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Health care providers' perspectives on challenges and opportunities of intercultural health care in diabetes and obesity management: a qualitative study

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Abstract

Background: Migrants often face worse health outcomes in countries of transit and destination because of challenges such as financial constraints, employment problems, lack of a network of social support, language and cultural differences, and difficulties accessing health services. As understanding how the migrant context affects patient–provider engagement is critical to the provision of contextually appropriate care, this study aimed at understanding primary health care provider perspectives on challenges and opportunities of the intercultural care process for migrant patients with diabetes and obesity.

Methods: This qualitative study within a multimethod, participatory research project involved primary care providers in clinics and primary care networks in Edmonton, Alberta, between September 2019 and February 2020. We explored health care providers' approaches to diabetes and obesity management, and experiences of and challenges with intercultural care. We conducted a thematic analysis using an interpretive qualitative approach.

Results: We conducted 9 interviews and 4 focus groups and identified 3 themes: a shift from traditional weight loss-centred approaches; relationships and navigating cultural distance; and importance of and limitations in identifying and addressing root causes and barriers. Health care providers encounter considerable nonmedical challenges when supporting immigrant patients, such as navigating cultural distance and working with patients' financial constraints.

Interpretation: The nonmedical challenges we identified can hinder the process of chronic disease management. Thus, in addition to educational programs and trainings to enhance the cultural competency of health care providers, incorporating avenues for cultural brokering in health care can provide invaluable support in patient–provider engagements to mitigate these challenges.

iabetes and obesity are chronic diseases with substantial individual- and population-level impacts, increasing morbidity and mortality.¹⁻³ Globally, the prevalence of diabetes and obesity have steadily increased over the past few decades.³ Treating these diseases and associated complications contributes considerably to health care and national economic costs. In Canada, diabetes and obesity are pressing health concerns. Approximately 11.7 million people live with diabetes or prediabetes,⁴ with direct and indirect health care costs of diabetes estimated to exceed \$17 billion by 2025.⁴ About 1 in 4 Canadian adults live with obesity according to measured height and weight data,⁵⁻⁷ with estimated health care costs of \$5-\$7 billion.^{2,8}

In Alberta, Canada, family doctors and allied health care professionals, including nurses, behavioural health consultants, social workers and dieticians, work collaboratively in primary care networks to provide integrated care for the primary care needs of patients.⁹ This includes managing chronic diseases through long-term management with diverse strategies using team-based care.⁹⁻¹¹ Personalized health care

approaches responsive to patients' life conditions¹²⁻¹⁴ are recommended for diabetes and obesity management. This care process represents an adaptive challenge of addressing health

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care providers' beliefs, knowledge, skills and practice standards, and improved organization of care.¹⁰ Many primary care professionals feel ill-prepared to undertake effective obesity management.^{15,16} Reasons for this include knowledge gaps, weight bias, inadequate training and lack of experience working in interprofessional teams.^{15,17}

The 2021 Canadian census showed that almost onequarter of the population (more than 8.3 million) were landed immigrants or permanent residents in Canada, the largest proportion among G7 countries.¹⁸ Migration could both improve or diminish an individual's health status. Often, immigrants and refugees face worse health outcomes in countries of transit and destination owing to challenges such as financial constraints, employment problems, lack of a network of social support, language and cultural differences, and difficulties accessing health services.^{19,20} Moreover, with societies becoming increasingly multiethnic with immigration, it adds considerable intercultural care challenges to health care systems.^{21,22}

Intercultural care in the context of this work refers to a meeting of different cultural contexts, perspectives and understandings in the patient–health care provider encounter.^{21,23} This could be an opportunity to co-create meaning-ful health care practices, giving various cultural perspectives equal voice and space. However, intercultural care encounters could also face challenges, contributing to inappropriate assessments, diagnoses and treatments when cultural differences are not factored in.²⁴ Consequently, understanding nuances of intercultural care encounters is crucial to providing meaningful health care to immigrants and refugees living with diabetes and obesity. In response to this, our research examines the dynamics of chronic disease management with patients from immigrant communities, to generate sustainable solutions.

The aim of this study was to understand primary health care provider perspectives on challenges and opportunities of the intercultural care process for patients with diabetes and obesity from immigrant and refugee communities.

Methods

We conducted an interpretivist qualitative study to understand health care providers' experiences and the meanings they assigned to them.²⁵⁻²⁷ Interviews and focus groups were conducted between September 2019 and February 2020 in clinics and primary care network offices in Edmonton, Alberta (Appendix 1, available at https://www.cmajopen.ca/ content/11/4/E765/suppl/DC1). This study is 1 of 3 qualitative studies aimed at understanding the gaps in intercultural care from the perspectives of patients - members of ethnocultural communities with diabetes and/or obesity;28 multicultural health brokers - community health workers embedded in these communities; and health care providers in Edmonton. We drew on the population health approach²⁹ in data collection and analysis to capture determinants of health, and synergistic effects of health, illness experience and vulnerable conditions. The design of the qualitative studies

including data collection instruments was in collaboration with our community partners — the Edmonton Multicultural Health Brokers Cooperative (MCHB) and Edmonton Southside Primary Care Network (ESPCN).

Edmonton is a multicultural city, home to migrants of diverse backgrounds including economic immigrants, asylumseekers and refugees. One in 4 Edmontonians is an immigrant, and it is anticipated that by 2050, half of the population in Edmonton will be immigrants.^{30,31} Although immigration experiences vary by the immigration status or route, all have a common need — to be emplaced, find their feet and have a meaningful presence in the society.³² Additionally, given the vital role of immigration to the Canadian economy,^{31,33} supporting immigrant health is critical. One of the 2 key partners involved in this work was the MCHB, which has been immersed in community health and cultural brokering for more than 25 years, supporting immigrant and refugee ethnocultural communities in Edmonton.34 The second partner was the ESPCN,³⁵ which we have collaborated with in previous research to advance diabetes and obesity care in Edmonton. Thus, Edmonton was the setting for this project because of the diversity of the population and the strong community partnerships we had to address our research question.

