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Inequities in Diabetes Outcomes among Urban First Nation and Métis Communities: Can Addressing Diversities in Preventive Services Make a Difference?

Hasu Ghosh
Institute of Population Health, University of Ottawa, hghos099@uottawa.ca

Denise Spitzer
Institutes of Women Studies and Population Health, University of Ottawa, dspitzer@uottawa.ca

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Abstract

This article primarily aims to demonstrate how diversity is reflected among urban Aboriginal peoples in Canada. Secondly, it uncovers if and how preventive health services in the province of Ontario, Canada are responsive to this diversity. Data for this study were gathered from a review of literature on culturally appropriate health service delivery to Aboriginal peoples in Canada and a qualitative exploratory study conducted with urban First Nation and Métis people, and health service providers and policy makers. The findings from review of literature and the exploratory study indicated that the nature of Aboriginal diversity and its trends are complex. From the document review, we can comprehend that socio-economic disparities among First Nations and Métis, compared to non-Aboriginal people, are reducing slowly; however, evidence from the exploratory study suggested otherwise and indicated that there is also a strong need for First Nation and Métis families to overcome barriers in order to improve their quality of live in urban Ontario, Canada. It is evident that health services for urban First Nation and Métis people cannot address existing health inequities by simplistic application of pan-Aboriginal strategies in preventive services. Initiatives for urban First Nation and Métis people require strategies that are targeted at the unique and distinct needs of First Nation and Métis residents regardless of their legal status, cultural pluralities, socio-economic backgrounds, and place of residence in cities.

Keywords

diversity, inequities, diabetes, urban First Nation and Métis people, pan-Aboriginal approach, preventive health services

Inequities in Diabetes Outcome among Urban First Nation and Métis Communities: Can Addressing Diversities in Preventive Services Make a Difference?

Increasing numbers of Indigenous peoples[1] around the world are residing in urban areas. Although a majority of the first people of a land are rural (National Aboriginal Health Organization [NAHO], 2011), there is a trend towards increasing urban migration (United Nations, 2008). For example, over half of the Indigenous peoples in Australia, New Zealand, and the USA live in urban areas (New Zealand, 2011; UN-HABITAT, 2010). A similar movement of urban migration among Aboriginal peoples[2] is taking place in Canada as well. In most prominent images, Aboriginal peoples in Canada are located in rural landscapes; however, the association of Aboriginal peoples and communities solely with rural life belies the demographic changes that have taken place over the past 60 years. For instance, the 1951 Census of Canada showed that 6.7 percent of Aboriginal peoples lived in urban Canada (Peters, 2002); however, by 2006, that proportion had increased to 54 percent (Statistics Canada, 2008). As Aboriginal peoples in Canada are increasingly becoming urban, they constitute a significant component of the urban landscape (Environics Institute, 2010). First Nations people accounted for 50 percent of the urban Aboriginal populations, while 43 percent were Métis (Statistics Canada, 2008). Currently, the percentage of Aboriginal peoples living in urban areas is higher in the Province of Ontario (62%) than the national average (54%) (Ontario Ministry of Aboriginal Affairs, 2012). The majority of the health and social programs and services are available in cities; however, the programs homogenize the realities of Aboriginal peoples and most often define them in terms of their social and economic needs (Peters, 2002, 2006). Current practices in serving the disparate needs of urban First Nation and Métis peoples often mask the diversity of their lived realities. Urbanization, along with continued colonization and marginalization, has exposed First Nation and Métis peoples to a broad range of contextual factors over the last several decades that have been significant in making them vulnerable to adverse health events, diminishing their spirit and their capacities (Peters, 2006; Smylie, 2009; Reading, Kmetic, & Giddion, 2007). Understanding these contextual factors is a major, but much needed, undertaking for policy-makers and health service providers, and using these understandings to guide policy-making and service delivery is a significant, yet worthy, health policy and service provision challenge.

The overarching objective of this article is to highlight the need of addressing Aboriginal diversities in preventive service provision and policy development. Specifically, this article aims to explore ways to improve health services and policies that are viewed as culturally appropriate and responsive by urban First Nation and Métis peoples. We will engage this issue by illuminating the urgency of developing

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[1] We use the term Indigenous peoples to denote the collective identities of the first, or original, peoples of a territory whose land has commonly been occupied by settler societies.

[2] Indigenous peoples in Canada are referred to as Aboriginal peoples; this overarching category is further differentiated into First Nations, Inuit, and Métis. First Nations refer to the Indigenous peoples of Canada who were the first occupants of the land (Wotherspoon & Satzewich, 1993). First Nations peoples registered under the *Indian Act* can be referred to as either Registered or Status Indian (Indian and Northern Affairs Canada [INAC], 2010), whereas First Nation peoples not registered with the federal government are called non-Status Indians. Métis refers to the mixed ancestry descendants of French fur traders or Scottish or English traders and First Nation women. Inuit are Aboriginal peoples of the Canadian Arctic (Aboriginal Affairs and Northern Development Canada [AANDC], 2010). Participants in this study include only individuals who self-identified as First Nations or Métis.

services and policies that address the multiplicity of needs determined by the cultural, legal, and spatial diversities among Aboriginal peoples in the urban landscape. Furthermore, we assert that the policy process should place Aboriginal peoples at the front and centre of policy-making and reject deficit-based approaches that have characterized past policy initiatives designed to address the challenges of urban Aboriginal populations (Institute on Governance, n.d.). Secondly, we review select findings from an eastern Ontario-based exploratory and community-based study with urban First Nation and Métis peoples, and health and social policy professionals regarding their understandings of diabetes and its prevention. Through participants' narratives and a review of documents, we uncover the limitations of existing preventive health services in addressing diverse needs among urban Aboriginal peoples and call for improved services where diversities among Aboriginal communities are recognised. More specifically, findings of this study indicate that policies must also engage with and incorporate Indigenous knowledge and understandings as a way to work through existing and future challenges of urban Aboriginal lives.

