

Examining attitudes toward a proposed sugar-sweetened beverage tax among urban Indigenous adults: a qualitative study using a decolonizing lens

Maria Kisselgoff MSc, Michael Redhead Champagne, Riel Dubois, Lorna Turnbull LLB JSD, Jeff LaPlante BA, Annette Schultz PhD RN, Andrea Bombak PhD, Natalie Riediger PhD

Abstract

Background: Sugar-sweetened beverage taxation has been proposed as a public health policy to reduce consumption, and compared with other ethnic or racialized groups in Canada, off-reserve Indigenous populations consume sugar-sweetened beverages at higher frequencies and quantities. We sought to explore the acceptability and anticipated outcomes of a tax on sugar-sweetened beverages among Indigenous adults residing in an inner-city Canadian neighbourhood.

Methods: Using a community-based participatory research approach, we conducted semistructured interviews (November 2019–August 2020) with urban Indigenous adults using purposive sampling. Interviews were audio-recorded, transcribed verbatim and analyzed using theoretical thematic analysis.

Results: All 20 participants (10 female, 8 male and 2 two-spirit) consumed sugar-sweetened beverages on a regular, daily basis at the time of the interview or at some point in their lives. Most participants were opposed to and concerned about the prospect of sugar-sweetened beverage taxation owing to 3 interconnected themes: government is not trustworthy, taxes are ineffective and lead to inequitable outcomes, and Indigenous self-determination is critical. Participants discussed government's mismanagement of previous taxes and lack of prioritization of their community's specific needs. Most participants anticipated that Indigenous people in their community would continue to consume sugar-sweetened beverages, but that a tax would result in fewer resources for other necessities, including foods deemed healthy.

Interpretation: Low support for the tax among urban Indigenous people is characterized by distrust regarding the tax, policy-makers and its perceived effectiveness. Findings underscore the importance of self-determination in informing health policies that are equitable and nonstigmatizing.

Sugar-sweetened beverage intake is a global public health concern because of its association with incident type 2 diabetes.^{1,2} As such, health authorities such as the World Health Organization, Diabetes Canada, and Heart and Stroke Foundation, among others, are urging governments to implement sugar-sweetened beverage taxation to reduce consumption.^{3,4} In Canada, Newfoundland and Labrador is the first, and so far only, province to implement an excise tax on sugar-sweetened beverages,⁵ though other provincial parties have included sugar-sweetened beverage taxation in their election campaigns or explored the policy, including in Manitoba.^{6–8}

Urban Indigenous people represent a key interested group with regard to sugar-sweetened beverage taxation. Off-reserve Indigenous people consume sugar-sweetened beverages at a higher frequency and volume than other ethnic or racialized groups.^{9,10} Food insecurity and lower income are associated with greater consumption of sugar-sweetened beverages.^{9,10} Given that Indigenous people are also disproportionately affected by food insecurity¹¹ and poverty¹² compared with non-Indigenous

populations, these disparities likely contribute to higher intake of sugar-sweetened beverages among Indigenous people, though there are likely other factors that contribute to higher intake. Importantly, social, economic and health disparities among Indigenous people are attributable to historical, as well as contemporary, colonial policies.¹³ Government-led policies tend to have poor implementation and outcomes among Indigenous people because they are designed by non-Indigenous people, informed by associated ideologies and utilize a deficit lens.¹⁴ It is therefore critical to explore the acceptability of sugar-sweetened beverage taxation among Indigenous people.

Competing interests: None declared.

This article has been peer reviewed.

Correspondence to: Natalie Riediger, Natalie.Riediger@umanitoba.ca

CMAJ Open 2023 October 10. DOI:10.9778/cmajo.20230025

Public acceptability is an important aspect of the implementation of population-level policies.¹⁵ Support among the target population is associated with higher effectiveness of health care measures in changing behaviour and benefiting overall health.¹⁶ Behaviour modification intended by a proposed tax in an urban setting may be challenging owing to the high prevalence of poverty among Indigenous people, lack of full-service grocery stores and abundance of convenience stores, which elevate the price of food significantly.^{12,17} Unintended effects of sugar-sweetened beverage tax policy may therefore exacerbate health inequities among individuals or communities who are not in a position to change behaviours as readily. For example, taxes on sugar-sweetened beverages are regressive,¹⁸ meaning lower-income populations pay a higher proportion of their income, which could exacerbate existing economic disparities and food insecurity.

Health inequities experienced by Indigenous people are a direct result of settler colonialism, as reported in the Truth and Reconciliation Commission of Canada,¹³ and as such, a critical inquiry of sugar-sweetened beverage taxation should be conducted through a decolonizing lens.¹⁹ A decolonizing framework seeks to incorporate Indigenous perspectives and approaches to research, as well as recognize, decentre and dismantle oppressive colonial systems and policies. Specifically, we were interested in examining the main themes of settler colonialism, spatial structures, power structures and social narratives, as they relate to the proposed tax on sugar-sweetened beverages.²⁰ Spatial structures are important when we consider where people purchase drinks (and associated costs), especially in urban settings where the abundant convenience stores are more expensive, and full-service grocery stores are farther removed. Power structures, in the form of law and policy-making, also bring about questions of who has the power to decide what we tax and what tax revenue is used for. Finally, given that policy-making is a socially constructed phenomena, we also sought to explore how social narratives inform perspectives of sugar-sweetened beverage purchasing, how the “problem” of sugar-sweetened beverage purchasing has been framed and constructed, and how these understandings may inform acceptability of taxation on sugar-sweetened beverages.

We sought to explore the acceptability and anticipated outcomes of a tax on sugar-sweetened beverages among Indigenous adults residing in an inner-city Canadian neighbourhood.

