Pharmacist prescribing and care improves cardiovascular risk, but what do patients think? A substudy of the R_xEACH study

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Introduction

Pharmacists' interventions in patients with chronic diseases have been shown to improve outcomes¹⁻⁶ and reduce health care costs.⁷ As a result, their scope of practice is expanding in Canada to include more patient-centred services.⁸ This expansion, combined with the fact that they see patients with chronic conditions frequently,⁹ place pharmacists in an ideal position to systematically identify patients with chronic conditions and contribute to their treatment and management.

The Alberta Vascular Risk Reduction Community Pharmacy Project (R_xEACH) was a large randomized trial designed to evaluate the impact of a community pharmacy-based case-finding and intervention program on cardiovascular (CV) risk in patients at high risk for CV events.⁶ This included those with diabetes, chronic kidney disease, established vascular disease or Framingham risk >20% who had at least 1 uncontrolled risk factor (i.e., blood pressure, low-density lipoprotein cholesterol, tobacco use or A1C). The pharmacist intervention included patient assessment, laboratory assessment, individualized CV risk assessment and education about this risk, treatment recommendations, medication adaptation and prescribing, regular communication with the patient's family physician and regular follow-up every month for 3

months.⁶ The study demonstrated a 21% reduction in risk for CV events when compared with usual care.⁶

Identifying the perceptions of patients, pharmacists and family physicians regarding pharmacists' identification and management of patients at high risk for CV events was a secondary objective of the R_xEACH study.¹⁰ During our interviews, patients provided important insights into pharmacists' care. As a patient-centred program, we sought to report patients' perceptions in further detail.

Methods

A detailed description of the methods of this qualitative descriptive study has been described elsewhere.¹⁰ In summary, all participants who took part in the R_xEACH study were eligible to participate in this substudy. Letters were sent to the participating community pharmacists to identify eligible patients (as per research ethics board request). After being approached by their pharmacist, interested patients were sent a letter of invitation describing the substudy. All participating patients provided verbal informed consent before being interviewed. The research was approved by The Conjoint Health Research Ethics Board, University of Calgary.

The interview guide was developed based on a review of the literature^{11,12} and in consultation

with the research team (pharmacists, nurses, family physicians and researchers). Questions for the patient interview focused on their perception of the intervention and the care they received from pharmacists; communication and interaction between patients, pharmacists and family physicians; and suggestions for sustainability.

All interviews were audio-recorded and transcribed verbatim. Field notes were recorded at the time of the interview and used to inform data analysis. Recruitment and interviews were continued until data saturation was achieved.

Data were analyzed using conventional qualitative content analysis.^{13,14} Three reviewers (Y.N.A.H., S.L., C.M.) analyzed and coded the data independently. C.M. is a patient who had not used pharmacists' expanded scope of practice services before and was not part of the R_xEACH study. As such, he offered a unique unbiased perspective to data analysis and provided a special assessment to the transcribed data. Consensus on final themes was achieved through discussion between the reviewers.

Results

Pharmacists identified 16 eligible patients, 14 of whom consented to take part in this study. The patient characteristics are outlined in Table 1. There were equal numbers of male and female participants, and approximately two-thirds (57%) were older than 60 years. The patient reviewer's (C.M.) codes and themes were consistent with the other 2 reviewers. We identified 3 main themes: 1) patient-pharmacist relationship, 2) health care system characteristics and 3) patient reaction. The main theme and subthemes are outlined in Figure 1.

Patient-pharmacist relationship

Rapport. Participants highlighted the importance of having a strong relationship with the pharmacist. Indeed, most of them indicated that such a relationship could enhance the level of support and comfort they have with their pharmacists.

I'm thinking that she and I get along so well that she's continuing to monitor me. She's an excellent person. (Patient 2)

Compassion. Participants appreciated the compassion pharmacists showed during their interactions. They felt that the pharmacist truly cared about them both as patients and as people.

TABLE 1 Patient characteristics

Characteristic	No.
Sex	
Male	7
Female	7
Age distribution (years)	
≤50	2
51-60	4
61-70	6
71-80	1
≥81	1
Residence location	
Urban	8
Rural	6
Comorbidities	
Diabetes	12
Chronic kidney disease	8
Previous cardiovascular disease	5
Hypertension	14
Tobacco use	2

[The pharmacist] asks us how we feel and actually talks to us. . . . He cares, the pharmacist. He's very special. (Patient 12)

Participants also highlighted that pharmacists took the time to listen to them and conveyed messages in a way that they could understand.

He's been very good, kept us well informed and when he recommends something he explains why he's recommending it, what it's gonna do for us and how it's gonna change things and he gets feedback from us as well. (Patient 4)

Health care system characteristics

Filling health care gaps. Most participants identified pharmacists' expanded scope of practice as an opportunity to fill health care gaps, reduce the strain on the health care system and address the needs of those patients who do not have a physician or are unable to see their

FIGURE 1 Themes and subthemes

physician in a timely manner due to scheduling conflicts or prolonged wait times.

I think our health care system is strained as it is and if we can give power to the people to do certain things that would help [patients] help themselves. (Patient 2)

Collaboration. Participants highlighted pharmacist and physician collaboration as an integral part of their care. They appreciated such collaboration and felt reassured when they knew that their pharmacist and physician were communicating regularly about their care.

... and like I said [the pharmacist] keeps [the doctor] up to date on what's happening with us and he's really happy with the way things are done for us ... [the doctor is] very happy because [the pharmacist] keeps him informed on everything. (Patient 3)

Some participants indicated that their pharmacists would refer them to their physicians when needed.