Setting the Context

Diversity: Legislated and Lived

The category of Aboriginal in Canada masks a wide array of nations, cultures, languages, life-ways, and histories. In addition to this myriad of variations, Aboriginal peoples have had legal definitions imposed upon them by the federal government for the purposes of administering their responsibilities for "Indians" as defined by the Indian Act (1985). Although amended over the years, the Indian Act (1985) remains a central fact in the lives of Aboriginal peoples as it creates distinct categories of "Status" versus "non-Status" among First Nations and produces associated restrictions for other Aboriginal groups such as Métis and Inuit (Sawchuk, 2001). These differences in legal status among Aboriginal peoples determine, amongst other entitlements, the nature and scope of health services offered to peoples of different origins. In 1982, changes to the Constitution Act of Canada (1982) recognised First Nations, Métis, and Inuit as three distinct Aboriginal Canadian groups.

The present context shaping health provisions for Aboriginal peoples in Canada can be traced back to the implementation of British North America Act (BNA) (Constitution Act, 1867), which created ambiguity over first peoples' health that still exists because it assigned health services to provincial jurisdiction and Indian Affairs to federal jurisdiction. Subsequent implementation of the Indian Act (Constitution Act, 1867), however, included health related provisions, but the lack of clarity in this provision failed to provide clear legislative authority to the federal government for first peoples' health provision (National Collaborating Centre for Aboriginal Health [NCCAH], 2011b, 2011c). Presently, the First Nation and Inuit Health Branch (FNIHB) of Health Canada oversees the federal government's role in the provision of health services for status (Registered) First Nations on reserves and for Inuit living in their traditional territories (Health Canada, 2008). FNIHB also provides non-insured health benefits (NIHB) such as prescription drugs, vision, and dental coverage to all Status or Registered Indians and Inuit, regardless of their place of residence in Canada. However, Métis and non-Status Indians, despite being considered as Aboriginal peoples in Canada, are not eligible to receive non-insured health benefits. Although physician and hospital care is provided by provincial and territorial governments for all Canadians (Health Canada, 2008; Native Women's Association of Canada, 2007), as a result of historical legislative ambiguities and the multiplicity of authorities involved in health service

provisions, the Aboriginal health policy framework seems limited in its capacity to address the needs of the Métis or First Nation peoples who are either not registered or not living on reserve or traditional territory (UNICEF Canada, 2009).

Although there are many commonalities in cultural practices and belief systems amongst Aboriginal Canadians, there are also significant variations in lifestyles, traditions, languages, and cultures, and as such there is no singular culture or tradition that can represent Aboriginal peoples as a homogeneous group. These variations are not only in particular geographic settings, but also reflected in their livelihoods, environments, and worldviews. In the past, Aboriginal peoples resided in their traditional territories and were distinctive by knowledge, language, and culture (Henderson, 2007). Currently, Aboriginal peoples are not confined to set spatial contexts, but are dispersed across Canada in different urban regions, provinces, and territories. In Ontario alone, there are 133 First Nation communities, 127 of which are recognized under the Indian Act with two main language groupings: Algonkian and Iroquoian (Ontario Ministry of Aboriginal Affairs, 2012). Besides First Nations cultural differences, there are Métis people, with two distinct cultural origins, and Inuit people. Notably, Aboriginal peoples in urban Canada form complex and heterogeneous communities and cultures that are a mix of different Aboriginal sub-cultures and urban livelihoods.

In addition to variations in legal definitions or cultural practices, Aboriginal peoples are economically and educationally diverse as well; some have opportunities for achieving better education and secured income from employment or other resources, while others have none. Geographic diversity also makes Aboriginal lifestyles different. Some Indian reserves are located in the vicinity of the larger cities (for example, Six Nations on the outskirts of the City of Toronto), while other communities are isolated and accessible only by air or water. Moreover, there are significant diversities within each community (Voyageur & Caillou, 2000/ 2001).

Urban Aboriginal Landscape

The growing trend of urbanization among the world's Indigenous populations has been associated with high rates of geographical mobility between rural and urban areas as compared to non-Indigenous populations (Newbold, 2004). In Canada, increased urban migration among Aboriginal peoples is often characterised by a hybrid residence pattern wherein people move back and forth between urban and rural areas on a regular basis, thereby maintaining strong ties with rural and/or reserve communities (Lawrence, 2004; Peters, 2004). Notably, the high rates of mobility among Aboriginal peoples in Canada may affect the continuity in accessing health services and service providers may experience difficulty in maintaining adequate care (Clatworthy & Norris, 2007). International research indicates that in-country population mobility may impact health service delivery (Long & Memmott, 2007) and thereby create disparities in health care utilization rates between Indigenous and non-Indigenous populations (Marrone, 2007).

Moreover, ongoing jurisdictional[3] conflict between federal and provincial governments over responsibility for urban Aboriginal programming presents distinct challenges for both developing and sustaining health services, and advocating for peoples' needs. As a result, there is significant variation in meeting the particular health service needs of urban Aboriginal peoples even across a single province. Given the complex nature of the health care system for Aboriginal peoples, access to health services is fragmented (Lavoie & Gervais, 2011). As noted earlier, the federal government is responsible for providing limited primary health services for Registered or Status Indians living on reserve and Inuit living within the traditional territories but not to the First Nations, Métis, non-Status Indians, and Inuit who are living in urban areas (Bent & Haworth-Brockham, 2007). Such complexity of health care for Aboriginal peoples results in inequities in accessing health services within and across Aboriginal communities. While Status and non-Status Indians and Métis living in urban areas have access to provincially funded mainstream health services, little or no attention is paid to their specific cultural or spatial needs (Tait, 2009).

