'We're just seen as people that give out the methadone...': exploring the role of community pharmacists in the opioid substitution treatment team

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ABSTRACT

INTRODUCTION: People receiving opioid substitution treatment are a vulnerable population who experience significant health inequities and stigma, but have regular interactions with community pharmacists. Many pharmacists now work collaboratively with other health providers to ensure effective and safe use of medicines, as well as being involved in the prevention and management of chronic health conditions.

AIM: To explore the role of New Zealand community pharmacists in the provision of opioid substitution treatment and how they perceive their role as part of the wider opioid substitution treatment team.

METHODS: Semi-structured video interviews with a purposive sample of 13 diverse pharmacists explored their current practices in providing opioid substitution treatment, and their perceived role in the treatment team. Interviews were audio-recorded and transcribed verbatim. Data were coded and analysed using an inductive thematic approach.

RESULTS: This study found that pharmacists are providing accessible support to a population with known barriers to accessing health care. However, participants also identified challenges with communication and a perceived lack of understanding of the pharmacist role as barriers to collaboration with the wider opioid substitution treatment team.

DISCUSSION: Collaboration within health-care teams has been shown to improve health outcomes, and pharmacists are well placed to provide health-care services as well as offer valuable insight into clients' mental and physical wellbeing. Improved communication channels that facilitate information sharing, as well as the opioid substitution treatment team's recognition of a pharmacist's role, may facilitate collaboration and, in turn, improve the quality of health care provided to this vulnerable population.

Keywords: Pharmacy services; drug addiction; mental health; primary health care

Introduction

Opioid dependence is a chronic relapsing health condition and opioid substitution treatment is a widely used, evidence-based pharmacological treatment for people dependent on opioids.^{1,2} Opioid misuse is associated with a reduction in quality of life, high rates of medical and psychiatric co-morbidities^{2,3} and significant mortality rates.^{4,5} In New Zealand (NZ), opioid substitution treatment is initially prescribed by addiction services' authorised prescribers, but clients may be transferred to primary care prescribers following a period of stability.⁶ Although there is no current estimate of NZ's opioid dependent population, the number of people receiving opioid substitution treatment at December 2017 was 5538.⁷ Clients usually consume treatment (primarily methadone or buprenorphine-naloxone) at a community pharmacy most days of the week under the supervision of a pharmacist.⁶ In 2018, there were ~1000 community pharmacies in NZ,⁸ and ~60% had a contract to provide opioid substitution treatment.⁹

There is now substantial evidence that despite improved health and social outcomes for opioiddependent people on prescribed opioid substitution treatment (compared to opioid-dependent people not treated), this cohort have more hospitalisations and a higher mortality rate than the general population.¹ Te Pou (NZ's mental health and addiction workforce development centre) report that people with serious mental illness or addiction have a life expectancy up to 25 years less than the general population.¹⁰ In addition, people in NZ on opioid substitution treatment are an ageing population, with 61% of clients aged >45 years in 2017.⁷

Te Pou recommends addressing inequities by making changes to health-care service delivery, including implementing collaborative integrated models and strengthening linkages between primary care and mental health services.¹⁰ International studies exploring opioid substitution treatment from a pharmacy perspective have shown that despite service expansion over the last 20 years, many pharmacists still do not perceive themselves as part of a collaborative team, due to their lacking client information and difficulties communicating with prescribers.^{11–16} Little is known about the current role of NZ community pharmacists in providing an opioid substitution treatment service.

The aim of this study was to explore the role of community pharmacists, examining their perceptions and practices in opioid substitution treatment provision and how they perceive their role as part of the wider treatment team.

WHAT GAP THIS FILLS

What is already known: People on opioid substitution treatment are a vulnerable population who often have complex co-morbidities and known barriers to accessing health care. Collaborative health-care teams that provide continuous and comprehensive health care can improve patient outcomes.