The study was reported using the Consolidated Criteria for Reporting Qualitative Research checklist.³⁶

Participants

We reached out to primary health care providers through primary care networks in Edmonton that we had previously worked with and via email introductions from primary care providers on the research team. We used purposive and snowball approaches for participant recruitment.³⁷ For the former, we specifically sought out health care providers who engage regularly with patients from newcomer immigrant and refugee communities who could provide insights on the topic. Participants self-determined fit for this criterion. We also reached out to health care providers our research partners suggested. These included health care providers from primary care networks and clinics in Edmonton that have a large patient base from immigrant and refugee communities. These contacts further directed us to other health care providers who met the criterion. Given the iterative nature of data collection and analysis,37-39 the interviewer was able to seek out specific health care providers to fill gaps in the data and capture additional insights on aspects of the topic that emerged as important. Interested participants who responded to the research team were provided with study information and consent forms.

Data collection

Study data were composed of audio recorded and transcribed interviews and focus groups, and field notes taken by the interviewer and research assistant. Interviews and focus groups were led by an experienced qualitative researcher, N.N.O., supported by a research assistant, N.M. The interviewer and study participants did not know each other before the study, and thus the interviewer worked on building rapport³⁷ and used strategies to minimize the potential for desirability bias.⁴⁰ The choice of interviews and focus groups was based on the availability of participants. Focus groups included 6 to 12 participants, consistent with standard practice.⁴¹⁻⁴³ Data collection lasted 45-60 minutes for individual interviews, and 60-90 minutes for focus groups. We used interview and focus group guides with semistructured, open-ended questions,38 with input from our research partners, including primary care providers, and based on insights from literature and our previous work, ensuring that questions were relevant to answering the research question. Since data collection and analysis is iterative,37 the interviewer added or modified questions during the discussions to deepen and clarify responses. We explored health care providers' approaches to diabetes and obesity management, and their experiences of and challenges with engaging with migrants with diabetes and/or obesity. Data collection was continued with different health care providers until saturation was reached. This was established when interviews and focus groups were not generating new insights, and new data produced repetitions of ideas and experiences expressed in previous data in relation to our questions.^{26,37,44}

We incorporated processes to ensure rigour and trustworthiness in our research.^{26,37} Reflexivity exercises at the start of our research helped us maintain a reflexive approach in participant and partner engagement. Additionally, we facilitated regular discussions and documentation (audit trail) of the research process with our community partners to establish credibility and dependability of findings. We ensured methodological coherence in our interpretive qualitative approach with method, data generation strategy, sample size and data analysis processes aligned to our research question.^{26,37}

Data analysis

Data were managed and coded in NVivo (QSR International Pty Ltd. Version 12, 2018). We conducted a thematic analysis of the data, an iterative process of coding, categorizing and generating themes.^{27,45} Data were first cross-coded by N.N.O., T.L., N.M. and D.L.C.-S., and a code manual was collaboratively developed based on discussions from the crosscoding. N.N.O. and N.M. recoded all data using the code manual. Patterns in the data were identified by N.N.O. and discussed with the research team. Patterns were categorized and abstracted to generate themes. Field notes from data collection were referred to during the analysis for additional contextual information. We described the meanings people attribute to the phenomenon,46,47 while keeping descriptions at a level knowledge users can relate to so they can better understand the situation and motivate action.48 Participants were given codes (e.g., P1 = participant 1 and FG1 = focus group 1) in the order in which the interviews and focus groups were conducted.

Ethics approval

This research was approved by the University of Alberta research ethics board (ID: Pro00089571).

Results

Participants included physicians (n = 11), nurses (n = 7), social workers (n = 2), dieticians (n = 2), a pharmacist and certified diabetes educator (n = 1), behaviour health consultants (n = 2), an exercise specialist (n = 1), quality improvement facilitators (n = 6), a special programs manager (managed refugee health programs for the primary care network) (n = 1), a psychologist (n = 1) and clinic managers (n = 3). Duration of practice ranged from 1 year to 30 years. We conducted 9 individual interviews with 7 females and 2 males and 4 focus groups with 6 to 8 male and female participants.

We identified 3 themes: a shift from traditional weight loss-centred approaches; relationships and navigating cultural distance; and importance of and limitations in identifying and addressing root causes and barriers. Illustrative quotations supporting these themes are presented in boxes.

A shift from traditional weight loss-centred approaches

Providers described how they have shifted their focus from weight loss-centred obesity management approaches to encouraging patients to have healthy lifestyles. They felt that there was a need to help patients focus on practical and realistic lifestyle changes for managing diabetes and obesity, rather than "the number on the scale" (FG1). As one provider stated, "people who need to lose weight usually already know they need to make a change or lose weight" (FG3). Some providers described their approach as "weight-neutral" (FG1). In line with this, providers try to avoid inflexible diet plans and encourage mindfulness around eating and other realistic and sustainable goals (Box 1; FG1, FG3 and P8). However, the topic of weight loss still comes up in conversations, especially when discussing cultural foods that may be heavier in sugars and carbohydrates, which affect diabetes or obesity. Providers also mentioned the importance of conveying that weight maintenance is also a valid goal in situations where the patient felt discouraged that despite their lifestyle changes their weight had plateaued.

