

Barriers and enablers to collaborative working between GPs and pharmacists:

a qualitative interview study

Abstract

Background

Many UK GP practices now employ a practice pharmacist, but little is known about how GPs and pharmacists work together to optimise medications for complex patients with multimorbidity.

Aim

To explore GP and pharmacist perspectives on collaborative working within the context of optimising medications for patients with multimorbidity.

Design and setting

A qualitative analysis of semi-structured interviews with GPs and pharmacists working in the West of England, Northern England, and Scotland.

Method

Thirteen GPs and 10 pharmacists were sampled from practices enrolled in the 3D trial (a complex intervention for people with multimorbidity). Participants' views on collaborative working were explored with interviews that were audiotaped, transcribed, and analysed thematically. Saturation of data was achieved with no new insights arising from later interviews.

Results

GPs from surgeries that employed a pharmacist tended to value their expertise more than GPs who had not worked with one. Three key themes were identified: resources and competing priorities; responsibility; and professional boundaries. GPs valued pharmacist recommendations that were perceived to improve patient safety, as opposed to those that were technical and unlikely to benefit the patient. Pharmacists who were not known to GPs felt undervalued and wanted feedback from the GPs about their recommendations, particularly those that were not actioned.

Conclusion

A good working relationship between the GP and pharmacist, where each profession understood the other's skills and expertise, was key. The importance of face-to-face meetings and feedback should be considered in future studies of interdisciplinary interventions, and by GP practices that employ pharmacists and other allied health professionals.

Keywords

medication review; multimorbidity; pharmacists; polypharmacy; primary health care; qualitative research.

INTRODUCTION

Through medicines optimisation, GPs and pharmacists are tasked with working with patients to ensure that they get the best possible outcomes from their medications.¹ This can require complex clinical decisions, particularly with deprescribing (tapering down and stopping of medications), where issues such as loss of clinical benefit must be balanced against reductions in medication errors, adverse reactions, and prescribing burden. Clinicians are encouraged to follow evidenced-based guidelines for prescribing and, although there are some criteria-based tools (such as, STOPP/Start)² that highlight medications that are potentially harmful and could be deprescribed, these are outweighed by disease-specific guidelines that almost always recommend starting and intensifying treatment.³

In response to increased primary care workload pressures in the UK,⁴ there has been an increase in the number of practice pharmacists working as part of the primary care team.^{4,5} Practice pharmacists have non-dispensing roles, including dealing with prescription requests from patients and community pharmacists and reconciling medications following discharge from hospital, as well as consulting with and treating patients. Pharmacists could play a key role in tackling the workload associated with managing polypharmacy; however,

research into how best to integrate their skills is lacking.

The authors have previously explored GP and pharmacist perspectives on the usual practice of medication reviews and found that being efficient (getting it done) tended to take priority over being thorough (doing it well).⁶ The aim of the current study was to explore GP and pharmacist views towards interprofessional working within the context of optimising medicines for patients with multimorbidity.

METHOD

Setting, design, and participants

The present study was nested within the 3D trial, a multicentre, cluster-randomised controlled trial of a complex intervention to improve quality of life for people with multimorbidity.⁷ The study intervention was based on the 3 D's: the Dimensions of health (including quality-of-life and patient priorities for their health); identifying and treating Depression; and simplifying Drug treatments. The 3D trial comprised 6-monthly comprehensive reviews with a focus on patient-centred care, and included a pharmacist reviewing the patients' electronic medical records and making up to four medication recommendations for consideration during a face-to-face review between the GP and patient.⁷

Semi-structured interviews were conducted with GPs and pharmacists

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How this fits in

Pharmacists working within GP practices have the potential to reduce GP workload and to improve the quality and safety of prescribing. Optimising medications for complex patients with multimorbidity is one area where pharmacist expertise could be usefully deployed but research into how to do this effectively is lacking. This study found that traditional ideas about the different professional roles of GPs and pharmacists (for example, concerns from some GPs that pharmacists stuck too rigidly to guidelines) may stop pharmacists fulfilling their potential within primary care. Where GPs worked collaboratively with pharmacists (for example, in practices that employed a pharmacist) they reported confidence in their professional skills and more effective collaboration was possible.