What this study adds: Community pharmacists are well placed to provide health services to a population experiencing health inequities, but there are important barriers to collaboration between pharmacists and the wider opioid substitution treatment team. Participants identified challenges with communication and a perceived lack of understanding of a pharmacist's role.

Methods

This was a qualitative interview study (University of Otago ethical approval reference D17 221). A semistructured interview schedule was developed based on the literature, the researchers' experience and four face-to-face interviews with key NZ addiction sector stakeholders.

All participants were asked to describe current opioid substitution treatment practices in their pharmacy, perceptions of their role within the wider treatment team and perceived barriers and challenges to providing treatment. Participants were encouraged to discuss examples of experiences with clients, prescribers or other health workers.

The interview schedule and processes were piloted with two pharmacists. No changes were made following these interviews, so data from both were included in the final dataset.

Participants were a purposive sample of community pharmacists from around NZ. Initial recruitment was through the Pharmaceutical Society of New Zealand's electronic newsletter, with further recruitment to target geographic and demographic gaps. Inclusion criteria for participants in the study were: currently practising as a community pharmacist (subsequently referred to as 'pharmacist') in NZ and having any current, or previous, experience in providing opioid substitution treatment.

Seven pharmacists initially responded to the advertisement. Five agreed to participate. Two pharmacists

did not respond after receiving further information about the study, despite two follow-up emails.

Using professional contacts, six pharmacists who could fill demographic gaps identified in the sample (including one not currently providing opioid substitution treatment) were invited, and agreed, to participate. Including the two pilot interviewees, the final study sample size was 13 pharmacists. It is suggested that saturation of themes occurs after approximately 12 interviews.¹⁷

Ten interviews were conducted using 'Zoom' videoconferencing software (Zoom Video Communications Inc., San Jose, CA, USA), two interviews by telephone and one was face-to-face. All interviews were audio-recorded then transcribed verbatim by an independent transcriber. RL reviewed each transcription against the original audio-recording to ensure accuracy and then conducted an initial inductive thematic analysis. This is a qualitative method for identifying, analysing and reporting common patterns of data extending across multiple interviews, beginning with open coding where key concepts and quotes are identified, followed by reviewing and refining the codes into common themes and sub-themes.¹⁸ Further iterative analysis examined variation between the participants' perspectives and relationships across the themes. CM and BG independently cross-checked and validated the themes. Quotations below illustrate the concept identified, together with the participant number.

Results

Thirteen interviews with an average time length of 35.5 min (range: 18 – 72 min) were conducted between March and September 2018. Table 1 shows the diversity within the sample.

Additional care and social support

All participants reported that their role included dispensing opioid substitution treatment and many also recognise they are well placed to provide additional health care and psychosocial support for the target population.

'We take into consideration the whole person ... it's not just the medicines that they're on, the suboxone, the methadone or whatever - we do kind of make sure we look after them.' [P13] An essential role of pharmacists when providing treatment is to monitor clients' wellbeing and watch for destabilisation.

'Our key role is observing client behaviour. I think we are probably the first ones to see on a daily basis if the wheels are starting to fall off.' [P4]

Many participants recognised that their regular interactions with clients meant they were able to notice changes in behaviour. This is important as it may indicate a lapse or relapse, or be related to their mental or physical health.

'I can kind of pick when they come in where they're at... you can kind of gauge if they're having a rough time or if they perhaps need a little bit of help, because I've worked with them probably for nearly four years.' [P12]

Health navigation

Most participants recognised the clinical role for pharmacists including providing medicines information, facilitating health care and navigating health services for clients.

'I'm often worried with our methadone clients of their level of literacy, so that's why we go through the processes to make sure that they understand everything.' [P1]

Some participants discussed ways they provide accessible health services from their pharmacy for this population group.

'I've printed information for them, talked to lots of them about Hep C treatment... about trying to cut their alcohol use down, ... we've done blood pressures, even had respiratory nurses to come and do some spirometry...' [P7]

Participants acknowledged that people on opioid substitution treatment often need additional advice or support in managing their health, as they may not have social supports that other population groups take for granted.