Providers felt that flexibility in diabetes and obesity management approaches is helpful (Box 1; P9). This is because management of these diseases can be complex, with biological, psychological, social and financial aspects interacting in a person's life. Some primary care networks offer both group and individual education sessions on diabetes. They also found it beneficial in some instances to offer separate sessions for newcomers and immigrants with support from other immigration support agencies. From experience, they realized that having strict program requirements does not work for people and often results in poorer attendance and engagement, and often causes difficulty for patients to access (Box 1; P1). An illustrative example was a provincewide weight management program, with about a 2-year wait, requiring certain classes or modules to be completed before first consultation.

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Box 1: Supporting quotations for theme 1 — a shift from traditional weight loss-centred approaches

- "And so we try to use what we would call a weight-neutral approach. Just because we find a lot of folks when they have weight as that primary measure of success, that's not always the greatest measure of success, because if they're not seeing that number change, then they assume that what they're doing isn't working and it's not helping. Whereas if we're looking at managing a chronic condition like diabetes, or really any other chronic condition or even pain, even though the weight might not be changing, if we're creating more stability, if we're using those muscles, if we're metabolizing our blood glucose better, we're seeing improvements in health, we might not be seeing changes in weight." (FG1)
- "So we try to take that weight neutral approach and look at other measures of success as well. So how are you feeling? How are your abilities? What are you capable of doing now? What's your endurance like? Other measures versus just like, okay, I stepped on the scale today, did I lose 5 pounds this week? And if I didn't, I guess I'm failure and I'm just going to stop doing what I'm doing. But we try to look at all aspects of health, not just that number." (FG3)
- "You know, obesity is something that, again we're very much more focused on trying to encourage lifestyle changes versus just focusing on, you know — the numbers, the scales, there's a lot of weight management programs, different approaches; we try to take a very weight-neutral approach in managing these patients." (P8)
- "They [patients] definitely direct that care and their own goals
 ... So, I'll ask, 'how often are you currently having those
 cookies, are you having it every single day, during the week,
 well, what is realistic for you, can we cut down to, you know,
 4 times during the week or can we, you know, move that
 down to 2 times during the week?' And just really try and set
 those goals based on their current pattern and not giving
 them, okay, you have to eat it or you can only have it 1 time
 a week but trying to help them set those goals for
 themselves." (P9)
- "Well ... if we want to refer somebody to the obesity program and their English isn't up to snuff, and the requirements for them to participate in an obesity program is quite stringent or otherwise they get [dropped] if they don't follow the instructions, and if they don't follow the program they basically kick them out of the program. So, we've had situations where, you know, somebody had been referred, and because they can't follow through properly, they get kicked out of the program and we've got to start from square one again. We've got to re-refer or whatever, or just decide to deal with it ourselves. Yeah, some of these programs aren't necessarily easily accessible." (P1)

Relationships and navigating cultural distance

Providers expressed the importance of establishing trust and a relationship with patients to learn about their context and provide appropriate care. Building trust and a relationship is a two-way process that requires elements on both provider and patient sides (Box 2; FG3:1). Patients need to understand the provider's role and services they offer. Providers expressed that roles such as behavioural health consultants were not well understood, especially for people from cultures where mental health issues are not recognized (Box 2; P2). Similarly, social workers were sometimes associated with fears around child

Box 2: Supporting quotations for theme 2 — relationships and navigating cultural distance

- "There's an awful lot of trust that a patient has to have, too, to even address [weight]. Because they're embarrassed, you know; if I have a patient who's 300 pounds, they're not happy about the fact that they're 300 pounds. They're really embarrassed about it. They don't necessarily want to talk about that, right? So they have to really trust you to open up about that. Usually there's a lot of tears and a lot so that's like, that's a long visit. That's not 5 minutes. ... They come in with their own long list of problems, so, to really get into all the issues as to why they're overweight, I mean, it's not simple." (FG3)
- "Not that the provider will fix you, but that you collaborate on making decisions about your health, especially for diabetes and obesity management, as it requires a lifestyle change component." (FG1)
- "There is lots of explanation needed to help patients understand the role of behavioural health consultants, because people are unfamiliar with the Canadian health care system." (P2)
- "Having a family doctor may be foreign to some. Booking appointments versus just showing up and waiting to see the doctor is also foreign to some." (FG3)
- "People may have a distrust for government agencies and, so, will not disclose mental health issues such as depression, PTSD to the provider for fear that if it gets to children's services, their children will be taken away from them." (FG3)
- "Lately, we are seeing a lot of patients who are going [to] Mexico, San Diego, those places and India and they are coming back. They didn't tell me that they are going. I receive them after the gastric sleeve surgery is done. So, now, because there is no education ... In Alberta, we have a good program and that involves teamwork but for them [some foreign health care services] there is no teamwork But they [patients] don't understand that after surgery you still have to stick with the [healthy] lifestyle, right? And then they come with complications." (P6)
- "Yeah, and it's, you know, the longer you do a position like mine, you kind of dial in on some key areas and then right away it often allows me to develop a quick relationship with patients to be very open to find out really what's happening. And that connection always makes a big difference as far as them, you know, being, appreciating the support, you know, trying to understand why these things are happening, so that's always kind of a good way to start for a lot of patients." (P8)
- "It's in the approach in teaching and talking about different conditions, you know. When it comes to the diet in general, you know, I try to explain to patients that, with a condition like diabetes, people can always continue to eat whatever foods they like to eat. It's never about eliminating foods forever; it's being more mindful about the choices they make, the portions, how often they have certain foods. ... You know, to say to a person who is Southeast Asian origin, that you can never have rice ever again is foolish; you know, I have a lot of patients [who are] North African, you know, breads like injera or things like that, you know, a lot of traditional foods. You don't want to do that. You're not trying to take that away, because it's, I think would make it very challenging for those patients to accept, you know, other bits of information. So, that's where, again it's all part of the knowledge process to make them aware that it's just about, you know, incorporating exercise, mindful eating and to still retain as much of their culture as they want to retain." (P9)

Note: PTSD = posttraumatic stress disorder.

