

> Statement of Objectives

After reading this lesson you will be able to:

1. Identify the need for special counselling attention in geriatrics
2. List factors contributing to drug-use problems in the elderly
3. Describe specific factors affecting medication adherence by the elderly
4. Describe the issues in dealing with geriatric patients
5. List different techniques and tools to assist counselling geriatric patients



COUNSELLING GERIATRIC PATIENTS

by Melanie Rantucci, M.Sc.Pharm., Ph.D

> Instructions

1. After carefully reading this lesson, study each question and select the one answer you believe to be correct. Circle the appropriate letter on the attached reply card.
2. Complete the card and mail, or fax to (416) 764-3937.
3. Your reply card will be marked and you will be advised of your results in a letter from Rogers Publishing.
4. To pass this lesson, a grade of 70% (14 out of 20) is required. If you pass, your CEU(s) will be recorded with the relevant provincial authority(ies). (Note: some provinces require individual pharmacists to notify them.)



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1. INTRODUCTION

Case 1:

CK is a 76-year-old woman who receives nine different medications every three months from pharmacist BB. She suffers from diabetes, CHF, arthritis, COPD, constipation and cataracts, and is a little hard of hearing. She seems frail and unsteady on her feet and most often receives her prescriptions by delivery. She calls the pharmacy to ask about a refill for one of her inhalers but seems unclear about which one she needs (she uses both salbutamol and orciprenaline). BB asks her to describe the colour and is able to identify it as the salbutamol, but notices in her record that she received it the previous week. CK sounds annoyed when the pharmacist tells her this and insists she did not get it. BB becomes annoyed also and says he will send another out but that CK should keep better track of her medications in future.

Pharmacists deal with elderly patients like CK more than any other patient age group.¹ This is a fast-growing group — 3.92 million Canadians over 65 in 2001 (about 12% of the population), expected to reach 6.7 million in 2021 and 9.2 million in 2041 (25% of the population).⁴ The proportion of Canadians over 85 years of age is growing even faster, with 430,000 in 2001 expected to reach 1.6 million (4% of the population) by 2041.⁴

Seniors consume 28 to 40% of all prescription medications in Canada.¹ Canadian studies report that three-quarters of seniors have taken a medication in the previous two days, up to an average of eight medications per day.^{2,3} This extensive use of medications by seniors is partly a result of the increasing morbidity that occurs with aging. On average, geriatric patients have six co-existing conditions, more often chronic (reported in 80%) than acute.^{1,4,5}

Of particular concern to pharmacists is the inappropriate use of these medications and drug-related problems (DRPs). DRPs, including drug interactions, adverse drug reactions (ADRs), lack of effect or excess effects and unnecessary use of medications, have been reported in up to 75% of seniors.⁹ This results in six to 28% of hospital admissions, as well as physician visits, drug therapy, ER visits, long-term care admissions and ultimately deaths, at an estimated cost of \$11 billion.^{3,8}

From 16 to 73% of medications used by seniors have been shown to be inappropriate, resulting from noncompliance and inappropriate prescribing.⁶ Studies in the elderly indicate that age does not appear to have an effect on compliance, however complexity of drug regimen and patient comprehension do affect compliance.⁷

Inappropriate prescribing has been more recently investigated as a factor in

DRPs. A Canadian study of community-dwelling seniors found that nearly one-fifth (16.3%) receive at least one potentially inappropriate medication. Other studies have reported from four to 53%.^{3,9}

Many of these problems are preventable (12% in a recent study of hospital admissions in Canada), creating an important role for pharmacists.¹⁰

A number of strategies have been proposed to reduce preventable drug-related problems (PDRPs) in seniors, including seamless-care programs linking hospital- and community-based pharmacists (to be discussed in future lessons) and improved communication between the patient and pharmacist to monitor and provide advice.⁸ To fulfill this role, pharmacists need to understand factors affecting drug-use problems in the elderly, how to deal with elderly patients and effective ways to counsel them.

FACTORS AFFECTING DRUG-USE PROBLEMS IN THE ELDERLY

MANY FACTORS CREATE AN INCREASED RISK for DRPs in the elderly, involving both patient and physician issues. Patient issues such as the “pharmaco-unique-ness” of geriatric patients have been recognized as most important, along with compliance, co-morbidities, polypharmacy communication and cultural issues.⁸

Physicians’ issues such as their lack of time, knowledge of medications, and inappropriate prescribing and access to care have also been noted as potential contributing factors for DRPs.

