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

Evolving Role of the Pharmacist

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Canadian Frailty Network National Conference
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Assessing and understanding frailty and high-risk non-prescription drug use in community pharmacy practice
Research Team – PIs & CIs
9 Members (ON, SK, AB)

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  - Consumer Health Products Canada
- Amanda Moir
  - Health Canada

- Fares Health Group

- Areen Duqoum
- Samuel Dubinsky
- Sarah Leslie
- Yanling Guo

__________ 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...

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Total Sample</td>
<td>56% strongly agree/agree</td>
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<tr>
<td>Community Pharmacist</td>
<td>50% strongly agree/agree</td>
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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>Items</th>
<th>Percentage of Respondents</th>
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<tbody>
<tr>
<td>Declining Physical Performance</td>
<td>90.26</td>
</tr>
<tr>
<td>Decline in Functional Independence</td>
<td>89.68</td>
</tr>
<tr>
<td>Falls</td>
<td>87.11</td>
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<tr>
<td>Weakness</td>
<td>85.39</td>
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<tr>
<td>Accumulation of Health Deficits</td>
<td>82.81</td>
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<tr>
<td>Cognitive Impairment</td>
<td>82.23</td>
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<tr>
<td>Multi-Morbidity</td>
<td>71.63</td>
</tr>
<tr>
<td>Unintended Weight Loss</td>
<td>66.48</td>
</tr>
<tr>
<td>Hospitalization</td>
<td>65.62</td>
</tr>
<tr>
<td>Social Isolation</td>
<td>62.46</td>
</tr>
<tr>
<td>Approaching End of Life</td>
<td>61.6</td>
</tr>
<tr>
<td>Old Age</td>
<td>60.46</td>
</tr>
<tr>
<td>Polypharmacy</td>
<td>53.58</td>
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(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...
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
Phase 3 (I): Frailty Screening Tool

- Frailty screening tools in community pharmacy practice, assessing:
  - Acceptability
  - Feasibility
  - Sustainability
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...