Methods

This community-based participatory research study was conducted in partnership with the National Indigenous Diabetes Association (NIDA) and Fearless R2W, two Indigenous-led community organizations based in Winnipeg, Manitoba, focused on diabetes care and prevention, and child-parent welfare, respectively. In line with the 9 principles of community-based participatory research,²¹ we worked closely with community partners on formulating research objectives, developing research instruments, collecting and interpreting data, knowledge translation, publication and developing policy

recommendations, ensuring that all partners equitably partake in decision-making, sharing of knowledge and responsibilities in all phases of the research. The research question was developed in response to widespread endorsement of sugar-sweetened beverage taxation by various health organizations and the need for Indigenous organizations to gather their own data to inform their position. The principal investigator developed separate research agreements with NIDA and Fearless R2W, outlining the shared values of the study; the study objectives; roles and responsibilities; funding, employment and training opportunities; knowledge dissemination; and ownership, control, access and possession of the data. Frequent meetings allowed us to adjust elements of the study as needed based on community needs and preferences, and pandemic-related contexts. The research process was informed by a decolonizing framework¹⁹ as described above. The complete study protocol is available in Appendix 1, available at www.cmajopen.ca/content/11/5/E922/suppl/DC1.

Study setting

Participants were recruited from the North End community area located within the city of Winnipeg, Manitoba, on Treaty One territory. Winnipeg is home to the largest number of Indigenous people of any metropolitan area in Canada, with 92 810 residents, or 12.2% of total population, self-identifying as Indigenous (54% Métis, 44% First Nation).²² The North End community area has long included the largest proportion of Indigenous people, constituting 29% of the area's total population.²³ The North End is the lowest-income neighbourhood cluster in the city of Winnipeg with considerable health and social disparities, including higher prevalence of diabetes, single-parent families and rates of unemployment.^{23,24} In addition to these inequities, the North End is characterized as a food desert, where full-service or chain grocery stores are located 500 m or farther from low-income households,²⁵ though we acknowledge critiques of this concept as oversimplified.²⁶

Study participants and recruitment

The study included self-identifying Indigenous people aged 18 years or older residing in the North End, and who speak English. Using purposive sampling, we aimed to recruit individuals who regularly consumed sugar-sweetened beverages, took care of dependents and experienced food insecurity to capture a diversity of relevant perspectives. We also aimed to recruit Elders with strong connection to the North End, as identified by the community research assistant (R.D.) and community partner (M.R.C.). Recruitment was led by a research assistant (R.D.) known to community residents who shares a similar background as a self-identifying Indigenous adult living in the North End. The research project was introduced to community members at a feast organized together with Fearless R2W at North End's Indigenous Family Centre, a common space of gathering within the neighbourhood. At the feast, interested community members were invited to sign up for the study with the research assistant. The study was shared again at weekly community events at the Indigenous Family Centre. The research assistant also conducted

recruitment through personal connections to ensure the inclusion of residents who may have been subject to various barriers of participation.

Because of unforeseen circumstances related to the COVID-19 pandemic, we used 2 different informed consent protocols before the commencement of each interview. For interviews conducted in person, participants provided both written and verbal consent. After the enforcement of COVID-19-related public health measures and approval from the research ethics board, we proceeded to conduct interviews over the telephone and collect informed consent over email and again verbally. As part of the informed consent process, we clarified that the research was being carried out in partnership with NIDA and Fearless R2W.

Data collection and analysis

We conducted semistructured interviews between November 2019 and August 2020, which were audio-recorded and transcribed verbatim. In-person interviews were conducted from November 2019 to early March 2020, at which time we switched to telephone interviews to comply with public health guidelines. The interviewer administered a demographic questionnaire immediately before the interview to describe participant characteristics, including age, gender, employment status, sugar-sweetened beverage intake and self-rated health. The interview guide is included in Appendix 1, and the demographic questionnaire is publicly available.²⁷ In-person interviews were conducted at the University of Manitoba's Inner City Social Work Campus, located centrally within the North End neighbourhood. Detailed postinterview notes were recorded and incorporated into analysis for situational context.

Interviews were coded in NVivo 12 Pro and analyzed following Braun and Clarke's theoretical thematic approach,²⁸ involving prior engagement with the literature. This type of analysis provides a rich, detailed account of select aspects of the data, rather than a description of the data set as a whole.²⁸ In line with the theoretical thematic method, we approached analysis with prior engagement with the literature to relate findings to the theoretical framework and published knowledge.²⁸ The first 7 interviews were actively and repeatedly reviewed to generate an initial list of codes. Preliminary analysis began concomitantly after interviews, during debriefing and reflection to capitalize on emerging themes. Once data collection was completed, we began to conduct active and repeated readings of the data to identify important patterns and themes.²⁸ With further review of all transcripts, codes were refined, expanded or collapsed into categories, and eventually grouped into themes.

Analysis following the decolonization theoretical framework was conducted to explore participants' discussion in relation to the 3 elements of settler colonialism in the context of proposed taxation of sugar-sweetened beverages. We assessed how power, spatial and social structures influence participants' levels of trust in government and society, sense of justice and acceptability of government-led policies. Results were shared first with study partners and participants to obtain feedback, member check and refine themes. Study

findings were also shared at a regularly scheduled, in-person community event in the North End organized by Fearless R2W and through a newsletter and infographic with NIDA.^{29,30} Discussions with the broader community further contributed to the data interpretation.

Positionality

We each approached this study holding certain assumptions and beliefs shaped by our unique background and experiences, as well as differing perspectives of a proposed tax on sugar-sweetened beverages. Acknowledging our backgrounds and social position, as well as how they influenced approaches and decision-making, is an important aspect of conducting qualitative research. Owing to the interpretive nature of qualitative research, we actively made decisions and interpretations based on personal epistemologies, a concept known as "researcher as instrument."³¹ As non-Indigenous people (M.K., N.R., L.T., A.S. and A.B.) conducting research with Indigenous partners (M.R.C., R.D. and J.L.) and participants, we engaged in ongoing reflection in relation to the research. By discussing our positionality, we reveal our personal histories and identity to others, acknowledge our motivations and, hopefully, foster accountability and trust.³¹ M.K., N.R., L.T., A.S. and A.B. all identify as White settler women, who have diverse personal and ancestral immigration histories, and diverse areas of academic expertise, including public health, nutrition, nursing, law and social sciences.