Patient Issues: The elderly are a heterogeneous group. Physiologic and cognitive changes that come with aging occur to different degrees and at different rates. To

varying degrees, aging results in physiologic changes to the gastrointestinal system (GI), fat and muscle distribution, serum albumin, hepatic blood flow, drug metabolizing enzyme activity and glomerular filtration rate which may alter absorption, distribution, metabolism and elimination of drugs, and result in increased sensitivity to drugs and adverse effects.⁶ Other than decreased renal function (creatinine clearance <50 mL/min) or body mass index (BMI <22), these effects of aging are not easily identifiable. It is considered wise to proceed with caution in dosing and carefully monitor for adverse effects.

Cognitive functioning also changes at varying rates with age. A decline in short-term memory may cause patients to forget how and when to take medications or the reason for taking them.⁶ Confusion may result from the degenerative process of aging, Alzheimer’s disease, or other dementias, but more often occurs due to sleeping problems, changing drug regimes, discharge from hospital or ADRs.¹¹ Drug-induced effects may also cause cognitive dysfunction such as memory deficits, hallucinations, lethargy, headaches, central nervous system depression, catatonic states, delirium and dementia.¹² Many classes of drugs can cause cognitive dysfunction including antidepressants, antiparkinson agents, antiepileptics, antipsychotics, benzodiazepines, cardiovascular drugs, corticosteroids, GI drugs, mood stabilizers, muscle relaxants, NSAIDs, and opioid analgesics.¹² When any of these drugs are used by elderly patients, the pharmacist should take particular note of the patient’s ability to respond and remember. Socioeconomic issues also affect elderly patients’ susceptibility to DRPs. One-third

of people over age 65 in Canada live alone (53% over age 85) and 80% need help for at least one activity of daily living such as housework, meal preparation and personal care.^{2,4} Paying deductibles or coverage for nonformulary medications may also be an issue since 19% of seniors (53% of elderly women) have low incomes.² Elderly patients may therefore need help getting food, taking or paying for medication, and reaching health-care services.

Age over 85 has been found to be an indicator of a greater risk of adverse drug events, so the very elderly should be identified for greater vigilance.⁶

Co-morbidities: Thirty-two percent of noninstitutionalized seniors in Canada suffer chronic pain or discomfort and 80% have a chronic health condition.^{2,4} Most common conditions include arthritis-rheumatism (reported by 55%), hypertension (39%), respiratory problems (24%) and chronic hearing problems, cataracts and diabetes.⁴ Having more than six chronic health problems has been identified as a risk factor for DRPs in the elderly.⁶ The most common drug-related problem identified in a Canadian study was “patient not receiving a required drug for a symptom.”^{3,8} Having multiple conditions makes DRP identification difficult because symptoms may be a result of an existing condition, a new condition, a natural result of aging or a drug effect. Symptoms may be unreported due to embarrassment (e.g. incontinence or forgetfulness), because they are not recognized (e.g. depression), or are attributed to normal aging (e.g. forgetfulness). Lack of knowledge about conditions can also lead to failure to report worsening symptoms or drug noncompliance.

FACULTY COUNSELLING GERIATRIC PATIENTS

ABOUT THE AUTHOR

Melanie Rantucci has a doctorate in pharmacy administration. Her research involved patient counselling for nonprescription drugs and factors affecting drug misuse in the elderly. She has published numerous articles on counselling, as well as books which have been distributed to pharmacists and pharmacy schools around the world. In addition, Melanie has presented workshops on patient counselling for practising pharmacists across Canada and in the U.S.

REVIEWERS

All lessons are reviewed by pharmacists for accuracy, currency and relevance to current pharmacy practice.

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Symptoms should be identified and followed-up for possible drug-related effects, and patients should be educated about their conditions, symptoms and treatment.

Polypharmacy: Taking six or more drugs has been indicated as a risk factor for DRPs in geriatric patients.⁶ Fifty-six percent of the elderly reported using two or more medications in 1997.^{4,13} They also self-prescribe nonprescription medications and herbal remedies, adding to the complexity of their regimes.

