

“You Need a Medication for That”

Medication Myths in Older Adults



Winnipeg Regional
Health Authority

Office régional de la
santé de Winnipeg

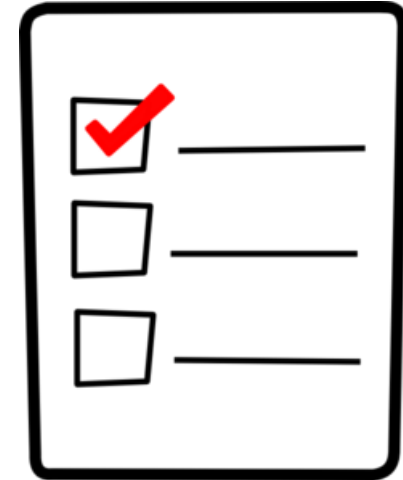


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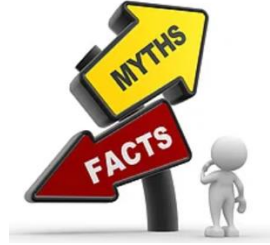


Outline

1. Medications and aging
2. Polypharmacy
3. Medications that may cause harm
4. Prescribing cascade
5. Deprescribing
6. Medication reviews
7. Resources for clients/residents/families



Myth 1: *The benefit of a medication is the same regardless of age*

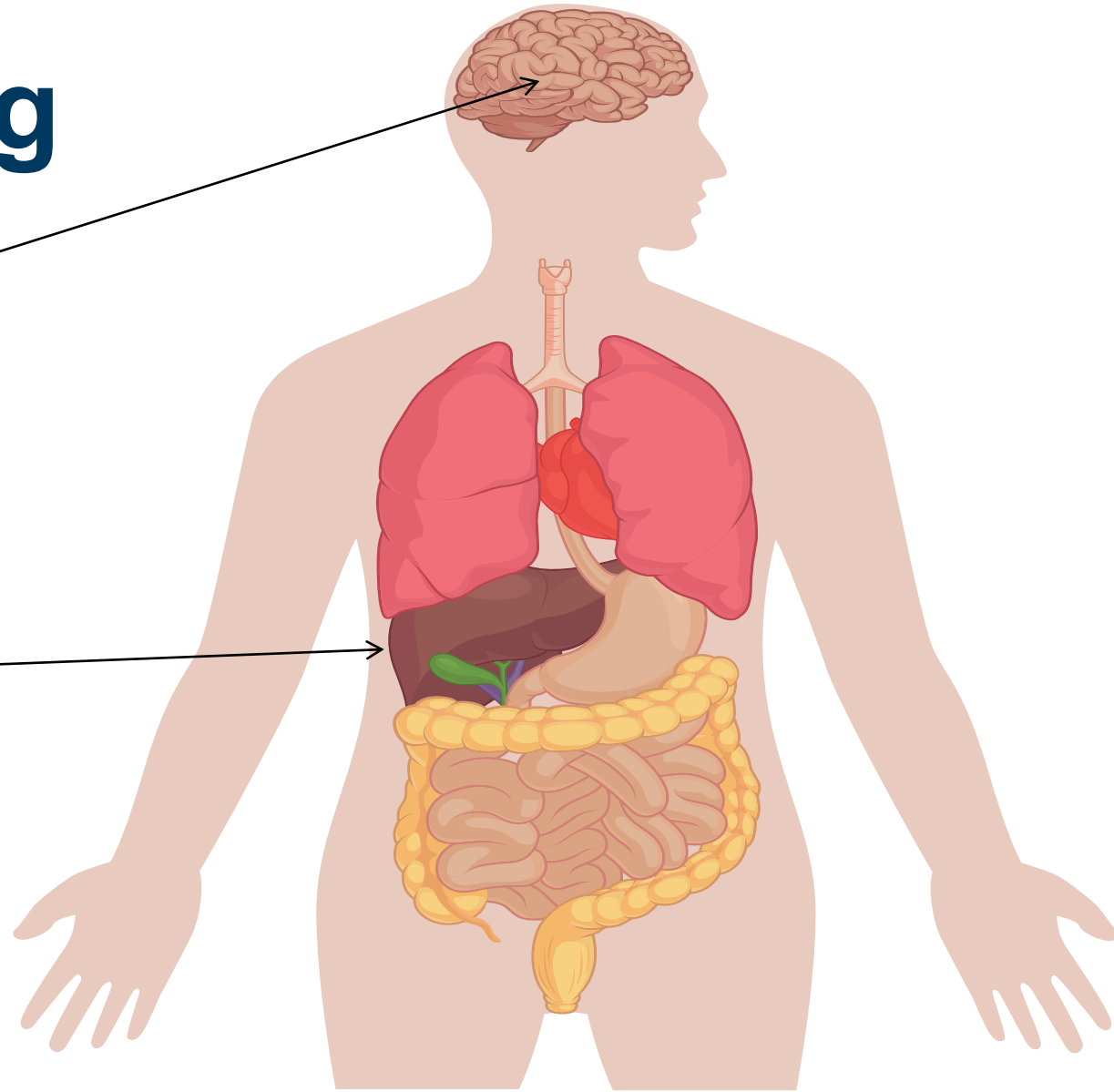


- Older adults often need to take more medications to manage chronic conditions
- The benefit the medication has can decrease and the risks can increase as we get older
- The risk versus benefits for each medication should be reassessed based on individual factors
- Alternate medications or dose changes may be required