participating in the 3D trial. Purposeful sampling from usual care and intervention practices, and practices with and without a practice pharmacist, allowed for a range of views and experiences to be captured. Before the study, six of the pharmacists were working as practice pharmacists, three were Clinical Commissioning Group pharmacists (who tended to work

across several GP practices), one was a community pharmacist, and three GPs worked in practices that employed a practice pharmacist. The authors stopped recruiting interviewees once data saturation had been reached.

Research team and data collection

One author interviewed participants face-to-face in GP surgeries or over the phone between January and October 2017. The interviews lasted between 40–60 minutes and were recorded using an encrypted audiorecorder.

Topic guides tailored for GPs and pharmacists were developed by two authors who are GPs (Boxes 1 and 2). The first half of the interview focused on the usual practice of medication reviews and the second half on the 3D trial intervention. To ground the interviews, GPs and pharmacists were asked to review the records of several 3D trial patients (case studies) selected by the interviewer during the interview. For GPs and pharmacists working in the same GP practice, the same 3D trial case study patients were discussed. The GPs were asked to reflect on the pharmacist recommendations (for example, did they look at them? Were they useful? Did they act on them? Did they have any concerns?) and the pharmacists on whether the GP had acted on their recommendations.

Analysis

To aid interpretation of the meaning behind participant responses, field notes were taken immediately after the interviews. The audiorecordings were transcribed and anonymised. Field notes and interviews were imported into NVivo (version 11) and the interviews analysed thematically.⁸ One author read and coded all of the transcripts. Three further authors read and coded a subset of transcripts independently. Emerging themes were discussed and a coding structure was developed over several team meetings. The remaining interviews were coded using the agreed framework. As data analysis continued, two authors modified the coding framework. Codes were grouped under overarching themes.

RESULTS

This study reports on GP and pharmacist perspectives of working together both within the context of the 3D trial intervention, which included a non-patient facing medication review by the pharmacist, and within the context of usual practice. Some pharmacists interviewed worked as independent

Box 1. GP interview topic guide

Usual practice (question prompts)

- Before we get into the specifics, I'm interested in understanding how repeat medications are reviewed in your practice? (How often? Within/outside of consultations? Patient involvement; purpose; and barriers/facilitators)
- Can you tell me about your experience of reviewing medications for patients with polypharmacy? (Different to other medication reviews?)
- Do pharmacists play a role in medication reviews in your practice? (CCG pharmacist or practice pharmacist?)
- Are any other non-GP staff involved in medication reviews in your practice?

Usual practice case patients

- Can you think of any non-3D trial patients who are prescribed lots of medications who you could look up on EMIS?
- Could you talk through how you might review their medications? (Is that typical?)

3D trial

- I'd like to ask you to focus more on the 3D trial now. How have you found reviewing patient's medications during the 3D consultations? (Purpose of the reviews; pharmacist recommendations; patient involvement; and types of changes made, examples)

3D trial case patients, 2–3 for each interview

- Can you have a read over the record for this patient and talk me through how you might have come to the decisions about their medications? (changes made; pharmacist recommendations — looked at, useful, acted on, concerns; patient involvement; typical of other reviews? Same/different to usual practice?)

Any other issues

- Any other issues you would like to raise?

CCG = clinical commissioning group.

