Pharmacists’ perceptions of the barriers and facilitators to successful medicines management for people with dementia in primary care

Mairead McGrattan
PhD Student
School of Pharmacy, Queen’s University Belfast
Background

• People with dementia commonly suffer from other comorbidities
  - Polypharmacy
  - Complex medication regimens

• Currently over two-thirds of people with dementia reside in the community setting\(^1\)

• Community pharmacists are one of the most accessible healthcare professionals
  - Ideally situated to provide medicines-related support to people with dementia
Medicines management

“Encompassing the entire way that medicines are selected, procured, delivered, prescribed, administered and reviewed to optimise the contribution that medicines make to producing informed and desired outcomes of patient care”

Prescribing  Dispensing  Adherence  Review
The development of complex interventions (MRC 2008 Guidance)

- Feasibility/Piloting
- Development (Incorporating theory)
- Evaluation
- Implementation
The development of complex interventions (MRC 2008 Guidance)
Incorporating theory into intervention design

• Theoretical domains framework (TDF) \(^3\)
• Refined from 12-domain to 14-domain framework
• Addresses key domains that act as barriers or facilitators to healthcare professionals’ behaviour

14-domain TDF

<table>
<thead>
<tr>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
</tr>
<tr>
<td>Skills</td>
</tr>
<tr>
<td>Memory, attention and decision processes</td>
</tr>
<tr>
<td>Behavioural regulation</td>
</tr>
<tr>
<td>Social/ professional role and identity</td>
</tr>
<tr>
<td>Beliefs about capabilities</td>
</tr>
<tr>
<td>Optimism</td>
</tr>
<tr>
<td>Beliefs about consequences</td>
</tr>
<tr>
<td>Intentions</td>
</tr>
<tr>
<td>Goals</td>
</tr>
<tr>
<td>Reinforcement</td>
</tr>
<tr>
<td>Emotion</td>
</tr>
<tr>
<td>Environmental context and resources</td>
</tr>
<tr>
<td>Social influences</td>
</tr>
</tbody>
</table>
Study aim

• To explore community pharmacists’ views of medicines management for people with dementia, their approach to dispensing for these patients, and their perceptions of barriers and facilitators to successful medicines management for this patient group
Method: Sampling and recruitment

• As part of a larger study, a purposive sample of two general practices from each of the five Health and Social Care Trusts in Northern Ireland were recruited

• These practices provided information on the community pharmacists who dispensed the majority of their prescriptions (>75%)

• Pharmacists were approached by telephone and invited to participate
Method: Semi-structured interviews

- Conducted between November 2015 and March 2016
- Duration ranged from 33 to 80 minutes
- Written informed consent
- Guided by a TDF-based topic guide
- Digitally recorded and transcribed verbatim
Sample interview questions

Knowledge
What knowledge do you think you need as a community pharmacist when providing medicines management for patients with dementia?

Optimism
How optimistic are you that appropriate medicines management can be achieved for patients with dementia?

Reinforcement
What would encourage you to ensure medicines management is appropriate for patients with dementia?
Method: Data analysis

- Data was analysed independently by two members of the research team

- **Extensive familiarisation process** was undertaken which involved reading transcripts several times and listening to the audio recordings

- **Framework method** was used to systematically chart and index the data
  - Deductive approach using pre-defined coding categories-14 TDF domains

- **Content analysis** was employed to identify the specific barriers and facilitators within each domain
  - Interpretative summary table produced
## Results: Demographics

<table>
<thead>
<tr>
<th></th>
<th>Community pharmacists (n=15)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participant gender</strong></td>
<td></td>
</tr>
<tr>
<td><em>Male</em></td>
<td>8</td>
</tr>
<tr>
<td><em>Female</em></td>
<td>7</td>
</tr>
<tr>
<td><strong>Years of professional experience</strong></td>
<td>1- 27</td>
</tr>
<tr>
<td>(range)</td>
<td></td>
</tr>
<tr>
<td><strong>Healthcare Trust Area</strong></td>
<td></td>
</tr>
<tr>
<td><em>Belfast</em></td>
<td>4</td>
</tr>
<tr>
<td><em>Northern</em></td>
<td>3</td>
</tr>
<tr>
<td><em>Southern</em></td>
<td>2</td>
</tr>
<tr>
<td><em>Western</em></td>
<td>3</td>
</tr>
<tr>
<td><em>South Eastern</em></td>
<td>3</td>
</tr>
</tbody>
</table>
## Results: Facilitators and barriers within each domain