Jurisdictional issues arise frequently and in many forms for Aboriginal peoples affected by or at risk of developing chronic diseases such as diabetes. Diseases like diabetes, however, do not respect the legal boundaries that divide Aboriginal peoples who are subsequently proffered disparate benefits.

Type 2 Diabetes

Type 2 diabetes mellitus (also known as adult-onset or non-insulin-dependent; hereafter, called "diabetes") used to be most commonly diagnosed in persons over forty years of age; however, in recent decades rapid changes in life circumstances have resulted in alterations of proximal risk factors related to diabetes such as obesity, diet, stress, and physical activities (Bowser, Utz, Glick, & Harmon, 2010; Pan et al., 2011). These factors appear to affect First Nation and Métis peoples differently from other Canadians resulting in a higher incidence of this chronic condition among much younger people. Aboriginal peoples in Canada, more specifically in Ontario, experience diabetes at 3 to 5 times the rate of the general population and face a higher risk of developing the disease and related complications (Raphael, 2009).

Although rarely reported in Aboriginal communities prior to the 1950s, current statistics show a higher prevalence of diabetes in this population compared to their non-Aboriginal counterparts (Public Health Agency of Canada [PHAC], 2011). Much of the dominant discourse attributed these changes in disease prevalence to personal health behaviours, most notably compromised diets and limited opportunities for physical activity. However, attention to social, economic, and political marginalization; the impact of systemic and structural racism; and the on-going legacy of colonization, including the trauma of the residential schools and its impact on survivors and their families, the witnessing of increased environmental degradation, and the loss of traditional life-ways and the resultant anomie, appear to offer

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[3] The issue of jurisdiction with respect to Aboriginal peoples in Canada involves the Royal Proclamation (1763); the historical relationship between the Crown and First Nations, treaties and land claims agreements, the Indian Act (1982), the concept of fiduciary responsibility, judicial decisions, and the transition to self-government. In brief, Parliament generally exercises the full weight of its constitutional powers over "Indians" while taking a narrow view of its historically based responsibilities to all Aboriginal peoples including those on reserve, off reserve, Status, non-Status, Métis, and Inuit.

even greater explanatory power in our understanding of factors that precipitate or exacerbate Type 2 diabetes than the more limited focus on individual behaviour (Ghosh & Gomes, 2011; Lightman, Mitchell, & Wilson, 2008). Research into the relationship between Type 2 diabetes and stress enables us to link the context in which people live with disease outcomes both through the stimulation of neuroendocrine pathways (Golden et al., 2008), as well as the additional burdens faced in the transition from rural to urban living conditions (Wang & Hoy, 2004; Wilson, Gilliland, Moore, & Acton, 2007). Social determinants of health, therefore, are vitally important to the aetiology, exacerbation, and mitigation of Type 2 diabetes.

Significant differential prevalence of Type 2 diabetes within and between the Aboriginal population groups living across Canada has also been observed (Macaulay et al., 2003; Saksvig et al., 2005). Under the rubric of Aboriginal peoples, the First Nations population living off reserve is most affected by diabetes, followed by the Métis population (Reading, n.d.). The combination of early onset of diabetes, increased urbanization of this population, and the inequitable progression of this disease process that is still preventable may pose extremely serious challenges to the Canadian health system. While this situation is not that different from the case of other populations of low socioeconomic status living in urban areas, the main disparity is in the apparent lack of employment, education, health, and housing services needed to facilitate the transition from on reserve conditions to urban settings (Peters, 2002). This difference has been worsened by limited cultural supports in larger cities and a general lack of investigation pertaining to the potential salutary effects of cultural factors on urban Aboriginal peoples' overall wellbeing (Peters, 2002; Wilson & Rosenberg, 2002). In addition, health and social services and practices are informed by historical and political legacies and imbued with dominant Euro-Canadian values that work to reify social hierarchies and the *Othering* of Indigenous peoples in Canada (Spitzer, 2004). This is a plausible reason for Aboriginal peoples' poor utilization of health services and greater likelihood of being diagnosed at a later stage of the disease than non-Aboriginal people (NCCAH, 2011a). Thus, prevention of long-term complications of diabetes becomes more difficult or no longer possible. It is in this shifting context that Aboriginal peoples living in urban Ontario encounter potential risk factors for the development or exacerbation of diabetes. Nevertheless, intersecting contextual factors such as historical legacies and compromised social determinants of health rarely inform health service and policy decisions related to diabetes management and prevention, which is reflected through the conversations we had with research participants that are presented in the findings section of this article.

Beyond the Social Determinants of Health

This article draws on an exploratory study that is conceptually grounded in population health. The population health approach focuses on understanding the social determinants of health by considering the structures and systems within which people are born, grow, work, and live as opposed to comprehending their health separately from their social-cultural, political, and historical contexts (Marmot, Friel, Bell, Houwelling, & Taylor, 2008). Indeed, the social determinants of health approach has been described as research that moves thinking from "the cell to the social" and as a practice of investigating the "causes of causes" (Marmot, 2007; Raphael, 2009) by shifting the focus of health and well-being from a biomedical investigation of susceptibility to disease to an understanding of health as being socio-contextually determined (Raphael, 2007; Wilkinson & Marmot, 2003). Although the social determinants of health approach may be associated with an overall improvement in population health, it

often makes use of static conceptions of "subgroups" and concomitant "risk factors". As a consequence, there may be gaps between understanding the social context of health and affecting meaningful changes in the health outcomes of those situated at intersecting axes of disadvantage (Hankivsky, 2012; Paterson, 2010). Extending beyond the social determinant of health framework, intersectionality helps to unpack the multi-level interpenetrating social locations, forces, factors, and power structures that shape and influence human health and well-being (Hankivsky, 2012; McGibbon & McPherson, 2011). An intersectional framework recognizes the plethora of structural and social factors that are simultaneous and mutually different and work at both micro and macro levels to affect health. Since social determinants of health may be distributed unequally and affect inter- and intra-group population diversity differentially, the need to consider intersectionality as a conceptual framework is essential to better understand the complexities surrounding Aboriginal diabetes in the urban context.