Box 2. Pharmacist interview topic guide

Usual practice (question prompts)

- Before we get into the specifics, I want to find out a bit more about your role as a pharmacist outside of the 3D trial. In particular, whether you are involved in medication reviews for patients? [Driven by cost or CCG targets, or led by the practice? Face-to-face or computer-led? Useful or not? Barriers and facilitators]
- Can you tell me about the last time you were involved in medication reviews for a practice? [Is that typical?]
- How have you found working with practices?
- Have you been involved in medication reviews for patients with polypharmacy? [Driven by cost or CCG targets, or led by the practice? Face-to-face or computer-led? Useful or not? Barriers and facilitators]

3D trial case patients, 2–3 for each interview

- Before we go on to talk about the case study patients, can you tell me any thoughts you have about the medication reviews for the 3D trial? (Working with practices; doing the reviews; purpose; useful?)
- Can you have a read over the record for this patient and talk me through the process you might have gone through when you reviewed this patient's medications?
- Recommendations (types of medications stopped/started; purpose of stopping/starting medication, for example, safety, pill burden, guidelines)
- Typical of other 3D trial reviews?
- Same/different to usual practice?
- Reflect on whether the GP acted on the recommendations [Is that typical?]

Any other issues

- Any other issues you would like to raise?

CCG = clinical commissioning group.

prescribers outside of the context of the 3D trial. Thirteen GPs and 10 pharmacists were interviewed. The participant characteristics

Table 1. Participant characteristics

| Pharmacists (N= 10) | | GPs (N= 13) | |
|--|---|--|----|
| Variable | n | Variable | n |
| Sex | | Sex | |
| Male | 3 | Male | 5 |
| Female | 7 | Female | 8 |
| Estimated age, years^a | | Estimated age, years | |
| 31–40 | 6 | 30–39 | 6 |
| 41–50 | 4 | 40–49 | 2 |
| | | 50–59 | 5 |
| Job role | | Job role | |
| Community pharmacist | 1 | GP partner | 10 |
| CCG pharmacist | 3 | Salaried GP | 3 |
| Practice pharmacist | 6 | | |
| Years qualified as a pharmacist | | Years qualified as a GP | |
| 5–9 | 4 | <5 | 3 |
| 10–14 | 3 | 5–9 | 4 |
| >15 | 3 | 10–14 | 3 |
| | | >15 | 3 |
| Years working in primary care^b | | | |
| <2 | 3 | | |
| 2–9 | 0 | | |
| >10 | 3 | | |
| Intervention or usual care practice | | Intervention or usual care practice | |
| Delivered the 3D intervention | 8 | Intervention practice | 9 |
| Working in usual care practice | 2 | Usual care | 4 |

^aAn estimate of age was considered appropriate for the purpose of this study. ^bFor the six practice pharmacists.

CCG = clinical commissioning group.

are shown in Table 1. The roles of the six practice-based pharmacists varied but included fielding prescription queries and reconciling medications after hospital discharge. The barriers and enablers to collaborative working between GPs and pharmacists are described within the main themes of: resources and competing priorities; responsibility; and professional boundaries. A summary of the findings is shown in Figure 1.

Resources and competing priorities

GPs weighed up the time and cost of employing a practice pharmacist against the benefit of the pharmacist taking on some of their workload.

Of the six practice pharmacists, only one was routinely involved in medication reviews due to competing priorities, such as managing prescription requests, which were perceived to impact more on GP workload and were prioritised by the GP practices.

Workload and value-for-money. Many GPs and pharmacists talked about the current GP recruitment crisis in the UK and the need for practices to employ allied health professionals to reduce GP workload:

'We've had trouble recruiting GPs ... a pharmacist was a good person that could actually do quite a lot of things that we [GPs] do at the moment.' [GP6, female (F)]

For practices that employed a pharmacist, both professions argued that they significantly reduced GP workload. Several pharmacists and GPs argued that some pharmacist-led projects, particularly those focused on cost-saving, increased GP workload, however:

'They'll send it to me ... it's just the GPs' workload, they can't get through everything.' [practice pharmacist [PP], PP2, F,]