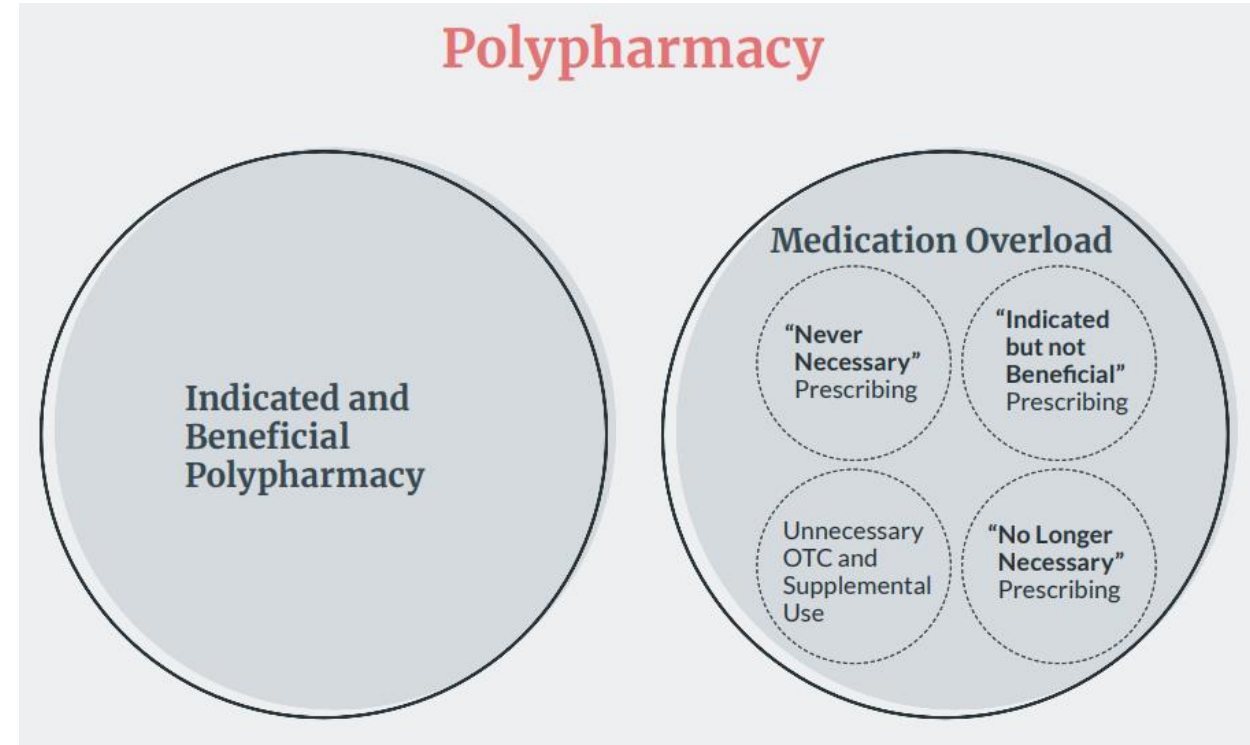
Changes with Aging

- The brain becomes more sensitive to drug effects
- Medications stay in our body longer because we have less muscle and more body fat
- Our liver and kidneys do not process medications as efficiently as when we were younger
- Our body contains less water and some medications can become more concentrated



What is Polypharmacy?

- Taking multiple medications
- Usual threshold is 5 or more medications, but no single agreed upon definition
- Can be helpful or harmful, depending on the person's conditions and the specific medications



What is medication overload?

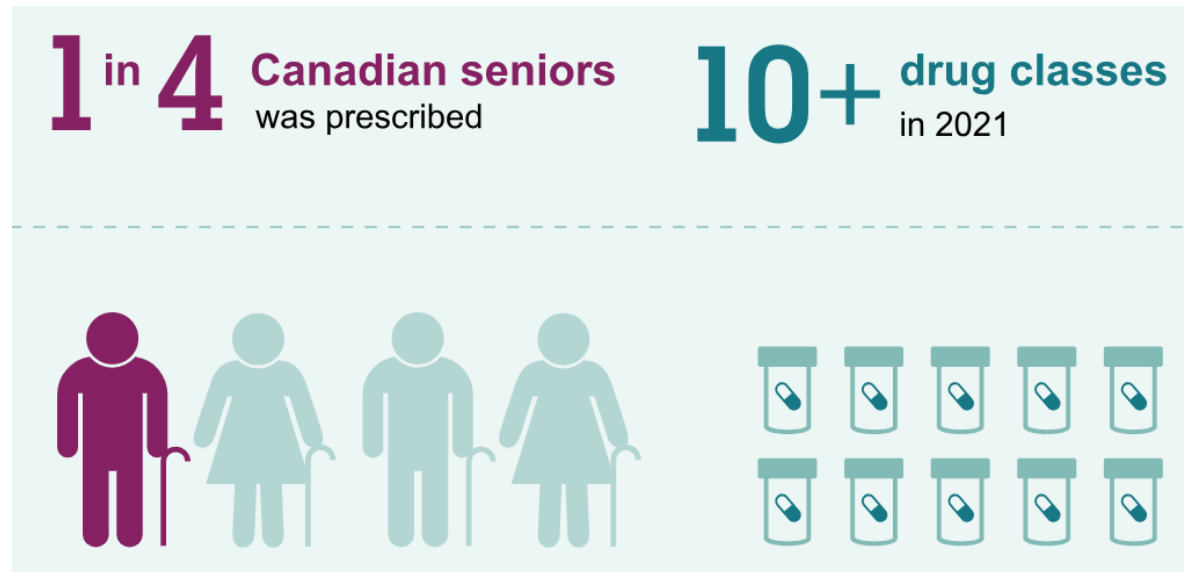
Medication overload is the use of multiple medications that pose a greater risk of harm than benefit. There is no strict cutoff for when the number of medications becomes harmful, but the more a person is taking, the greater their likelihood of experiencing harm, including serious, even life-threatening adverse drug events.