We must also acknowledge and reflect on participants' potential assumptions regarding our personal and collective stance with regard to a tax on sugar-sweetened beverages. During the first few interviews, participants inquired about our research team's position regarding the proposed tax as non-Indigenous researchers from an academic, publicly funded institution, which caused us to reflect on how to mitigate or address these dynamics. Efforts were made to indicate that the study's research team was partnered with local Indigenous organizations and not affiliated with the policy or health authorities who have endorsed or have the power to directly influence the course of sugar-sweetened beverage taxation in any jurisdiction.

Ethics approval

Ethics approval was obtained from the University of Manitoba Health Research Ethics Board for the larger study HS21878 (H2018:234) and for secondary analysis of the data presented in this publication HS24317 (J2020:065).

Results

We interviewed 20 Indigenous adults, whose ages ranged from 20 to 65 years, with 10 self-identifying as female, 8 as male, and 2 participants identifying as two-spirit. Other demographic results are reported in Table 1. The first 6 interviews were conducted in person, and the remaining 14 interviews were completed over the telephone. All participants consumed sugar-sweetened beverages on a regular, daily basis at the time of the interview or at some point in their lives.

Table 1: Demographic characteristics of participants

Characteristic	No. (%) <i>n</i> = 20
Gender	
Female	10 (50)
Male	8 (40)
Two-spirit	2 (10)
Age range, yr	
20–34	12 (60)
35–49	6 (30)
50–65	2 (10)
Mean age	34
Ethnicity	
First Nation	15 (75)
Métis	4 (20)
Indigenous	1 (5)
Highest level of education	
Completed primary school	1 (5)
Some secondary school	4 (20)
Completed secondary school	11 (55)
Completed trade/technical school or college diploma	4 (20)
Completed university degree	0
Current employment status	
Not working in the labour force	15 (75)
Working full time in the labour force	4 (20)
Retired or semiretired, or working part time in labour force	1 (5)
Self-rated health	
Excellent, very good or good	17 (85)
Fair or poor	3 (15)

Using thematic analysis of the interviews, we identified an overall strong opposition to the proposed taxation of sugar-sweetened beverages. Participants' unfavourable attitudes and limited acceptability of the policy stem from 3 interrelated themes: government is not trustworthy, taxes are ineffective and lead to inequitable outcomes, and Indigenous self-determination is critical. These themes are presented with exemplar quotations, using pseudonyms, within the text and in Table 2.

Government is not trustworthy

Participants expressed a general sense of low expectations and trust in the government, with their disappointment characterized by Gavin as “the norm.” Previous actions of government underscore participants' concerns for the future implementation of any tax. Participants implied that governments have the power to do as they wish with no way of keeping them accountable.

Some participants were not supportive because they viewed a sugar-sweetened beverage tax as a “cash grab” and were concerned that the true motivation behind the price increase was to generate another stream of revenue disguised as a health initiative. Participants perceived the government to not be transparent in their spending, referring to previously implemented taxes. Previous public funds that were allocated to the community were perceived as token gestures that did not address the immediate and dire priorities of the North End residents. For instance, participants described that previous public investments were made in parks and art galleries or general city maintenance. This was juxtaposed against the participants' main concerns for their community, including food insecurity, addiction, poverty and underserved community resources. Participants expressed where they would want the revenue to go if given the choice, such as educational programs, community programs, child welfare and health care. However, even when discussing hypothetical causes to direct tax revenue toward, some participants were apprehensive of lofty contingency promises to Indigenous communities pinned on the tax because of previous experience.

Participants were also not supportive of the tax because of the decision-makers behind the proposed policy, whom they perceived to push similar agendas that do not take into account Indigenous-specific determinants and needs. These “do-gooders” were perceived as lacking an understanding of the realities facing Indigenous communities, as well as how to approach health and behavioural reforms effectively and equitably, which instead have led to “pilot projects” that have the intention to change behaviour but have not resulted in meaningful benefits. In discussing a proposed tax on sugar-sweetened beverages, participants referred to decision-makers as the “higher ups,” “privileged,” “powerful,” “elitist,” “virtuous,” “parental” and “condescending,” and indicated that they “don't give a shit about you.” The decision-makers and people of higher socioeconomic status were considered by participants to belong to the same group of people.

The true benefactors of the proposed policy were perceived by some participants to be more privileged communities. One participant viewed the proposed tax as a “financial siphon,” which would strip North End residents of money to support priorities of more privileged groups or the government. Participants indicated that privileged communities would benefit in financial, social and health aspects because they already consume fewer sugar-sweetened beverages and are more likely to comply with the proposed policy, which will keep more money in their pockets, and reinforce their self-perception of virtuousness and healthfulness. Given that privileged people were perceived to benefit more, these ideas also contributed to the second theme that we identified — that taxes on sugar-sweetened beverages lead to inequitable outcomes.

Taxes are ineffective and lead to inequitable outcomes

The second theme is characterized by concerns regarding the efficacy and equity of the tax as a behavioural intervention. Based on their previous experiences, participants predicted

that a sugar-sweetened beverage tax will not change behaviour, particularly for regular consumers, because it will not address the underlying determinants of sugar-sweetened beverage consumption, including food insecurity, poverty, addiction and social aspects of sugar-sweetened beverage consumption among Indigenous people in the inner-city context. Many participants predicted that people will shop for substitutions, cheaper alternatives, or stockpile on sales or bulk options. Other participants believed the tax would not be effective because of the psychological and emotional aspects of consuming sugar-sweetened beverages, providing comfort, pleasure and a means to cope among residents of a neighbourhood who are often in “survival mode.”

Some participants raised concerns that the tax will likely lead to a negligible increase in price, which will not be substantial enough to reduce sugar-sweetened beverage consumption. Regardless of the amount of the tax, it was largely perceived as taking much-needed money away from residents of the North End, while improving the more privileged neighbourhoods and groups who have “more healthy coping habits.” Amanda

compared a sugar-sweetened beverage tax to the Sheriff of Nottingham, a villainous agent of the greedy state in English folklore, to “keep them extra poor.” Given residents’ already tight budgets, an increase in the price of sugar-sweetened beverages will further increase their financial burden, leaving less for other obligations and basic necessities, because sugar-sweetened beverages will continue to be a priority. Notably, one of the obligations that was anticipated to suffer as a result of a sugar-sweetened beverage tax would be the procurement of “healthy” food because sugar-sweetened beverages will continue to be prioritized. Groups identified as especially negatively affected by a sugar-sweetened beverage tax were “the little people,” those “on EIA [Employment and Income Assistance] with children,” the “working poor,” those “on pension,” those in “the North End,” “senior citizens who like to buy pop and have it in their home for their grandchildren or when people come over” and “Indigenous people.”