'Tamsulosin capsules instead of Tamsulosin tablets to save like £3.50 a month ... it's kind of frustrating that we have to waste your [the GP's] time.' [P4, F, non-practice pharmacist [NPP], NPP4, F]

There were mixed views about whether a practice-employed pharmacist was good value-for-money. Several pharmacists commented that they were cheaper to employ than a GP. However, some GPs argued that pharmacists tended to take longer to complete tasks than GPs and so, although pharmacists cost less per hour

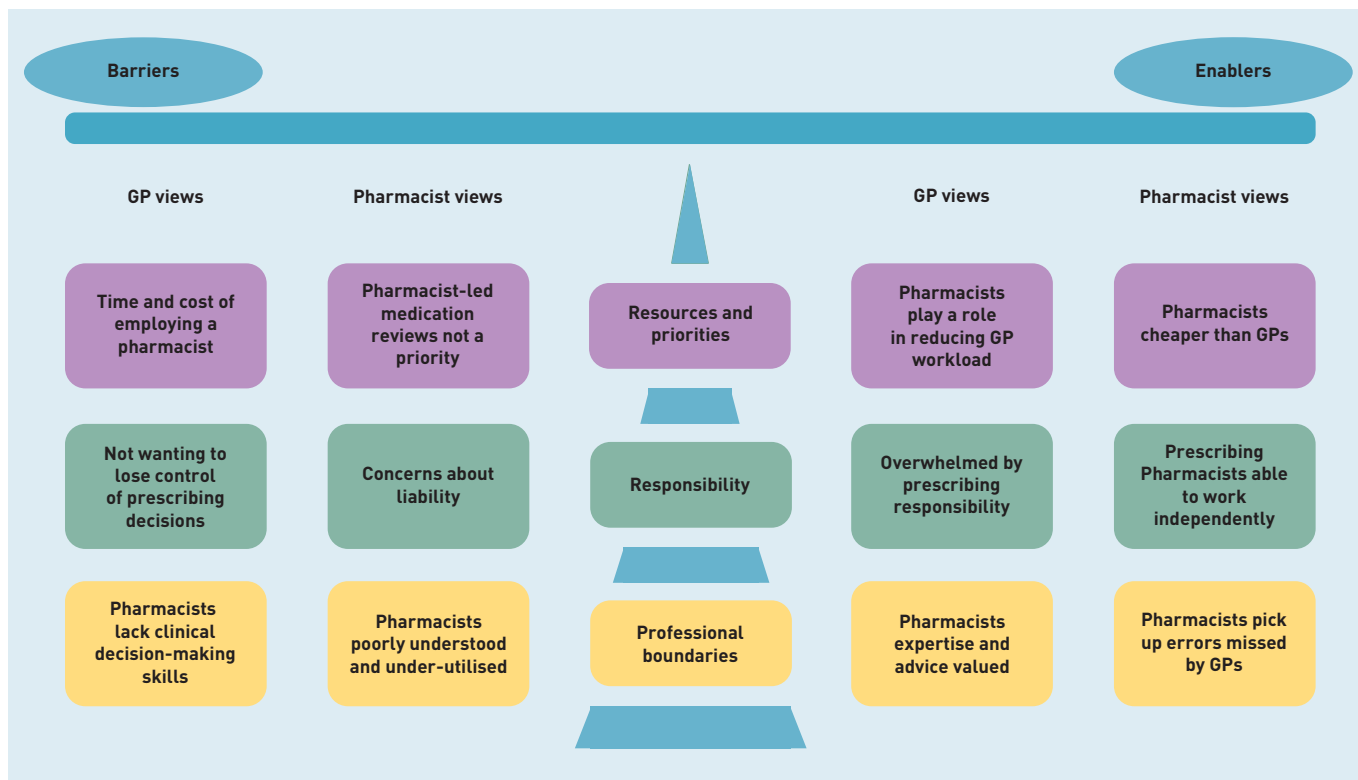


Figure 1. GP and pharmacist reported barriers and enablers of collaborative working.

