.

References


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