Deprescribing Medications: Barriers and Enablers

Research Exchange Group on Aging
The Newfoundland & Labrador Centre for Applied Health Research
Presenter: Sarah Mackey
Presenter and Subject Expert: Dr. Justin Turner
12:30pm NST | November 26, 2020
Presentation Overview

- About Rapid Evidence Reports
- Background
- Research Question
- Literature
- Evidence Categories
- Contextualization to NL
- Conclusion
• Support evidence-based health system decisions
• Provide expedited information
• Synthesize the best evidence
• Focus on priority research topics
• Overview of issue/ background
• Scope/nature of the literature
• Key features of the evidence
• List of peer-reviewed research literature
• Selective list of policy reports/ grey literature
• Analysis of contextual issues that might influence the use of the evidence in the Newfoundland and Labrador healthcare context
• Guided by a subject matter expert
  • Dr. Justin Turner, BPharm, PhD
Medications can be great

• Necessary for health
• Improving symptoms
• Managing chronic conditions (e.g. diabetes, high blood pressure, chronic pain)
• Prolonging life expectancy
But more is not always better

• Polypharmacy (the use of multiple medications) increases the risk of
  • Falls
  • Hospitalisation
  • Drug interactions
Some medications are risky

Some medications the risk of harm outweighs the risk of benefit

BUT

31% of men
42% of women

across Canada are prescribed them every year
Some medication can be risky

- Some medications the risk of harm outweighs the risk of benefit
- e.g. Sleeping pills may help you fall asleep faster
  - 14 minutes faster on average
- But increase the risk of:
  - Falls & fractures
  - Motor vehicle accidents
  - Memory problems
Risky pills are common in Canadian seniors

37% of seniors are prescribed risky medications

$419 Million

$1.4 Billion
What is Deprescribing?

“Deprescribing is the process of withdrawal of an inappropriate medication, supervised by a healthcare professional with the goal of managing polypharmacy and improving outcomes.” (Reeve et al. 2015)
The research question:

“What barriers and enablers to deprescribing medications are identified in the scientific research literature?”
## Search Strategy

- PubMed, Embase CINAHL (from December 2013 and December 2019)
- Consultation with HS Librarian

### Inclusion Criteria

<table>
<thead>
<tr>
<th>Population</th>
<th>Adults or older adults including mixed populations where adults made up the majority, healthcare providers e.g., general practitioners, pharmacists, nurses</th>
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<tbody>
<tr>
<td>Intervention</td>
<td>Deprescribing in various forms including: Pharmacist-led medication reviews, Physician-led interventions, Prescriber education programs, Multidisciplinary interventions, Clinical support systems, Patient education</td>
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<tr>
<td>Outcome</td>
<td>Barriers and enablers to deprescribing medications</td>
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<tr>
<td>Setting</td>
<td>Community, Long-term care, General Practice, Mixed settings</td>
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Characterizing the Evidence: Notable Issues

• Qualitative Studies
• Defining “deprescribing”
• General deprescribing vs. deprescribing specific medications
• Study Populations
• Study Settings
• Categorizing barriers and enablers in the literature
What we included in our report

17 publications total:
  • 6 systematic reviews,
  • 1 comprehensive environmental scan,
  • 10 primary studies.

• Evidence Categories:
  • Patient-Level Barriers and Enablers
  • Provider-Level Barriers and Enablers
  • System-Level Barriers and Enablers
## Patient-Level Barriers and Enablers

<table>
<thead>
<tr>
<th>Barriers</th>
<th>Enablers</th>
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<tbody>
<tr>
<td>Patient attitudes and perspectives</td>
<td>Patient attitudes and perspectives</td>
</tr>
<tr>
<td>Lack of patient knowledge about medications/medication management</td>
<td>Patient-prescriber relationships</td>
</tr>
<tr>
<td>Patient Characteristics</td>
<td>Improving patient knowledge or understanding of medications or the deprescribing process</td>
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<tr>
<td></td>
<td>Patient characteristics</td>
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</table>
## Provider-Level Barriers and Enablers

<table>
<thead>
<tr>
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<th>Enablers</th>
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<tbody>
<tr>
<td>Provider perceptions and concerns</td>
<td>Provider perspectives and concerns</td>
</tr>
<tr>
<td>Provider concerns about inter-professional</td>
<td>Adverse drug reactions</td>
</tr>
<tr>
<td>relationships</td>
<td></td>
</tr>
<tr>
<td>Limitations of knowledge, skills, or experience</td>
<td>Provider-patient relationships</td>
</tr>
<tr>
<td></td>
<td>Improving provider knowledge, skills and experience</td>
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</tbody>
</table>
# System Level Barriers and Enablers

<table>
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<tr>
<th>Barriers</th>
<th>Enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of multidisciplinary coordination and communication</td>
<td>Access to professional or technical support</td>
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<tr>
<td>Time required for consultations</td>
<td>System-level knowledge and skills improvement</td>
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<tr>
<td>Other system-level barriers</td>
<td>Supporting system-level cultural and attitudinal changes</td>
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<td></td>
<td>Access to safer alternatives, including non-pharmacological options</td>
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Contextual Factors in Newfoundland & Labrador

Demographic & Population Health Factors

• NL has the oldest and the most rapidly aging population in Canada

• % of seniors taking either 5-10 medications or > than 10 medications is higher in NL than in most other Canadian provinces

• Rural areas have less access to non-pharmacological alternatives e.g. physiotherapy, psychological counselling

• Highest use of potentially inappropriate medications e.g. sleeping pills, reflux medications, opioids
NL has high use of inappropriate medications

Percentage of seniors who are chronic users of:
- Benzodiazepines
- Proton Pump Inhibitors

Source: Canadian Institute for Health Information
Organizational Capacity

- Deprescribing initiatives already underway and supported in the province e.g.,
  - Canadian Foundation for Healthcare Improvement (antipsychotic reduction),
  - Quality of Care NL and Choosing Wisely (various projects),
  - School of Pharmacy’s Medication Therapy Services Clinic, e-prescribing service called PrescribeIT®,
  - Long term care facility project,
  - www.SaferMedsNL.ca (3 yr universal deprescribing initiative)
    - Pharmacist scope of practice
    - Public awareness campaign
Conclusions from the report
Key messages:

• The research evidence on barriers and enablers to deprescribing medications that we reviewed is largely qualitative in nature and based on the perspectives of patients and providers rather than on tested interventions.

• Although evidence indicates some willingness on the part of both patients and providers to support deprescribing in principle, in practice deprescribing involves a complex interplay of patient, provider, and system-level factors that affect whether medication reduction or cessation will be enabled or inhibited.

• For older patients and patients with multiple morbidities, the complexity of medication management for patients and providers alike increases with the number of medications being prescribed. This complexity poses challenges to deprescribing.
Key messages:

- Research suggests that improvements in system-level communication and coordination of care among multiple providers would likely improve deprescribing practices. Other system supports that will help enable deprescribing include interface management, accurate patient records and IT support.
- When preparing deprescribing resources for patients, decision makers should consider literacy and health literacy levels, patient preferences, and the need to present both the risks and benefits of deprescribing clearly.
- Direct-to-patient education can promote deprescribing.
- Evidence suggests that receiving information about deprescribing directly from a healthcare provider is beneficial to patients.
QUESTIONS?
Link to full report with references