than GPs, they were not necessarily more cost effective. GPs commented that, owing to pharmacists spending longer on tasks, the quality of their work was high. Other GPs commented that pharmacists were more expensive than other professionals, such as nurses:

'... they're [pharmacists] cheaper than GPs, it makes a lot of sense.' (PP3, male [M])

'I think that she [the pharmacist] would probably take twice or three times as long doing it as a GP would but I've got no doubt that she would do it a hundred percent correct ... in some ways GPs are the most quick person at dealing with almost anything (laughs) ...' (GP4, M)

'The downside of it is that they're [pharmacists] a more expensive member of staff than a nurse ... you get more for your money.' (GP10, M)

Competing priorities. Medication reviews were not prioritised by practices for many of the practice pharmacists. Some GPs reasoned that pharmacist-led medication reviews would not impact much on GP workload as they were being done as part of routine consultations.

Pharmacist skills were viewed by practices as being better utilised carrying

out other duties, such as dealing with prescription enquires:

'They might take away some [workload] but it would probably be quite small because we're all doing this as part of our general consultation.' (GP2, F)

'We have a big workload in terms of repeat prescriptions so some help with getting through that ... patients who ring up with medication queries ... he can fend off a lot of those.' (GP9, M)

One pharmacist appeared frustrated that GP practices focused too much on reducing GP workload and this led to pharmacists carrying out more mundane tasks:

'Some of the pharmacists are just doing all the medicines management which we're not supposed to be doing and I think if you asked those practices they'd say that's the pro of having a pharmacist there ... someone's just sat signing prescriptions all day ...' (PP9, M)

Responsibility

For most interviewees, the responsibility for prescribing decisions lay with the GP. However, some pharmacists were independent prescribers and, within their usual practice outside of the 3D trial, would make changes

to patient's medications without involving the GP. Many GPs were reluctant to relinquish control of prescribing decisions and preferred having decisions approved by them. Other GPs felt overwhelmed by the responsibility of prescribing increasingly complex medications and valued pharmacist expertise.

Several GPs, particularly those who had a good knowledge of and relationship with their patients, preferred to remain in control of prescribing decisions and some pharmacists liked to seek the reassurance of GPs. There was a tension between GPs staying in control of decisions and reducing their workload by delegating responsibility/tasks to pharmacists:

'We [GPs] are quite possessive of our patients ... some of us who have been here a long time and know our patients very well need to let go so ... personally I would probably be happy for the pharmacist to work it out and I don't know that I would need to ok it.' (GP1, F)

'Notes to the GPs to just say this is what I'm doing, are you happy with that? ... For me it's quite a nice little buffer ... I can just run past things in front of the GPs ...' (PP6, F)

Many GPs felt overwhelmed by the responsibility of prescribing and some GPs described an increasing expectation for GPs to prescribe complex medications that would have previously been prescribed only by hospital doctors. Many of the GPs welcomed the pharmacist's advice but preferred to remain in control of decisions:

'There's been just the most amazing difference between prescribing when I first started being a GP and prescribing now ... it is a massive responsibility which I really don't think that we are, um, able to do safely without help from other professionals ...' (GP1, F)

'She [the pharmacist] will perhaps point out anti-cholinergic burden in elderly patients or dementia patients ... we can then discuss- GP makes a decision and then she will take the required action [...] So that's incredibly valuable.' (GP5, F)

Pharmacists who were independent prescribers deferred prescribing decisions to the GPs when they encountered conditions that were outside of their area of expertise:

'I'm a prescriber by the way ... I'm basically working independently all the time. I don't

ask for any kind of guidance on any of that ... diabetic neuropathy and erectile dysfunction, those are a couple of areas where I don't initiate treatment myself just 'cos I kind of haven't, um, really worked that through ... I just tell them [the patients] they need to make a GP appointment.' (PP3, M)

Professional boundaries

GPs had mixed views about whether pharmacists should have the authority to suggest and make changes to patients' medications, with some GPs valuing pharmacist's knowledge of medicines. Other GPs raised concerns that pharmacists lacked the key attributes required to make clinical decisions, including a trusting relationship with the patient and knowledge of their medical and social background. Within the context of the 3D trial, GPs most valued pharmacist recommendations that improved the safety of prescribing and least valued recommendations that they perceived as being technical and unlikely to lead to patient benefit.