With some exception, the majority of research deploying intersectionality continues to centre primarily on gender, race, and class (Black & Veenstra, 2011). Our investigation of diabetes incorporated the relatively unexplored dimension of Aboriginal diversities within and between First Nation and Métis populations that are created by systemic determinants that include, but are not limited to, poverty, unemployment, stress, food insecurity, education, and access to health services determined by cultural variations, Aboriginal status, and jurisdictional squabbles related to place of residence. We considered these pluralities because we anticipated that peoples' experiences of systemic determinants vary within and between First Nation and Métis peoples and their respective social locations. For example, the experiences and social interactions of a Status Indian diabetic person living with secured employment, higher education, and necessary material resources may significantly differ from a homeless non-Status First Nation diabetic person with little formal education and employment who relies on a drop-in centre or food bank on a regular basis. Additionally, interpersonal experiences again may vary between Status Indian and Métis peoples because of their differential access to government funded health services. We also noted that many studies have found that diversity within and between First Nation and Métis population results in differential exposure to the contextual stressors for chronic health conditions (Peters, 2006; Reading et al., 2007; Smylie, 2009). In this article, we draw from peoples, providers and policy-makers' narratives to determine how this particular dimension of inequality intersects with other dimensions in diabetes occurrence, its prevention and management, and attempt to ascertain if this set of inequalities is being addressed in health service delivery and policy development.

Methods

This study was grounded in the fundamental principles of community-based research (Israel, Schulz, Parker, & Becker, 1998). The research respected the OCAP™ (ownership, control, access, and possession) principles that offer a First Nations approach to research, data, and information management (NAHO, 2005), and OCAS (ownership, control, access, and stewardship) (Bartlett, Sanguins, Carter, Hoeppner, & Mehta, 2010) principles that include a Métis approach to maximize privacy protection for Métis citizens and Canadian Institutes of Health Research (CIHR) guidelines for health research involving Aboriginal peoples (CIHR, 2007). The governance structure included the student researcher who was a doctoral candidate, the thesis supervisors, the thesis advisory committee, and an Aboriginal Community Advisory Circle (ACAC) comprised of members from Aboriginal research organizations, a community Elder, and health care providers.

Upon receiving approval from the University of Ottawa's Research Ethics Board, multiple strategies were employed to recruit community participants that included: making presentations to Aboriginal organizations and Aboriginal studies programs; circulating recruitment flyers among Aboriginal organizations, their networks, and mainstream health and social service organizations; and making radio broadcasts. The majority of the interviews with primary participants took place at partner Aboriginal organizations, although some were conducted at the participants' homes. Professional participants were recruited purposefully by the researcher and were interviewed at their workplaces or locations preferable for them. Primary data were collected in the form of narrative interviews with First Nation and Métis community members, health service providers (HSPs), and policy-makers. At the beginning of each interview, the consent forms and demographic questionnaire were explained to each participant and any questions were addressed. Thereafter, participants completed a demographic questionnaire. All interviews were recorded after receiving approval from the participant. While interviews were casual in tone, a semi-structured interview guide, developed in consultation with the ACAC and thesis advisory committee, informed by the literature, and designed to be relevant to respondents, was used (Hunt, 1998; Kleinman, 1988; Loewe & Freeman, 2000). Each primary research participant received a token of appreciation in cash.

Primary data were collected in the form of narrative interviews with 27 urban First Nation and Métis community members, six health service providers, and seven policy-makers, and was further informed by field-notes and secondary document review. The urban community participants included: 11 First Nation (six females and five males) and 15 Métis persons (nine female and six males), and one female participant who self-identified as both First Nation and Métis. The details of participant demographic information are presented in Tables 1 and 2.

All recorded primary data was transcribed word for word by experienced transcriptionists. Data were analyzed using Riessman's (2008) narrative thematic analysis. Coding, sorting, and the identification of themes were an essential part of the analytical process as they capture the commonalities or experiences across interviews. The goal of the narrative thematic analysis process in this study was to find commonalities as well as variations within and among the narratives of the participants. To that end, a within-case and an across-case narrative thematic analysis approach was used (Ayres, Kavanaugh, & Knafl, 2003; Poirier & Ayres, 1997). Analysis of the narratives gave birth to themes or subthemes that were coded with the help of NVivo software. These themes or typologies were related to the theoretical frameworks of intersecting determinants of health, then situated within broader Métis and First Nations' contexts and explored for concordance or discordance with professionals' narratives. This resulted in a description of individual narratives as they related to the larger social groups of First Nations and Métis and respective social, cultural, economic, and political contexts. A summary of the key concepts of thematic narrative analysis applied to this study can be found in Table 3, which describes the definition and structure of narratives employed, the exemplars of unit of analysis, and the contextual information of the narratives.

Table 1. Community Participants' Demographic Details

Community Participants	Gender	State of Diabetes	Age Range	Length of Urban Residence	Level of Education	Employment Status
First Nations (11)	5 male and 6 female	6 diabetic and 5 non-diabetic	20 - 54 years	5 - 39 years	Less than high school to undergraduate degree	8 employed and 3 unemployed
Métis (15)	6 male and 9 female	8 diabetic and 7 non-diabetic	20 - 74 years	2 - 70 years and all life	High school diploma to graduate degree	8 employed, 6 unemployed, 1 status undisclosed
Mixed descent Self-identified (1)	1 female	Non-diabetic	Over 50 years	50 years and above	Graduate degree	Employed

Note. Number within bracket denotes the number of participants in each category.