'a lot of them ... they don't have the capabilities to go and ask for themselves, they're not motivated, or they've had such bad reactions at general practitioners (GPs) they don't want to go and ask.' [P7]

Table 1. Participant demographic details ($n = 13$

Participant demographic information ($n = 13$)	Number of participants
Gender	
Male	4
Female	9
Ethnicity	
NZ European	10
Indian, Middle Eastern, African	2
Asian, Chinese, South-east Asian	1
Age distribution (years)	
25–34	4
35–44	4
45–54	4
55–64	1
Geographical region (by DHB)	
Waitemata	2
Bay of Plenty	1
Waikato	2
Lakes	1
Taranaki	1
Whanganui	1
Capital and Coast	2
Nelson-Marlborough	1
Canterbury	1
Southern	1
Participants' pharmacy practice ($n = 13$)	
Community pharmacy experience (years)	
<5	3
5–14	3
15–29	5
≥30	2
Professional development in addiction [†]	
Yes	5
No	8
Role in the pharmacy	
Owner	5
Employee	6
Dispensary Manager	1
Locum	1
Work hours	
Part-time (≤35 h per week)	4
Full-time (>35 h per week)	9

(Continued)

Table 1. (Continued)

Participant demographic information ($n =$ 13)	Number of participants
Participants' pharmacy workplace ($n = 13$)	
Size of pharmacy	
Small (1–2 pharmacists)	7
Medium (3–4 pharmacists)	5
Large (5–6 pharmacists)	1
Days open each week	
Monday–Friday (5)	3
Monday–Saturday (6)	4
Monday–Sunday (7)	6
Number of clients on opioid substitution	
0	1
1–4	1
5–19	6
20–29	1
≥30	4
Medications provided	
Methadone	3
Methadone and Buprenorphine	9
No opioid substitution offered	1

[†]Professional development included: attending local Continuing Education meetings, National Association of Opioid Treatment Provider meetings or undertaking onsite, online or distance learning papers or courses. NZ (New Zealand); DHB (District Health Board).

Participants identified an increasing number of health issues with this population, including comorbidities and palliative care, and a role for pharmacists in navigating and supporting people with complex health conditions. Participants also acknowledged they were an important link between health services for clients under multiple providers.

'.... we've ended up with three or four patients who are hospice patients.' [P1]

'We're the main person trying to oversee everything... there's consultants, there's GPs, and then there's the addiction service, hospital doctors... we're the one person that sees all of it.' [P7]

Greater team involvement

However, some participants felt that despite being in the unique position of having regular contact with clients in a health-care setting and insight into clients' health and social circumstances, the observations and information pharmacists have about clients' wellbeing are often not formally recognised or regularly accessed by other health providers.

'We could see her progressively getting more and more unwell, so we spent a lot of time phoning to say that she is getting incredibly unwell, and you need to do something about her.' [P1]

Participants said that much of a client's relevant clinical and psychosocial health information, including co-morbidities, environmental stressors and recovery goals, are inaccessible to them, thereby preventing pharmacists from providing optimal health care and support.

'I think we're just seen as people that give out the methadone which I think is wrong. ... we should probably be included in meetings with the client, just to know what's going on with them, to give input about where we think they're at ... we're undervalued and under used.' [P12]

Several pharmacists identified fragmented care and lack of access to health information as significant barriers to their fulfilling their clinical role. Some felt this was because other health professionals did not understand the clinical role of pharmacists.

'We don't even have the information that means that we can do our job well. As a pharmacist you want to know liver function and renal function when you're looking at people's medications. I think we're critical to monitoring their health, watching for drug interactions, side effects, ... I don't think anybody really understands pharmacy and the role of the pharmacist at all.' [P7]

When participants were asked if they perceived themselves as part of the opioid substitution treatment team, many did not. Most participants felt that sub-optimal communication between pharmacists and other health providers was the most significant barrier to collaborative care.