Clinical decision-making skills of pharmacists. Several GPs expressed dismay about pharmacist recommendations that they deemed as *'treating the numbers'* (GP1, F) rather than the patient, such as recommendations to change a patient's statin in line with the most recent National Institute for Health and Care Excellence (NICE) guidance. GPs tended to ignore this advice because they felt that in the context of often complex social and medical problems, altering a statin was unlikely to make a significant difference to the patient's health.

In general, the GPs perceived that the pharmacists tended to be driven by following guidelines to the letter:

'I kind of didn't really feel greatly engaged with changing that [the statin] particularly 'cos, you know, if your cholesterol's 3.4 I don't think there's a lot to be gained really.' (GP6, F)

Some GPs thought that very few pharmacist recommendations were made. One such GP was surprised to find that pharmacist recommendations had been made for the case study patients:

'... it's my recollection that I was doing these reviews and the pharmacist hadn't provided any information ... whether that was just luck because all of them [the case study patients] had, hadn't they, and in fact we'd acted on a few of them ...' (GP8, M)

Several GPs questioned the clinical decision-making skills of pharmacists, commenting that they were good at applying clinical guidelines but struggled to think outside the box. A small number of GPs described the pharmacist as being technical and clerical rather than clinical:

'They [pharmacists] want strict protocols-their job is very technical, they have to get the end dosage right, quantities etcetera. Sometimes, I mean clinical medicine isn't-you've got to think outside the box ...' (GP3, M)

'They[pharmacists] are perhaps less willing to tolerate the uncertainty that a GP would tolerate ...' (GP4, M)

In contrast, many of the GPs valued pharmacist's knowledge of medicines and, feeling de-skilled in chronic disease management (a point also noted by pharmacists), welcomed the pharmacist's input. GPs valued pharmacist recommendations which improved the safety of prescribing:

'... they [pharmacists] have such a good clinical knowledge and they also have that kind of pharmacological knowledge ... I just think as a GP you can't possibly know all of those things.' (GP12, F)

'A patient ... on a vitamin D replacement, on a high dose sort of quick replacement that had never been dropped down [...] So that was all very useful ...' (GP1, F)

A hierarchy of authority. Some GPs described a hierarchy of authority, whereby the opinion of hospital doctors and GPs took precedence over that of the pharmacist. In contrast, other GPs and pharmacists argued that pharmacists had a better eye for detail and would pick up and challenge medication errors made by doctors:

'They're [hospital doctors] the gods (laughs) in hospitals as far as a lot of the elder patients are concerned so they're [the patients] not going to want to go against them unless we have got a really good reason for stopping and we have sent them [the patients] for that opinion ...' (GP2, F)

'I don't take what the hospitals say for granted ... I will question it ...' (PP2, F)

The relationship between the GP and pharmacist. Pharmacists that were not attached to a specific practice described

some difficult relationships with GPs, where they felt poorly understood and underutilised. One non-practice pharmacist wanted feedback from GPs to understand the reasons that her recommendations had not been implemented:

'There were other surgeries that didn't have that open-mindedness ... I suppose were sort of old-fashioned really in the sense that they didn't want anybody else to sort of interfere with the medication ...' (NPP8, M)

'I sometimes feel that we don't get utilised ... people [need to] realize that pharmacists are more useful than just sticking labels on boxes [...] The patients don't realise, the GPs don't realise ... I would check back to see how they got on. Yeah, rarely the GP, erm, took upon my suggestion ... I wasn't being nose-y, I was just interested to see, did they take heed or did they not ...' (NPP4, F)

In contrast, the practice pharmacists felt valued as part of the practice team, and many GPs and pharmacists described a good collaborative relationship with the two professions seeking advice from one another:

One pharmacist (P6, F) had joined a practice since taking part in the 3D trial and commented on the value of getting to know GPs in the practice through informal face-to-face chats.

