

Editorial: Canadian Association on Gerontology Policy Statement: Seniors and Prescription Drugs

Statement of the Problem: Canada requires improved policies to guarantee safe, effective and accessible drugs for seniors.

Scope: Drug expenditures are responsible for an increasing proportion of Canadian health care cost, 9.9 billion in 1993² and 14 billion in 1996. Approximately one-third of the increases in cost are related to new drugs entering the market, and 24 per cent to increased utilization by patients (more prescriptions per person).³ Consumer cost-sharing (co-payments, co-insurance, deductibles) for prescription medication and provincial control over the list of drugs that will be insured in the public plan (the formulary) are the two main methods used to control costs in provincial health care systems.⁴ While in theory, cost-sharing and formulary restriction, are supposed to reduce the use of 'less-essential' drugs (drugs that have limited or no superior benefit in improving health status), in practice, cost-sharing appears to create financial barriers to drug access for both essential and less essential therapies.⁵⁻⁷ The consequences of cost-sharing and formulary restriction on the health and well-being of seniors has not been adequately investigated in Canada.⁸ While, the fiscal integrity of the Canadian health care system is of concern for all Canadians, current cost-sharing policies for prescription drugs penalize seniors who are in the poorest health, or who have the misfortune to have illnesses where the cost of therapy is particularly high.

Analysis: Some classes of medication are over-used by seniors, the most common being benzodiazepines and other sedative-hypnotics for the treatment of anxiety and insomnia,⁹⁻²⁰ and non-steroidal anti-inflammatory drugs (NSAIDs) for the treatment of musculo-skeletal problems mainly osteoarthritis.^{10,21,22,22-26,26} This is a problem because benzodiazepines increase the risk of fall-related injuries, motor vehicle accidents, and possibly cognitive decline,²⁷⁻⁴³ and NSAIDs increase the risk of fatal and non-fatal gastrointestinal bleeding.^{21,44,45,45-57} Overuse of medications appears to be related to several factors: i) the relative inaccessibility of alternate therapies for anxiety, insomnia and musculo-skeletal problems; ii) lack of knowledge of consumers and physicians about the risks of drugs and habituation potential for benzodiazepines; iii) difficulties in stopping

medication once it is started (patient resistance, physician time for review and education); iv) a communication gap between seniors and physicians (physicians believe patients expect medication, and seniors believe physicians prescribe medication rather than spending time to listen to their concerns); v) the use of multiple physicians and pharmacies with no single physician or pharmacist responsible for coordinating drug use, and; vi) the socio-demographic characteristics of the consumer – seniors, unemployed persons, the poor and women are more likely to use medication for anxiety and insomnia.^{58–62}

There are also issues surrounding under-use of drug therapy which have not been investigated extensively (i.e. how many people need drug treatments that are not getting it). Of the studies that have been completed, one common trend emerges. Some classes of medication appear to be under-prescribed to seniors – prophylactic therapy; estrogen replacement for osteoporosis,⁶³ betablockers for the prevention of myocardial infarction recurrence,^{64–66} and antidepressants for depression.⁶⁷ There are two hypotheses about why this may be occurring. One hypothesis is that seniors are more likely to be taking a number of medications, and have a number of diseases, and as a result, physicians are more reluctant to add another drug to a complex drug regimen because of its negative impact on compliance. The second hypothesis is that it represents an age bias, whereby treatment of older people is valued less than younger adults.⁶²

Another set of issues which deserves attention is inappropriate prescribing. Seniors are more likely to receive prescriptions for medication that are potentially inappropriate; 11 to 46 per cent of seniors receive at least one inappropriate prescription per year.^{9,68–78} Inappropriate prescriptions include drugs that are relatively contraindicated by virtue of co-existing disease (drug-disease contraindications), by other drugs in an individual's treatment regimen (drug-drug interaction, therapeutic duplication), by age (drugs contraindicated in older persons) or by treatment duration (excess duration). Prescribing errors account for approximately 19 to 36 per cent of drug-related hospital admissions.^{79,80} The co-existence of multiple prescribing physicians, the number of drugs currently in the market (over 24,000), the number of relative contraindications documented (over 33,000) and deficiencies in physician knowledge related to both age and training are important contributors to the risk of inappropriate prescriptions.^{81–83}

Adequate adherence to prescribed medication varies from 16 to 73 per cent. Both intentional and unintentional non-compliance with prescription medication leads to problems of drug-related illness.⁸⁴ The direct costs of non-compliance in Canada have been estimated to be between \$3.53 and \$4.49 billion per year.⁸⁵ The most important factors influencing compliance are the number of medications, the complexity of the regimen, the perceived usefulness of the therapy; side effects, and forgetting.⁸⁵ Simplification of the drug regimen, minimization of the use of less essential therapy, improvements in patient education, shared decision-making about pre-

scription drug use, and medication organizer and reminder devices can improve medication compliance.⁶²

Seniors are excluded or disproportionately under-represented in the evaluation of the safety, efficacy and effectiveness of new drugs.¹ Knowledge about the effect of new drugs on seniors is therefore limited, particularly for seniors who are more likely to be excluded from trials – those with a number of health problems who are taking a greater number of medications. As a result, physicians have little empirical information to guide the selection and use of new drugs for seniors who are in poorer health, the precise group who are at greatest risk of drug-related illness.

Recommendations: The Canadian Association on Gerontology, therefore, recommends that the federal, provincial and territorial governments in association with all health professionals and seniors work together to develop best practices and public education programs for the safe prescription and use of drugs.

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The CAG, therefore, recommends that the federal, provincial and territorial governments in association with key representatives of various health professions, seniors, and their key contacts work together to share information to minimize prescribing errors.

Editor's Note

The full list of references is available from the Canadian Association on Gerontology (info@cagacg.ca). Key References only are listed below.

Selected Key References

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