Although most of these drugs are appropriately prescribed, it has been estimated that seniors receive inappropriate drug therapy in 11% of physician office visits.⁸ Examples of drugs inappropriately prescribed include long-acting and short-acting benzodiazepines, drugs with anticholinergic effects, and long-term non-selective NSAIDs without cytoprotection.⁶ On the other hand, beta-blockers, warfarin and antidepressants are commonly under-utilized or under-dosed.⁶

Complexity of treatment, i.e. use of multiple drugs and multiple doses, is considered among the main causes of noncompliance in this age group, with an estimated 3.6 times increase in noncompliance with more than one medication.⁷ Multiple drug use results in drug interactions and adverse effects. The greater the number of drugs, the higher the frequency of ADRs, the less likely it is that the patient has knowledge of the drug, and the greater the possibility of being admitted to hospital for problems arising from noncompliance.^{6,7}

Elderly patients' prescription and nonprescription medications should be regularly reviewed and assessed for indication and interactions.

Compliance/Adherence: Nonadherence with medication regimens (both intentional and unintentional) ranges from 26 to 59% in studies of elderly patients.⁶ While nonadherence rates have not been found to be significantly different from other age groups, the causes may be different for the elderly. Reasons in elderly patients include misunderstanding the purpose, forgetfulness, intolerable adverse effects, difficulty hearing or seeing instructions, inability to take medication (difficult opening vial, trouble swallowing), belief that drug is not needed, fear

of side effects, perceived lack of efficacy, and cost.^{6,7} While personal characteristics (age, sex, education, marital status, social class), type of medication and dosage have not been found to affect adherence in elderly patients, patient understanding and comprehension has been found (along with complexity of treatment) to have an effect.⁷

Elderly patients must understand the purpose of all medications and have strategies to help with memory and organization.

Communication: Elderly patients are faced with a number of barriers to communication including vision and hearing problems, declining cognitive function, literacy and attitude. Ninety percent of people over age 60 have vision problems, with 6% reporting they cannot see well enough to read, even with glasses.⁶ Sixty percent experience loss of hearing and sound distortion, with 8% unable to follow a conversation even with a hearing aid.⁶ Often these disabilities are not immediately apparent and seniors may be reluctant to acknowledge that they are unable to hear or see information provided. Inappropriate response to questions, frequent requests for repetition, turning head so that ear is closer, squinting, cupping hand behind ear, speaking loudly and omitting word endings are indicative of such problems.¹⁴ Attention to the environment and use of modified counselling aids and approaches (e.g. voice amplification) can compensate.

Ability to learn may be affected by mental characteristics including intelligence, information processing, problem solving, and approach to learning tend to decrease with age. Fluid intelligence (perception of complex relations, short-term memory, abstract reasoning) gradually decreases with age, whereas crystallized intelligence (number facility, verbal comprehension, general knowledge) is maintained or increases with age.¹⁵ Information processing is affected so that there is increasing difficulty with registering new information and retrieving information.¹⁶ A decline in problem-solving ability may be associated with age due to a decline in short-term memory, difficulty organizing complex material, interference from previous learning, and difficulty disregarding irrelevant aspects.¹⁵ In their

approach to learning, the elderly also may be less motivated to learn, less active, more rigid and cautious.¹⁷ These aspects of cognition and learning in the elderly can be addressed by teaching strategies that compensate for this.

Literacy is also an issue when counselling seniors. Many printed materials require grade eight-level or a higher reading ability, yet seniors have, on average, lower levels of education than other age groups. More than one-third of Canadian seniors have no secondary education, and more than half are able to perform only simple reading tasks.^{4,18} Literacy and education levels will likely improve with the next cohort of seniors.

Attitudes are an important aspect of communication with the elderly, from the pharmacist's and the patient's perspective. Older people may perceive things differently than other age groups because they adhere to beliefs, values and perceptions learned in their younger years, such as the need to hoard medications, suffer in silence, prudishness about their body functions, and keeping health matters private.¹⁹ Their view of health professionals may be more respectful due to their knowledge and status, and they may expect an authoritarian approach. However, they may also hold them to higher standards and have a stereotypical view of how a professional should look (e.g. male, well-groomed, professional-looking). Elderly patients may also appear demanding because of their need to assert their independence, because they are sad, grieving the loss of a spouse, or lack social support.

Some pharmacists may see elderly patients in a stereotypical way, expecting them to be frail, confused, slow, hard of hearing, visually impaired and needy. People fear aging — dealing with the elderly is a reminder of this and may cause stress in the relationship.¹⁴

Cultural Issues: Elderly patients reflect Canada's diverse cultural mix, with one in four Canadian seniors having been born outside of Canada.⁴ Most have been in Canada 35 years or more (60%) and are acclimatized to Canadian culture. However, 3% of recent immigrants to Canada are seniors, with Asians being the fastest growing cultural minority.^{4,20} While the majority of seniors speak one or both of Canada's official languages, 4% can speak neither

(5% of women and 3% of men).

