Abstract: The oral health of Inuit children in Canada has been identified as a public health crisis. Although efforts are being made to identify and address ways to deal with this crisis, current policy and program approaches are largely entrenched within the prevailing paradigm of dental science to the exclusion of Indigenous people’s understandings of health. This article reports qualitative findings of a larger study aimed at identifying, understanding, and addressing rates of oral disease among children living in NunatuKavut, a cluster of small, coastal Inuit communities located in southern Labrador, Canada. Through 18 focus groups with youth (n = 86), caregivers (n = 22), and interviews with key informant (n = 13), this study begins to elucidate southern Inuit understandings of oral health. Theorized using Two-Eyed Seeing, an Indigenous approach to balancing both Indigenous and non-Indigenous understandings of the world, the findings reported here reveal 3 themes, each of which is crosscut by historical and contemporary dimensions: 1) (w)holistic conceptualizations of health are essential to good oral health; 2) achieving optimal oral health is prohibitive for Inuit communities, and 3) community-engaged oral health service delivery is needed. Our recommendations have implications for improved oral health service delivery for Inuit communities, in that the inclusion of Inuit perspectives on oral health should form an instrumental element of oral health service delivery.

Knowledge Transfer Statement: The results of this study may be used by clinicians and oral health educators to inform approaches to oral health service delivery within the context of Indigenous communities. It may also be used by policymakers to recognize how historical and contemporary issues of colonization relate to the formation of oral health–related policies.

Keywords: Indigenous health, community-based participatory research, health promotion, Indigenous population, dental health education, Inuits

Introduction

Oral disease among Indigenous children is a major public health concern globally (Watt et al. 2015). Rates of tooth decay, or early childhood caries, are unacceptably high in many Indigenous communities in Canada (First Nations Information Governance Committee 2007; Health Canada 2011). Poor oral health in early childhood is of particular concern because it may increase the likelihood of acquiring oral diseases and other serious health complications into adulthood (Bruerd and Jones 1996; Petersen et al. 2005; Lawrence et al. 2015). Oral diseases share the same risk factors of many preventable chronic
diseases such as diabetes and heart disease (Petersen et al. 2005; Schroth et al. 2009; Mejia et al. 2010; Parker et al. 2010; Watt et al. 2015). However, what is somewhat unique about oral diseases is that with early detection, they are often treatable or even reversible (Petersen et al. 2005; Watt et al. 2015). A number of initiatives recognize that urgent attention is needed to improve the oral health status of Inuit (Health Canada 2011; Inuit Tapiriit Katanami 2013). Inuit Tapiriit Katanami, representing the interests of Canada’s Inuit, released a 2013 report, the Inuit Oral Health Action Plan, outlining recommendations for improvements to oral health service delivery, prevention, and promotion activities within Inuit communities. A crosscutting recommendation suggests that Inuit must be fully engaged in all program and policy changes. This recommendation is supported by a significant body of Indigenous health research demonstrating that poor overall health is linked with social structures, systems, and institutions that have historically excluded or ostracized Indigenous peoples generally, and Inuit specifically, from participating in decisions that directly affect their health (Castleden et al. 2016; McNally and Martin 2017). Serious efforts to address oral health disparities must, therefore, heed their knowledge and advice about what will work best within Inuit communities. This article reports qualitative findings of a larger study aimed at identifying, understanding, and addressing rates of oral disease among children living in NunatuKavut, a cluster of small, coastal Inuit communities located in Southern Labrador, Canada. An oral health survey to establish the oral health status of NunatuKavut children and youth (aged 0–19 y) was also conducted and is reported elsewhere (Kungatsiajuk [Healthy Smiles Project Research Team 2015). This article aims to elucidate Southern Inuit understandings of oral health and to theorize how efforts to address oral health crises might balance both Indigenous and non-Indigenous perspectives about oral health issues.

Research Goal

This study asks how conceptualizations of oral health might differ between Inuit and their dental service providers and how the implications of these differences might pose challenges and opportunities for oral health service delivery in NunatuKavut.