Polypharmacy & Canadian Seniors

Among Canadians 65 years and older:

- **3 out of 5 (63%)** prescribed 5 or more different drug classes
- **1 out of 4 (24%)** prescribed 10 or more different drug classes
 - Increases to **37%** over age 85
- **8%** prescribed 15 or more drug classes



Harms of Polypharmacy



Adverse Drug Events

For each additional drug in a patient's medication regimen, the **risk of adverse drug events increases by 7 to 10 percent.** ^{7,8,9}



Delirium

Older patients taking 6 or more drugs in the hospital are more than **twice as likely to experience delirium** compared to patients taking fewer drugs.¹⁰ Older people taking more than 10 drugs are nearly 2.5 times more likely than those taking fewer than 5 drugs to experience impaired cognition.¹¹



Falls

For older adults, taking 4 or more drugs is associated with an **18 percent greater risk of falls.** Taking 10 or more drugs is associated with a 50 percent higher risk of falls.^{12,13}



Mortality

For older adults, taking 6 to 9 medications is associated with a **59 percent greater chance of death** compared to taking no medications. Taking 10 or more medications is associated with a 96 percent greater chance of death.¹⁴

- Drug interactions
- Hospitalizations
- Cost
- Poor adherence to medications
- Errors/confusion in managing medications

Medication Review: 7-Steps to Appropriate Polypharmacy



“She was now on 9 drugs.
‘Not very many,’ we were told.”

– Johanna Trimble,
Patient Champion, Patients for Patient Safety Canada



Family Story

A Failure to Communicate

Myth 2: Medications don't increase the risk of falls



SENIORS' FALLS IN CANADA

FALLS are the **LEADING CAUSE OF INJURY** among older Canadians:

20-30% of seniors experience **1+** falls each year.




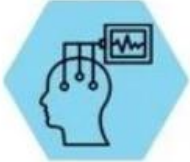






- Taking more medications increases your risk of falls
 - 4 to 7 medications **doubles** your risk of falls
 - 8 medications or more **increases even more** your risk of falls

Medications & Falls

- Medications can cause:
 - **Dizziness or drowsiness**
 - Less alert affecting coordination and potentially causing loss of balance
 - **Drop blood pressure or heart rate**
 - Increases the risk of dizziness and low blood pressure
 - This is particularly true when changing positions, for example, when moving from lying down to standing up
 - **Low blood sugar levels**
 - When blood sugar levels become too low (called hypoglycemia), it can make us feel weak or cause us to faint, leading to falls.



Medications that can increase your risk of falls

	Sleeping pills		Antipsychotic medications
	Antidepressants		Anti-epilepsy medications
	Opioids		Muscle relaxants
	Diabetes medications		Prostate medications
	Diuretics (pills that make you produce more urine)		Medications that dilate blood vessels

De Vries M et al., Fall-Risk-Increasing Drugs: A Systematic Review and Meta-Analysis: I. Cardiovascular Drugs. 2018

Seppala LJ et al., Fall-Risk-Increasing Drugs: A Systematic Review and Meta-Analysis: II. Psychotropics. 2018

Seppala LJ et al., Fall-Risk-Increasing Drugs: A Systematic Review and Meta-analysis: III. Others. 2018

Myth 3: *Sleeping pills help you sleep better*



Benefits

1 person out of 13
will experience one of the
benefits below.



Extra sleep:
approx. 35 minutes

Getting to sleep faster:
14 minutes

Harms

1 person out of every 6
will be harmed. This includes
delayed reaction time and
impaired cognition.



+50%
increase in falls

2X
increase in hip fractures

Driving:
equivalent to a blood-alcohol
level of 0.06-0.11%

Reassessing Sleep Medications



- Dependence on sleeping medications can occur within just 2 weeks of regular use
- The most common feature of dependence is poor sleep when skipping a dose
- Stopping sleeping pills too quickly can lead to withdrawal symptoms like insomnia and other more serious problems
- To avoid this, the dose should be reduced gradually
- Consult your doctor, nurse or pharmacist before stopping any medication
- Use a sleep diary to track sleep patterns
- Try non-medication strategies for sleep

A screenshot of a 'Sleep Diary' form. The form is titled 'Sleep Diary' and includes a subtitle 'Exact times are not necessary. Estimate are all you need.' It features a grid for tracking sleep patterns over a week, with columns for 'Day of the week' and 'Night' (01-09). The form also includes sections for 'Sleep Numbers' and 'Sleep Efficiency %'. The form is partially filled out with blue and green markings.

Sleep well, without medication

How to get a good night's sleep
without medication



my *Sleepwell.ca*



Myth 4: Antipsychotics are effective for all behaviours associated with dementia

Some common responsive behaviours include:



Psychosis

- Delusions (false beliefs)
- Hallucinations (hearing/seeing things that aren't there)



Reactions

- Defensiveness
- Resistance to care
- Severe verbal reactions
- Severe physical reactions



Agitation

- Dressing or undressing
- Pacing
- Repetitive actions
- Restlessness/anxiety



Depression

- Anxiety
- Guilty thoughts
- Hopelessness
- Irritability
- Sadness/tearfulness
- Suicidal thoughts



Apathy

- Lack of motivation
- Lack of interest
- Withdrawing from others



Mania

- Intense excitement
- Irritability
- Fast speech

Other: • Hiding or collecting things • Getting lost • Disinhibition (e.g., sexual)



