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Short Communication

Australian community pharmacists' perceptions of public health before the COVID-19 pandemic

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Abstract

Background: Consensus is lacking regarding delivery of public health services in community pharmacy.

Objective: The objective of this study was to explore pharmacists' perspectives on public health initiatives in community practice.

Method: Australian community pharmacists were randomly sampled to participate in face-to-face, semi-structured interviews to explore public health definitions and perceptions.

Key findings: Nine pharmacists participated early 2020, pre-COVID-19. Mean interview duration was 23 min. Results revealed little distinction between individual and public health services. Barriers to service provision were lack of time, remuneration, training, standards and privacy. Enablers opposed barriers, namely accessibility, improved funding, education, standardised services and consulting rooms.

Conclusion: Improved clarity is required regarding the role that community pharmacists can assume in provision of public health.

Keywords: community pharmacy practice; public health; Australia

Background

Public health involves organised societal approaches to promote health, prevent disease and enhance longevity in individuals, communities and populations.^[1] It is important for the effectiveness and efficiency of health system delivery. Consensus is lacking over the parameters of public health services, particularly involving the pharmacy profession.

The ambiguity of the definition of public health contributes to the difficulty in defining the role community pharmacists could play in public health. There is evidence of successful international community pharmacy driven public health initiatives, facilitated by the accessibility, proximity and availability of community pharmacists.¹², ³¹ Evolving pharmacists' roles in a changing practice landscape has facilitated provision of health screening, early intervention and treatment services to improve public health outcomes. Successful

interventions include chlamydia^[4] or Hepatitis C screening,^[5] antimicrobial stewardship,^[3] vaccine administration,^[6] smoking cessation,^[7] alcohol screening^[8] and opioid replacement programs and disease control (e.g. obesity management, blood pressure screening, diabetes management). Consumers report mixed satisfaction with health interventions undertaken in community pharmacy.^[9]

Pharmacy public health initiatives may potentially reduce health care systems burden and generate cost savings.^[3, 5, 7, 10] However, reported barriers to the implementation of public health interventions have included under-resourcing, skill shortages, insufficient capacity, poor morale, low pay, self-perceived competency, inadequate training, pharmacist's workload, lack of time, lack of space and lack of demand or awareness of services.^[2, 10, 11]

Given the recent expansion of pharmacists' roles, particularly in vaccine administration in Australia, it is timely to explore

Individual Patient Focus	[Blood pressure checks] "Pharmacy is a really easy, convenient		
	place to come and get that monitored." P2		
Disease Management	[Weight management] "It's less confronting to go to the pharmacy it's always been a bit of a core part of pharmacy." P1		
Primary Prevention	[Primary prevention] "We correlate it if it's stroke week, or heart week, or asthma week, and we try opening some of those conversations and see where we can help them manage their conditions better too." P2 "We can't just treat one disease and isolate it it's all intertwined poor diet, smoking, alcohol, weight gain, all that contribute to the disease in the end." P6		
Patient Support	[Smoking cessation] "We do want to encourage them in their quitting journey it's very important for health. That can prevent a lot unnecessary spending by the government and hospital" P6		
Screening	[Sexually transmitted infection screening] "I think it's a good idea. I mean we would be comfortable doing it" P8		
	[Alcohol screening] "It's massive health problem So that's an ideal thing that healthcare should be focusing on." P4		
	[Needle and syringe program] "We promote safe use of needles and syringes and we've got a bin to dispose of [them]." P2		
Harm Reduction	[Opioid replacement] "Most definitely, strong believer in that we definitely have a place to play." P4		
Herd Immunity	[Vaccine surveillance] "I think pharmacists play a big role in and we're a lot of times the first point of call to ask what vaccinations they need checking their vaccination status and always just reiterating the importance of staying up-to-date with it." P2		
Antimicrobial Stewardship	[Vaccine administration] "We certainly feel like we have the capacity to expand that." P9		
	[Antimicrobial stewardship] "Most definitely, and community pharmacy is ideally placed." P3		
Pandemic Education	[Pandemic education] "We're probably more of an education than anything. There's been a lot of scare mongering – a lot of misinformation" P5		
Pandemic Support	[Distribution of personal protective equipment] "so we are providing the alcohol, the masks." P5 "a distribution opportunity that the government needs." P8		
	[Vaccination] "We potentially could be an enormous resource if we were to face an epidemic of some sort of virus in the world. If we were required to vaccinate the whole population the current system probably would be stretched to the limit." PO		
Whole Community Focus	system probably would be stretched to the limit." P9		

Figure 1 Concepts and exemplar quotes relating to pharmacists' perceptions of public health services.

pharmacists' current perceptions of public health in community pharmacy. Recent Australian research has focused on extended pharmacy services, [9] which prompted exploring the role of community pharmacists in public health within an Australian context.