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apprehension and met with distrust (Box 2; FG3:2). Providers also expressed concern about how some patients perceive relationships with health care providers as transactional rather than a long-term trust relationship (Box 2; FG1). Some providers felt that this may stem from patient experiences in their country of origin where doctors are seen on demand without routine check-ups, and without the habit of forming longterm relationships with providers (Box 2; FG3:3). They felt that this contributed to instances whereby patients purchase diabetes medication abroad because they felt they were cheaper, or patients go abroad for gastric bypass surgery without informing their Canadian doctor. They would usually return without the needed information and support to manage their lives postsurgery (Box 2; P6). In each of these situations, providers were usually unaware that this was going on until concerns arose with the patients' condition.

Providers, on the other hand, need to be equipped with intercultural skills. Some described having received training on "cultural awareness" and being "trauma informed." Providers with years of experience with patients of diverse ethnic backgrounds, and those with a relatively recent immigrant experience expressed that they were able to connect more quickly with patients and identify contextual issues relating to diabetes and obesity management (Box 2; P8). Primary care network staff were described as key players in getting to know more about patients' contexts, since they usually have more time to spend with patients. "Doctors have only 15 minutes with patients; that is why the allied health professionals are there to support" (P2). Providers also described how offering support beyond immediate health needs helped patients from immigrant backgrounds form close connections with their clinic. One francophone clinic with multilingual capacities had patients coming back for document translation and letters of support to access social support services. These connections were formed because, "they know that we're trusted people and that we can translate. And maybe we've helped them with another situation in the past" (FG4). They felt that patients were appreciative of these supports.

Providers indicated that patients needed to be "aware of what programs are available, how to access the programs, to understand program requirements and how to comply with requirements" (FG3). However, they also felt that newcomers to Canada have quite a learning curve understanding and navigating the health care system, in addition to other aspects of adapting to the Canadian context, including language, employment, housing and so on. "If it's hard for me [a health care provider] to navigate health care services, resources, [and] supports, how much more the newcomer?" (P2). Providers expressed challenges with delivering care when patient expectations do not match the reality of the health care. They felt that some patients' concept of health care is not "preventative or continuity of care but rather acute care, where they see a doctor only when they feel they are sick. And once they see a doctor and get some treatment, that's the end" (FG3). Additionally, some patients do not recognize that they can take an active role in their health care. Some providers suggested that having targeted resources for newcomers could be helpful. For instance, since primary care networks and their services are not known within ethnocultural communities, primary care networks could reach out more to raise awareness about their services. Providers also suggested that Canadian immigration points of entry would be a good starting point to supply information to newcomers about resources and support they can access to support their health and well-being while settling in Canada.

Providers also need support to navigate diverse cultural contexts and develop intercultural communication skills to make interactions with patients meaningful. Providers expressed that language barriers and low literacy levels affect how people understand their health conditions and how to manage it. Consequently, primary care networks and clinics have developed formal and informal approaches to address language and literacy challenges in health care. These include hiring multilingual staff, using language translations service supplied by Alberta Health Services, and translation by patients' family members or friends. Lack of access to educational resources in other languages was a concern for some providers. They felt that access to multicultural resources or educational materials on specific diseases adapted to various populations would be helpful. Although there are resources for addressing language barriers, providers remarked that issues sometimes go beyond language barriers to a need for cultural interpretation between provider and patients. This means presenting what is being communicated in ways that can be understood within the cultural understandings of patients and providers (Box 2; P9). Lack of cultural interpretation where needed could affect how patients and providers understand each other and, potentially, the quality of health outcomes.

Importance of and limitations in identifying and addressing root causes and barriers

Providers emphasized that identifying root causes and contextual barriers is crucial to diabetes and obesity management. "You need to see the patient holistically, see what their situation is, to be able to meaningfully engage in chronic disease management" (P5). Therefore, they attempt to address root causes and barriers, using a team approach to address contextual barriers that fall outside their scope (Box 3; P4). Regarding obesity, most providers, especially family doctors and nurses had heard of the 5As (ask, assess, advise, agree and assist) of obesity.49 They mentioned that although they do not directly use the 5As approach, they use some related concepts such as identifying and addressing root issues, assessing the patient's context — stress, mental health, strengths, challenges and priorities — to adapt their approach and care goals accordingly. Providers emphasized that a key aspect to the care process is that patients need to be invested in their health. However, competing interests, such as child care, immigration stress, domestic relations and financial challenges, may affect how invested people can be. Since the complications of diabetes and obesity may be "so far down the line for most people" (P1), competing priorities may inhibit patient motivation to take crucial actions for their well-being,

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Box 3: Supporting quotations for theme 3 — importance of and limitations in identifying and addressing root causes and barriers

