Optimizing medication in caring for seniors living with frailty: Five perspectives

Evolving Role of the Pharmacist

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Assessing and understanding *frailty* and high-risk *non-prescription* drug use in *community pharmacy* practice
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- Knowledge Users
- Collaborator
- HQPs & Analysts
Study - Background

1. **Non-prescription medication** use is increasing

2. **Vulnerable older patients** are particularly susceptible to adverse effects of these medications

3. **Community pharmacists** are experts in drug therapy management, and are accessible health care professionals that can help decrease these adverse effects
Frailty & Medication Use

- Frailty status may be associated with altered medication clearance
  (Hilmer, et al., 2011; Johnston, et al., 2015)

- Cognitive, psychological and social vulnerabilities are associated with medication management problems
  (Hayes, et al., 2009; Osborn, et al., 2012)

- Some (but not all) studies show greater risk of adverse outcomes in frail older adults using suboptimal medication compared to non-frail older adults
  (Bennet et al., 2014; Pugh et al., 2014; Runganga et al., 2014)
Study – Background

Phase 1

Phase 2

Phase 3
Phase 1: **Knowledge and Understanding**

- National Pharmacist Survey
- Community Pharmacist Focus Group
Phase 1: Knowledge and Understanding

National Pharmacist Survey

Community Pharmacist Focus Group

Older Adults / Family Carers Focus Group
National Pharmacist Survey

• **Released** on June 8, 2018 and **closed** July 20, 2018

• **Inclusion criteria:** Licensed practicing Canadian pharmacists
  • Any setting

• **43 questions**
  1. Demographic questions – Pharmacists
  2. Demographic questions – Patients
  3. Frailty knowledge, understanding & assessment

• **510 total responses**
  • Eligible for survey
  • Community pharmacists and non-community pharmacy
  • Includes all stages of survey completion
  • Potential duplicate responses
Eligible Respondents: Start of Survey

Complete Responses: overall RR=68.4% (349/510)
Data: A Closer Look
Results: Overall Data

• **Female** (>60%)
• 25 – 34 years old
• Ontario residents
• **Community pharmacists**
• In practice for 1 – 5 years
• Canadian pharmacy graduates

• Understanding of *frailty* is heavily based on *physical* function
It is important for pharmacist to know a patient’s frailty status...

- **Total Sample**
  - 80% strongly agree/agree

- **Community Pharmacist**
  - 77% strongly agree/agree
It is important for pharmacist to **assess** a patient’s frailty status...

- **Total Sample**
  - 56% strongly agree/agree

- **Community Pharmacist**
  - 50% strongly agree/agree
Do you **assess** for frailty in your pharmacy practice?

- **Total Sample**
  - 36% Yes (9% DK)

- **Community Pharmacist**
  - 30% Yes (9% DK)
Items Pharmacists Associated With Frailty

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>DECLINING PHYSICAL PERFORMANCE</th>
<th>FALLS</th>
<th>WEAKNESS</th>
<th>COGNITIVE IMPAIRMENT</th>
<th>MULTIMORBIDITY</th>
<th>UNINTENDED WEIGHT LOSS</th>
<th>HOSPITALIZATION</th>
<th>SOCIAL ISOLATION</th>
<th>APPROACHING END OF LIFE</th>
<th>OLD AGE</th>
<th>POLYPHARMACY</th>
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<tr>
<td>90.26</td>
<td>89.68</td>
<td>87.11</td>
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<td>66.48</td>
<td>65.62</td>
<td>62.46</td>
<td>61.6</td>
<td>60.46</td>
</tr>
</tbody>
</table>
(Free Text) Frailty Definitions

- Judgment Based Measures
- Physical
  Performance/physical frailty
- Multidimensional frailty/Frailty Index
- Resilience
- Increased Falls Risk
- Other
Frailty: Related, but distinct from disability and comorbidity...
Study – Background

Phase 1

I & II

Phase 2

Phase 3
Phase 2(I)

• Partnership with researchers at Statistics Canada
• Release of Cycle 5 of National CHMS survey
• Purpose: assess current patterns of non-Rx, Rx & NHP use by
  • Age, sex, frailty status
Phase 2 (II)
Waterloo Region Area Survey (WRAS)

Annual survey by the University of Waterloo Survey Research Centre of adults ≥20 years old in KW Region

- Web-based and telephone surveys
- Based on 2017 survey results ~80% of respondents ≥45 years old

Questions used:
Supplement on medication use designed by research team Includes standardized questions similar to those used in the CHMS

Potential future research:
Older adults’ medication use behaviours, AND unmet information and care needs as they pertain to nonRx medication use
Study – Background

Phase 1

Phase 2

Phase 3

I & II
Phase 3 (I): Frailty Screening Tool

- Frailty screening tools in community pharmacy practice, **assessing:**
  - Acceptability
  - Feasibility
  - Sustainability
Phase 3 (II): Knowledge Translation

A day-long symposium, **goals:**

1. Consensus on key priority areas for future research
2. Optimization of non-Rx drug use in older adults and clinical oversight
3. Improving communication between key players in non-Rx drug policy
Thank you...

Questions?