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Reducing polypharmacy in the elderly: Cases to help you “rock the boat”

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WHY IS IT SO HARD TO STOP MEDICATIONS? PHARMACISTS SEE it all the time—elderly patients taking 15, 20, sometimes 25 medications. Pill burden can be as high as 60 doses per day. Patients are unsure of the reasons for medications, take them haphazardly and often have other medications added to treat side effects. They tell us they hate taking these drugs. Family doctors express frustration, sometimes inheriting an elderly patient with little medication history and struggling to keep up with changes made during multiple hospital admissions or specialist visits. They feel pressured by various clinical guidelines to start medications, aren't sure what a patient is actually taking, may have difficulty distinguishing symptoms from side effects, but don't have a ready-made solution to the problem.¹

Polypharmacy is variously defined as high numbers of medications (e.g., more than 5-10), use of more drugs than clinically indicated or use of inappropriate medications. In 2009, 63% of Canadian seniors were taking more than 5 medications, and 30% of those older than 85 years were taking more than 10. The prevalence is even higher for those living in long-term care.²

The impact of polypharmacy on our elderly population is significant. It is associated with poor adherence, drug-drug interactions, medication errors and adverse drug reactions—including falls, hip fractures, confusion and delirium—accounting for a significant percentage of potentially preventable emergency room visits and hospitalization.^{3,4}

But interventions to reduce medication use are not consistently used. There are consensus-developed screening criteria for inappropriate medications, as well as algorithms and acronyms to help health care professionals conduct medication reviews to identify drug-related problems.⁵ However, there is little guidance with regard to how to implement suggested changes to reduce medication use. Many prescribers are reluctant to make such changes, often fearing adverse drug withdrawal events,⁶ and say they do not want to “rock the boat.”

In the Geriatric Day Hospital of Bruyère Continuing Care, our elderly patients often have multiple issues such as cognitive impairment, falls, pain and deconditioning. They attend twice weekly for functional assessment and rehabilitation with an interprofessional team. Patients referred for medication review are typically taking 15 medications per day and have an average of 9 drug-related problems.⁷ We see prescribing cascades (in which a medication has been started to treat a side effect of another medication) and adverse effects of drugs on multiple systems, including hypotension, impaired cognition and balance problems. One by one, over a 10- to 12-week admission, we taper and stop those medications for which we have little evidence for continued use and those that might be contributing to adverse effects. We focus on reducing pill burden, facilitating independent medication management, furthering knowledge and understanding of medication use and communicating changes clearly. The outcome can be amazing. We've seen patients demonstrate significant improvement in symptoms with reduction in medication.

Frustrated with the never-ending supply of patients suffering with polypharmacy, and the lack of broadly implemented clinical guidance to reduce polypharmacy, we have developed a series of case reports about polypharmacy in the elderly that demonstrate the strategies we employ to reduce medication use in our patients. Identifying drug-related problems, prioritizing them, using tapering approaches, monitoring for adverse drug-withdrawal events, reducing pill burden and appropriately using compliance strategies are demonstrated throughout these cases. As an interprofessional team, each member plays a role in helping to reduce medication use and monitor the effects. We have therefore designed the case reports so they can be used for interprofessional education in geriatric pharmacotherapy. The series is planned for the *Canadian Pharmacists Journal*, *Canadian Family Physician* and the *Canadian Medical Association Journal*. Each case

will link to online resources to facilitate interprofessional discussion.

We hope pharmacists and other health care professionals will find the strategies in this series supportive of their own efforts to reduce polypharmacy. With recent regulatory and remuneration changes, pharmacists are even better placed to actively participate in optimizing therapy in the elderly.⁸ We hope those who develop clinical guidelines will take note and consider how they might include “deprescribing” guidelines to further support tapering and stopping of medications

when evidence is limited or when pharmacokinetic and pharmacodynamic parameters affecting medication distribution and effectiveness change with age.⁸

We'd like to thank the Bruyère Academic Medical Organization for its support, our colleagues in the Geriatric Day Hospital of Bruyère Continuing Care for their collaboration and our patients who willingly work with us to taper their medications, particularly the many patients who enthusiastically agreed to share their stories. We hope you enjoy the series and welcome your comments and feedback. ■

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LETTER TO THE EDITOR

Clinical services

I TOTALLY AGREE WITH THE EDITORIAL IN THE MAY/JUNE issue.¹ In the 1990s, we were wondering (in hospitals) why more pharmacies were not offering clinical services, and we wrote about it and studied it, hoping to stimulate the development of such services. Later, we and others clearly showed that community pharmacists *could* make great clinical improvements in patient care—in research study conditions. In real life, we wondered why it has not expanded more, and Frankel and Austin² have provided a significant insight into the issue. The solution of taking up responsibility may be

harder to inculcate, but it must start and start hard in our faculties. We can make huge differences, and doing anything else is a waste of our time. ■

—William McLean, PharmD, FASHP, FCCP, FCSHP
Ottawa, Ontario

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