Seniors from certain cultural groups may have genetically inherited traits (e.g. sickle cell anemia in black communities, thalassaemia among those from the Mediterranean area, lactose intolerance in South Asian people) and height, weight and metabolism may be different such that it may affect the pharmacodynamics and pharmacokinetics of drugs.²⁰ Aboriginal seniors are another growing cultural group in Canada due to better health and subsequent longevity.⁴ However, they still have double and triple the rates of chronic conditions such as heart disease, hypertension, diabetes and arthritis compared to other seniors.⁴

Seniors from cultural minorities may also have different views about what causes illness and how to prevent or treat illness, and different perceptions of health-care professionals resulting in health behaviours that may increase the risk of DRPs. They may not report symptoms (due to side effects or illness). They may be noncompliant with medications because they treat chronic illness only when symptoms are apparent or because they believe Western medicine is too strong and fear side effects. They often self-medicate with traditional medicines that may interfere with prescription medication or be used to replace it.²⁰

ISSUES IN COUNSELLING GERIATRIC PATIENTS

WHEN PHARMACISTS COUNSEL ELDERLY patients, they need to recognize a variety of issues such as ageism, disabilities, memory and mental deterioration, learning style, and time management which affect our attitudes and communication.

Ageism: Our attitudes to the elderly may be complex and dependent on our own experiences. To a degree, the elderly are stereotyped as a cohesive group who are generally ill, rigid in thinking, and failing mentally. However, they are actually a diverse group, still largely active members of society. The relationship between the elderly patient and health-care workers may be tainted by these stereotypes,²¹ due in part, because we deal largely with the afflicted aged. Consequently, there is a tendency to provide largely custodial or palliative therapy to elderly patients and both groups may approach each other somewhat negatively.²¹

TABLE 1 Accommodations to Counselling and Compliance for Disabilities¹⁴

Disability	Accommodations
All disabilities	<ul style="list-style-type: none"> Be prepared for feelings Offer assistance Do not avoid eye contact Address patient directly (not care-giver) Allow extra time Attend to the environment Solicit feed-back to ensure understanding
Hearing problems	<ul style="list-style-type: none"> Do not yell Enunciate clearly Speak on side of good ear Face person directly Ensure adequate lighting Use simple sentences to allow for lip-reading Supplement verbal information with print materials, charts, diagrams
Visual problems	<ul style="list-style-type: none"> Identify yourself Use large print and colour coding or Braille labels as needed and available Vary sizes of medication container to help identify different medications Use audio-taped information where available
Physical disabilities	<ul style="list-style-type: none"> Provide simple-to-open containers Remove physical barriers to access – wide doorways and aisles, remove clutter Provide seating Home visit

Since chronic illness is more often the reason for interactions between health-care workers and the elderly, both parties become frustrated because there is no direct cure. There is uncertainty about how the condition will progress and be treated, and the patient may lose faith, often becoming noncompliant.²¹

Pharmacists must attempt to see the individual patient, beyond the elderly façade.

Disabilities: Elderly patients may have visual or hearing disabilities that hamper their ability to communicate. As well, one-quarter of Canadian seniors have a long-term disability or handicap which may affect their ability to access the pharmacy or physician's office or to administer medication themselves.⁴ Accommodations which can be made are shown in Table 1.

Emotional accommodations should also be made.¹⁴ The pharmacist may feel tension, frustration, embarrassment, aversion or pity when dealing with a disabled patient. The patient may feel frus-

tration, but also irritation with others' attitudes and may react aggressively or uncooperatively.

The environment is also important to consider. Issues such as wheel-chair accessibility, available seating, need for quiet surroundings and adequate lighting should be attended to. Counselling materials and medication-dispensing procedures should be adapted to assist patients to see, hear and understand information. It is important to allow adequate time for disabled patients to see, hear, move and understand. When they feel rushed, their disability may be accentuated.

When counselling disabled elderly patients, understanding can be ensured by asking for feedback in a way that places the onus on the pharmacist, not the patient. For example, ask, "So that I can be sure I have made myself clear, would you tell me how you are going to take this medication."