Symptom Response to Antipsychotics



Likely to Respond to Antipsychotics

Antipsychotics **may** help to manage symptoms or responsive behaviours like:

- Hallucinations (distressed by hearing voices or seeing people who are not there)
- Delusions (feeling suspicious or paranoid that people are trying to hurt them)
- Severe agitation (extreme irritability, screaming)
- Severe physical reactions (shouting, hitting, kicking, or biting)



Unlikely to Respond to Antipsychotics




Antipsychotics **do not help** to manage symptoms or responsive behaviours like:

- Unsocial behaviour towards other people
- Apathy (no interest in what is happening)
- Disinhibition (like taking off clothes or sexual advances towards other people)
- Hiding or collecting things
- Repeating actions or words/chanting
- Resistance to a specific person
- Wandering or being restless
- Inability to sleep

Antipsychotics: Help versus Harm

- At best, antipsychotics resulted in improved behaviour in 1 out of 5 people with dementia when taken for 12 weeks.
- Research shows that for every 100 people with dementia who take an antipsychotic, 1 person is likely to have a stroke or die (mostly related to heart failure, sudden death, pneumonia).



 : Likely to be helped by antipsychotics
 : Likely to have no benefit from using antipsychotics
 : Likely to have a stroke or die*

Before starting an antipsychotic consider:

- *Are symptoms likely to respond to antipsychotic?*
- *Is there an imminent risk of harm to self and/or others?*
- *Are symptoms particularly disturbing, distressing, or dangerous?*
- *Do the potential benefits outweigh the harms?*



Monitoring Antipsychotics

- Assess over 1-3 weeks
- Effectiveness:
 - Frequency of symptoms
 - Severity of symptoms
 - Functional status (activities of daily living)
 - Quality of life
- Monitor side effects specific to the medication
- If lack of response or tolerability, adjustment may be needed
 - Dose increase (if not at maximum) or taper/discontinue



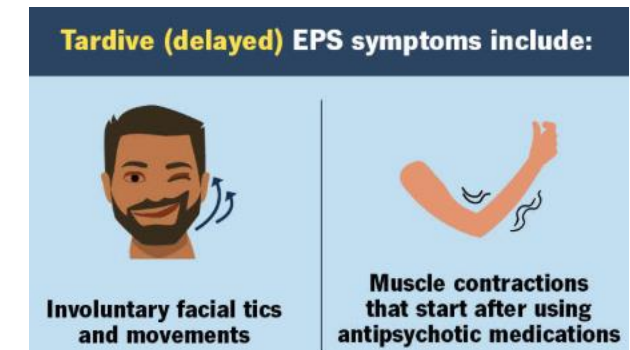
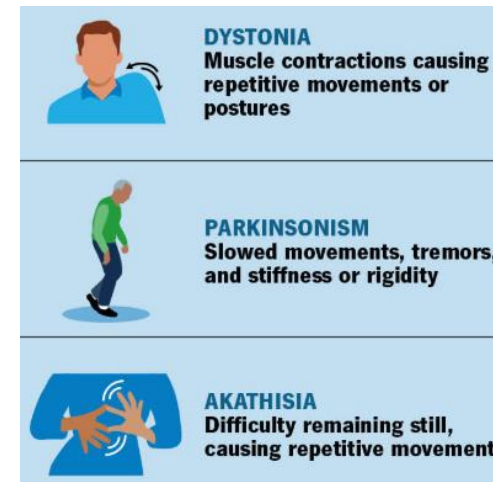
Antipsychotic Side Effects

- More common:

- Feeling sleepy or groggy
- Confusion
- Weight gain
- High blood sugar or cholesterol
- Dizziness caused by low blood pressure
- Constipation
- Swelling, usually around the ankles
- Problems urinating (more common in older men)

- Less common:

- Tight muscles that make the person shuffle or take short steps
- Shaking in the hands or arms
- Restlessness or needing to walk around a lot
- Twitching face



Reassessing Antipsychotics

- Discuss dose reduction or discontinuation if the antipsychotic:
 - Is not effective, or
 - Has intolerable side effects, or
 - Behaviours have been manageable and stable for 3-6 months
- Reassess after 3 months of antipsychotic use
 - Stopping or tapering antipsychotics may decrease risks
 - Behaviours may improve over time due to:
 - Disease progression, delirium resolution, adjustment to environment, effective non-medication strategies

Resources for Antipsychotics in Dementia



Centre for Effective Practice

Canadian Foundation for Healthcare Improvement
Fondation canadienne pour l'amélioration des services de santé

How Antipsychotic Medications are Used to Help People with Dementia

A Guide for Residents, Families, and Caregivers



Providing the Best Care, Support and Appropriate Use Of Antipsychotics For People Living With Dementia:

GUIDANCE FOR PEOPLE LIVING WITH DEMENTIA AND CARE PARTNERS

ANTIPSYCHOTICS:

- 1 Are not the best choice for reducing negative personal expressions and behaviours
- 2 Are prescribed to treat specific diagnoses
- 3 Can cause serious side effects
- 4 Can be deprescribed (under supervision), improving a person's quality of life and safety

Dementia is caused by physical changes that affect the brain. These changes can affect memory, thinking, mood, problem solving, and communication. A person living with dementia can become confused and depressed. **Negative personal expressions or behaviours** (e.g., agitation, resistance, shouting, or repeating actions) can be a response to the way a person feels about a change in environment, routine, or from an unmet need.

Negative personal expressions are also known as responsive behaviours, or behavioural and psychological symptoms of dementia (BPSD).

WHO SHOULD USE THIS GUIDE?

A person living with dementia or people who provide care or support for a person living with dementia.

