Influences on prescribing decisions by non-medical prescribers: a qualitative study

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Non-medical prescribing (NMP) in the UK: nurses, pharmacists, physiotherapists, podiatrists, diagnostic and therapeutic radiographers, optometrists and dietitians

- Supplementary\(^{(1)}\) and independent\(^{(2)}\) prescribing
- All within self-assessed areas of competence
Pharmacist prescribing in the UK

Supplementary prescribing 2003

- voluntary partnership between an independent prescriber and a supplementary prescriber to implement an agreed patient-specific clinical management plan with patient agreement

Independent prescribing 2006

- prescribing by a practitioner responsible and accountable for the assessment of patients with undiagnosed or diagnosed conditions and for decisions about the clinical management required, including prescribing
Impact of non-medical prescribing

Research mainly among nurse and pharmacist prescribers:

- views of NMPs on education, training and practice\(^{(3,4)}\)
- views of patients and the general public\(^{(5-7)}\)
- views of medical mentors\(^{(8)}\)
- Cochrane review of clinical effectiveness\(^{(9)}\)

Little known about influences on NMPs’ prescribing decisions.
PhD research: overview of study

Part of a programme of research:

• Systematic review of literature\(^{(10)}\)

• Phase 1: semi-structured interviews with nurse and pharmacist independent prescribers

• Phase 2: participant audio self-recorded reflections on noteworthy prescribing decisions

• Phase 3: interviews about these reflections

University ethics and NHS R&D approval received; advised NHS ethics not required
## Underpinning: Theoretical Domains Framework

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills</td>
<td>Memory, attention &amp; decision processes</td>
</tr>
<tr>
<td>Social/professional role and identity</td>
<td>Environmental consequences and resources</td>
</tr>
<tr>
<td>Beliefs about capabilities</td>
<td>Emotions</td>
</tr>
<tr>
<td>Optimism</td>
<td>Social influences</td>
</tr>
<tr>
<td>Beliefs about consequences</td>
<td>Behavioural regulation</td>
</tr>
<tr>
<td>Reinforcement</td>
<td></td>
</tr>
<tr>
<td>Intentions</td>
<td></td>
</tr>
</tbody>
</table>
Recruitment

• Recruitment via e mails sent by NHS Grampian non-medical prescribing Leads

• Sent to all supplementary and independent NMPs employed by or contracted to Grampian Health Board

• Reminder e mail sent

• “Snowballing” among participants
Interview schedule

Semi-structured interview schedule developed from the literature including the Theoretical Domains Framework of behavioural determinants\textsuperscript{(11)}

- Supervisory team discussions
- Review by senior medical and non-medical prescribers
- “Sense check” by nurse and pharmacist NMPs from primary and secondary care
- Pilot
Analysis using N-Vivo®

Data from interviews

Parent nodes (N-Vivo®)

Child nodes (N-Vivo®)

Themes and sub-themes
Analysis using N-Vivo®
Participants

Eight pharmacist independent prescribers
  Two in secondary care
  Five in primary care and community pharmacy
  Experience as prescriber: 3 – 12 years
  Wide range of prescribing areas

Five nurse independent prescribers
  All in primary care
  Experience as prescriber: 8 months – 11 years
  Wide range of prescribing areas
Findings

Interviews lasted between 22 and 58 minutes

Patient at the heart of prescribing decisions

Complexity in patient health and/or social circumstances

Multiple and sometimes contradictory influences on prescribing decisions

Most TDF domains influential, some overlap

Multi-disciplinary working and experience also influential
Knowledge

Knowledge of the patient

“That’s probably the most useful thing to find out: what it is they’re looking for.”

Nurse 4, primary care, female

Knowledge of guidelines and local formulary

“Calcium channel blockers you’ve got your amlodipine first choice, felodipine only if you need it.”

Pharmacist 9, primary care, female

Knowledge of specific patient groups or drugs
Communication

“History taking’s probably still the key and, and, dare I say it, listening is the most important thing within that...”

Pharmacist 7, community pharmacy, male

Physical assessment

“And the heart failure clinic, if they're not euvoalaemic and they're still symptomatic and I can hear fluid in their chest I'm going to give them diuretics and maybe increase other medication.”

Pharmacist 5, primary care, female

Interpersonal, negotiation and documentation skills
Social/ professional role & identity

Background and scope of practice
Responsibility as a prescriber

“I take that responsibility, it is on my head. I sign that prescription and I am happy to do it. I don't have a problem with it.”

Pharmacist 4, primary care and community pharmacy, female

Approach to prescribing
Professional boundaries
Awareness of limitations
Beliefs about capabilities

Competence

“It is very much about sticking to your own competencies, your own areas of expertise and not, not trying to go outside of that.”

Nurse 2, primary care, female

“You will come across decisions where you think ‘Oh actually I'm not so confident with this or I think I need a bit of extra advice or someone else to say “Yeah, I would do the same.”’”

Pharmacist 2, secondary care, female
Beliefs about consequences

Consequences for the patient, the family and others, for colleagues and for themselves

“We've transformed the lives of a few patients. I have a couple who I've worked with for maybe five years who've now had a baby and bought a house and they're both working. It is amazing to see, but that's unusual.”

Pharmacist 6, community pharmacy, female

“The consequences for me, as the prescriber, if that patient has side effects from the vancomycin ... could be severe for the patient and severe for me.”

Pharmacist 2, secondary care, female
“… I can have a quick look before I go out but I can't remember all the allergies and things like that.”

Nurse 1, primary care, female

“With analgesia, I tend to recheck things over and over again, and quantities and break through doses and things like that…”

Nurse 2, primary care, female.

“What I am confident about is the process and the safety net and that steps that I would go through to get to a decision hopefully is reasonably steady.”

Nurse 3, primary care, male
Environmental consequences & resources

Evidence-based guidelines

“I do like a nice protocol and a nice guideline.”
Pharmacist 8, primary care, female

Doctors and other colleagues

“Sometimes I'll go and I've got a mentor GP, and I'll just go and just run it through with him.”
Pharmacist 5, primary care, female

Practice setting

“I would probably prescribe things here that I wouldn't be happy to prescribe to a patient who's going to walk out the door.”
Pharmacist 3, secondary care, female
Emotion

Leave emotions behind

Emotional response to certain patients

“The relationship you have with the patient and how you related to them, I think definitely influences your prescribing. Can be tough sometimes.”

Pharmacist 3, secondary care, female

Worry

“It is certainly things that you think about, if this treatment goes wrong. Sometimes it keeps you awake at night.”

Pharmacist 4, primary care and community pharmacy, female
Social influences

Respect for others in multi-disciplinary group

“What I would hate to do is, to be in a situation where I would be prescribing something that one of my other colleagues has disagreed with.”

Pharmacist 7, community pharmacy, male

Influence of patient

“Patients come in sometimes with very fixed ideas of what they like and what they don't like ... in some scenarios you almost do just have to give in to what they want.”

Pharmacist 9, primary care, female


Acknowledgements

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Any questions?