Pharmacists can also accommodate disabled patients by making home visits. This relieves nurses and home-helpers from

TABLE 2 Counselling Techniques and Tools for Geriatric Counselling

Technique/Tool	
Counselling Content	Identify DRPs History of conditions particularly GI, liver and kidney Complete drug use Assess drug-taking ability and factors that may contribute to noncompliance Refer patient for assistance as needed Provide information on side effects Keep it simple Use a variety of counselling methods Provide information in several sessions
Conduct Medication Reviews	At first patient meeting and when new drugs added Best by appointment In pharmacy, clinic, doctor's office or home Break into smaller sessions Use pre-planned format, e.g. "Just Checking" Focus on issues of importance to drug use in the elderly and various recommendations
Teaching Strategies	Use strategies to maximize learning ability Use key questions to enhance learning
Improve Compliance	Actions to reduce each factor that contributes to nonadherence
Family and Community Support	Educate and involve care-givers about drugs and DRPs Assist patients to find support if needed
Raise awareness	Offer services to elderly and care-givers Presentations in community

performing medication-related functions, improves compliance and reduces DRPs.²²

Memory and Mental Deterioration:

Pharmacists may be the first health professional to identify a senior patient experiencing difficulties with memory and mental functioning. Confusion over how or when to take medication, whether medication has been ordered, received or taken may become apparent when the pharmacist is counselling the elderly patient. It may be difficult to approach the patient directly about this, and should be done with tact. The patient may make excuses or deny any problems. If possible, family members and/or the patient's physician should be notified of concerns about medication problems resulting from this disability.

There are tests a health professional can administer to assess mental status such as the Short Mental Status questionnaire.²³ A series of simple questions are asked (e.g. name, address, year, month, day of week) and the patient is asked to do some simple memory tasks (e.g. name the Prime Minister, remember three items). Pharmacists may be in a position, during a

medication assessment, to administer such a test without offending the patient.

To assist a patient with failing memory, pharmacists can provide dosettes or blister packaging, and refer patients for home-care visits to assist in taking medication.

Learning Style and Time: Difficulty registering new information and retrieving information can be accommodated by simple format (i.e. short lists) and uncomplicated content.¹⁶ More reinforcement is needed to learn new material, so material should be reviewed regularly. Motor tasks tend to be done more slowly in order to be accurate, so time should be allowed for performing and learning tasks like inhaler use.¹⁵ Problem-solving ability can be assisted by providing simple, well-organized material, relating it where possible to previously learned material.¹⁵

COUNSELLING TECHNIQUES AND TOOLS FOR GERIATRIC COUNSELLING

PHARMACISTS SHOULD BE PREPARED TO approach counselling geriatric patients with a variety of accommodations, and mindful of the potential DRPs that can

arise. These are summarized in Table 2.

Counselling Content: It is critical to gather elderly patients' complete health and medication history, including non-prescription medications, herbal and folk remedies.

Part of an elderly patient's assessment should include a discussion of the home situation, social supports, need for assistance with daily living activities, and ability to take medications, and referrals for assessment by home-care, dietitian, social worker, or other health-care professionals as needed.

Regular medication reviews should be conducted with elderly patients as conditions, medications and dosage may change.

When DRPs are identified, patients, their families, care-givers and other health-care professionals involved should be informed of the problems and involved in developing plans to deal with them. Factors contributing to the noncompliance should be identified and resolved.

When counselling an elderly patient about a new drug, it is important to consider any assistance the patient may need in taking the medication, including issues such as scheduling in relation to other medications, diet and cognitive abilities.

Side effects should be discussed for new and continuing medications, as they can occur at any time. However, it is important that they be presented in a way that is not frightening and easily understood. Patients should be encouraged to report anything unusual, since symptoms may not be attributed to medication use.

Finally, because there is often so much information, it should be provided as simply as possible. To avoid overwhelming the patient, it may be necessary to schedule several sessions to cover information on many medications. A variety of counselling methods (e.g. verbal, print, AV) may relieve the volume of material. Providing the patient with a series of questions may help them organize their learning.

Conducting Medication Reviews:

Medication reviews should be conducted frequently with elderly patients. Following a pre-planned format is helpful in covering the necessary material. The "Just Checking" program is an ideal tool for this. Developed in 1999 by the Canadian Pharmacists Association, in collaboration with member pharmacists, sen-

iors and an expert advisory committee, the program has been extensively used and tested for efficacy by pharmacists.^{24,25} It includes a patient screening tool, a pharmacist assessment tool, and forms for documenting gathered information, identified problems and follow-up plan. There are tips on enhancing relations with older adults, dealing with specific communication issues, and dealing with specific problems such as reading labels and understanding instructions. The program is available in print or computer-based format from the Canadian Pharmacists Association (www.pharmacists.ca).