'I don't really see us involved at all ... like I said, the case workers never call us to ask us how a client's going.' [P8]

Barriers to good communication

Several participants identified an important barrier to regular communication and integrated care was the physical location of a pharmacy being separated from the rest of the team.

"The community pharmacist is in the team, but oddly dislocated from it ... that gives us a level of contact with the client, but also our dislocation from the rest of the team. I guess it gives us a unique insight into the client, but it straightaway hinders our ability to actually communicate with the rest of the team.' [P6]

Participants spoke of logistical barriers to communication, including pharmacists being unable to easily and efficiently contact other health providers when they needed to, and frustration at being unable to contact prescribers after hours.

'I end up leaving a message with the office who will then pass it on to the doctor, who may or may not then get back to me.' [P5]

'... they will come in after-hours, and something will be wrong ... trying to get into contact with someone who can help is such a mission after-hours.' [P9] Some participants felt the administration and training aspects, as well as time required to contact providers and support clients, is not recognised or adequately funded, thereby making it not financially viable.

'... you know, we have a business to run.... like where's the funding coming from?... you have to value your pharmacist time ...' [P2]

Benefits of good communication

Several pharmacists commented that regular communication with the opioid substitution treatment team, when it occurred, was beneficial both in improving service delivery and in developing relationships between health providers.

'Everyone seemed to rely on each other because obviously if we had any issues, we needed to be able to contact them about any patients straight away ... And ... if they had any issues, they needed to contact us.' [P11]

Some pharmacists felt that regular face-to-face interactions with other heath providers were more valuable than phone or written communication, as it helped to develop the working relationship essential for collaborative care.

'A couple of them do make an effort to come into the pharmacy and say, 'oh hi I am here from [addiction service]', because you know them on the phone, but meeting them in person is very different.' [P10]

Pharmacists felt that visits from the addiction service could provide insight as to some of the administrative issues and challenges with providing opioid substitution treatment from the pharmacist's perspective.

'No, I don't think we're really considered as part of the team. ... it wouldn't hurt for clinic staff and case managers to visit dispensaries occasionally just to see what really does go on.' [P4]

Discussion

Health policy recommends using primary care resources, including community pharmacists, to identify and manage the needs of vulnerable populations.¹⁹ Primary health care has been shown to be most effective when it is accessible and

delivered by collaborative teams.²⁰ Although this study did not explore consumer perspectives, research and policy documents identify pharmacists as an accessible health provider,^{21–25} and interview data confirm that pharmacists in NZ are well placed to support people on opioid substitution treatment.

Findings from this research suggest that despite being an accessible health provider for a population who experience significant health inequities,^{7,10,26} clients' health care could be improved by other health providers recognising the clinical role of pharmacists and by ensuring there are effective communication systems that allow for efficient information sharing and better team engagement. Many study participants confirmed previous reports that pharmacists do not perceive themselves as part of the opioid substitution treatment team.11,14 NZ health policy identifies an integrated health workforce as a priority^{27–29} and both the national Opioid Substitution Treatment Guidelines and associated Audit and Review Tool suggest that pharmacists should be considered part of the multidisciplinary team.^{6,30} However, results from this study align with Australian^{15,31} and United Kingdom^{11,12,14} research finding that pharmacists do not perceive themselves as part of a collaborative team due to lack of co-location and involvement in clinical decisions and difficulty in prompt communication with other health-care providers.

McDonough and Doucette's Collaborative Working Relationship Model³² identified role specification as the most influential factor in developing a Collaborative Working Relationship.^{33,34} Participants described their role in supporting and managing clients' co-morbidities, referring to some of their clients as being medically complex, with medications prescribed by multiple health providers. Pharmacists can be 'the one person who sees all of it,' but some feel under-valued by other health providers and under-utilised in the health system.