Methods

Qualitative Approach and Research Paradigm

In general, health disparities that exist within Indigenous communities can be traced to historical and ongoing colonization (King et al. 2009; Castleden et al. 2016; McNally and Martin 2017). Two-Eyed Seeing is a guiding principle that presents a means to hold research accountable to that legacy (Iwama et al. 2009). It recognizes that some of the greatest challenges being experienced in the world today require solutions derived from more than one perspective (Martin 2012). Two-Eyed Seeing balances diverse ways of understanding the same concept, such that multiple knowledge systems are used. For this research, employing Two-Eyed Seeing has meant that existing cultural and context-specific Inuit land-based knowledge vetted through generations of Indigenous families regarding how to protect and enhance the health of their children is positioned alongside conventional evidence-based dentistry practices targeted at improving oral health. Our analysis reveals how Inuit conceptions of health and well-being might inform oral public health service delivery, as well as tensions that emerge when these 2 diverse worlds collide—and what this means for the oral health of Inuit youth.

Researcher Characteristics and Reflexivity

The lead researcher (Martin) and coauthors Clarke and Wall are members of NunatuKavut and are intimately familiar with health issues facing communities included in the study. We interpret this as a strength of this study as, although research capacity is steadily increasing within many Indigenous communities in Canada, most health research conducted in Indigenous communities continues to be undertaken by non-Indigenous researchers, using non-Indigenous approaches. These authors acknowledge that their relationship to the research community does not diminish professional responsibilities with respect to the study and may have strengthened aspects of the research by garnering community support. The remaining authors are non-Indigenous. Although experienced in community-driven Indigenous research, they acknowledge that theirs is a Western scientific position, external to Indigenous ways of knowing.

Context

Within Canada, close to 60,000 Inuit live predominantly in Canada’s northernmost regions. This study includes the Southern Inuit, politically represented by the NunatuKavut Community Council. Historians have noted that health care delivery in Southern Labrador is “willfully ignorant,” where a glaring absence of government infrastructure and resources, combined with an absence of cultural training for health care providers, has resulted in inconsistent and culturally inappropriate delivery (Zammit et al. 1994; Perry 1997; Martin 2012). During the late 1800s, Dr. Wilfred Grenfell, a British physician and philanthropist, traveled to the region noting the desperate need for reliable medical attention. He created a nonprofit organization that recruited nurses from Britain, the United States, and Australia to deliver health services. Although Grenfell’s services filled a gap in health care services, the middle-class upbringing of him and his coworkers is reflective of colonial attitudes of the time, evidenced by their participation in “carrying civilization to . . . a dark and neglected corner of the British empire” (Perry 1997, p. 6).

With respect to oral health, historical contact among Southern Inuit with European settlers appears to have had significant implications. A study in the
late 1920s noted that in settlements where Inuit had begun to incorporate a “Westernized” diet with refined carbohydrates and less reliance on traditional foods, “the teeth were found to be in deplorable condition.” For communities that remained nomadic and continued to eat primarily wild/traditional foods high in proteins and fat, “the teeth were practically free from decay” (Waugh 1928, p. 428).

Less than a decade following Waugh’s findings, oral disease rates appeared to have increased substantially in Southern Labrador. A volunteer dentist in Southern Labrador in the 1930s noted that caries rates among residents were extreme and “restorative dentistry was almost unknown . . . I had to extract four teeth for every one I could fill” (Dunning 1989, p. 212). Such a sharp difference in oral health status over a short period of time could be linked to the significant changes in diet that were evident during that same time period.

Although dental facilities began to appear in larger centers in Labrador, services did not extend to this remote region until the 1970s to 1980s (Messer 1990). As a result, there has remained a paucity of data regarding the oral health status of Southern Inuit. The impetus for this research was the result of serious concern from residents regarding the oral health status of children and youth. Our research team, comprising scholars, community representatives, oral health researchers, practitioners, and policymakers, mobilized to address this issue.