A couple of participants anticipated that to continue to afford sugar-sweetened beverages, people will go to greater lengths to earn more money, and the tax may even lead some

Table 2 (part 1 of 3): Thematic analysis results with exemplar quotations

Theme	Subtheme	Categories	Quotation	
Government is not trustworthy	Taxing experiences	Lack of transparency	“The tax money is supposed to be used for something positive that people want, but it’s not most of time. Or you just don’t know where the heck it’s gone. Maybe it doesn’t even matter, but it should be taxed to avoid people from buying it, but then again, maybe just leave it alone because I don’t know where the money is going anyway.” (Dakota)	
		Token gestures	“They always have everything for hotels, or potholes, or whatever, or licences, or some parks, or some stupid thing.” (Carolyn)	
		Not accountable	“My opinion would only change once it was happening, you know. I, I don’t trust anything the government says ... we can say whatever we want to say but until the action is put into it, it doesn’t really mean anything, you know? ... That’s from my own life experience as an Indigenous woman Otherwise our Indigenous communities would have drinking running water already, you know.” (Louise)	
	Taxes are financial siphons	Other government priorities	“Knowing government, a lot of times it’s either to balance other areas of the budget, but sometimes it’s a lot of bullshit and then it goes directly back to privileged communities, or it goes to things in which this community don’t value as much.” (Gavin)	
		Higher SES neighbourhoods		
		Pocketed by those in power	“Just put it in their pockets. They always do. Government’s greasy, man.” (Tyler)	
	Misinformed “do gooders”	Paternalistic		“... and then to tax that, to make that person who already is — have their own issues and they’re coping with it, with food and then you tax their sugary beverages then ... that actually is like almost like a punishment. It’s um ... its uh, like condescending and authority in the sense that like, like they are trying to be parental. Right? It’s gross.” (Amanda)
		Out of touch		“I think that it’s kind of like elitist in a lot of times. It’s always like the do-gooders within politics or within activism that say those kinds of things. Not really realizing like those folks are still going to buy it no matter what.” (Gavin)
	True benefactors		“The more people that would be deterred are those that have the more healthy coping habits, or the people to have accessibility to those things. This area would be impacted more, and it doesn’t address any underlying things. It’s the same.” (Gavin)	

Table 2 (part 2 of 3): Thematic analysis results with exemplar quotations

Theme	Subtheme	Categories	Quotation
Taxes are ineffective and lead to inequitable outcomes	Ineffective	Does not address determinants of sugar-sweetened beverage consumption	"You will do whatever you need to do to fix that feeling, you know. To fill that feeling up, that void, that sugar your body needs at that time. You'll do whatever you need to do, to do that. So I feel like people are still going to They're still gonna buy pop. I don't think it's ... that's gonna change at all. It's not gonna change how much pop or how much sugary drinks are being sold. That's not gonna change either." (Louise)
		Negligible increase in price	"It's always, it's increased, and if they put a little bit more of the tax on there, on the sugar, then what's the difference of that? The only difference is somebody's making money, as in the end somewhere else down the line. That's what it is. And I mean, that's all, hey, that's what I see. Like, because most of us are low income. So like, it, we, it would, um, have us spend a little bit more. But like I said, I don't think it would stop us from buying it." (Charlotte)
		Substitution	"Um, but they're not ... I don't think like one family is gonna completely cut out a, a habit that they had for years, so it's gonna be like Um, they're gonna buy it, but for a cheaper price somewhere else or deal somewhere." (Diane)
	Inequitable socially	Signalling/stigmatizing	"I think it would like make people aware that, well, it's unhealthy and if you're gonna pay more for it, maybe it's a good idea to quit." (Beverly)
		Destabilizing	"What the hell? I do not like that. Because like, what if I don't have the exact change of what I wanted and then all of a sudden I need to have more than I don't have. And I won't be able to get it. Which would suck and I would be mad." (Shelly)
		Reinforcing social differences	"It makes you look at even more at the people that have what you don't have. Why do they get to live that good fucking life and I have to sit here in my front yard with a shovel to make sure that nobody's going to bust in my front door because they're living in survival mode? You know, we ... Like it's just ... It blows my mind. And, um, it's really hurtful as a single parent knowing that if this tax goes up, like I already struggle with feeding my kids. I already struggle with making sure that we're getting by, you know, just everyday things." (Louise)
	Inequitable economically	Hurt pockets	"I think it [sugar-sweetened beverage tax] would hurt all of our pockets, definitely ... so maybe a tax would, like, have to, like I said, if they gonna get taxed on it, maybe they'd have to, like, cut something else off in their, in their monthly budget, or their weekly budget or whatever, how they're doing it." (Carolyn)
		Less for other obligations	"More priority on pop, less priority on everything else they have to buy. Basically just that. Like if pop goes up, pop's still cheaper, pop's still more accessible. To them, it's still more norm. So if they're spending more money on pop, and that little extra money they might have been able to use on more, like, healthier groceries, that's just canceled." (Gavin)
		Risky acquisition	"People will go out of their way to find that extra money, that extra whatever-it-is, to still maintain their pop addiction, their sugar addiction. It is an addiction." (Louise)
		Rich richer (intersects with subcategory True benefactors)	"The more people that would be deterred are those that have the more healthy coping habits, or the people to have accessibility to those things. This area would be impacted more, and it doesn't address any underlying things. It's the same." (Gavin)

to risky money-acquisition behaviours. A few participants also discussed how sugar-sweetened beverages are used as a form of harm reduction, or something people transition to after quitting the use of illicit substances. There was also concern a tax on sugar-sweetened beverages could transform their only socially acceptable vice to an unaffordable taboo.