- "It's about removing barriers. Finding ways to make things work for the patient." (P2)
- "They [some health care providers] don't check, verify what these guys [patients] are eating. They don't verify how the situation, the family [if] they have violence involved. The kids are being bullied at school. They don't know what's going on. Because in 5 minutes, you cannot check it out. You see how complex it is? It's social, it definitely is a disease. It's biological. You have the bio stuff. It's psychological as well because you don't know what is involved there. For example, [with] obesity there are lots of mental things related and you have the social piece, community, money, basic needs. Everything for them to survive. You are supposed to start basically what will be the first step? Social, always, is the basic, give the basic to them. The rest, they are going to engage slowly but they need to put food on the table. The kids, they're going to go to school. The kids have to have a decent life. Mom and dad have to have a good relationship. You know, there are lots of things involved." (P5)
- "And I address barriers, I address everything with the client, and that, I have found, has been the best approach for me when it comes
 to obesity management, to kind of find out about their story and to, like you know, what have they done, what like, you know,
 what more is there to be done." (P4)
- "For some patients for instance, they cannot afford to take time off work to go participate in health care programs. This is because time off work may mean reduced income for them so they cannot afford to prioritize certain medical appointments." (P8)
- "Maybe the answer is culturally sensitive patient navigators ... because for all these barriers, number 1 is the time, number 2 is the mechanics of answering the phone, booking the appointment, going to the appointment, filling out the prescription et cetera, right? ... Because then that would take a lot of the burden if you're having to chase after and fill all these forms. If they can do that and help them understand the system before they come to see you." (FG3)
- "The strips are very expensive, so even if they are, I'm able to get samples of strips ... for a short amount of time. But I'm not able to provide, you know, a large amount of strips forever and ever and ever. So, there's a lot of things, a lot of supplies that I can provide to patients to at least help with the starting the process to trying to understand But I'm also helping in the end with the money or the pain or the stress that comes with testing ... I always think about for patients ... trying to help with financially, with testing, with supplies, all those kind of things. But then, ultimately they have to find a long-term solution, because you can't be giving it forever." (P8)
- "Number 2, mostly because of the socioeconomic they don't have any coverage. They don't want to buy those medications. Number 3, some of them who are already diabetic and they are bringing the medical from back home because it's cheaper. So it is really a challenge when you try to change it or add something because they don't have coverage and they don't want to and whenever we have samples, we provide them but those are the issues." (P6)
- "If an organization is seeing a patient, they cannot provide information on that person to the hospital staff. This may be a reason for the lack of communication. When the clinic staff write a letter to the organization to support a person's application, the organization will deal with the person, not the writer of the letter." (FG3)

resulting in health complications (Box 3; P8:1). By adopting holistic perspectives to care, patients and providers can work together to navigate these challenges and plan lifestyle changes that fit the patient's context.

Providers expressed that they faced limitations addressing the contextual challenges of immigrants and refugees. First, knowledge and training to address the nonmedical issues of patients, such as financial problems and social and cultural challenges, are usually outside the scope of providers' work. Additionally, the nature of some of these challenges require long-term time commitments, which providers cannot afford or are outside their scope of work (Box 3; P5). However, providers would still suggest potential supports from personal experience, researching and asking around in their teams. For instance, providers who have engaged with patients from the immigrant and refugee context for many years and providers who also have migration backgrounds were more familiar with the contextual challenges and could suggest avenues for help. In some instances, because patients do not see a doctor with the expectation of discussing nonmedical issues, discussions about their living conditions and socioeconomic problems may not come up. Without knowledge of these contextual barriers, health problems may persist and impede the diabetes and obesity management process. Providers mentioned that, sometimes, it is only by chance that socioeconomic challenges surface. An example is when a patient with no health coverage

or expired refugee claimant status needs to pay out of pocket for the medical appointment. Although a provider with knowledge of socioeconomic barriers and determinants of health may attempt to probe into the patients' background, sometimes "asking a lot of personal questions could be triggering for some patients who come from authoritarian regimes" (P2).

Second, resource and time limitations affected providers' ability to address the nonmedical challenges of immigrants and refugees. For instance, where financial constraints inhibit a patients' ability to purchase medications for diabetes, providers mentioned that they could supply samples of medications and test kits, but only as a short-term solution (Box 3; P6, P8:2). However, these samples are sometimes not brands that patients would typically be able to afford. Additionally, given the limited time and the volume of work providers have, they sometimes felt unable to address patients' socioeconomic problems meaningfully. They found it difficult to commit to the time and resources needed to keep abreast with social support programs and policies, and to follow up with patients until their issues are resolved. Some providers try reaching out to support organizations on behalf of patients. However, because there is usually no information-sharing agreements between such organizations and the health care institutions, they do not receive feedback on their patient's situation (Box 3; FG3:1). Some providers expressed that having culturally sensitive patient navigators could help in a brokering

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capacity to build trust between patients and providers, and support patients in accessing social support services to address their basic needs (Box 3; FG3:2).

Interpretation

This study highlights challenges of intercultural care for diabetes and obesity in primary health care settings from health care providers' perspectives. Health care providers encounter considerable nonmedical challenges when supporting immigrant patients, such as navigating cultural distance and working with patients' financial constraints. These issues tend to be outside providers' usual scope of work and medical training; thus, increasing awareness of intercultural health care challenges is key to generating the needed supports for providing effective care.

This study compliments findings from our recent study examining the lived experiences of patients from immigrant and refugee backgrounds living with diabetes and obesity.28 Findings from the patient study showed that, whereas both immigrant and nonimmigrant patients may struggle with treatment costs, overwhelmed household budgets and limited capacity for lifestyle changes, immigrants have the added burden to first navigate the challenges associated with immigrating and settling into a new environment to have the capacity to manage their chronic diseases. Consequently, they need health care that is holistic, addressing their nonmedical contextual challenges as well as their chronic diseases. By highlighting the challenges health care providers face with cultural distance and the nonmedical contextual challenges of migrants, this health care provider study contributes to discussions around the nature of care needed for patients with diabetes and/or obesity experiencing vulnerable circumstances from migrant contexts. Although personalized health care approaches are important, the immigrant and refugee context presents challenges to this care approach because migrants need first to be meaningfully situated in their new environment to have capacity to manage chronic diseases and focus on improving health. Consequently, understanding the migrant context, including pre- and postimmigration realities of ethnocultural communities and potential impacts on people's capacity to manage health needs is critical to meaningful patient-provider engagement.²⁸ Patients' burden and capacity to manage their health are intertwined and affect each other such that, when patient burden outweighs their capacity, clinical and social factors accumulate and interact to hinder access, utilization, self care and health.⁵⁰ Therefore, addressing impacts of syndemic interactions of the sociocultural context and health issues migrants face requires identifying meaningful and impactful ways to help immigrants orient themselves in society. Context-informed approaches to care is an opportunity to advance health care for ethnocultural communities.