Objective

The overall aim of the study was to explore community pharmacists' perspectives on public health initiatives in community practice.

Method

The exploratory study involved semi-structured interviews with community pharmacists in the Gold Coast area of Queensland, Australia. Institutional ethical clearance was received (HREC No. 2019/1014).

Community pharmacists were randomly sampled. Potential participants were telephoned, emailed study information and semi-structured interviews conducted face to face at participants' pharmacy sites. Consented interviews were audio recorded,

Table 1 Main barriers and enablers to public health services in community pharmacy

Barriers	Exemplar interview quotation	Enablers	Exemplar interview quotation
Lack of Time	"I think we fail generally, I guess, because we are time restricted. Again, lack of resources and lack of staff on site. So, yeah, I feel ashamed that we can't do more." P6 "in a time-poor environment, we're already cherry-picking how we interact with our customers and we're prioritising obviously from what's most important to least important. And unfortunately, it is a retail environment. So, a pharmacist's time does cost, so we have to use it judiciously." P7	Accessibility	"We are probably the most successful medical professional that the community has, trusted, and often a friend to patients, we're less confronting than going to the doctor, and I think the fact that we're open seven days a week, it means that people have a medical professional on hand always that they can go to." P1 "The pharmacist is the first point of contact with the patient, and for generations, we have been plugged in to our local community, we know our customs, we know their families, we know their history, we know their medical history, and we've always been the first point of call, and we then will refer a patient on to a doctor or a hospital, but we've looked after primary health for that." P4
Lack of Remuneration	"we're already doing major first line involvement in [state] and the whole country's health that's saving the government a lot of money and they need to value it more. I think we need to be paid by Medicare for some of our services." P1 "Time and money. So, if you're not being remunerated effectively for it you can't afford to have more professional services if you can't afford the profession to promote them." P5 "If pharmacy is [going to] provide a service that's under the umbrella of a public health service, it has to be viable financially. Unfortunately, doctors don't provide a	Funding	"Definitely some more government funding." P2 "I guess maybe a complete separate funding." P3 "We still have to be commercially operating we do them [services] but I certainly think more government supported [funding] would help." P8
Lack of Privacy	service for free. So, the same applies for pharmacy." P7 "Yes, it's tricky. I didn't have a private treatment or even a consult room." P1 "Personally, I think confidentiality and privacy is a bit of a barrier in pharmacy and I feel that [sexually transmitted infection screening] would be something customers would maybe not feel very comfortable talking about." P2	Consulting Rooms	[Weight management] "I think if you've got enough staff and you've got a private consult room, [it] is the way to go." P1 [Alcohol screening] "I think there could be a place for it, but again, I think it's a bit more of a privacy and confidentiality, privacy type consult room sort of situation." P2
Lack of Training	"I think it's lack of training, like we don't how [to do it]. If we know how then we'd all be engaged." P6 "without knowledge on the situation, it's hard to provide a service and you have to be definitely competent to make sure you're not going to either apply information or service incorrectly." P7	Education	"So, even if we're looking at doing any public health, obviously making sure everyone – all the pharmacists partake in the training needed." P2 "And more education obviously as well" P3 [STI screening] "If there is some sort of training, they can train pharmacists how to engage and how to promote that I believe there is a need for that." P6
Lack of Standards	[Vaccine records] "there's a bit of a gap there until we have a more integrated system with electronic health records, we're not going to be able to survey the population properly and get a really accurate understanding of who's vaccinated and who's not." P1 "I don't think we're lacking information. We might be lacking coordination and standardisation." P4	Standards of Service	"Even if there will be surveillance or some sort of supervision to check and make [sure] a pharmacist [is] upholding the standards." P3 "Needs to be more structure and [there] needs to be more coordination between our recognised professional groups." P4

transcribed verbatim and de-identified transcripts quality checked by researchers.