Several participants anticipated a sugar-sweetened beverage tax would also destabilize their or others' sugar-sweetened beverage shopping routines and budgets, something relatively steady in the life of participants. By extension, a sugar-sweetened beverage tax will be another reminder of one's financial situation and poverty, and having less than others.

Table 2 (part 3 of 3): Thematic analysis results with exemplar quotations

Theme	Subtheme	Categories	Quotation
Indigenous self-determination is critical			<p>“Where we’re pushed to make, uh, a choice from two bad choices so that we’re doing it to ourselves, so that ultimately, nobody else is responsible, right? Like, the government isn’t responsible for putting these taxes on things that we really need and not putting taxes on stuff we don’t need. You know, it’s self-elimination. It’s, it’s, uh There’s a certain word for it I can’t think of, but, like, um. They are... We’re wiping ourselves out. We’re wiping ourselves out, we’re wiping each other out, so that it’s just less, you know, less dirt on somebody else’s hands, right? Because ‘we did it to ourselves,’ quotation marks. I have big bunny ears here happening. You know, it’s the same with, with addiction. You know, they They’re gonna keep putting shit out on the streets so that we’re consuming it ourselves as our own choice but we’re being pushed to do that, right? Like, we, like, it’s, yeah Sorry. Just, uh.” (Louise)</p> <p>“... it has to have a positive effect in the mind of Indigenous people, because I think people are aware of the, impact of diabetes in their families. So I think if it is seen as preventing more complications due to diabetes, uh, people are more likely to support it than if it was going into something that was seen as directly beneficial to the community.” (Alan)</p>

Note: SES = socioeconomic status.

Indigenous self-determination is critical

Indigenous input and self-determination were critical for participants in garnering any support for a sugar-sweetened beverage tax. Two participants pointed out that the governments introduced sugar and sugar-sweetened beverages into Indigenous diets and neighbourhoods initially, linking the current dietary disparities to colonialism. Louise described the situation, which would be exacerbated by a sugar-sweetened beverage tax, as leaving Indigenous people in the North End with “two bad choices,” presumably, drink sugar-sweetened beverages or nothing at all, and in essence continuing the existing colonial agenda designed to eradicate Indigenous people by making Indigenous people “do it to themselves” and “wiping [them]selves out.”

Participants expressed greater support for sugar-sweetened beverage taxation if the generated revenue was earmarked to initiatives that were important to them. In this regard, the tone of many interviews changed during this line of questioning. Many participants who were strongly opposed to the tax shifted their attitude when asked how they would like the revenue to be allocated in the scenario that the tax was in fact implemented. Although earmarking the tax to a worthy cause changed some participants’ attitudes, it did not change all participants’ minds. It was pointed out that hinging a benefit, especially a basic human right such as clean water or access to healthy food, on a tax that would financially burden the targeted population, was a concern.

The minority of participants who were supportive of the tax irrespective of where the revenue would be allocated did not consume sugar-sweetened beverages themselves or exhibited some cognitive dissonance. They described the tax as an educational tool and an effective behaviour modifier for a substance of health concern, despite acknowledging either its unfairness or ineffectiveness.

Interpretation

Drawing on their lived experiences with previously implemented taxes, participants’ low acceptability of the proposed sugar-sweetened beverage tax was rooted in the interrelated dispositions that government is not trustworthy, taxes are ineffective and lead to inequitable outcomes, and Indigenous self-determination is critical. Indigenous peoples’ distrust of the government is also a result of colonialism and associated paternalism and exploitation.³²⁻³⁴ Broadly, mistrust in government and public health care systems has heavily affected outcomes during the COVID-19 pandemic and was associated with lower adherence to COVID-19-related distancing measures, vaccination, and overall higher infection and death rates.³⁵ It is therefore critical for policy-makers and public health researchers to consider the indirect health impacts of government distrust with respect to sugar-sweetened beverage taxation, given the broader health risks associated with government distrust.³⁶

This study also draws attention to the ineffective and punitive nature of sugar-sweetened beverage taxation for regular consumers of these beverages, particular Indigenous populations who have a higher prevalence of food insecurity and consume sugar-sweetened beverages in higher quantities than other populations.⁹⁻¹¹ Participants predicted a sugar-sweetened beverage tax would leave less money for other necessary expenses and lead to risky acquisition behaviours. Participants’ predictions of how sugar-sweetened beverage taxation would influence future spending are supported by research in tobacco control, where lower-income individuals employed conservation strategies by spending less on food and delaying paying utilities.³⁷ In this regard, higher provincial sales tax rates in

Canada,³⁸ grocery taxes in the United States³⁹ and tobacco taxes⁴⁰ are associated with greater likelihood of food insecurity. Food insecurity, in turn, is associated with higher health care costs, infectious disease, injuries and mortality.^{11,41–43} Furthermore, increases in tobacco taxation were associated with increases in violent robberies for cash and tobacco in low-income communities in New Zealand.⁴⁴ To our knowledge, these theoretical outcomes have not been considered in any simulations or evaluations of sugar-sweetened beverage taxation; as such, their omission may misrepresent the true impacts of a sugar-sweetened beverage tax on health equity. Furthermore, these outcomes further exacerbate the known predictors of sugar-sweetened beverage intake, namely food insecurity,^{45,46} trauma^{47,48} and discrimination.⁴⁹

Participants' perception of the tax being a paternalistic tool underscores the importance of engaging Indigenous self-determination strategies when developing new policies. Public health priorities and policies designed to affect Indigenous communities should be defined, designed and implemented with Indigenous people to ensure efficacious outcomes and minimize harmful unintended effects.¹⁴ However, policies are often poorly implemented owing to the fragmented nature of the government bodies, the continual undermining of Indigenous self-determination, and the lack of incorporation of Indigenous knowledge and perspectives. As a colonial reflection of their power and privilege, policy-makers tend to frame Indigenous people as the problem, as "other," which historically have led and presently lead to assimilatory measures. Rather than addressing the colonial policies that have led to, and maintain, higher sugar-sweetened beverage intake among Indigenous people,¹⁴ a sugar-sweetened beverage tax, informed by deficit-based narratives, acts to extract resources (i.e., money) from Indigenous people. Our findings, informed by a decolonizing lens, demonstrate that this behaviour-based approach, developed without prior, culturally safe engagement, may replicate, and indeed worsen, health inequities for Indigenous communities.