'I feel we couldn't manage without her [the pharmacist] at all. She a vital member of the clinical team.' (GP5, F)

'It's lovely working as part of the team because they're [the GPs] throwing questions at me ... they know what I can do and I know what they can ... it [the 3D Study] was good but it felt slightly different because you didn't know everybody, you didn't know quite how to word things ... you can actually have a face-to-face chat about it ... you're there all the time for them to come and bounce ideas off you ...' (PP6, F)

DISCUSSION

Summary

This study identified barriers and enablers to collaborative working between GPs and pharmacists within the context of both usual practice and the 3D trial intervention, which included a non-patient facing medication review by the pharmacist. A good working relationship was key to effective integrated working and GPs who worked in practices that employed a pharmacist were more likely to value their professional expertise.

In some practices, independent prescribing pharmacists prescribed within clearly defined competencies deferring decisions outside of this to GPs. This suited both the pharmacist, who liked the safety net of 'running things past' the GP, and the GP, who preferred to remain in control of complex prescribing decisions but benefited from the pharmacist's knowledge.

Most interviewees felt that pharmacists could reduce GP workload by taking on routine prescribing tasks, although not all pharmacists thought this the best use of their time. In contrast, it wasn't clear that pharmacists doing medication reviews would reduce GP workload even if valuable in other ways. Within the context of the 3D trial, GPs valued pharmacist recommendations that improved prescribing safety but tended to ignore recommendations that they deemed as being technical and of little benefit to the patient. GPs who worked in practices that did not employ a practice-pharmacist were more likely to question pharmacists' clinical decision-making skills and ability to 'think outside the box'.

Strengths and limitations

A key strength is that the interviews were grounded using real patient case studies, which encouraged interviewees to reflect on real decisions and yielded richer information than talking in generalities. One GP, for example, commented that few pharmacist recommendations were made. By reviewing the case study patients, this view could be challenged, as it was evident that the pharmacist had made recommendations and that GPs had acted on some of them. A further strength is the iterative approach with analysis of earlier interviews informing the focus of later interviews. A range of views was captured, including those of community, clinical and practice pharmacists, and GPs working in practices with and without a practice pharmacist. One limitation is that all interviewees were recruited from practices enrolled in the 3D trial, introducing potential bias towards better performing GP practices.

Furthermore, some GPs had limited experience of working with practice-based pharmacists and may have based their views (for example, about pharmacists being technical and not clinical) on recommendations made by pharmacists as part of the 3D trial. This is a qualitative study that does not make claims to generalisability, but provides possible explanations for observed phenomena. One final limitation is that the interviews were conducted by a GP. This may have influenced

how forthcoming the interviewees were, particularly in terms of being negative about one another's profession.

Comparison with existing literature

Most interviewees in the present study argued that pharmacists had a role to play in reducing GP workload, particularly in performing tasks such as reconciling medications after hospital discharge. However, since medication reviews were being conducted by GPs in a time-efficient manner (for example, alongside several other problems during a 10-minute GP consultation) and pharmacists tended to require more time to complete this task (for example, a separate 20-minute appointment), several GPs argued that pharmacist-led medication reviews were unlikely to impact significantly on GP workload. These views were shared by GPs in New Zealand, some of whom argued that pharmacist-led medication reviews increased GP workload since the GPs were required to action pharmacist advice.⁹ Other barriers to collaborative working reported in the literature include funding,¹⁰ concerns from GPs that community pharmacists may be commercially driven,¹¹ pharmacist fears about stepping on GPs' toes,⁸ and GPs being too busy to speak to pharmacists.¹²