Sampling Strategy

A community advisory committee (CAC) was created to provide guidance to our research team throughout this study. An important piece of their work was providing guidance around recruitment. Recruitment was done using posters, a Facebook site, and direct verbal communication. A local coordinator was hired as part of the research team and was heavily involved with recruitment. This position was created because the CAC stressed the importance of having a community champion who would able to connect with community members in person throughout the study.

Ethical Issues Pertaining to Human Subjects

This research has been reviewed and approved by provincial, university, and community-level health research ethics authorities and follows national ethical guidelines for health research involving Indigenous peoples (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada 2010).

Data Collection

Data collection included 18 qualitative focus groups (n = 108) and 13 key informant interviews in 6 communities of NunatuKavut in Southern Labrador. These coastal communities are remote and range in population from 210 to 550 (Statistics Canada 2011). In each of the 6 communities, focus groups were held with “younger youth” (ages 10–13 y), “older youth” (ages 14–17 y), and caregivers of youth 9 y and younger. Key informants included adults who work directly with youth or were familiar with issues facing youth, such as school educators, elders, public health nurses, store owners, politicians, and dental service providers. For children and youth, their parent or caregiver provided informed consent, and the child/youth provided assent.

Data Collection Instruments and Technologies

A digital recorder was used to capture participants’ responses. On the advice of the CAC, the interviews were conducted in English. An experienced transcriptionist familiar with NunatuKavut vernacular transcribed the data. Data were uploaded into a data management software program (Atlas.Ti) and coded for themes and subthemes.

Data Processing

Focus groups and interviews were transcribed and coded according to an emergent code list developed by the authors. The research team analyzed code lists, and the CAC vetted subsequent emergent themes through workshops held in Halifax and Labrador. Security measures included restricted physical access, passwords, and encryption, and all data stored were unlinked.

Data Analysis

The findings were analyzed using an inductive thematic approach, and emerging themes were vetted by community members several times. Through this iterative process of discussion and analysis, 3 key themes emerged: 1) (w)holistic conceptualizations of health are essential for good oral health, 2) achieving optimal oral health is prohibitive for Inuit communities, and 3) community-engaged oral health service delivery is needed. Where representative quotes have been used to support our analysis, participants have consented to be identified by position and community location.

Findings

Theme 1: (W)holistic Conceptualizations of Health Are Essential for Good Oral Health

Among Inuit, living “off the land” has always nourished and reinforced identity.

People lived off the land and they lived long lives. Like half a century ago, you found people lived off the land more and people consumed the meat and the birds and things like that. —Mayor and store owner, Port Hope Simpson

Since everything that one needed was acquired through engagement with the natural world, this had implications for how oral health was understood. For example, without basic municipal services such as running water (still not available in all Southern Inuit communities; see, e.g., Hanrahan et al. 2014), oral hygiene practices were very difficult to do.

Somebody had to go to the brook and get some water, water was scarce, water was precious . . . I think it was
much easier to just slip out the door and perhaps next week you gave your teeth a good brushing. —Community leader, Port Hope Simpson

From a conventional health perspective, the “lack” of regular oral hygiene practices suggests that preventive oral health activities were not important for Inuit. Yet, if we view the relationship that Inuit have historically had with their foods, where foods were an essential component of community-environment interactions (Martin 2011), this offers a very different understanding of preventive oral health that extends far beyond individual behaviors promoted by dental practitioners. For example, chewing the bones, marrow, and hide of animals were practices that offered a natural way to clean teeth, but the benefits to one’s teeth were a side effect of these activities rather than their explicit purpose.

If or when oral health issues arose, people would have turned to the natural pharmacy, where the anesthetic properties of birch, willows, and other natural remedies would have been used to address all types of health concerns, including those related to oral health.