Limitations

This study has a number of notable strengths and limitations. Continuous collaboration and conversation with research partners, between community and student/staff research assistants, and the broader community as a form of member checking enhanced the rigour of the study. However, the study was limited by impacts of the COVID-19 pandemic and associated public health restrictions. Community-based participatory research relies on relationship building and engagement, primarily via in-person interaction; similarly, qualitative interviews are often enhanced through face-to-face data collection.⁵⁰ Team members were also themselves negatively affected by the pandemic in myriad ways, which influenced interactions. Whereas the research process was substantially altered, relationships established and data collection conducted before the start of the pandemic contributed to the high quality and trustworthiness of the findings.

Finally, given the nature of qualitative research, findings presented in this paper are not representative of all urban Indigenous people or those experiencing food insecurity in Canada. Findings are likely to be more transferable to populations exhibiting similar demographic and neighbourhood characteristics, namely urban Indigenous adults, families experiencing food insecurity and individuals residing in inner-city neighbourhoods.

Conclusion

Participants were generally opposed to sugar-sweetened beverage taxation. On the basis of our findings and calls of the Truth and Reconciliation Commission of Canada¹³ and the United Nations Declaration on the Rights of Indigenous Peoples,⁵¹ Indigenous self-determination in policy-making is vital for the protection and advancement of Indigenous health in Canada. The findings have important implications for sugar-sweetened beverage policy development in Canada and globally. According to the participants of this study, who are members of the relevant community, it is likely, if a sugar-sweetened beverage tax were implemented, that the policy would have limited, if any, influence on the rates of type 2 diabetes for many urban Indigenous communities.

References

1. Imamura F, O'Connor L, Ye Z, et al. Consumption of sugar sweetened beverages, artificially sweetened beverages, and fruit juice and incidence of type 2 diabetes: systematic review, meta-analysis, and estimation of population attributable fraction. *Br J Sports Med* 2016;50:496–504.
2. Malik VS, Popkin BM, Bray GA, et al. Sugar-sweetened beverages and risk of metabolic syndrome and type 2 diabetes: a meta-analysis. *Diabetes Care* 2010;33:2477–83.
3. Policy brief: taxing sugar-sweetened beverages. Copenhagen: WHO Regional Office for Europe; 2022:1–16. Available: <https://www.who.int/europe/publications/i/item/WHO-EURO-2022-5721-45486-65112> (accessed 2022 Oct. 13).
4. Call to action: levy on manufacturers of sugary drinks. Toronto: Heart & Stroke Foundation; 2017. Available: <https://www.heartandstroke.ca/-/media/pdf-files/canada/media-centre/sugary-drink-levy-call-to-action-en.ashx?la=en&hash=A1765156FCC79BED91D5A397B229738E1794BF66> (accessed 2023 Apr. 21).
5. Sugar sweetened beverage tax information circula (RRA-SSB updated 2022-08-31). St. Johns: Government of Newfoundland and Labrador; 2022:1–12. Available: <https://www.gov.nl.ca/fin/files/Information-Circular-Sugar-Sweetened-Beverage-Tax-Sept-2022.pdf> (accessed 2022 Sept. 15).
6. Using the tax system to encourage healthy choices: implementing a sugar-sweetened beverages tax in the Northwest Territories [discussion paper]. Yellowknife: Government of Northwest Territories; 2019. Available: https://www.fin.gov.nt.ca/sites/fin/files/resources/sugar_sweetened_drinks_tax-discussion_paper.pdf (accessed 2023 Apr. 21).
7. Simpson K. Ontario Liberal MPs eye 'soda tax' idea for October election campaign. *CBC News* 2019 May 26. Available: <https://www.cbc.ca/news/politics/liberals-ontario-soda-tax-proposal-federal-election-campaign-katie-simpson-1.5136724> (accessed 2023 Apr. 21).
8. The Canadian Press. Manitoba Greens pitch 20% tax on sweet drinks to reduce diabetes. *CBC News* 2019 Aug. 27. Available: <https://www.cbc.ca/news/canada/manitoba/green-party-sweet-drinks-tax-diabetes-1.5261605> (accessed 2023 Apr. 21).
9. Garriguet D. *Obesity and the eating habits of the Aboriginal population*. Component of Statistics Canada Catalogue no 82-003-X Health Reports. Ottawa: Statistics Canada; 2008:1–16. Available: <https://www150.statcan.gc.ca/n1/en/pub/82-003-x/2008001/article/10487-eng.pdf?st=iNf3kJT4> (accessed 2019 Dec. 19).
10. Jones AC, Kirkpatrick SI, Hammond D. Beverage consumption and energy intake among Canadians: analyses of 2004 and 2015 national dietary intake data. *Nutr J* 2019;18:60.
11. Tarasuk V, Mitchell A. Household food insecurity in Canada, 2017–18. Toronto: Research to identify policy options to reduce food insecurity (PROOF); 2020:1–27. Available: <https://proof.utoronto.ca/wp-content/uploads/2020/03/Household-Food-Insecurity-in-Canada-2017-2018-Full-Report.pdf> (accessed 2022 Aug. 20).

