

## Point of View



## Polypharmacy in the elderly: finding the right balance

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Polypharmacy, the concurrent use of multiple medications by an individual, is a common and growing concern in the elderly population (1). It often stems from the need to manage multiple chronic conditions, leading to complex medication regimens. While medications play a crucial role in maintaining and improving the health of older adults, polypharmacy can pose significant challenges and risks. Striking the right balance between appropriate medication use and potential harm is a critical objective in geriatric care.

I participated as a delegate in the multidisciplinary Continuing Medical Education (CME) event titled "An Integrated Approach to Geriatric Health," organized as part of the United Nations International Day of Older Persons celebration. The common concern raised by various speakers was polypharmacy in the elderly. In this context, the aim of this article is to highlight several factors that can aid in managing medication overload in the aging population. This article explores the multifaceted issue of polypharmacy in the elderly, discusses its implications and provides insights into finding the right balance when managing medications for older adults. These factors are summarized into five key areas, each with a distinct focus.

### a. Prevalence and drivers of polypharmacy in the elderly

Polypharmacy is prevalent in the elderly population due to several factors:

- **Multiple chronic conditions:** As people age, they often accumulate chronic medical conditions such as hypertension, diabetes, heart disease and osteoarthritis. Each condition may require its own set of medications contributing to polypharmacy.
- **Specialist care:** The elderly often receive care from multiple specialists, each prescribing medications to address their area of expertise. This can result in overlapping or potentially conflicting drug therapies.
- **Non-prescription medications:** Over-the-counter medications, supplements and herbal remedies are frequently used by the elderly, sometimes without healthcare provider's knowledge, further complicating the medication regimens.
- **Medication adherence:** Adherence to complex medication regimens can be challenging for older adults, leading to

potential underuse or overuse of medications (2).

- Cognitive and physical changes: Age-related changes in cognitive and physical abilities can make it difficult for seniors to manage their medications effectively.

### **b. Risks and consequences of polypharmacy**

Polypharmacy in the elderly can have adverse effects, including:

- Medication related problems: Increased medication use raises the risk of drug interactions, adverse drug reactions and medication errors (1).
- Falls and fractures: Certain medications such as sedatives can increase the risk of falls and fractures in the elderly.
- Cognitive impairment: Some medications like anticholinergic drugs may contribute to cognitive decline in older adults.
- Decreased quality of life: The burden of managing multiple medications can negatively impact on older adult's quality of life and independence.

### **c. Strategies for finding the right balance**

- Medication review: Regular medication reviews by healthcare providers are essential to assess the appropriateness of each medication, potential interactions and the need for dose adjustments (1).
- Shared decision making: Engaging patients and their caregivers in shared decision-making processes can help align medication regimens with individual goals and preferences.
- Deprescribing: Deprescribing, the systematic process of discontinuing medications that may be unnecessary or

harmful, is a key strategy to reduce polypharmacy in older adults (3).

- Comprehensive geriatric assessment: Comprehensive geriatric assessments consider the physical, mental and social aspects of an older adult's health, assisting in the creation of personalized care plans.
- Polypharmacy guidelines: Evidence-based guidelines and tools, such as the Beers Criteria and the STOPP/START Criteria can assist healthcare providers in identifying and managing inappropriate medications (4-5).
- Medication therapy management (MTM): Medication therapy management services provided by pharmacists can help optimize medication regimens, improve adherence and reduce polypharmacy related risks.

### **d. The role of healthcare providers and pharmacists**

Healthcare providers and pharmacists play a crucial role in addressing polypharmacy in the elderly:

- Medication reconciliation: Healthcare providers should routinely conduct medication reconciliation to ensure accurate and up-to-date medication lists.
- Education: Providing clear and patient friendly medication information can enhance understanding and adherence.
- Regular monitoring: Healthcare providers should closely monitor patients' responses to medications and address any emerging issues promptly.
- Collaboration: Interprofessional collaboration among healthcare providers, including physicians, pharmacists and nurses is vital for coordinating care and addressing polypharmacy.

### e. Patient-centred approaches

A patient-centred approach to managing polypharmacy in the elderly emphasizes the importance of:

- **Communication:** Open and honest communication between healthcare providers, patients, and caregivers is key to making informed decisions about medication use.
- **Tailored care plans:** Individualized care plans should consider the patient's goals, values and preferences in managing their health.
- **Regular reassessment:** Medication regimens should be reevaluated and

adjusted as needed to align with the changing health status and priorities of older adults.

### Conclusions

Polypharmacy in the elderly is a complex issue that requires a delicate balance between the benefits and risks of medication use. Finding the right balance involves a combination of evidence-based strategies, patient-centred care, and interprofessional collaboration. By addressing polypharmacy effectively, healthcare providers can optimize medication regimens, enhance the quality of life for older adults and mitigate the risks associated with multiple medication use.

### Author Declarations

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