Participants highlighted pharmacists' unique understanding of medication and clinical role in mitigating risk, and yet not always having access to the health information necessary to prevent drug interactions or address sub-optimal prescribing. Pharmacists also identified concerns with some clients' health literacy and their important role in explaining medical information and health navigation. For effective collaboration within healthcare teams there needs to be a clear understanding of all team members' roles and responsibilities, and respect for each other's professional knowledge.^{32,35,36} However, several studies suggest that healthcare providers may not fully understand or recognise pharmacists' clinical role.^{35,37,38} From this research, we suggest this extends to some opioid substitution treatment teams.

The model created by McDonough and Doucette, supported by international research, also suggests that in addition to understanding each other's roles, collaboration between clinicians is enhanced by proximity and effective and efficient communication.^{32,35,38,39} Although most participants did not specifically refer to proximity, many attributed the lack of effective communication to not being colocated, constraining collaboration. This is supported by research showing that team members who are not co-located are often less integrated into teams.^{32,40} Pharmacists reported knowing clients through their regular interactions and sometimes being the first to notice when a client is unwell, yet information about clients' wellbeing is not sought by, or easily communicated to, the wider opioid substitution treatment team. Conversely, the team often have relevant information about a client's social situation, early warning signs and recovery goals that are not shared with pharmacists.

Despite being an accessible health service provider for clients, many pharmacists work in isolation from other health services,²³ and clinical conversations with other health providers can be logistically challenging. Several pharmacists felt that if relevant patient health and psychosocial information were more accessible, they could be in a better position to support clients on their recovery journey. In line with Australian research, pharmacists discussed challenges contacting prescribers.^{31,41} The NZ Audit and Review Tool for opioid substitution treatment specifically requires addiction services to be accessible to pharmacists, including after hours, and that pharmacists are involved in major treatment decisions,³⁰ but our findings suggest this may not always happen.

Pharmacists recognised value in face-to-face communication during visits from addiction service staff, or attending team meetings; this has previously been identified as an important facilitator to collaboration.⁴⁰ Although participants noted that time and staffing constraints on both sides can make this challenging, there has been a significant increase in the use of video-link technologies since the COVID-19 pandemic arose. As these technologies are becoming more accessible and reliable, this could provide opportunities for pharmacists to be more involved in clinical conversations with the wider treatment team. This would, however, require additional resourcing, with some participants already noting they are time-poor and not funded for additional time spent supporting clients and communicating with the team.

This qualitative study has provided insight into the opioid substitution treatment service from the perspective of a diverse group of NZ community pharmacists. Pharmacists are well placed to support people prescribed opioid substitution treatment with many of their health-care needs, yet this study suggests some pharmacists do not feel the wider opioid substitution treatment team understand their role or perceive themselves as part of collaborative teams. Communication barriers and misunderstanding of pharmacists' clinical role make collaborative working relationships challenging and are limiting the care being provided to this vulnerable population.

A strength of this research was the diversity of participants practising in different locations nationally, including a pharmacist not currently providing opioid substitution treatment. Four interviews with addiction sector stakeholders helped to inform the interview schedule to reduce researcher bias. Technical issues meant different interview formats were used. Responses in telephone interviews tend to be briefer and non-verbal cues are less easily interpreted than in video interviews, but there is limited evidence about this affecting the quality of collected data.42,43 A single researcher undertook data collection and preliminary analysis; all authors (two pharmacists and a GP) were involved in reviewing, discussing and agreeing upon the final coding framework. Although 10 District Health Boards (DHBs) were represented, there is likely to be further geographical variation, which could be better understood with quantitative research.

This research sought only to explore perceptions of pharmacists. Further research could usefully examine the views of clients, prescribers and the wider treatment team. Client and provider perspectives of the service have been explored nationally^{44,45} before the current guidelines were released⁶ and did not specifically examine the pharmacist's role. Understanding clients' views on privacy, stigma and the pharmacist's role in providing additional health services (as investigated in Australia^{22,46,47}) is essential in developing an improved health-care model for this population.

Competing interests

The authors declare no competing interests.

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