Table 2. Professional Participants' Demographic Details

	Professional Role	Years in Present Role	Years in Aboriginal Health and Social Care	Years in Health Policy Decision-Making	Aboriginal Patients with Diabetes/ Month	Gender	Age Range
Health Service Providers (6)*	Family physician, Dietician educator, Nurse diabetes educator, Diabetes prevention coordinator	Less than 5 years to 14 years	Less than 5 years to 19 years	NA	1 to 120 patients	5 female and 1 male	20 years to over 50 years
Policy-Makers (7)	Health planner, Policy analyst, Program manager, Policy advisor, Research manager, Director	Less than 5 years to 10 years	NA	5 years to over 10 years	NA	5 female and 1 male	31 years to over 50 years

Note. Number within bracket denotes the number of participants in each category.

Table 3. Thematic Narrative Analysis

Definition of Narrative	Representation of Narratives	Unit of Analysis: Focus	Analysis to Contexts
Bounded segment of interview text about an incident	Brief interview excerpt; cleaned up speech	Subjective experiences of genesis of illness (diabetes) reported in personal narratives	Societal: considerable
		Acts of initiatives or attempts to prevent or manage his/ her illness (diabetes) as demonstrated in personal narratives	

Note. Adapted from Riessman (2008).

Riessman (2002) stated that traditional applications of reliability standards do not and should not apply to narrative analysis. Similarly, Bradbury and Reason (2008) suggested that practitioners of community-based participatory research should "broaden the bandwidth of validity" by including different "ways of knowing," including community lay knowledge alongside more traditional scientific sources of knowledge. This study asserts its trustworthiness and rigour by: (a) maintaining factual accuracy of the account or *descriptive validity* (cleaning up the spoken language to construct unambiguous plot lines but keeping the meanings of participant's understandings and story lines intact); (b) undertaking rigorous iterative analytic process using within-case (each transcript) and across-case (from one transcript to the other) analyses that inherently prevents any risk of errors in *theoretical validity*; and (c) focusing on the reflections and perspectives of the participants rather than those of the researcher by remaining true to the *interpretive validity*.

Findings

The divergence and convergence between First Nations and Métis community people, and health service providers and policy-makers' understandings point out the need to develop culturally appropriate health services that respond to the diversity of urban First Nations and Métis people's historical, socio-economic, legal, cultural, and spatial realities.

Perceptions of Diabetes

The Métis and First Nation participants' experiences demonstrate how urban living, poverty, food insecurity, and federal-provincial jurisdictional squabbles intersect and increase susceptibility to develop health problems and vulnerability to Type 2 diabetes (Ghosh, 2012). Participants expressed their experiences with multiple health risks that were worsened by broader inequities related to urban living, poverty, food insecurity, lack of interconnected but structured services, as well as continuous colonial relationship with governments. A young Métis woman said:

I think … that a lot of the traditional like a lot of the food we eat today are not the things that the ancestors were used to.

Another young female participant of First Nation origin agreed, saying:

I think another factor would be like, a lot of Aboriginal peoples here are unemployed too … so they are still not able to afford the better kinds of food.

More precisely, peoples' descriptions of vulnerability to Type 2 diabetes largely detailed social and economic factors rather than standard physiological risk factors as identified in the Western biomedicine. These sentiments are summarized most clearly by a middle-aged female university professor, who self-identified as First Nation and Métis, and who said:

When you're in poverty, so much time is spent struggling, it's just not worth it. That kills you … your health. Poverty kills your health.

Barriers to Accessing Services

Several First Nation and Métis community members said that preventive services tend to overlook the linguistic, cultural, economic, and legal diversities that exist within and between Aboriginal peoples in this urban location. In order to understand the elements of health service delivery to diverse minority First Nation and Métis populations living in this urban Ontario setting, it is important to first comprehend the challenges or barriers to access culturally responsive health services. Many socio-economic and political factors including jurisdictional issues, resource allocations and procurement, funding allocation, and decision making process have influenced the characteristics of the diverse Aboriginal communities in urban Ontario. These political diversities may have implications for the formation of community-institutional partnerships and for collaboration with Aboriginal peoples in the program development and service deliveries.

Cultural diversity. Demands for, and barriers to, access of culturally appropriate preventive health services hold a different set of implications for First Nation and Métis women with or at risk of diabetes. In particular, Métis people living in urban areas revealed that health services tend to overlook Métis-specific needs and more often focus on First Nations' needs and priorities. One elderly Métis woman who is also quite engaged with the local Métis community at the professional level said:

Oh, it [health services] has to be Métis specific. Because... when we walk in there as Métis, we always don't feel Aboriginal enough, you know? And we're treated differently. Because we look so much like mainstream…. Well as a second class, like.

One First Nation male participant stated a similar sentiment, saying:

It's like me. I want to learn my culture. I don't want to learn about Mohawk... I don't want to learn about Cree, I'm Ojibway... I am Native all the same but I am within a cultural group that is Ojibway... I think there is need to acknowledge that uniqueness.

One Métis mother who was expecting her second child during the time of interview spoke of her experience with health care professionals' limited knowledge of Aboriginal cultural diversities and how that had impacted the nature of her medical care during and after pregnancy. She shared that:

> … I have [an] amazing family doctor … he's not ignorant the least bit [of my culture] … My OB on the hand was really ignorant, he had no idea what Métis person was … he just looked at me and … I said ya well I'm Métis person and he said well what's that? … I think if he was more educated he would have contacted me because my family doctor when he saw the results of the gestational diabetes he was like, "Oh you're borderline," so he was wondering why I wasn't contacted.

In many cases, professionals were either unaware of the cultural diversities within and between Aboriginal populations and how they may affect service delivery, or simply found it too complex to consider in their scope of practice. One professional participant, a community diabetes educator, stated:

> So whoever comes to see us that identifies themselves as having, being First Nations or Métis they [are the] same … come in to the same population groups as the other clients, so we don't pinpoint them or identify.