The interview guide consisted of nine questions with prompts, asking about public health interventions in community pharmacy; pharmacists' perceptions about enablers and barriers to expansion of community pharmacists' public health role; and potential changes needed for expansion to occur. The interview guide was validated by two practising community pharmacists, whose data were excluded from analysis.

Thematic analyses were used to code and generate ideas, and themes that emerged included definitions, pharmacist roles, barriers and enablers to the provision of public health interventions. All team members reviewed the analysis.

While the study aim was to interview a larger sample of pharmacists, recruitment slowed by February 2020, with spreading awareness of the novel coronavirus. Community pharmacists became increasingly unavailable for research. Data collection was suspended once the World Health Organization declared SARS-CoV-2 (COVID-19)

as a pandemic (11 March 2020). Preliminary results are presented of pharmacists' pre-pandemic perceptions of public health initiatives.

Results

Thirteen pharmacists were approached and nine (four females, five males) were interviewed in January and February 2020. Their roles were owners, managers and pharmacists in charge with practice experience ranging from 5 to more than 30 years. Six of the community pharmacies identified with three different banner groups, and the remainder were independent pharmacies. Mean interview duration was 23 min (minimum 15, maximum 42 min).

Study results revealed a lack of consistency regarding the definition of public health initiatives in Australian community pharmacy, with limited focus on public health as organised societal efforts. Instead, participants mostly discussed individual patient screening services. Participant comments related to concepts of public health services and interventions in community pharmacy were critically analysed, clustered with similar ideas and presented on a continuum, from individual patient-centric to community-centric concepts, in Figure 1.

Participants appeared to value aspects of public health that they were familiar with or participated in; most commonly primary health prevention measures (i.e. blood pressure monitoring), smoking cessation, needle and syringe programs and vaccination. All participants recognised pharmacist-administered vaccination as an important public health intervention. The success of Australian community pharmacy vaccine programs was viewed as a potential gateway to the expansion of public health services. In contrast, many participants expressed discomfort with sensitive or unfamiliar service topics, particularly alcohol or sexually transmitted infection screening and opioid replacement programs, with some identifying lack of training and awareness as contributing to their lack of confidence in these unfamiliar areas.

Participants identified barriers and facilitators to the delivery and expansion of public health initiatives, with exemplar interview quotes related to each summarised in Table 1.

Participants expressed willingness to support programs perceived as beneficial, particularly if they minimally impacted pharmacy time or workload, such as needle and syringe programs. For more involved interventions, the main barriers to provision were lack of remuneration, time, training, standards and unsuitability of premises. While lack of familiarity and confidence were mentioned when discussing potential public health initiatives, they were not identified as possible barriers to expansion of services.

Discussion

This study identified that community pharmacists' perceptions of public health revealed little distinction between individual and broader population-focused public health initiatives. Barriers to the provision of public health services identified in this study aligned with previous research. [2, 11] However, lack of confidence not being identified as a potential barrier in this study contrasted with previous research, in which pharmacist competency was identified as the primary barrier to public health role expansion. [10]

The primary facilitators to expansion of public health initiatives mostly opposed the lack of resources identified as barriers. Enablers were pharmacists' accessibility; provision of funding and education; availability of private consultation rooms in pharmacies and

professional standards. Perhaps identification of aspects of practice (e.g. funding, education) as either barriers or enablers was determined by the pharmacist's willingness and motivation to undertake an expanded role in public health, which somewhat reflects recent research.^[9]

The later interviews were conducted as COVID-19 awareness increased. Participants described pharmacists' potential role in the management of current or future pandemics, proposing that they could provide consumer education, personal protective equipment or implement mass vaccination measures. Pharmacist pandemic vaccination would be facilitated by community pharmacists' accessibility and proximity, aligning with previous research findings.^{12,3,6]}

A study limitation was disruption of data collection by COVID-19, therefore data saturation could not be attained. The researchers intend to resume interviews once COVID-19 abates, to explore pharmacists' opinions following their pandemic experience.

Conclusion

This research highlighted the need for improved clarity of the role that community pharmacists can assume in provision of public health.

Supplementary Material

Supplementary data are available at *International Journal of Pharmacy Practice* online.

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Author Contributions

Conceptualisation, DH and LH; Methodology, DH and LH; Investigation, JD and JC; Formal Analysis DH and LH; Writing - Original Draft Preparation, DH; Writing - Review and Editing LH; Funding Acquisition DH and LH. All authors have read and agreed to the published version.

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Conflict of Interest

None declared.

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