The following recommendations will guide pharmacists in conducting reviews to reduce DRPs in the elderly.^{8,12,26}

- Review medication profile of patients whose clinical condition has changed.
- Monitor regularly and have a high index of suspicion for adverse reactions (symptoms may present atypically or be attributed to medication) and interactions, particularly with alcohol and psychoactive drugs and during times of acute illness.
- Assess medications of elderly patients who fall or develop delirium.
- Drugs (particularly psychoactive drugs) should be started at the lowest dose possible.
- Aggressively review psychoactive medications and medications that may potentiate effects of psychoactive medications.
- Note extrapyramidal effects of many medications that may result in falls.
- Watch for drug-induced cognitive effects and warn patients of this potential.
- Where possible, reduce polypharmacy.
- Avoid drugs with high risk of cognitive effects such as hypnotics, narcotics, drugs with anticholinergic effects.
- Note the constipation effects of many medications.
- Document and communicate information and decisions to health-care team.
- Involve the patient and care-giver in care.
- Ensure the patient can use administration devices.
- Negotiate a regimen the patient can tolerate, manage and afford.

Teaching/Learning Strategies: Because elderly patients may have cognitive, hearing or vision problems, or may be frail and unwell, attention needs to be paid to ways that informational material is provided. The following strategies should be

used to maximize the elderly patient's ability to learn.

- Decrease distractions such as background noise, to allow patient to focus on learning.
- Utilize patient's experiences or knowledge to tie new learning to old.
- Pace the learning by making slower presentation of material. Allow the patient to learn in his or her own time. Pause frequently. Allow time to respond.
- Present material over several sessions.
- Organize material with introduction, overview, list of facts, summaries.
- Give concrete examples.
- Motivate the patient by asking and addressing their needs and desires. Provide rewards.
- Provide the same information visually (written or pictures) and verbally.
- Provide positive feedback (avoid criticism, provide encouragement).
- Attend to visual and auditory needs e.g. allow plenty of light, larger print, etc.
- Provide a list of key questions and answers to help understand their medication (e.g. What is the generic or brand name of the drug? What is the purpose of the drug? When should I take the drug? How is the drug best taken?).

Improving Compliance: To assist medication adherence in elderly patients, potential causes of nonadherence must be identified. During counselling, the pharmacist needs to assess the patient, the medication and the patient's environment to determine potential causes of nonadherence. A patient may have a variety of factors/reasons that will contribute to nonadherence. Here are suggestions on how to deal with specific reasons for nonadherence.

- Misunderstanding the purpose or belief in the medication - Identify the purpose of the medication on the label and/or medication chart. Educate the patient on how the drug will benefit them, and the potential effects of not adhering, e.g. risk of stroke if daily ASA is not taken.
- Forgetfulness - Use dosettes or charts with schedule agreed upon by patient in relation to their normal daily activities (e.g. take after walking dog in the afternoon).
- Adverse effects - Identify when adverse drug reactions are occurring, but also discuss strategies to deal with ones that

affect everyday life such as excessive urination, drowsiness or constipation. Recommend a change of medication to the physician if the adverse effects are dangerous or become intolerable.

- Difficulty hearing or seeing instructions
- Inquire and be alert to signs of difficulties. Provide written materials in larger print, and speak clearly in a quiet, well-lit area.
- Inability to take medication (difficulty opening vial, trouble swallowing) - Make easy-to-open packaging available. Ask if the patient has any potential difficulty taking a medication, with particular attention paid to physical issues (e.g. putting on a nitroglycerine patch when hands or shoulders are arthritic).
- Belief that drug is not needed or perceived lack of efficacy - Explain the purpose of the medication, how the drug will benefit the patient, and the potential effects of not adhering. If the patient is still unconvinced, negotiate with them for a trial period. Suggest ways to identify that the drug is working, such as regular blood pressure readings or checking pulse.

Explain how the medication will improve their quality of life (even if they feel they have little time left). Suggest they also discuss this with their physician.