Socio-economic diversity. Métis and non-Status First Nation participants of this research who have no access to non-insured health benefits due to their status face considerable challenges in either preventing diabetes or slowing its progress. Particularly, cost of medications and supplies become challenging for non-Status First Nation or Métis peoples. Community participants discussed the need for monetary supports for medications, supplies, and healthy foods. One First Nation woman described her experiences of dealing with her non-Registered First Nation mother's diabetes:

> Before my mom wasn't able to pay for her pills sometimes 'cause she was lower income and … so sometimes she would just not take them for a month or so …, and then the needles now you have to pay for every month so she can test for.

A non-Aboriginal physician participant from a mainstream health centre, commented:

> I don't think money is a big issue. I really don't. In most cases, particularly First Nations people … they get most of their medications covered by the government.

When he was further questioned about the realities of non-Status First Nation and Métis peoples, the physician agreed that situation is much more complex for Métis and non-Status First Nations. He said:

> … not for Métis, yeah. Right! That's true, so they don't have any of the [government provided] advantages. So there are the expenses of medications definitely that can be very significant…

His comments clearly demonstrate that there are disparities in health providers' understanding about the inequities non-Status First Nation and Métis peoples face in accessing health services due to their legal status.

Legal diversity. A clear need for equitable access to health services for the Aboriginal peoples of diverse socio-economic, linguistic, cultural, and legal orientations have been reflected in both Métis and First Nations participants' narratives. Participants shared their feelings of marginalization, discrimination, and alienation with the existing pan-Aboriginal health strategies and service provision. Participants' narratives clearly present how non-registered Aboriginal peoples struggle with diabetes management when they have inadequate income. As the daughter of an elderly non-Status First Nation woman said:

> You can't take care of yourself as well if you're in lower income… before, my mom wasn't able to pay for her pills sometime… they [work insurance] pay for half of whatever… She doesn't have a Status card, so she's just covered under her work insurance.

Métis participants' perceptions also revealed how the exclusionary nature of government provided health services limited their capacity to prevent diabetes or its long-term complications. They felt that government-provided services designed for Aboriginal peoples could act as a protective measure against occurrence of diabetes and preventing its long-term consequences. A young Métis woman said:

> … [T]hey probably do something for the First Nations, Aboriginal peoples… but for the Métis, I don't know, I don't think they do. … But they [Métis] should have just as much right as the next culture [First Nations and Inuit], [and so do we] because we're descendent of that [Métis] culture.

Spatial diversity. Participants revealed their frustrations with and expectations for policy-makers in developing policies that determine the design and delivery of health services. In contrast to the preconceived notion that Aboriginal peoples predominantly reside in downtown areas, Aboriginal peoples are dispersed throughout the city. Centralizing Aboriginal health or social services in the downtown core, therefore, does not make it equitably accessible for all. One Métis man with diabetes said:

> They [policy-makers] have to make it [health and social services]… accessible for everybody… It doesn't do anything for anyone who lives off of [downtown street]. It's a heck of a travel [for me]. You need more, you need some central, or you need satellite areas…

A new mother of Métis descent told us:

> We used to go to [name of the Aboriginal health centre] for pre-natal [care], and I found just traffic you know, it's all the way out in [name of a place]… it's still it's a half an hour at least to get there and that's a long drive … but there is nothing in [name of the place where she lives]… sure would like to have something that's geared to us, ya.

Responsive Policies

First Nation and Métis participants' narratives indicate that explanatory models of diabetes and its causal factors were informed by both social and biomedical understandings. As policy responses are determined by how a problem is defined or framed, attending to the social significance of a disease can enrich policy decisions by going beyond the deterministic logic of biomedicine. For example, when

biomedicine increasingly defines diabetes as a lifestyle-related disease, policies focus on solutions such as healthy eating and physical activity; thereby, ignoring the social and non-medical determinants of health such as the socio-economic status of the population, the affordability of and access to both planned physical activities and healthy food, including the role of media in product promotion. Policy-makers who participated in this research articulated both biomedical and intersecting social determinants of health views about diabetes causation; however, they faced challenges in addressing the social determinants of health within their scope of practice. They also acknowledged the policy limitations of addressing and responding to local needs as policies are generally developed higher up in the decision-making hierarchy without community input. A senior program manager from a federal government department said:

> So I could see where the distortion happens where it's [inter governmental coordination and engagement with urban communities] still very siloed… like we do work with our colleagues and stuff, so we're connected, but program connectivity happens at our program community level. … But you can tell from here, you gotta look up a looooooong way to see where it gets coordinating. And by the time you're up here you get a nosebleed (laughs). And you're not looking up no more (laughs).

Thus, front-line and senior policy-makers felt disempowered within the scope of their institutional practice despite their willingness to make changes. Moreover, lack of demographic information and scientific evidence on urban Aboriginal populations were identified as barriers to understanding and acknowledging Aboriginal subpopulation-specific issues in policy formulation, particularly with respect to Métis peoples.

Improving Preventive Services

In urban centres, First Nation and Métis peoples form a diverse subpopulation with varied cultural, linguistic, socio-economic, and educational backgrounds, and Aboriginal statuses; thus, highlighting the limitations of pan-Aboriginal approaches to health service delivery. The need for culturally appropriate health services must acknowledge population diversities, which are often shaped by the varied legal, economic, and social realities of their urban lives. Again, historical legislative ambiguities and jurisdictional disputes due to involvement of multiple authorities result in a great deal of diversity in Aboriginal health service provision across the provinces and territories.

