Defining clinical decision-making by advanced pharmacy practitioners

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Clinical decision-making

I don’t like to make recommendations unless I’m right. Doctors and nurses deal with uncertainty. I feel I need to be correct ... but with patients it’s about negotiation. (AP01)

I don’t want to trust myself entirely ... not like a GP. (AP10)
Clinical decision making

Why a pharmacist dispensed a lethal prescription despite her better judgement

Coroner makes recommendations on power balance with doctors

Clinical reasoning

...can be defined as the thinking process physicians use to arrive at a diagnosis and treatment plan. (e.g., Eva, 2004)
Management Reasoning (Cook, Sherbino, & Durning, 2018)

1. Processes used for drug therapy decisions require further understanding. *(Assumed to be the same as diagnostic reasoning)*

2. Errors in drug therapy decisions need to be defined and recognised. *(Not straightforward – there may be multiple solutions)*

3. Optimal teaching for drug therapy decisions is an area for growth. *(Particularly around handling uncertainty)*

4. Strategies to support clinical decision-making in practice need to be identified and implemented.

*Cook et al. JAMA 2018;319(22):2267-2268*
Study aim

To identify the components of clinical decision-making described by advanced pharmacy practitioners.
Participants

Invited: $n = 27$
Interviewed: $n = 17$
Gender: 15 female, 2 male
Ethnicity: 16 NZ European, 1 Māori
Work setting: 5 primary care
3 community
3 hospital
6 multiple settings
Participants

Experience (mean): 27 years (range 10 - 37 years)

Education: All with post-graduate qualifications including:
3 prescribers, 3 Certificate, 5 Diploma, 8 Masters, 1 PhD

In addition to clinical pharmacy, areas studied included:
adult education, business/management,
medicines information, mental health, palliative care, public health
Methods

• Semi-structured interviews conducted via video conferencing (Zoom)
• Interviews were audio/video recorded
• Data analysis using a general inductive approach (Thomas, 2006) with the theoretical framework for interpreting the clinical decision making process (Duffull et al., 2017)
Results

A predominantly tacit process that appears to involve 4 steps.
Results

Clinical decision-making...

…it’s the rationale for how I reach my decision (AP04)

…it’s the process of weighing up options (AP07)

...making a decision after evaluating outcomes likely to result, including patient factors (AP12)
Results - Transition

It’s not about drugs…what are the issues for the patient? Who do I need to talk to? What actions need to be taken? (AP11)

It took me a while to feel comfortable using my pharmacy skills in a educative role. (AP06)

This is the change, being able to work as a respected member of the team. (AP15)
Identity formation
(O’Sullivan, Irby, & Steinert, 2017)
Discussion

Three main types of pharmacy services

- **Checking** for clinical safety
- **Advising** healthcare professionals or patients about health and optimal use of medicines
- **Prescribing** for promoting health and wellness
A philosophical framework for pharmacy
(Duffull, Wright, Mara, & Anakin, 2017)

Bioethical principles
(Beauchamp & Childress, 2009)
PHARMACY
DECISION FRAMEWORK

CHECK
- Clinical check
- Reduces harm to patient

Non-maleficence

ADVISE
- Optimising care
- Supports a clinical process

Secondary beneficence

PRESCRIBE
- Initiating care
- Creates a clinical process

Primary beneficence
CLINICAL DECISION MAKING

01 INFORMATION GATHERING
- Understanding the patient
- Recognising the issues

02 CLINICAL REASONING
- Contextualising goals
- Therapeutic options

03 CLINICAL JUDGEMENT
- Weighing up the options

04 CLINICAL DECISION
- Enacting the decision
- Reflecting on the outcome

Study findings; further exploration required

Manuscript ready for peer-review
Take home messages

• Clinical (therapeutic) decision-making skills for therapeutics are under-developed
• Clinical decision-making is an important component of professional competency
• Clinical decision-making is required to support expanding pharmacists roles
• Some components of clinical decision-making are tacit
• Direct responsibility for clinical decisions is not traditionally a component of pharmacy professional identity
Educational implications

• Clinical decision-making can be taught as a core skill.
• Students must learn to be responsible/accountable for the therapeutic decisions they make.

Students need to understand ‘grey’ (AP09)
Thank you

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