Context-informed care, for immigrant and refugee populations, is care that is cognitive and considerate of their intersecting realities, such as preimmigration trauma, and socioeconomic and cultural barriers to health.^{28,51,52} The context-informed care approach invites health care providers to consider and learn about different contexts relevant to understanding life experiences at play when engaging with individuals, families and groups from immigrant or minority communities.53 This approach involves developing an understanding of diversity and root causes of inequity for different populations to give care that fits with patients' realities. With health disparities at the forefront of health care discussions, context-informed care is part of the solution because it guides health care providers' understanding of the drivers of health disparities for at-risk or vulnerable populations. This contextinformed understanding is the foundation to addressing risk factors, which would "shift the whole distribution of risk in a favourable direction"54 for a community. Context-informed care also enables more realistic and holistic perspectives that consider the resilience and strengths of individuals, families and communities.53 Pursuing context-informed care requires an understanding of the needs of patients and providers. In this study, we identified 2 key challenges to health care providers in intercultural care for immigrant patients with chronic diseases, namely, how to navigate nonmedical contextual barriers and cultural distance in practical and effective ways. Education, training and tools to improve health care providers' cultural competence and enhance patient-provider communication are the most prevalent types of interventions.55-58 However, reviews of these types of intervention have shown inadequate evidence to support them as longterm stand-alone interventions, given the complexities of barriers to health care and health outcomes for immigrant, refugee, and racial and ethnic minorities.⁵⁶ Consequently, gaps in care resulting from cultural distance and the nonmedical challenges of immigrants still persist.

Based on insights from our larger project²⁸ and literature on cultural brokering,^{52,59-62} we suggest that cultural brokering could provide invaluable support to the formal health care system to address these gaps. Although cultural brokering is a largely unrecognized resource in the formal health care system, especially in Canada,52,62 it holds great promise for addressing these challenges. Shommu and colleagues conducted a systematic review on use of community navigators to help immigrant and ethnic minority groups in Canada and the United States to overcome barriers to health care.⁵² Studies reviewed had navigators who were trained to guide members of several ethnic communities in chronic disease prevention and management, undertaking cancer screening and accessing primary health care. The studies reported substantial improvement in the immigrant and ethnic minority health outcomes in the US.52 The single Canadian study also reported positive outcomes of navigator services among immigrant women.⁶¹ The authors stated that Canada is at an early stage in adopting community navigators for immigrant populations, with a paucity of research on the topic. However, findings from the Canadian study showed that the cultural brokering model was a successful alliance between communitybased organizations and the public health care system, targeting barriers to accessing primary care for vulnerable immigrant populations. The critical need of patients from newcomer immigrant communities is knowledge and resource support to navigate and settle in their new environment, to be

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able to engage meaningfully with their health care.^{28,51} Therefore, in addition to interventions such as educational programs and training to enhance health care provider cultural competency, cultural brokering can provide invaluable support for intercultural care by bridging bidirectional cultural and communication gaps, and provide support to newcomer ethnocultural communities to navigate life in their new environment.^{59,63} This is because organizations that usually engage in cultural brokering tend to have a deep understanding of the contextual issues of patients, are usually current in their knowledge of services and resources that can help address the basic needs of their patients, such as food and housing insecurity, and unemployment. Consequently, partnerships between formal health care systems and cultural brokering groups could help leverage community strengths and resources to mitigate the sociocultural needs of migrants living with chronic diseases in ways that are meaningful to the patients.⁵⁹

Limitations

Limitations of this study involved constraints to one interview or focus group per participant to minimize participant burden. However, we continued recruitment with diverse roles of health care providers until data saturation was realized, thereby yielding a rich and expansive view of perspectives shared.

Conclusion

Our findings highlight the challenges of intercultural care in primary health care settings. Health care providers face considerable challenges navigating the cultural distance and nonmedical contextual challenges immigrant and refugee patients face. Since intercultural care requires multiple supports for patients and health care providers, cultural navigators and organizations acting in a brokering capacity are critical components to engage in this space. Supporting cultural brokering services in primary care settings have widespread implications for improving health care and reducing health disparities for migrants with diabetes and/or obesity.

References

- Guh DP, Zhang W, Bansback N, et al. The incidence of co-morbidities related to obesity and overweight: a systematic review and meta-analysis. BMC Public Health 2009;9:88.
- Anis AH, Zhang W, Bansback N, et al. Obesity and overweight in Canada: an updated cost-of-illness study. Obes Rev 2010;11:31-40.
- Global report on diabetes. Geneva: World Health Organization; 2016:1-88. Available: https://apps.who.int/iris/handle/10665/204871 (accessed 2023 Jan. 3).
- Diabetes rates continue to climb in Canada. Toronto: Diabetes Canada; 2022. Available: https://www.diabetes.ca/media-room/press-releases/ diabetes-rates-continue-to-climb-in-canada (accessed 2022 Aug. 15).
- Obesity in Canada. a joint report from the Public Health Agency of Canada and the Canadian Institute for Health Information. Ottawa: Public Health Agency of Canada; 2011, modified 2013 Apr. 3. Available: https://publications. gc.ca/site/eng/388626/publication.html (accessed 2020 Nov. 10).
- 6. Table 13-10-0373-01: Overweight and obesity based on measured body mass index, by age group and sex. Ottawa: Statistics Canada; 2020. Available: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310037301 (accessed 2020 Nov. 10).
- Lytvyak E, Straube S, Modi R, et al. Trends in obesity across Canada from 2005 to 2018: a consecutive cross-sectional population-based study. CMAJ Open 2022;10:E439-49.
- Obesity in Canada. Edmonton: Obesity Canada, University of Alberta. Available: https://obesitycanada.ca/obesity-in-canada/ (accessed 2021 Sept. 14).
- 9. Alberta Find a Doctor: primary care networks. Available: https://albertafind adoctor.ca/pcn (accessed 2022 Dec. 20).