12. Arriagada P, Hahmann T, O'Donnell V. Indigenous people in urban areas: vulnerabilities to the socioeconomic impacts of COVID-19. Cat. no. 45280001. Ottawa: Statistics Canada; modified 2020 May 26:1-7. Available: <https://www150.statcan.gc.ca/n1/en/pub/45-28-0001/2020001/article/00023-eng.pdf?st=z-rgL0r9> (accessed 2022 Apr. 10).
13. Truth and Reconciliation Commission of Canada: calls to action. Winnipeg: Truth and Reconciliation Commission of Canada; 2015:1-20. Available: https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf (accessed 2019 Sept. 17).
14. George E, Mackean T, Baum F, et al. Social determinants of Indigenous health and Indigenous rights in policy: a scoping review and analysis of problem representation. *Int Indig Policy J* 2019;10:4. doi: 10.18584/ijp.2019.10.2.4.
15. Diepeveen S, Ling T, Suhrcke M, et al. Public acceptability of government intervention to change health-related behaviours: a systematic review and narrative synthesis. *BMC Public Health* 2013;13:756.
16. Sekhon M, Cartwright M, Francis JJ. Acceptability of healthcare interventions: an overview of reviews and development of a theoretical framework. *BMC Health Serv Res* 2017;17:88.
17. Skinner K, Pratley E, Burnett K. Eating in the city: a review of the literature on food insecurity and Indigenous people living in urban spaces. *Societies (Basel)* 2016;6:7.
18. Backholer K, Sarink D, Beauchamp A, et al. The impact of a tax on sugar-sweetened beverages according to socio-economic position: a systematic review of the evidence. *Public Health Nutr* 2016;19:3070-3084.
19. Smith LT. *Decolonizing methodologies: research and indigenous peoples*. 3rd ed. London (UK): Zed Books; 2021:1-345.
20. Barker A, Lowman EB. Settler colonialism. *Global Social Theory*. Available: <https://globalsocialtheory.org/concepts/settler-colonialism/> (accessed 2022 Nov. 7).
21. Israel BA, Schulz AJ, Parker EA, et al. Critical issues in developing and following community-based participatory research principles. In: Minkler M, Wallerstein N, editors. *Community-Based Participatory Research for Health*. San Francisco (CA): Jossey-Bass; 2008:47-62. Available: <https://www.scholars.northwestern.edu/en/publications/critical-issues-in-developing-and-following-community-based-parti-2> (accessed 2022 Aug. 29).
22. City of Winnipeg Indigenous peoples highlights: 2016 Canadian Census. Winnipeg: City of Winnipeg; 2018:1-10. Available: <https://winnipeg.ca/cao/pdfs/IndigenousPeople-WinnipegStatistics.pdf> (accessed 2019 Dec. 2).
23. Community Area Profile 2020: Point Douglas. Winnipeg: Winnipeg Regional Health Authority; 2019:1-9. Available: <https://wrha.mb.ca/files/cha-2019-profile-point-douglas.pdf> (accessed 2022 June 9).
24. Cui Y, Zinnick S, Henderson A, et al. *Winnipeg Health Region Community Health Assessment 2019*. Winnipeg: Evaluation Platform, Centre for Healthcare Innovation (CHI) and Winnipeg Regional Health Authority; 2019:1-420. Available: <https://wrha.mb.ca/files/cha-2019-full-report.pdf> (accessed 2022 Apr. 10).
25. Food and nutrition security. Manitoba Collaborative Data Portal. Available: <http://www.mbcddp.ca/fns.html> (accessed 2022 July 28).
26. Shannon J. Should we fix food deserts?: the politics and practice of mapping food access. In: Hayes-Conroy A, Hayes-Conroy J, editors. *Doing Nutrition Differently*. Abingdon: Oxfordshire (UK): Routledge; 2013:249-74. Available: https://www.researchgate.net/profile/Jerry-Shannon/publication/286406242_Should_we_fix_food_deserts_The_politics_and_practice_of_mapping_food_access/links/5875004908ae329d62205604/Should-we-fix-food-deserts-The-politics-and-practice-of-mapping-food-access.pdf (accessed 2023 Apr. 21).
27. Kisselgoff M. Examining attitudes towards a proposed sugar-sweetened beverage tax among urban Indigenous adults using a decolonizing lens [thesis]. Winnipeg: University of Manitoba; 2023. Available: <https://mspace.lib.umanitoba.ca/xmlui/handle/1993/37134> (accessed 2023 Sept. 19).
28. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol* 2006;3:77-101.
29. Kisselgoff M. Sticky money: experiences purchasing sugar sweetened beverages among Indigenous adults residing in the North End Winnipeg. In: *Summer 2021 Newsletter*. Winnipeg: National Indigenous Diabetes Association; 2021:4-6. Available: https://nada.ca/wp-content/uploads/2021_06_NIDA_Newsletter_interactive.pdf (accessed 2021 July 15).
30. Kisselgoff M. Attitudes towards a proposed tax on sugar drinks among Indigenous adults residing in Winnipeg's north end neighborhood. In: *December 2021 Newsletter*. Winnipeg: National Indigenous Diabetes Association; 2021:8-10. Available: <https://nada.ca/wp-content/uploads/Dec-2021-NIDA-Newsletter.pdf> (accessed 2022 Feb. 20).
31. Carter C, Lapum JL, Lavalée LF, et al. Explicating positionality: a journey of dialogical and reflexive storytelling. *Int J Qual Methods* 2014;13:362-76.
32. Ryan J. Restructuring First Nations' education: trust, respect and governance. *J Can Stud* 1996;31:115-32.
33. Morden M. Theorizing the resilience of the Indian Act. *Can Public Adm* 2016;59:113-33.
34. Groot G, Waldron T, Barreno L, et al. Trust and world view in shared decision making with indigenous patients: a realist synthesis. *J Eval Clin Pract* 2020;26:503-14.
35. COVID-19 National Preparedness Collaborators. Pandemic preparedness and COVID-19: an exploratory analysis of infection and fatality rates, and contextual factors associated with preparedness in 177 countries, from Jan 1, 2020, to Sept 30, 2021. *Lancet* 2022;399:1489-512.
36. Armstrong K, Rose A, Peters N, et al. Distrust of the health care system and self-reported health in the United States. *J Gen Intern Med* 2006;21:292-7.
37. Hoek J, Smith K. A qualitative analysis of low income smokers' responses to tobacco excise tax increases. *Int J Drug Policy* 2016;37:82-9.
38. Men F, Urquia ML, Tarasuk V. The role of provincial social policies and economic environments in shaping food insecurity among Canadian families with children. *Prev Med* 2021;148:106558.
39. Zheng Y, Zhao J, Buck S, et al. Putting grocery food taxes on the table: evidence for food security policy-makers. *Food Policy* 2021;101:102098.
40. Emery H, Tarasuk V, Guo X, et al. Tobacco use and food insecurity in New Brunswick. Hamilton (ON): Canadian Research Data Centre Network; 2019. Available: <https://crdcn.ca/publication/tobacco-use-and-food-insecurity-in-new-brunswick/#tab-page-1> (accessed 2022 Oct. 13).
41. Tarasuk V, Cheng J, de Oliveira C, et al. Association between household food insecurity and annual health care costs. *CMAJ* 2015;187:E429-36.
42. Men F, Gundersen C, Urquia ML, et al. Association between household food insecurity and mortality in Canada: a population-based retrospective cohort study. *CMAJ* 2020;192:E53-60.
43. Men F, Urquia ML, Tarasuk V. Examining the relationship between food insecurity and causes of injury in Canadian adults and adolescents. *BMC Public Health* 2021;21:1557.
44. Glover M, Shepherd R, Selket K, et al. Price hikes, crime fad or political football? What caused a spike in store robberies for cigarettes in New Zealand: analysis of news reports (2009-2018). *Safer Communities* 2021; 20:172-88. Available: <https://www.emerald.com/insight/content/doi/10.1108/SC-09-2020-0034/full/html> (accessed 2022 July 28).
45. Larson N, Laska MN, Neumark-Sztainer D. Food insecurity, diet quality, home food availability, and health risk behaviors among emerging adults: findings from the EAT 2010-2018 study. *Am J Public Health* 2020;110:1422-8.
46. Leung CW, Epel ES, Ritchie LD, et al. Food insecurity is inversely associated with diet quality of lower-income adults. *J Acad Nutr Diet* 2014;114:1943-53.e2.
47. Hirth JM, Rahman M, Berenson AB. The association of posttraumatic stress disorder with fast food and soda consumption and unhealthy weight loss behaviors among young women. *J Womens Health (Larchmt)* 2011;20:1141-9.
48. Vilija M, Romualdas M. Unhealthy food in relation to posttraumatic stress symptoms among adolescents. *Appetite* 2014;74:86-91.
49. Thurber KA, Long J, Salmon M, et al. Sugar-sweetened beverage consumption among Indigenous Australian children aged 0-3 years and association with sociodemographic, life circumstances and health factors. *Public Health Nutr* 2020;23:295-308.
50. Irvine A, Drew P, Sainsbury R. 'Am I not answering your questions properly?' Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face interviews. *Qual Res* 2013;13:87-106.
51. United Nations declaration on the rights of Indigenous Peoples. New York: United Nations; 2008. Available: https://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf (accessed 2022 Sept. 23).
52. Diabetes Canada Clinical Practice Guidelines Expert Committee; Houlden RL. 2018 Clinical Practice Guidelines: Introduction. *Can J Diabetes* 2018; 42(Suppl 1):S1-5.
53. Tomayko EJ, Mosso KL, Cronin KA, et al. Household food insecurity and dietary patterns in rural and urban American Indian families with young children. *BMC Public Health* 2017;17:611.
54. Warren C, Hobin E, Manuel DG, et al. Socioeconomic position and consumption of sugary drinks, sugar-sweetened beverages and 100% juice among Canadians: a cross-sectional analysis of the 2015 Canadian Community Health Survey-Nutrition. *Can J Public Health* 2022;113:341-62.
55. Absolon K, Willett C. Putting ourselves forward: location in Aboriginal research. In: Brown L, Strega S, editors. *Research as Resistance: Critical, Indigenous, and Anti-oppressive approaches*. Toronto: Canadian Scholars' Press; 2005:97-126.

