

# A QUALITATIVE STUDY OF COMMUNITY PHARMACISTS' CLINICAL DECISION-MAKING SKILLS

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# Background

- **Self-care** is increasingly promoted as a means to reduce pressure on healthcare systems
- Patients are encouraged to take their own decisions about their health
- Many medicines have been made available to the public without a prescription (over-the-counter or **OTC**)
  - Mainly for **minor illnesses**
  - OTCs for **chronic conditions** have become available (statins, tamsulosin) and *more* might become in the future

# Background

- As a result community pharmacists have a **unique opportunity** to help more people but are also faced with **new challenges**
- They need to be familiar with signs and symptoms of a wide range of conditions
- They need **decision-making skills** that will lead to the *safest and most appropriate* advice being delivered to the patient

# Background

- Decision-making is *not* traditionally taught in pharmacy schools
- The most common approach pharmacists have adopted is **protocol-driven questioning** based on mnemonic methods – **no proven diagnostic efficacy**
- Other clinicians use a **clinical reasoning approach**: combination of evidence based knowledge, professional experience and practice – **not established with pharmacists**

# Aim of the study

- To explore pharmacists' thought processes when making clinical decisions in order to reach a diagnosis for symptom-presenting patients

# Methods

- Face-to-face semi-structured interviews:
  - Pharmacists' consultation experiences
  - Hypothetical headache scenario
  - Sources of knowledge and experience
- Recruitment through snowballing sampling
  - At least 6 months of practice
  - Not working towards a prescribing qualification
- Framework analysis based on clinical reasoning, team-based approach

# Results

- 8 interviews, 5 male and 3 female pharmacists, practicing from 1 up to 40 years
- Results presented in 3 sections:
  - 1) Consulting the patient
  - 2) Decision-making
  - 3) Knowledge and experience

# Consulting the patient

## Pharmacists' motivations

- Product-based

*“...where I am looking at what it is they are treating, and trying to recommend the best product for—best product for that condition...” (M40SH)*

- Risk aversion

*“Again I want to make sure that I am recommending them things that actually are going to be suitable for them but I am not going to be doing them—I certainly don't want to recommend them things that are going to potentially make it worse or actually I should have maybe referred them, so all that background information is to do with that. Again any of the medications I am wanting to make sure there is going to be nothing that if I recommend is going to interact, I want to make sure there were no medicines that will actually cause the problem... (F6AB)”*

# Consulting the patient

## Questioning strategies

- Gathering information

*“So who is the patient, how old are they, are they at risk of anything other than something that’s serious, is there any symptoms that they have got that would warrant referral, so I would look at all of that and see what medication they are on as well, to see whether that headache could be a side effect of their medication.” (F5RM)*

- ‘Delving deeper’

*“Listening to the sentences, looking at what language, and how they feel, and finally, from the sort of sentence that they have given me, they are asked more probing questions about the condition and far more deeper into the sentence.” (M9SS)*

- Involving the patient

*“So, I think you have to give the patient a choice and, that they have, like I said, more of an ownership of the condition and why we’ve chosen the drugs.” (F3KM)*

# Decision-making

## Decision-making approaches

- Mnemonic method (WWHAM)

*“It's those basic five questions that you should ask that allows you to get the information that you need basically, to cover everything that should be covered when you are speaking to somebody about [a] health complaint” (F6AB)*

- Clinical reasoning elements (e.g. use of epidemiology) - sparse and sometimes used in incorrect ways

*“She obviously was quite young, say about 40, so obviously there is no worry with regards to, or suspecting any underlying conditions with that as well, there was no need for a referral really obviously because she had plenty of fluids and vitamin C and the paracetamol” (M1AV)*

# Decision-making

## Decision-making outcomes

- Diagnostic outcomes – poor diagnostic ability, often attributing condition to medication side effects
  - “but if they have to be diabetic or taking certain medications, diabetes medications maybe H2 blockers or any medication, which may cause I guess headaches as a side effect or even the natural condition may cause headaches then you perhaps ask about a diabetes control as well” (M9SS)*
- Product selection – main priority aiming at symptom relief, often overshadowing the need for a diagnosis
  - “I’ve asked him to describe the symptoms and they mentioned that there’s a bit of bloating now, if the patient mentions to me saying that he has heartburn also, then I’m more prone to recommend something like Wind-eze which has got the ingredients for indigestion and for heartburn” (M9SS)*

# Decision-making

- Referral – as safety netting, based on duration and severity of symptoms or when running out of options
  - “...if they have had the same headache continuously for more than two days or something, that's not – nothing has worked on it, then that would warrant referral” (F5RM)*
  - “I would probably recommend some basic pain killers and then refer them if they really are that concerned, if the headache is so severe” (M19MM)*
  - “...I don't really have anything else up my sleeve apart from referral, that's the reason.” (M19MM)*
- Other advice
  - “Don't use anything unless you absolutely have to. Don't use cough remedies, just let the cold work itself through. It's the body's natural response.” (M19MM)*

# Knowledge

- Personal beliefs

*“I don’t know. I mean, I think it’s just something I’ve always believed. Partly I think due to the nature of most headaches is that they are self-limiting and they go away around. They are very ... I think that’s part of the reason, is because they’re not serious.” (M19MM)*

- Beliefs of their circle

*“I think it's just, experience from my learning, but also personal experience, friend and family experience.” (F3KM)*

- Taught knowledge/Self-taught knowledge

*“Well, it's the way that we were always taught or I have been taught [...] at my university time” (F6AB)*

*“From research that I’ve done, CPD and also from sort of what and even just colleagues or patients have told me that they found that to be useful and it’s clinically indicated so.” (F3KM)*

# Experience

- Personal experience
  - *“I mean products that I use myself or products that I know ha[ve] been effective in patients that I have seen before...” (F5RM)*
- Professional experience – however, diagnostic level was not much different based on years of pharmacist experience
  - *“I’ve never sat down and said I must compile a list of questions for this and this and this ... I’ve never done that. I think it’s evolved over the years from countless thousands and thousands of consultations” (M19MM)*

# Discussion

- Diagnosis-based decision-making is an underutilised part of the consultation process
- Pharmacists constantly use and overly relied on mnemonic methods both for diagnostic purposes and product selection
- When clinical reasoning elements were present they were often not used appropriately and knowledge was not appropriate
- Product selection was the main motivation often ignoring the need for a diagnosis

# Discussion

- The pharmacists exhibited desire to 'delve deeper' shows they acknowledge there is a need to go beyond mnemonic methods
- Schools of pharmacy need to consider the potential harm of pharmacists' lack of decision-making skills and shape their programmes accordingly