- Campbell-Scherer D, Walji S, Kemp A, et al. Clinical practice guidelines: Primary care and primary healthcare in obesity management. Edmonton: Obesity Canada, University of Alberta; 2020. Available: https://obesitycanada.ca/ wp-content/uploads/2020/08/15-Primary-Care-v5-with-links_FINAL-1.pdf (accessed 2020 Nov. 9).
- Overweight and obesity in adult Albertans: a role for primary bealthcare. Calgary: Health Quality Council of Alberta; 2015:1-241. Available: https://hqca.ca/ wp-content/uploads/2018/05/HQCA_Obesity_Report_FINAL_RELEASE.pdf (accessed 2020 Sept. 16).
 Janke EA, Ramirez ML, Haltzman B, et al. Patient's experience with comor-
- Janke EA, Ramirez ML, Haltzman B, et al. Patient's experience with comorbidity management in primary care: a qualitative study of comorbid pain and obesity. *Prim Health Care Res Dev* 2016;17:33-41.
- Heintze C, Metz U, Hahn D, et al. Counseling overweight in primary care: an analysis of patient–physician encounters. *Patient Educ Couns* 2010;80:71-5.
- Torti J, Luig T, Borowitz M, et al. The 5As team patient study: patient perspectives on the role of primary care in obesity management. BMC Fam Pract 2017;18:19.
- Dietz WH, Baur LA, Hall K, et al. Management of obesity: improvement of health-care training and systems for prevention and care. *Lancet* 2015;385: 2521-33.
- 16. Asselin J, Osunlana AM, Ogunleye AA, et al. Missing an opportunity: the embedded nature of weight management in primary care: the embedded nature of weight management. *Clin Obes* 2015;5:325-32.
- Flodgren G, Gonçalves-Bradley DC, Summerbell CD. Interventions to change the behaviour of health professionals and the organisation of care to promote weight reduction in children and adults with overweight or obesity. *Cochrane Database Syst Rev* 2017;11:CD000984.
- Immigrants make up the largest share of the population in over 150 years and continue to shape who we are as Canadians. Ottawa: Statistics Canada; modified 2022 Oct. 26. Available: https://www150.statcan.gc.ca/n1/ daily-quotidien/221026/dq221026a-eng.htm (accessed 2023 Jan. 4).
- Ng E, Wilkins R, Gendron F, et al. Dynamics of immigrants' health in Canada: evidence from the National Population Health Survey. Cat. no. 82-618. Ottawa: Statistics Canada; 2005. Available: https://www150.statcan.gc.ca/n1/ en/pub/82-618-m/2005002/pdf/4193621-eng.pdf?st=65w_vyJr (accessed 2023 Jan. 5).
- Refugee and migrant health [fact sheet]. Geneva: World Health Organization; 2022 May 2. Available: https://www.who.int/news-room/fact-sheets/detail/ refugee-and-migrant-health (accessed 2023 Jan. 5).
- Degrie L, Gastmans C, Mahieu L, et al. How do ethnic minority patients experience the intercultural care encounter in hospitals? A systematic review of qualitative research. *BMC Med Ethics* 2017;18:2.
- Park S, Ahmed R. Communication dimensions of healthcare engagement and patient health literacy for immigrant populations: a systematic review. *Health Commun* 2021 Dec. 12:1-14. [Epub ahead of print]. doi: 10.1080/10410236.2021.2010328.
- Williamson M, Harrison L. Providing culturally appropriate care: a literature review. Int J Nurs Stud 2010;47:761-9.
- Haque S, Malebranche M. Impact of culture on refugee women's conceptualization and experience of postpartum depression in high-income countries of resettlement: a scoping review. *PLoS One* 2020;15:e0238109.
- Hesse-Biber SN. The practice of qualitative research: engaging students in the research process. 3rd ed. Thousand Oaks (CA): SAGE Publications; 2017:1-432.
- Morse JM, Barrett M, Mayan M, et al. Verification strategies for establishing reliability and validity in qualitative research. Int J Qual Methods 2002;1:13-22.
- Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol 2006;3:77-101.
- Ofosu NN, Luig T, Chiu Y, et al. Understanding the bigger picture: syndemic interactions of the immigrant and refugee context with the lived experience of diabetes and obesity. *BMC Public Health* 2022;22:345.
- What is the population health approach? Ottawa: Public Health Agency of Canada; 2012 Feb. 7. Available: https://www.canada.ca/en/public-health/services/ health-promotion/population-health/population-health-approach.html (accessed 2021 Mar. 9).
- 30. #ImmigrationMatters in Edmonton, Alberta: Serving Edmonton's seniors. Ottawa: Immigration, Refugees and Citizenship Canada; modified 2022 Dec. 2. Available: https://www.canada.ca/en/immigration-refugees-citizenship/ campaigns/immigration-matters/stories/heart-to-home-meals-serving-edmonton -alberta-seniors.html (accessed 2023 Jan. 3).
- Belonging: stories of the dignity and resilience of immigrants the state of immigration and settlement in Edmonton: Annual Report 2021. City of Edmonton; 2021:1-23. Available: https://www.edmonton.ca/sites/default/ files/public-files/assets/PDF/SIS-AnnualReport-2021.pdf (accessed 2021 Mar. 23).
- 32. Huttunen L. Emplacement through family life: transformations of intimate relations. In: Faist T, Pitkänen P, Gerdes J, et al., editors. *Transnationalisation* and Institutional Transformations. Bielefeld (Germany): University of Bielefeld, Centre on Migration, Citizenship and Development; 2010;236-55.
- Spitzer DL, editor. Engendering migrant health: Canadian perspectives. Toronto: University of Toronto Press; 2011:1-312.
- Multicultural Health Brokers Cooperative [home page]. Available: https:// mchb.org/ (accessed 2020 Dec. 27).