She'll say you know what, you need to make a doctor's appointment. ... I'll call the doctor. (Patient 1)

Others highlighted their physician referring them to the pharmacist for care.

Well ... I guess [I] became involved when our doctor recommended [the pharmacist] as having more knowledge on diabetes than we did so we went and saw him and he did a quick evaluation and put us on a program that helped get our diabetes down ... and he keeps the doctor informed. (Patient 4)

Accessibility. Participants felt that pharmacists were easily accessible and provided timely care and services. Many participants appreciated the fact that they did not need to make an appointment to discuss their health-related concerns, review laboratory data and get "in the moment" health care advice.

With the pharmacist, you have a lot more direct contact and you can see the pharmacist every time you go in, you don't need an appointment. ... If I wanted something I could go see [the pharmacist] today, this moment. (Patient 5)

Trusted health care professional. Participants reported that they would reach out to pharmacists to get information about their health and medications. Moreover, this was enhanced by physicians' trust, shown by referring patients to pharmacists. Participants indicated that they would like to see pharmacists' scope of practice expanded further and hoped to continue receiving the services provided during the R_xEACH study.

I feel very confident with going to a pharmacist and asking him these questions. (Patient 10)

Patient reaction

Satisfaction. All participants were extremely satisfied with the care they received from pharmacists.

He's definitely ... been a life saver. ... It's been a Godsend. (Patient 3)

Participants liked the idea of the expanded scope of practice and reported that they will recommend it to their family and friends.

I think is a fantastic idea and I think you'll be crazy not to continue. (Patient 2)

I would highly recommend it. I think it's the way to go. (Patient 5)

Oh extremely [satisfied]. . . If everyone can have a pharmacist like that, that would be a good thing because she takes the time for you. (Patient 12)

Empowerment. Most participants reported feeling empowered when pharmacists encouraged them to invest in their health and undertake activities to take responsibility for their own health. Pharmacists also encouraged patients to seek care from physicians when appropriate.

. . . gave me a reason to actually care about my health. (Patient 1)

And when you look at being encouraged to do good things for yourself and notice results it's not hard to stay on track. (Patient 2)

A few participants highlighted that they will only go to see their pharmacist and not any other pharmacist, because he or she received the required training and stays abreast of clinical evidence.

We've been lucky with [pharmacist], I mean the way he has been with us. I just think that as long as [the authority] is not given to everyone, you know [our pharmacist] is really up-to-date with everything and he's very good at everything. (Patient 3)

A limited number of participants warned against overwhelming the pharmacists with a large workload if they started providing the expanded scope of practice services on a wider scale.

The only fear I have is that they too will become overwhelmed by the numbers. Like, I would love to see this continue and would just love to continue going to my pharmacist for maybe more things, but I don't want to be in a line-up with 10 other people waiting to do the same thing. (Patient 10)

Discussion

Overall, participants were extremely supportive and appreciative of the pharmacists' expanded scope of practice. Indeed, most of them indicated that they would like to see such scope of practice expanded further, highlighting their satisfaction with the care that they received. Timeliness and ease of access, compassion, caring and strong relationships were major contributors to participants' satisfaction. Participants felt empowered, as they were encouraged to invest in their health and visit their physicians when needed.

Our findings are in line with the findings of Bajorek and colleagues,¹⁵ who assessed patients' perceptions of pharmacist-led service for hypertension management. They reported that trust and a strong relationship with the pharmacist were significant contributors to the high level of satisfaction with the service.¹⁵

McCann and colleagues¹⁶ evaluated patients' perceptions about pharmacist prescribing in diabetes, hypertension and anticoagulation. They found that patients appreciated being taken care of by a team.¹⁶ This is consistent with our findings in which participants reported being reassured when they knew that pharmacists and physicians were communicating about their care. Furthermore, some participants reported that their pharmacists would ask them to go see their physicians when needed, highlighting the complementary and unique skill set that each member of the health care team brings to the table.

Famiyeh and McCarthy¹⁷ conducted a scoping review to identify the views of patients and members of the public about pharmacist prescribing, which is a fundamental component of pharmacists' expanded scope of practice in Alberta. They reported that patients and members of the public highly valued the ease of accessibility and communication with pharmacists.¹⁷ Patients and members of the public were supportive of pharmacist prescribing in chronic conditions, which includes CVD.¹⁷ These findings are consistent with our findings where participants highlighted accessibility, good relationships and compassion as major contributors to being satisfied with pharmacist care.

Despite conducting a stand-alone conventional qualitative content analysis,^{13,14} our findings were still consistent with the findings of the main qualitative arm of the R_xEACH study, where we explored the perceptions of patients, pharmacists and family physicians regarding

pharmacists' identification and management of patients at high risk for CVD.¹⁰

The fact that participants were identified by their pharmacists could have introduced bias, since the chosen patients might have a more favourable opinion about pharmacists' expanded scope of practice when compared with the general population. However, our participants actually experienced pharmacists' expanded scope of practice, and their opinions were consistent with what has been reported in the literature. Using

a patient as an independent reviewer provided a special assessment and offered a unique unbiased perspective to the analysis. This adds to the strength of our substudy.

The high level of patient support and satisfaction combined with the fact that pharmacists are the most frequently visited health care professionals⁹ indicate that pharmacists' expanded scope of practice is both patient centred and could be of great public health benefit if implemented on a wider scale. ■

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