When you chew . . . willow root it takes out the toothache . . . . They chewed up the willow and it was a little chewy, like pasty gum, you just put it up on your tooth. . . . They use it with headaches too. —Older youth, Cartwright

The past 40 y have seen the introduction of greater amounts of store-bought foods, which began to happen in the 1930s (Hanrahan 2016). Until this point, and even some decades later, diets consisted mainly of locally harvested foods—fish, birds, wild animals, and berries; today, the diet looks very different. Locally harvested foods are often supplemented or replaced by processed foods. Fresh and frozen fruits and vegetables are available, but their cost, availability, and quality are dependent on weather, shipping distance, and storage (Martin 2011).

Y. Years ago] parents wouldn’t go and bring back 24 cans of 355 mL soft drink. It never, ever happened . . . so like I’ve asked myself the question, was it better back then, or is it better now? . . . There was nothing in their diet that contained all this sugar because it wasn’t there to buy and people couldn’t afford to buy it. —Mayor and store owner, Port Hope Simpson

Public health education began to respond to the subsequent rapid decline in oral health, but these efforts did not account for community context (Hanrahan 2016). This is not to suggest that formal oral health care services were not viewed as important or that public health efforts were inherently ineffective. Rather, it offers the possibility that public health efforts were ineffective because messaging did not match community needs. Inuit conceptualizations of oral health are (w)holistic in nature—the mouth, teeth, and gums are not separated from the rest of the body, and the body is not separated from one’s family, community, and natural environment. Thus, having “good oral health” is more about prevention in a (w)holistic sense—engaging in necessary activities for the overall health of the natural world, one’s family, and community.

We promoted brushing teeth but there was a lot of junk food around and we saw quite a lot of kids who had baby bottle mouth, you know, put in the crib with a bottle in their mouth, with apple juice in it . . . we would see the results of that in a couple of years. So that was something that we tried to promote was not to put babies in the crib with a bottle in their mouth to go to sleep because of course that just gives them dental caries and . . . back then, I’m talking 40 years ago, oral health was not a priority.—Retired public health nurse, Mary’s Harbour

Viewed through a more (w)holistic lens, it is understandable why the promotion of toothbrushing might not be supported by Inuit without a dramatic shift away from (w)holistic, community-level health to one’s own individual-level health. While the previous participant’s statement suggests that oral health might not have been “a priority” for local Inuit, sociocultural differences between provider and patient highlight a gap between Inuit knowledge and Western medicine that may prevent the uptake of conventional public health messaging.

Theme 2: Achieving Optimal Oral Health Is Prohibitive for Inuit Communities

While the adult population had experienced early childhood oral health challenges that may continue into adulthood, the research team learned that youth are knowledgeable about maintaining good oral health—how and when to brush and floss their teeth, as well as what foods and drinks they should limit. Most children and youth indicated that they regularly see a dental professional. They discussed getting a lot of their information from public health nurses, schools, local family resource centers, their parents, and media (television and Internet). This shows promise for widespread positive oral health in the region.

P: We all take good care of our teeth.
I: What do you do?
P: Brush them every day.
P: We floss too.
P: Yah. And we use mouthwash.
P: Brush for 2 minutes.
P: After every meal.

—Younger youth, Mary’s Harbour

The oral health knowledge expressed by youth is supported by an impressive array of health promotion programs and resources introduced through local nursing clinics, schools, and family resource centers (FRCs). Through our research, we learned that public health nurses provide information directly to caregivers about oral health and often partner with a regional nutritionist to provide oral health curriculum within schools. The FRCs provide perinatal, infant, and preschool programming that includes a wide range of health promotion activities, some of which are oral health related. Programming includes information about nutrition,
breastfeeding, and healthy cooking. Unfortunately, many of these programs operate on uncertain year-to-year funding cycles. While these services address important educational gaps in oral health education, our key informants pointed out to us that without consistent funding, they are not equipped for larger “upstream” sociostructural barriers that communities are facing, including food and water (in)security.

Maintaining good oral health is about more than knowing what constitutes good oral hygiene. It also requires accessible healthy foods, safe drinking water, and an environment that makes healthy food choices possible. Participants across all groups—younger and older youth, caregivers, and key informants—mentioned that the availability and quality of healthy foods is an issue.