<table>
<thead>
<tr>
<th>Domain</th>
<th>Facilitators</th>
<th>Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social/professional role and identity</td>
<td>• Large role in medicines management&lt;br&gt;• Accessibility of community pharmacists</td>
<td>• Professional boundaries between pharmacists and GPs (specifically with regards to medication review)</td>
</tr>
<tr>
<td>Beliefs about consequences</td>
<td>• Prevention of falls/hospitalisations&lt;br&gt;• Disease control</td>
<td>• Belief patients will be non-adherent (overdose vs underdose)</td>
</tr>
<tr>
<td>Behavioural regulation</td>
<td>• Compliance aids&lt;br&gt;• Patient medication record&lt;br&gt;• Carer involvement</td>
<td>• Ensuring GP-led medication review takes place</td>
</tr>
<tr>
<td>Environmental context and resources</td>
<td>• Computer systems&lt;br&gt;• Compliance aids&lt;br&gt;• Carer/relative contact details</td>
<td>• Time/work pressures&lt;br&gt;• Access to patient data&lt;br&gt;• Finance</td>
</tr>
</tbody>
</table>
‘Social professional role and identity’

• Community pharmacists considered their role to largely consist of dispensing, monitoring adherence, and providing counselling to people with dementia, and their carers.

• Community pharmacists generally considered medication review to be the role of the GP.
‘Social professional role and identity’

“I suppose that I would say we have a really big role in this part [medicines management]... You have the beginnings of from the prescription, to dispensing, counselling the patient, changing the new medication, dispensing that accurately, making sure patients get their medication”

(CP2)

“But with medicines management as well I kind of feel maybe GPs feel that that’s their job slightly and they feel that we’re encroaching on their territory slightly so dual education in terms of GPs more accepting of us taking on those roles”.

(CP7)
'Beliefs about consequences'

- Community pharmacists discussed the benefits of appropriate medicines management for people with dementia in terms of:
  - Slowing disease progression
  - Preventing hospitalisation
  - Improving quality of life

- Strong belief among this group of healthcare professionals that patients with dementia are often non-adherent
‘Beliefs about consequences’

"You are going to have better control of the disease, not only the dementia but any other comorbidities that they have. And then quality of life for that person and life expectancy, they probably benefit from that”

(CP9)

“And if you haven’t explained it properly the what’s and whys of it all, you can maybe find in a few months’ time... you get another four or five boxes of unused medicines being returned to you”

(CP13)
‘Behavioural regulation’

• Community pharmacists considered that they had an important role in monitoring patient adherence in terms of:
  - Checking the patient medication record to see how regularly prescriptions are being ordered
  - Taking control of the ordering process
  - Checking compliance aids for adherence
‘Behavioural regulation’

“We can monitor their blister packs to see. When we’re giving over their blister pack we might ask to see their previous week’s blister pack and you can see what medication has been taken…”
(CP14)

“You have to sort of get on top of the doctors to review weekly boxes, because it could very easily be caught in the system and just automatically order, automatically order”
(CP9)
‘Environmental context and resources’

- Community pharmacists emphasised barriers within the community pharmacy setting to providing effective medicines management including:
  - Lack of time
  - Staffing issues
  - Limited access to patient medication records

- Facilitators were also recognised including:
  - Accessibility of GPs
  - Patient/ carer contact details
  - Pharmacy computer systems
‘Environmental context and resources’

“Again a full medical history helps and it’s not always possible in a community pharmacy when people are coming between pharmacies because, as of yet, we don’t have national care records”
(CP1)

“I suppose we would quite often, in patients like that, have a contact phone number so that we would be able, if there was a problem or if something has come down and we’re not sure about it, we can contact them and talk to them, or a carer phone number”
(CP6)
Discussion

• Community pharmacists recognise the large role they have to play within medicines management in relation to dementia

• **Monitoring adherence** - emphasised by pharmacists as a major part of their role

• **Medication review** - area of uncertainty
  - Pharmacists mindful of professional boundaries with GPs
  - Pharmacists’ responsibility to flag up when review is required, GPs’ responsibility to undertake the review
  - Limited access to patient records makes it difficult for community pharmacists to be able to conduct a full review
Ongoing work

• Triangulate data with GP, patient and carer interviews

• Identify ‘key domains’
  - Domains most frequently coded and content linked directly to target behaviour
  - Consensus among research team

• Map key domains to behaviour change techniques (BCTs) i.e. the active ingredients of the intervention

• Develop draft intervention

• Test intervention in a feasibility study
Acknowledgements

- Department for Education and Learning
- The Atlantic Philanthropies
- Health and Social Care Research and Development Division
- Study participants

References
Research team

• Miss Mairead McGrattan, Dr. Heather Barry, Dr. Cristín Ryan, Dr. Janine Cooper, Professor Peter Passmore, Professor Louise Robinson, Dr. Gerry Molloy, Ms. Carmel Darcy, Dr. Hilary Buchanan, Professor Carmel Hughes

Any questions??