Treating Disruptive Behaviour in People with Dementia: Antipsychotic drugs are usually not the best choice



People with Alzheimer's disease and other forms of dementia can become restless, aggressive, or disruptive. They may believe things that are not true. They may see or hear things that are not there. These symptoms can cause even more distress than the loss of memory.

Health care providers often prescribe powerful antipsychotic drugs to treat these behaviours:

- Olanzapine (Zyprexa® and generic)
- Quetiapine (Seroquel®)
- Risperidone (Risperdal® and generic)

If you are uncertain if your loved one is taking one of these medications please ask their health care team.

In most cases, antipsychotics should not be the first choice for treatment, according to the Canadian Geriatrics Society. Here's why:

Antipsychotic drugs don't help much.

Studies have compared these drugs to sugar pills or placebos. These studies showed that antipsychotics usually don't reduce disruptive behaviour in older dementia patients.

Antipsychotic drugs can cause serious side effects.

Health care providers can prescribe these drugs for dementia for behavioural symptoms, but they cause serious side effects.

Side effects include:

- Drowsiness and confusion—which can reduce social contact and mental skills, and increase falls.



- Weight gain.
- Diabetes.
- Shaking or tremors (which can be permanent).
- Pneumonia.
- Sudden death.

Other approaches often work better.

It is almost always best to try other approaches first, such as the suggestions listed below.

Make sure the patient has a thorough exam and medicine review.

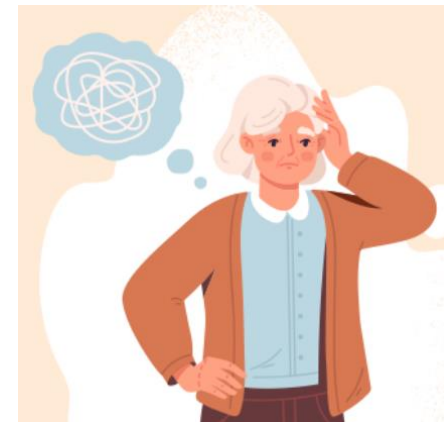
- The cause of the behaviour may be a common condition, such as constipation, infection, vision or hearing problems, sleep problems, or pain.
- Many drugs and drug combinations can cause confusion and agitation in older people.



Myth 5: Medications don't impact memory



- Medications can cause drowsiness, confusion, and a loss of balance which may interfere with attention, memory, language, task planning and execution, or other cognitive faculties.
- Older adults may be more sensitive to medication effects on the brain.
- Individuals who have a diagnosis of cognitive impairment or dementia should avoid taking medications that could worsen their cognition, especially when a safer and more effective alternative is available.



Which medications may affect memory?

- Antihistamines (allergy medication)
- Anti-nausea medications
- Urinary incontinence medications
- Sedatives (sleep medication)
- Antidepressants
- Antipsychotic medications
- Opioid pain medications
- Muscle relaxants
- Diabetes medications that cause hypoglycemia
- Blood pressure medications that cause low blood pressure
- Medications which can increase the risk of stroke