Affiliations: Department of Food and Human Nutritional Sciences (Kisselgoff, Riediger), University of Manitoba; Fearless R2W (Champagne, Dubois); Faculty of Law (Turnbull), University of Manitoba; National Indigenous Diabetes Association (LaPlante); College of Nursing (Schultz), University of Manitoba, Winnipeg, Man.; Department of Sociology (Bombak), University of New Brunswick, Fredericton, NB

Contributors: Maria Kisselgoff was involved in data collection, completed formal analysis and prepared the original draft. Natalie Riediger was involved in conceptualization, methodology, data collection, funding acquisition, supervision, project administration, review and editing. Andrea Bombak was involved in conceptualization, methodology, and review and editing of the original draft. Lorna Turnbull and Annette Schultz were involved in methodology, supervision, and review and editing of the original draft. Jeff LaPlante, Michael Champagne and Riel Dubois were involved in conceptualization, methodology, analysis and interpretation, and review and editing of the original draft; Riel Dubois was also involved in data collection. All of the authors gave final approval of the version to be published and agreed to be accountable for all aspects of the work.

Funding: The study was funded by a grant from the Canadian Institutes of Health Research to Natalie Riediger (grant no. 156260). Natalie Riediger is funded by a CIHR Early Career Investigator Award (grant no. 155435). Maria Kisselgoff is the recipient of a CIHR Canada Graduate Scholarship and top-up funding from the University of Manitoba, Faculty of Graduate Studies. The funders had no role in the study design, collection, analysis or interpretation of the data.

Content licence: This is an Open Access article distributed in accordance with the terms of the Creative Commons Attribution (CC BY-NC-ND 4.0) licence, which permits use, distribution and reproduction in any medium, provided that the original publication is properly cited, the use is noncommercial (i.e., research or educational use), and no modifications or adaptations are made. See: <https://creativecommons.org/licenses/by-nc-nd/4.0/>

Data sharing: The data are not publicly available. For data access, permission must be granted by Fearless R2W, National Indigenous Diabetes Association and Dr. Natalie Riediger.

Acknowledgements: The authors acknowledge Kelsey Mann for her project coordination and Anne Waugh for editorial support. The authors also thank the study participants for sharing their knowledge and experiences.

Supplemental information: For reviewer comments and the original submission of this manuscript, please see www.cmajopen.ca/content/11/5/E922/suppl/DC1.