Diversity, Inclusivity

Participants also emphasized the need for greater responsiveness in health service provision, including longer clinical hours, more patient and understanding attitudes from health service providers, flexible hours for physical social activities, support for transportation and childcare services, and programs that accommodate both work schedules as well as stay-home parents' schedules, as these supports would make existing services and programs more accessible for them. As one First Nation female participant suggested:

> I think the most important thing is transportation. If they have a diabetic van, for instance… and you know that could go around and collect people … and brought them to a centre and teach them how to exercise.

Community participants discussed the barriers and service needs around educational, nutritional, physical, and psychological aspects of diabetes, as well as the time and monetary limitations faced in trying to prevent or mitigate the condition. They also observed that lack of social support complicates Type 2 diabetes prevention and management. A young Métis women stated:

> … like let people know the preventative ways of doing it and then to have actual programming that is targeted … so for example, if alcoholism is a risk factor [of diabetes], you have programs to tackle those risk factors and you can do that through you know culturally safe initiatives and programming offered through different Aboriginal organizations...

Another community participant of Métis origin noted the lack of supportive food services:

> Like I've been told, "you should come down to the Aboriginal Community Centre for the food bank." I thought oooh... that's a long way to travel on a bus, with shopping bags... Like that's crazy…

He also added saying that:

> … if you just have one person, or two people in the satellite office. You [could] open a small food bank, emergency food services. You have these two people, who can direct you to services that are open to Métis and Native.

Health Human Resources

Informants emphasized the importance of recognizing the diversity of peoples and subsequently creating diverse approaches to health service provision. In 1996 the Royal Commission on Aboriginal Peoples (RCAP) stated that lack of access to culturally competent health care is as detrimental as a lack of other determinants of health. A paucity of cultural competence in the health delivery system results in miscommunication between health care providers and stakeholders thus creating a barrier to access services (Lemchuk-Favel & Jock, 2002; Pohar & Johnson, 2007). One Métis female community participant said:

> Every doctor should be educated on the Métis, Inuit, Aboriginal peoples because we are different … our culture is different our food is different, historically… yes, it's changed over time and we do need to get back to who we are.

Similarly, a physician who is a professor at a medical school and of Aboriginal background talked about need for cultural training for health service providers:

> It's one of the things I teach is making sure you are looking at the whole person, not just not just the problem they are there for … you look at them not only themselves, you look at their family, their home, their community...

A physician of First Nation origin, who is very much aware of the diversities among First Nation and Métis peoples, stated:

> The fact that these health services, these decisions are made by… people you know who may not be as familiar with the actual needs of the population that they're trying to serve… once they understand the… social and historical context of those populations, then you can develop those programs with more realistic measures.

Like the community participants, health service providers and policy-makers felt that health human resources are a priority for the First Nation and Métis communities in this city. They recommended that more health human resources be of Aboriginal descent to improve trust between providers and patients and ultimately improve community health outcomes. A physician of First Nation origin shared:

> As a family physician, I'm very privileged, sometimes, that the people I meet choose to trust in me because they know I am also Aboriginal and that they will share with me things that they have never shared before…

Nevertheless, it is vital to remember that urban First Nation and Métis communities are as varied as the recognized nation states, and that their experiences cannot be homogenized through a blanket terminology such as "Aboriginal." Indeed, the Ontario Federation of Indian Friendship Centres (2006) has argued that a "pan-Aboriginal approach fails to recognize the differences between diverse and distinct Aboriginal cultures, and amalgamates all Aboriginal cultures into a single melting pot, thereby erasing crucial aspects of identity specific to different Aboriginal peoples" (p. 2).

The conflation of Aboriginal legal and cultural identities and masking of cultural diversities are commonplace for both mainstream and Aboriginal health services; however, Indigenous participants insisted that recognition of Aboriginal diversities in health service provision is greatly needed. They also expressed a need for Aboriginal health care professionals to understand and communicate culturally appropriate messages for both Métis and First Nation peoples. A young Métis female university graduate student, who is deeply involved in community activities, particularly with youth, stated:

> Indeed, There are lot of Aboriginal cultural groups … that is First Nation and then there are Métis, Inuit...we are mixed now too... I think it is bad when it say that you are Aboriginal so you all speak same, eat same... we do not like to be imposed on us that we are all Aboriginal.

Recommendations

The recommendations generated from this study are not representative, but commonalities do exist across the Aboriginal population groups that can serve as a basis for policy and program development.

Engaging the Community

- The arbitrary regulations and distinctions that have created unequal health service provision based on one's legal status (First Nation [Status Indian] or Métis) must be removed to improve health outcomes for all Aboriginal peoples. For example, Métis participants expressed frustrations about being denied equitable access to health services.

- Restoring health and well-being among Aboriginal peoples requires services and programs founded on an integrated, holistic view of human health. Both First Nation and Métis

community participants expressed that preventive services are narrowly focused on diabetes as a disease and do not consider health in totality.

- Health and healing systems for Aboriginal peoples must be returned to the control of Aboriginal peoples. For example, policy-makers agreed that top-down decision-making approaches devoid of appropriate context are not responsive to local conditions, priorities, resources, and necessities; only local people have such knowledge about their community members, and their knowledge is essential to implementing successful programs and services.

- Health care services for Aboriginal peoples should have enough flexibility to accommodate differences in cultural and community realities, and diversity of local conditions and priorities. For example, Métis participants felt marginalized as Aboriginal health services reflected solely First Nation worldviews. Thus, health service providers need to respectfully respond to their clients' need in a way that encompasses the cultural components and beliefs of all Aboriginal groups.

Flexibility and Inclusivity

- Strategies to improve the nutritional and physical status of First Nation and Métis peoples in urban settings must reflect the realities of their circumstances and the manner in which they access, select and prepare food, and participate in physical activities. Policy initiatives to help create and sustain supportive environments are essential to make it easier for First Nations people and their families to increase healthy food intake and participate in physical activities.