- Fear of side effects - Elderly patients recognize that drugs have side effects and that some seniors are over-drugged. They may have personally experienced over-medication or hear from others who have. Rather than avoiding a discussion of side effects, it is better to clearly state the risk. "One in 100,000" is better than saying "occasionally" or "a few people." Patients often over-estimate the meaning of these generalizations. It is more important to describe symptoms they should watch for and what to do if they experience them. Balance this information with a discussion of the benefits of the drug.
- Cost - Fortunately, in Canada, most elderly patients have some insurance coverage for drugs. However there are some medications not covered. Delays for drugs to be listed in formularies mean that patients will occasionally have to pay for medications. Clearly justify the benefits (or recommend an alternative that is covered) and if possible refer the patient to community resources which may assist with payment.

• Complexity of treatment and number of drugs - The number of drugs should be kept to a minimum through regular medication reviews, discontinuing medications no longer needed, and ensuring that medications are not added just to counteract side effects of other medications. Where possible, once-daily dosing should be promoted. Charts and compliance aids can help where many medications are unavoidable.

Community and Family Support:

The patient's environment and support of family, friends and care-givers are important in preventing and reducing DRPs in the elderly. When possible, supportive individuals should be included in counselling sessions and provided with written and verbal information. When problems are identified, they should be involved in developing solutions (with the permission of the patient). If there is no such support available refer the patient to available community resources.

Raising Awareness: Elderly patients and their families are not always aware of the increased risks posed by drug therapy in elderly patients. Inform them of potential risks and valuable services pharmacists can provide such as medication reviews, dosettes or unit-dose packaging, charts and home visits. Outside of the pharmacy, make presentations to seniors' groups, and work with home-care and nursing agencies to raise awareness of the risks and benefits of medications and pharmacy services.

SUMMARY

IT IS IMPORTANT THAT PHARMACISTS ARE aware and equipped to identify and treat drug-related problems in the elderly and are comfortable dealing with this fast growing group of patients. Elderly

patients and their care-givers are very appreciative of pharmacy services, and it can be very rewarding for pharmacists, provided we are prepared.

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QUESTIONS

1. Pharmacists deal with many elderly patients because of all of the following EXCEPT

- a) There is an increasing number of seniors.
- b) Seniors demand extra health services.
- c) Seniors consume 28 to 40 % of prescriptions in Canada.
- d) The elderly have six medical conditions on average.
- e) Geriatric patients mostly have chronic conditions.

2. Regarding DRPs in the elderly, the following is/are TRUE.

- a) Increasing age is related to increasing noncompliance.
- b) Up to 75% of seniors have DRPs.
- c) Up to 90% of seniors have at least one inappropriate prescription.
- d) Many DRPs are preventable.
- e) Both b and d.

3. In Case 1 (in the lesson), which is a factor

contributing to the patient's DRPs?

- a) Literacy
- b) Cognitive impairment (forgetting)
- c) Self-prescribing
- d) Cultural issues
- e) Old age

4. In Case 1, which of the following appears to be an issue for the pharmacist, BB, in dealing with CK, the elderly patient?

- a) Multiple medication use

- b) Patient's hearing problem
- c) CK's memory
- d) CK's physical frailty/mobility
- e) All of the above

5. In what way could the pharmacist in Case 1 accommodate CK and improve counselling?

- a) Allow extra time
- b) Yell into the telephone
- c) Suggest a home visit (by pharmacist or home care)
- d) Provide written information
- e) Both a and c

6. All of the following classes of drugs are particularly noted to result in cognitive dysfunction in the elderly EXCEPT

- a) Antipsychotics
- b) Antilipidemics
- c) Muscle relaxants
- d) NSAIDs
- e) Corticosteroids

CASE 2:

VL is a 4-foot, 98-pound, 87-year-old, Asian patient. She lives alone and is on the following medications: lorazepam 1 mg HS, digoxin 0.25 mg OD, ASA 325 mg OD, sennosides OD, acetaminophen with codeine 30 mg q4h PRN, paroxetine 20 mg OD, hydrochlorothiazide 25 mg AM and multiple vitamin OD. She seldom comes to the pharmacy, but her neighbour, and occasionally her daughter, pick up prescriptions. The daughter calls the pharmacy to say her mother has just been released from hospital after a fall causing a broken ankle and needs all her medications refilled, all of which are covered by the provincial drug plan.

7. What recommendations would you make to VL's daughter?

- a) Make sure VL has her lorazepam and pain medication close to her bedside.
- b) Arrange for pharmacist to conduct a complete review of her medications.
- c) Get a three months' supply of all medications to avoid having to arrange for someone to pick up prescriptions.
- d) Get a dosette to help to organize her medications.
- e) Both b and d.