Research

- About Edmonton Southside PCN. Edmonton: Edmonton Southside Primary Care. Available: https://www.edmontonsouthsidepcn.ca/about/our-story/ (accessed 2021 Sept. 22).
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care 2007;19:349-57.
- 37. Mayan MJ. Essentials of qualitative inquiry. Walnut Creek (CA): Left Coast Press; 2009.
- Richards L, Morse J. Readme first for a user's guide to qualitative methods. 2nd ed. Thousand Oaks (CA): Sage Publications; 2007.
- Carminati L. Generalizability in qualitative research: a tale of two traditions. *Qual Health Res* 2018;28:2094-101.
 Bergen N, Labonté R. "Everything is perfect, and we have no problems":
- Bergen N, Labonté R. "Everything is perfect, and we have no problems": detecting and limiting social desirability bias in qualitative research. *Qual Health Res* 2020;30:783-92.
- Krueger RA, Casey MA. Focus groups: a practical guide for applied research. 3rd ed. Thousand Oaks (CA): Sage Publications; 2000:1-215.
- Lazar J, Feng JH, Hochheiser H. Chapter 8: Interviews and focus groups. In: *Research Methods in Human Computer Interaction*. 2nd ed. Elsevier, 2017:187- 228. Available: https://www.sciencedirect.com/science/article/pii/ B978012805390400008X?via%3Dihub (accessed 2022 Dec. 19).
- Guest G, Namey E, McKenna K. How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field Methods* 2017;29:3-22.
- Saunders B, Sim J, Kingstone T, et al. Saturation in qualitative research: exploring its conceptualization and operationalization. *Qual Quant* 2018;52:1893-907.
 Contributorn A, Nichara A, Chang A, Sanga A, Sa
- Castleberry A, Nolen A. Thematic analysis of qualitative research data: Is it as easy as it sounds? *Curr Pharm Teach Learn* 2018;10:807-15.
- Maxwell JA. Understanding and validity in qualitative research. *Harv Educ* Rev 1992;62:279-301.
- Sandelowski M. Whatever happened to qualitative description? *Res Nurs Health* 2000;23:334-40.
- 48. Chafe R. The value of qualitative description in health services and policy research. *Healthc Policy* 2017;12:12-8.
- 5As of obesity management. Edmonton: Obesity Canada, University of Alberta. Available: https://obesitycanada.ca/resources/5as/ (accessed 2020 Sept. 16).
- Shippee ND, Shah ND, May CR, et al. Cumulative complexity: a functional, patient-centered model of patient complexity can improve research and practice. *J Clin Epidemiol* 2012;65:1041-51.
- Ahmed S, Shommu N, Rumana N, et al. Barriers to access of primary healthcare by immigrant populations in Canada: a literature review. *J Immigr Minor Health* 2015;18:1522-40.
- 52. Shommu NS, Ahmed S, Rumana N, et al. What is the scope of improving immigrant and ethnic minority healthcare using community navigators: a systematic scoping review. *Int J Equity Health* 2016;15:6.
- Context informed perspective. Jerusalem (Israel): The Hebrew University of Jerusalem. Available: https://nevetgreenhouse.huji.ac.il/context-informed-perspective (accessed 2022 July 10).
- Rose G. Sick individuals and sick populations. Int J Epidemiol 2001;30:427-32, discussion 433-4.
- 55. de Sequeira S, Halperin I, Lipscombe LL. Culturally tailored resources for South Asian immigrant women with gestational diabetes: Do they work and what's missing? A qualitative study. *Can J Diabetes* 2019;43:573-9.
- Butler M, McCreedy E, Schwer N, et al. *Improving cultural competence to reduce bealth disparities*. Comparative Effectiveness Reviews, no. 170. Report no. 16-EHC006-EF. Rockville (MD): Agency for Healthcare Research and Quality (US); 2016. Available: http://www.ncbi.nlm.nih.gov/books/NBK361126/ (accessed 2022 Dec. 19).
- Fernández-Gutiérrez M, Bas-Sarmiento P, Albar-Marín MJ, et al. Health literacy interventions for immigrant populations: a systematic review. Int Nurs Rev 2018;65:54-64.
- Noël G, Luig T, Heatherington M, et al. Developing tools to support patients and healthcare providers when in conversation about obesity: the 5As Team program. *Inf Des J* 2018;24:131-50.
- Jezewski MA. Culture brokering in migrant farmworker health care. West J Nurs Res 1990;12:497-513.
- Lazarevic V. Effects of cultural brokering on individual wellbeing and family dynamics among immigrant youth. *J Adolesc* 2017;55:77-87.
- 61. Torres Ospina S. Uncovering the role of community health worker/lay health worker programs in addressing health equity for immigrant and refugee women in Canada: an instrumental and embedded qualitative case study [thesis]. Ottawa: uO Research; 2013. Available: https://ruor.uottawa.ca/handle/10393/23753 (accessed 2022 Aug. 18).

- Torres S, Spitzer DL, Labonté R, et al. Community health workers in Canada: innovative approaches to health promotion outreach and community development among immigrant and refugee populations. *J Ambul Care Man*age 2013;36:305-18.
- 63. Shommu NS, Ahmed S, Rumana N, et al. What is the scope of improving immigrant and ethnic minority healthcare using community navigators: a systematic scoping review. Int J Equity Health 2016;15:6.

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