There is evidence from this study and others from similar contexts internationally that GPs value pharmacists' expertise and the safety net they provided by checking for medication errors.^{3,10}

In the present study, GPs least valued pharmacist recommendations which they perceived as being 'technical' rather than having clear value for patients, particularly those with complex medical and social backgrounds. GPs in a study by Bryant *et al* were similarly frustrated by recommendations that were perceived as applying science and theory without considering the individual patient.¹³ Some pharmacists in the present study, particularly those who were not known to the GPs, would have valued feedback from the GPs about the acceptability of their recommendations, a view shared by pharmacists in New Zealand.¹⁴

In this study and others, GPs' views towards pharmacists were on a spectrum; at one end, pharmacists were viewed as professional equals and experts in medicines, and at the other end, as lacking clinical decision-making skills and being subordinate to GPs within the medical hierarchy.^{9,15,16} A study of patients found that they believed that reviewing medications was the doctor's rather than the pharmacist's role, and

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Ethical approval

The 3D trial was approved by South-West (Frenchay) NHS Research Ethics Committee (14/SW/0011). Trial registration number: ISRCTN06180958.

Provenance

Freely submitted; externally peer reviewed

Competing interests

The authors have declared no competing interests.

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that they trusted their doctor most.¹⁵ This view reflects the traditional idea of medical dominance, under which doctors are in charge not only of their patients but also of allied health professionals contributing to care.¹⁶

Responsibility for prescribing decisions in this and other similar studies lay mostly with GPs, many of whom did not want to relinquish control;^{11,12,15} however, several GPs in the present study felt overwhelmed by the responsibility of prescribing complex medications and were grateful for pharmacist input. The ability to independently prescribe medication is seen as an important part of clinical autonomy, which was previously the preserve of doctors, and allowing allied health professionals to prescribe independently can be perceived as a threat to medical dominance.^{17,18} In the present study, interviewees described a middle ground where some pharmacists were able to prescribe independently within their area of expertise but would defer decisions outside of their expertise to the GP. This appeared to suit both the GP, who liked to remain in control of decisions, and the pharmacist, who valued the safety net of running things past the GP. This is also consistent with current legislation for independently prescribing nurses and pharmacists, which requires them to limit their prescribing to specific areas of competence.¹⁹

Implications for research and practice

In this study, 'knowing' each other was an important underpinning for effective collaborative working between GPs and pharmacists, where each profession values, learns from, and utilises the other's expertise. In practices where GPs and pharmacists had little personal contact or knowledge of each other, pharmacists described feeling undervalued and GPs

expressed concerns that pharmacists stuck too rigidly to guidelines.

Recommendations for researchers and GP practices to improve collaborative working between GPs and pharmacists are:

- develop a trusting relationship between the GP and pharmacist through face-to-face meetings;
- improve clinical decision-making skills of GPs and pharmacists by taking opportunities to discuss complex patients and provide constructive feedback on prescribing decisions; and
- consider the limitations of non-patient facing medication reviews. The recommendations resulting from this type of review are likely to be technical as clinical decision-making requires knowledge of the patient, their social background, and their preferences. These technical recommendations may not be valued or actioned by GPs and so are unlikely to lead to patient benefit.

Only one of the practice pharmacists interviewed was routinely involved in medication reviews. Other roles, such as reconciling medications after hospital discharge, were perceived as having more impact on GP workload and so were prioritised by practices. It appears that, within the current context of high workload pressures and difficulties recruiting and retaining GPs in the UK, practices are having to prioritise GP workload pressures over all else.

Further research is needed to: establish the roles of practice pharmacists, including involvement in medication reviews; explore whether practice pharmacists improve patient health outcomes; and, if so, understand what is it about the model of working that enables this.

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