- Policies and funding for health services and education programmes, and auxiliary health supplies should be sufficiently flexible to enable programs to respond to the diverse cultural, legal, socio-economic, and spatial needs of urban First Nation and Métis peoples.

- Greater integration of resources and services is needed at the local level through inter-organizational collaborations to address funding shortages or discontinuities. Consulting research evidence and best practice models from different jurisdictions or international organizations could help improve Indigenous health. Importantly, service implementation requires sustainable programming that continues beyond its pilot project stage.

- The health system needs to be more proactive in dealing with the increasing needs of long-term complications of diabetes among Aboriginal peoples. While cultural sensitivity training may be useful, responding to Aboriginal diversity requires systemic change.

The Intersecting Determinants of Health

- Policy-makers need to shift from reactionary policy-making and program spending to more complex, pre-planned, targeted, inter-sectoral action and to reject the stigmatizing portrayal of First Nation and Métis peoples as "vulnerable populations" in favour of a focus on communal strengths.

- Change must start from an understanding that there is no "one size fits all" approach in providing preventive services. In this respect, policy-makers need to link the individual-level factors to the institutional systems that shape them, to consider power relationships, and to promote the development of more equitable policy.

- Meaningful and culturally-appropriate translations of knowledge surrounding diabetes causation and prevention requires that First Nation and Métis peoples, health service providers, and policy-makers understand and communicate each other's perspectives and work in partnership.

Finally, there are some real challenges associated with addressing First Nations and Métis diversity in Canadian cities beginning with the recognition of socio-economic, cultural, and spatial complexities of First Nation and Métis peoples' location in terms of accessing preventive services for diabetes. Another challenge is to provide a supportive environment for the propagation and continuation of First Nation and Métis cultures that is the foundation of improving the basic social and structural determinants of health. Importantly, we must recognize the histories of First Nation and Métis peoples, their legacy in cities, and the need for their input into health services and policy development.

Conclusion

Differences in historical legacies, legal statuses, socio-economic backgrounds, and cultural identities contribute to significant diversity among urban First Nation and Métis peoples. Hence, the nature and trends of the issues presented here are decidedly complex. While a recent study (Environics Institute, 2010) indicates that the socio-economic conditions of urban First Nations and Métis are improving and that the inequities between them and non-Aboriginal people are slowly reducing, informants in this study suggest that a considerable portion of First Nation and Métis peoples are still in extreme poverty and lack the basic material resources to lead healthy lives. Evidence also suggests that although there are positive changes in these urban populations, there is also a strong need for First Nation and Métis families to overcome barriers in order to improve their quality of lives in urban Ontario, Canada. Health services for urban First Nation and Métis peoples, however, cannot offer a simplistic application of pan-Aboriginal strategies designed to address their health inequities. Initiatives for urban First Nation and Métis peoples must be targeted at the unique and distinct needs of First Nation and Métis residents regardless of their legal status, cultural diversities, socio-economic backgrounds, and place of residence in the cities. Moreover, the initiatives must reflect First Nation and Métis peoples' strengths and needs by involving them in health planning and policy making processes.

Aboriginal-diversity informed preventive health services for First Nation and Métis peoples is needed; however, we must also address the barriers that First Nation and Métis peoples face in urban areas in

accessing culturally-appropriate health services. Vibrant First Nation and Métis cultures are important elements of the Canadian urban landscape and can provide an important foundation for improving health services to reduce inequities in health. Policy development requires meaningful relationships and necessitates that policies should be developed from the bottom up: those who are most affected by the policy should be included in its development so that local needs are acknowledged and addressed. Urban Aboriginal organizations can play a key role in linking with local First Nation and Métis communities for making programs and policies culturally appropriate and relevant from the start (Peters, 2006). Besides offering input for providing Aboriginal cultural-diversity informed programs and services, the organizations involved play significant roles in connecting clients to determinants of health such as food, shelter, education, and employment. The nature of urban Aboriginal communities is somewhat different from rural or reserve communities. In urban centres, Aboriginal communities are mostly created and maintained by local Aboriginal organizations. First Nation and Métis peoples, for example, come to Friendship Centres for social, educational, or spiritual purposes. Therefore, these organizations play a crucial role in improving the quality of lives of all Aboriginal peoples in a coordinated manner and in helping clients maintain a balance between the physical, mental, emotional, and spiritual aspects of their lives. Policy-makers in our study remarked that community strength includes not only personal strength and the commitment to understand themselves as Indigenous peoples, but also in locating the connections between common interests in urban centres, workplaces, educational facilities, and places of residence. Thus, recognizing themselves as an urban community, coming together and working together is one of the many positive aspects of urban First Nation and Métis communities. Another recognized strength of the community is in its committed providers in health and social service programs. Despite various obstacles and challenges, as well as insecurity with their own professional careers, these providers offer their best efforts to accommodate the community members' needs in overcoming the difficulties of prevention and management.

Responding to the unique needs of diverse urban Ontario First Nation and Métis populations in a meaningful way means acknowledging and understanding the historical, political, social, cultural, and local or community factors that influencing their well-being. Importantly, what is culturally appropriate health programming for one group of urban First Nation and Métis is not necessarily appropriate for another group living in another urban Ontario setting or elsewhere in Canada. Participants of this study came from a single urban Ontario setting; therefore the study may lack the potential to capture geographical variations across other cities within the province or across the country. Moreover, due to challenges with participant recruitment, we were not able to incorporate Inuit peoples' perceptions, which would have made our findings more complete; this must become a priority for future research, since identifying urban Inuit perceptions will aid in developing responsive and holistic preventive series for all Aboriginal groups. Despite these limitations, this exploratory study was the first attempt to bring together interrelationships of three groups - First Nations, Métis, health service providers and policy makers - in a single study and giving voice to their combined perceptions concerning preventive services for a chronic health condition in the urban context.

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