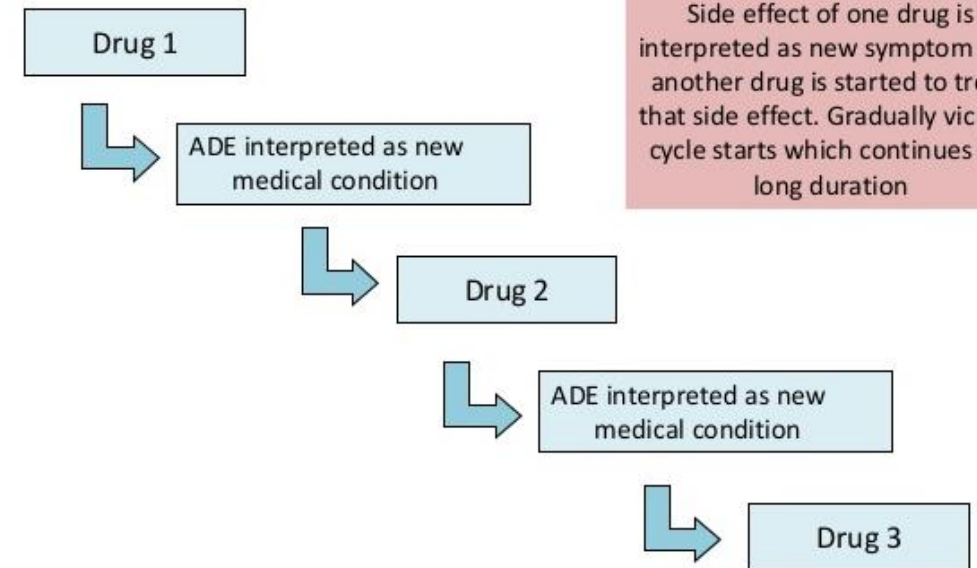


Myth 6: *A medication is needed for every new symptom*



• Prescribing cascade

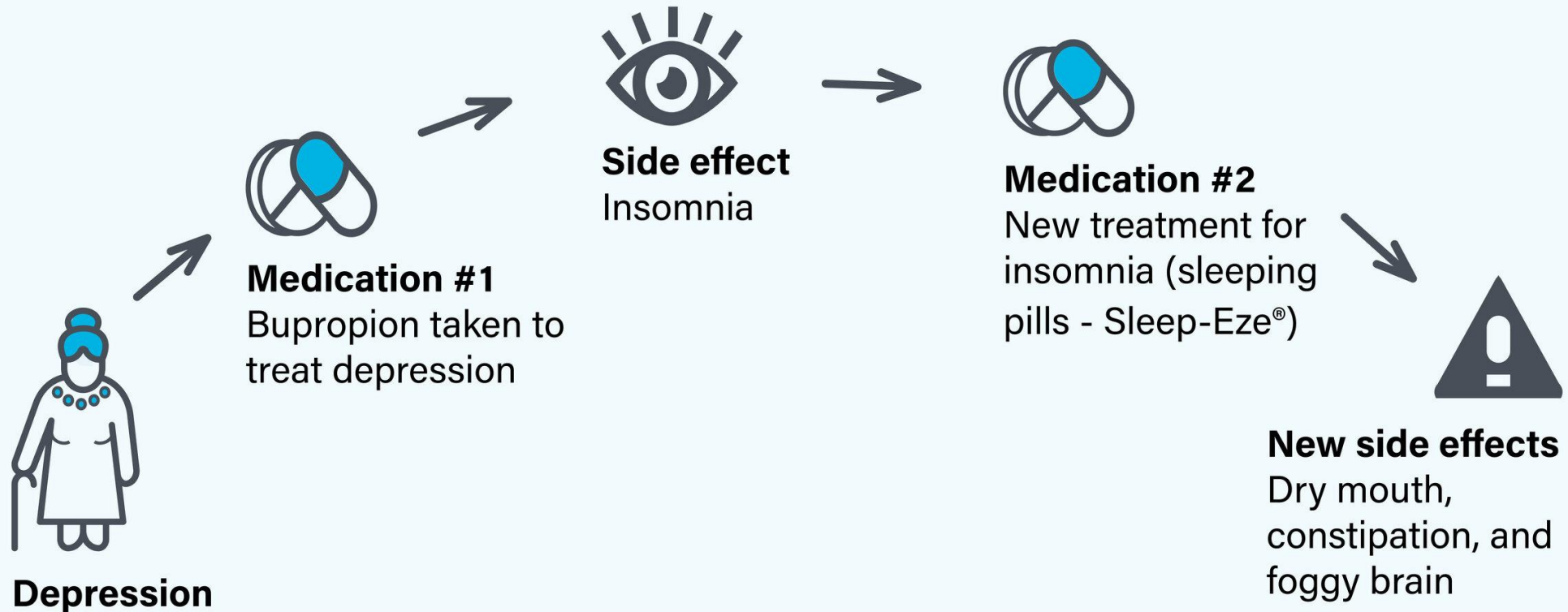
- New symptom may be a side effects of a medication
- If not recognized as a side effect, a new medical condition could be diagnosed
- A new medication prescribed to treat the side effects of the first medication



Rochon PA, Gurwitz JH. Optimizing drug treatment in elderly people: the prescribing cascade. *BMJ* 1997;315:1097.

Prescribing Cascade Example

Mrs. Reynolds' prescribing cascade



Myth 7: *Once we are on a medication, we need to take it for the rest of our life*



How do we get from here...



to here?



What is Deprescribing?

Deprescribing:

"The planned and supervised process of

DOSE REDUCTION or **STOPPING**

of **medication** that may be

CAUSING HARM

or

NO LONGER PROVIDING BENEFIT "

Reducing medications safely to meet life's changes

What is Deprescribing?



- Evidence-based, positive approach
- Part of the good prescribing continuum
- Identifying and discontinuing medications with unfavorable risk–benefit trade-offs
- Not about denying effective medications to appropriate patients
- Considers the context of illness severity, advanced age, multi-morbidity, physical and emotional capacity, life expectancy, care goals, and personal preferences
- Patient-centered intervention, with inherent uncertainties, and requires shared decision-making, informed patient consent and close monitoring of effects

Susan's Story



Deprescribing gave me
back my mom

A family's experience with
deprescribing



Myth 8: *My doctor won't want to review my medications*



5 STEPS to Participate in Shared Decision-Making About Medications.



Having conversations about **your medications**.

1. **CONSIDER** that a decision about your medication may need to be made.
2. **SHARE** goals of care and preferences.
3. **ASK** about the benefits, risks and expected outcomes of each option and listen to what the healthcare provider says about reasonable expectations.
4. Feel like you **UNDERSTAND** each option, ask questions if not sure.
5. **HELP** make an informed decision about medication options and let your healthcare provider know if you change your mind.

Take part in decisions about your medications with your healthcare provider. Consider using the prompts or questions below to help you when having these important conversations.

- “It is important to me that....”
- “What are the different options available to me? Are there any non-drug options?”
- “What are the risks and benefits of each option?”
- “I would prefer....”



5 Questions to Ask About My Multiple Medications

- Asking these 5 questions can help you make decisions together with your doctor, nurse practitioner or pharmacist.
- It's a way for you to know what's working well, and what might need attention.
- It can help you be more involved in decisions about your health and stay safe with your multiple medications.

5 Questions to Ask About My Multiple Medications

to help make decisions together with my doctor, nurse practitioner, or pharmacist



Taking multiple medications usually means taking 5 or more medications

What is the purpose of each of my medications?

Could I be experiencing any side effects or drug interactions?

Could lifestyle changes also improve my well-being?

Are all my medications needed?

What other information should I know about my medications?

For more information about the 5 Questions:



Click or scan



Institute for Safe Medication Practices Canada
Institut pour la sécurité des médicaments des patients du Canada



deprescribing.org



Canada's Drug Agency
L'Agence des médicaments du Canada



What is the purpose of each of my medications?

Medications can be used to treat or prevent a medical condition.

It is important to know the purpose of each medication so that you can check if they are working well.

"*Working well*" can mean different things to different people.

What does it mean for you? What matters most to you?

