MEDICATION USE AND SENIORS

Older Canadians represent the fastest-growing segment of our population and are the largest users of prescription drugs. Seniors take more drugs than younger Canadians because, on average, they have a higher number of chronic conditions. According to the Canadian Institute for Health Information, in 2012, nearly two-thirds of seniors had claims for 5 or more drug classes, and more than one-quarter of seniors had claims for 10 or more drug classes. The number of drugs used by seniors increased with age.[1]

The use of multiple medications, or polypharmacy, is of concern in the senior population. The risk of drug interactions and adverse drug reactions is several-fold higher for seniors than for younger people. This phenomenon is associated with pharmacokinetic and pharmacodynamics factors in seniors, including changes in renal and hepatic function, increased sensitivity to drugs and, potentially, multiple medical problems. In older persons, adverse drug reactions are often complex and may be the direct cause of hospital admissions for acute care. Cognitive and affective disorders, for example, may be due to adverse reactions to sedatives or hypnotic drugs. Chronic pain is a common issue, and it is important to carry out research into and education for health care providers concerning the unique challenges of managing pain in older adults.

The CMA supports the development of a coordinated national approach to reduce polypharmacy and prevent adverse drug reactions. Prescribers must be vigilant to optimize pharmacotherapy and in reconciling medications, taking into consideration physiological changes as a person ages. Deprescribing should be considered, reducing or stopping medications that may be harmful or no longer be of benefit, seeking to improve quality of life.[2]

There has been considerable interest in determining which factors affect prescribing behavior and how best to influence these factors. Strategies that improve prescribing practices include evidence-based drug information provided through academic detailing; objective continuing medical education; accessible, user-friendly decision support tools available at point of care; and electronic prescribing systems that allow physicians access to their patient's treatment and medication profiles.[3]

The following principles define the basic steps to appropriate prescribing for seniors.

- Know the patient.
- Know the diagnosis.
- Know the drug history. Keep a medication list for each patient and review, update, reconcile and evaluate adherence at each visit. Instruct the patient to bring all prescription and over-the-counter medications, including medications prescribed by other physicians, and natural health products, to each appointment. In some provinces, pharmacists conduct medication use reviews for patients on public drug benefit programs.
- Know the history of use of other substances such as alcohol, tobacco, cannabis, opioids and caffeine.
- Consider non-pharmacologic therapy, including diet, exercise, psychotherapy or community resources. Continuing medical education in specific non-pharmacologic therapies is valuable. For example, evaluation and management of behavioural and psychological symptoms of dementia should be considered before anti-psychotic therapy. As well, Canadian standardized non-pharmacologic order sets should be developed for the treatment of delirium.
- Know the drugs. Critically evaluate all sources of drug information and use multiple sources such as clinical practice guidelines, medical journals and databases, continuing medical education and regional drug information centres. Monitor patients continually for adverse drug reactions. Appropriate drug dosage depends on factors such as age, sex, body size, general health, concurrent illnesses and medications, and hepatic, renal and cognitive function (for example, older people are particularly sensitive to drugs that affect the central nervous system).
- Keep drug regimens simple. Avoid mixed-frequency schedules when possible. Try to keep the number of drugs used for long-term therapy under five to minimize the chance of drug interactions and improve adherence.
- Establish treatment goals. Determine how the achievement of goals will be assessed. Regularly re-evaluate goals, adequacy of response and justification for continuing therapy. Time to benefit of prescribed medications should be a key consideration when providing care to seniors at end of life.
- Encourage patients to be responsible medication users. Verify that the patient and, if necessary, the caregiver, understands the methods and need for medication. Recommend the use of daily or weekly medication containers, calendars, diaries or other reminders, as appropriate, and monitor regularly for compliance. Encourage the use of one dispensary.

The Institute for Safe Medication Practices Canada has developed a program, *Knowledge is the best medicine* (https://www.knowledgeisthebestmedicine.org), that can be helpful to seniors and their healthcare team manage medicines safely and appropriately.

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[1] Canadian Institute for Health Information. Drug Use Among Seniors on Public Drug Programs in Canada, 2012: Revised October 2014. Ottawa, ON: CIHI; 2014.
[2] Canadian Deprescribing Network. *What is deprescribing?* Ottawa: CADEN; 2018. Available: https://deprescribing.org/what-is-deprescribing/ (accessed 2019 Jan 22).
[3] Canadian Medical Association. *A Prescription for Optimal Prescribing*. Ottawa: The Association; 2011. Available: https://policybase.cma.ca/en/permalink/policy10016 (accessed 2018 Nov 21).