8. Regarding VL, which issue(s) would the pharmacist consider when checking for DRPs?

- a) Liver and kidney function
- b) Cultural issues
- c) Possible vision and hearing disability
- d) Physical disability
- e) All of the above

9. VL's daughter asks the pharmacist to provide some information to VL about paroxetine. The pharmacist should plan the education session with each of the

following considerations EXCEPT

- a) Avoid overwhelming detail of information provided.
- b) Schedule a long appointment to provide all the information in one session.
- c) Avoid printed materials in English until sure of VL's ability to read English.
- d) Provide multiple methods of education.
- e) Involve her daughter in educational efforts.

10. Given what is known about VL and her medications, which reason for noncompliance would be MOST likely for VL?

- a) Intolerable side effects
- b) Difficulty opening vials
- c) Forgetting
- d) Complexity and number of drugs
- e) Cost

11. The pharmacist arranges for VL's daughter to come with her mother to the pharmacy for a medication review. Which issue(s) should the pharmacist focus on in the review?

- a) Use of several psychoactive drugs
- b) Possible drug-related cause of fall
- c) Dosage of medications
- d) Possibility to reduce number of medications
- e) All of the above

12. All of the following are cultural issues the pharmacist should consider when dealing with VL EXCEPT

- a) Potential for genetically inherited traits affecting drug metabolism
- b) Potential self-medication with traditional Asian remedies
- c) Educational level
- d) English language fluency
- e) Ability to access physician

CASE 3:

DS is a 72-year-old patient who has reduced visual acuity, even when wearing glasses, and suffers from severe arthritis.

13. What accommodations should the pharmacist consider when counselling DS?

- a) Speak loudly
- b) Face DS directly
- c) Use simple sentences
- d) Provide simple-to-open containers
- e) Both b and d

14. Which assumptions that the pharmacist may make about DS are probably NOT true?

- a) Very unhappy and anxious
- b) Reduced intelligence
- c) No sexual interest
- d) Financially dependent on children
- e) All of the above

15. Health-care workers may feel frustrated and uncomfortable working with elderly patients due to all of the following

reasons EXCEPT

- a) Elderly have mostly chronic illnesses which have no cure
- b) Workers deal with elderly in poor health and rarely see healthy elderly patients
- c) See deteriorating physical and mental process with age as inevitable
- d) Elderly tend to be rude and uncooperative patients
- e) Tendency to stereotype elderly as rigid thinking

16. Which statement(s) is/are TRUE about learning and cognitive ability in the elderly?

- a) Intelligence declines with age.
- b) Relating new information to previously learned information assists problem solving.
- c) Providing long lists of information helps organize material for learning.
- d) Reviewing material frequently adds to confusion.
- e) A quick demonstration of inhaler use is usually sufficient.

17. In Case 3, which counselling techniques and tools should the pharmacist use?

- a) Teaching strategies to maximize learning ability
- b) Involve care-givers or family in education
- c) Conduct medication reviews regularly
- d) Identify factors that may contribute to noncompliance
- e) All of the above

18. To accommodate the needs of elderly patients, pharmacists should take all the following actions EXCEPT

- a) Make presentations to community groups about drug use and the elderly
- b) Offer home visits
- c) Offer to dispense medications in dosettes
- d) Provide written information sheets to all elderly
- e) Use a variety of counselling methods

19. Pharmacist LP is planning a presentation to a local seniors' group on safe medication use. What should he/she consider when preparing the presentation?

- a) Visual and hearing abilities of audience
- b) Negative attitudes to drug use
- c) Cultural issues
- d) Prepare detailed, printed handouts about common drugs
- e) Both a and c

20. Which drug effects should be focused on in a medication review with an elderly patient?

- a) Interactions with alcohol
- b) Constipation
- c) Anticholinergic effects
- d) Extrapyrmidal effects
- e) All of the above



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Feedback on this CE lesson

- Do you now better understand how to counsel geriatric patients? Yes No
- Was the information in this lesson relevant to your practice? Yes No
- Will you be able to incorporate the information from this lesson into your practice? Yes No
- Was the information in this lesson... Too basic Appropriate Too Difficult
- Do you feel this lesson met its stated learning objectives? Yes No
- What topic would you like to see covered in a future issue? _____

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