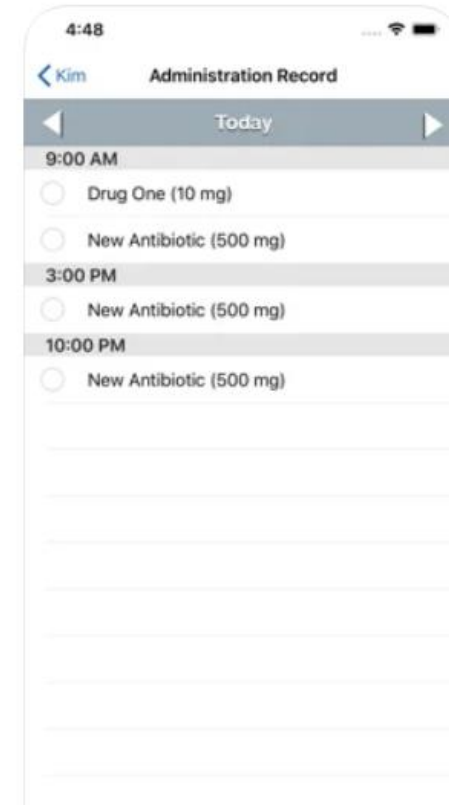
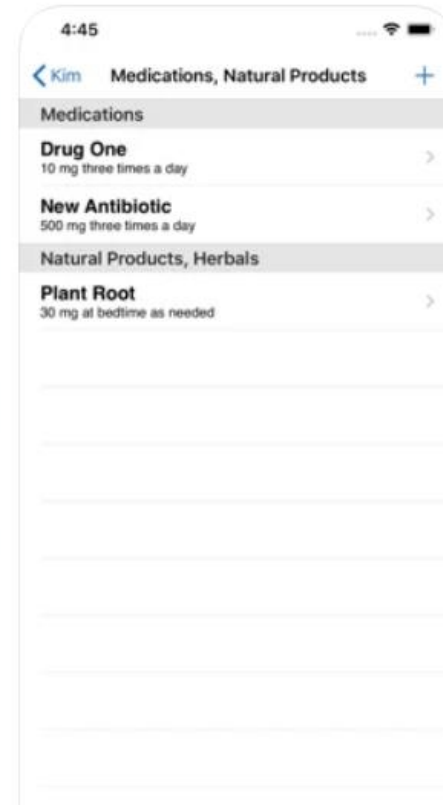
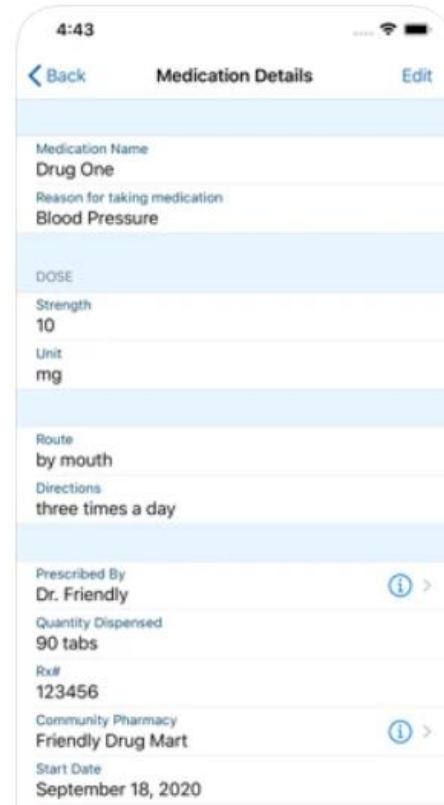
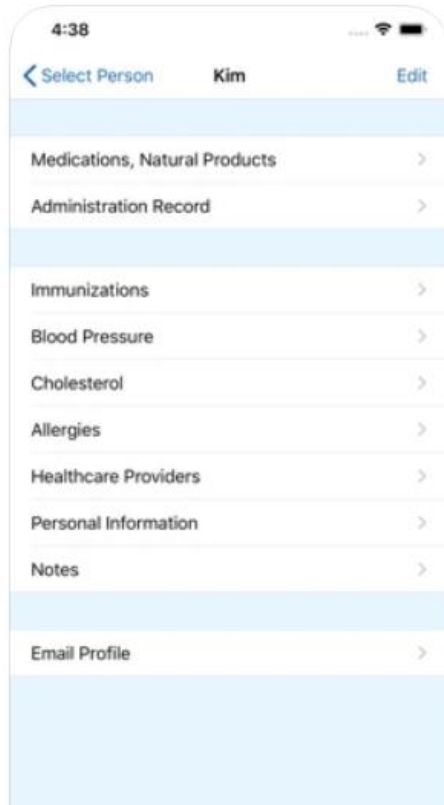


Remember to bring an updated list of all your medications including non-prescription medications, vitamins, and herbal supplements. Write down the reasons why you take each of your medications.

Medication App



MyMedRec 4+
ISMP Canada
Designed for iPad
★★★★★ 3.6 • 16 Ratings
Free



Could I be experiencing any side effects or drug interactions?



A side effect is a reaction to medication, for example, dizziness.



Sometimes medications can interact with each other and cause problems. For example, increased risk of bleeding or low blood pressure.



Always check with your doctor, nurse practitioner, and pharmacist before starting, changing, or stopping any of your medications.

What other information should I know about my medications?

Your doctor, nurse practitioner, or pharmacist might have additional information that is important for you to know, for example:

- safely managing your medication routine
- things to watch for (such as new symptoms)



You can make an appointment to talk with your doctor, nurse practitioner, or pharmacist about your medications.



You can ask your pharmacist for information about your medications, including if they are covered by a program, and alternative options.

Could lifestyle changes also improve my well-being?



Lifestyle changes can sometimes lead to a reduced medication dose or can replace a medication.



Talk with your doctor, nurse practitioner, and pharmacist about lifestyle changes like exercise, diet, or treatments such as physiotherapy.



Always check with your doctor, nurse practitioner, and pharmacist before starting, changing, or stopping any of your medications.

Are all my medications needed?

Your medications may need to change over time, for a variety of reasons. Sometimes medications are no longer needed because your health has changed.

Knowing the benefits (purpose), the possible risks (side effects or drug interactions), and possible lifestyle changes helps to inform decisions about medications.



When you talk with your care team, bringing a family member or friend to listen and take notes can be helpful.

MedSafer: Optimize Your Medications with a Prescription Check-Up!



MedSafer is a website that helps guide people aged 60 years and older, caregivers, and healthcare providers through a medication review or “prescription check-up”.

Available in both English and French, the website is backed by scientific evidence to optimize patients’ medications, based on their current health priorities. Developed with funding from Health Canada, MedSafer helps you and your healthcare provider work together to ensure that your medications are safe and effective!



MedSafer



<https://public.medsafer.org/public/start>



Winnipeg Regional Health Authority Office régional de la santé de Winnipeg

How to use MedSafer:

1 Start the MedSafer Interview

Go to the website and click on “Start the MedSafer Interview”. Here is the link to the website: public.medsafer.org.

2 Create an account

Follow the steps on the site to register.

3 Create a deprescribing report

- a. Keep all your medications nearby—the website will prompt you to enter all of them! You can include vitamins too.
- b. Answer the questions related to your health conditions. MedSafer doesn't need to know your entire medical history. Only a few key questions.
- c. Print your report and take note of your report code. This code is important to write down or take a photo of. It's how your healthcare provider will be able to log in and view your report.



4

Discuss your report with a healthcare provider



Bring your MedSafer report code to your doctor, nurse, or pharmacist and work together to review your medications.

Make sure you have access to your email on a device when you go to your healthcare provider. When your provider logs in, you'll need to check your email for a security code to gain access. This is to keep your health information private.



Is it time to review your medications?



Medication use is a fine balance



Medications can help us in many different ways. But medications can also cause us harm. That's why it's important to weigh the potential benefits and harms of taking a medication over time.

What is medication overload?



Medication overload means taking more medications than we need. It also means taking too many medications that, together, cause more harm than good.

What are too many medications?



There is no strict number. When we take even one medication that can cause more harm than good at a particular time in our life, one can be too many.

Medication overload causes harm

Medication overload can cause drug interactions and harmful side effects. Harms from medication overload can be very serious. Some examples include:



falls & fractures



hospitalizations



premature loss of independence



confusion & memory problems



car crashes



death

Who is at highest risk?



People who take multiple medications, older adults, and women are at greatest risk of medication harm. The more medications we take, the greater our risk of experiencing harm.

1 in 10

hospital admissions in older adults are the result of a medication side effect¹.

What can you do? Deprescribing may be an option.



Deprescribing means working with your doctor or another health care professional to stop or reduce the dose of a medication that you feel may cause you harm or is not helping you.

Preparing for a medication review with your doctor, pharmacist or nurse

1. **Book an appointment** with your doctor, pharmacist or nurse *specifically* to review your medications.

2. **Questions to ask yourself before your appointment:**

- How are my medications affecting me? Am I having any problems with them?
- If my doctor recommended that I stop taking one or more of my medications, would I be willing?

3. **Prepare your list of questions in advance!**

Here are 5 questions to ask your doctor, pharmacist or nurse when starting a new medication or reviewing one you are already taking:

1. Why am I taking this medication?
2. What are the potential benefits and harms of this medication?
3. Can it affect my memory or cause me to fall?
4. Can I stop or reduce the dose of this medication (i.e. deprescribing)?
5. Who do I follow up with and when?



Remember to write down any other questions you would like to ask about your medications, too.

4. **Bring an up-to-date medication list to your appointment.** Ask your pharmacist for a list of all your medications, or make your own ([visit DeprescribingNetwork.ca](https://www.deprescribingnetwork.ca) for a [sample record](#)). Include over-the-counter medicines and supplements.



Learn more about deprescribing and medication safety at [DeprescribingNetwork.ca](https://www.deprescribingnetwork.ca)

References

1. Parameswaran Nair, N., Chalmers, L., Connolly, M., et al. (2016). Prediction of Hospitalization due to Adverse Drug Reactions in Elderly Community-Dwelling Patients (The PADR-EC Score). PLoS One, 11(10): e0165757. <https://doi.org/10.1371/journal.pone.0165757>

PROMOTING SAFE AND APPROPRIATE USE OF MEDICATIONS
FOR ALL CANADIANS

RESOURCES FOR THE
PUBLIC

RESOURCES FOR HEALTH
CARE PROVIDERS

[Français](#)

The Canadian Medication Appropriateness and Deprescribing Network is a group of clinicians, educators, people with lived experience, policymakers, and researchers. We work together to produce, share, and apply information to promote the safe and appropriate use of medications.

www.deprescribingnetwork.ca



How to recognize medication side effects and take action: Frances' story, by her daughter Christine



Frances' Story

After Frances moved into assisted living, her daughter Christine noticed that her health was declining and she was no longer acting like herself. Then Christine discovered her mother's medication list.





**THE
TAKE-HOME MESSAGE**

- The risk versus benefit of medications may change with age
- Taking too many medications (polypharmacy) can sometimes be harmful
- Medications can be reassessed through a process called deprescribing
- Medication management should involve the whole healthcare team including shared decision-making with residents and families
- Many resources are available to support medication reviews and deprescribing



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Questions?