You can’t get fresh fruit here, it sucks. I was in [large city] last week and all I ate was like fresh fruit ‘cause I can’t get it here. —Older youth, Mary’s Harbour

Participants also indicated that even when these foods are available, they are often unaffordable. Simply knowing about what foods to eat for one’s oral health does not necessarily mean that these foods are available to everyone.

Food that’s good for you is a lot more expensive than you know the chips and the bars. There are a lot of families here who are eating badly because they can’t afford [to eat healthy], so there is a lot of that. —Public health nurse, Cartwright

With limited options, food choices may not be healthy. Educational efforts alone are not enough to lead to healthy behavior changes (Mirowsky and Ross 2017) when they do not account for an environment that has not made it possible for the healthy choice to happen (e.g., when soft drinks are cheaper than bottled water and tap water is frequently under drinking water advisories or is nonexistent).

You’re not supposed to use the water for cooking, you’re not supposed to brush your teeth with the water, so we spend probably $5 every three days filling the large 18-gallon [containers], and we use that for everything. We use it for cooking and the baby formula of course and the dog, so we probably spend $40 to $50 a month on water, so once again can people afford that? —Public health nurse, Cartwright

Water access and affordability in NunatuKavut are of deep concern among residents. Coupled with the earlier indication that youth are familiar with what they “should” be doing to maintain and promote good oral health, this suggests that educational efforts alone are not enough and that social, environmental, historical, and structural factors shape oral health.

Theme 3: Community-Engaged Oral Health Service Delivery Is Needed

With the introduction and professionalization of oral health service delivery in Southern Labrador and the increase in oral disease as a result of the displacement of traditional foods for processed foods, oral health service in Southern Labrador was, and still is, both wanted and needed. As one caregiver points out, before there was regular access to a dental professional, people would address dental emergencies through whatever means possible.

It was only a couple of days ago I heard Dad say that [my uncle], he cut every one of his [teeth] out himself with the knife, every tooth in his head was pretty much gone and he took them all out himself, he cut them out with his pocket knife. —Caregiver, Port Hope Simpson

Undoubtedly, there were health care providers who recognized the desperate need for oral health services to Southern Labrador and made every effort to provide it—the need for such services is undisputed. Rather, it is the culture of health service delivery, critiqued as being paternalistic and authoritarian (Perry 1997; Hanrahan 2016), that deserves scrutiny. For example, the particular model of oral health service delivery that was imposed in Southern Labrador, although very much needed, left little room for input from those receiving the services.

A lot of people was shy living in isolated communities and . . . I think they were a little bit shy to speak out [about poor healthcare services] . . . we don’t put up with things now like we did in them days. —Elder, Charlottetown

According to one of our key informants, who worked in dental administration before regularly scheduled visits were established in Southern Labrador, dentists traveled to the region with sporadic schedules. Thus, when the dentist did make it to Southern Labrador, he or she was often occupied with emergencies, leaving little opportunity for preventative efforts or consultations with community members about how services should be provided.

You had to go through an awful lot to see a dentist because the dentist wasn’t coming in very often, and then there was this big long list of people, and in order to see the dentist, it had to be urgent. —Caregiver, Cartwright

Today, the schedule of service delivery has improved considerably. According to one of our key informants who worked in this area for over 20 y, in the past decade, 6 communities in Southern Labrador receive scheduled 3- to 4-d visits from a dentist and hygienist on a 4- to 6-wk rotational basis. Most communities are geographically close enough to one of these dental clinics to enable access to basic dental care, including cleanings and restorative services. Complex and specialty treatment (general anesthetic) requires patients to fly out for treatment (involving a 2- to 3-night roundtrip, partially subsidized by the provincial government). Although this represents a huge improvement from the volunteer services of the past, it means that Inuit spend little time interacting with their dental care provider, and therefore, there is little time spent developing a relationship of trust. This has shifted concerns about dental
care away from the sporadic nature of services in the past and toward engaging/educating dental services providers about the communities they are servicing.

They only come on Monday, so Monday evening probably and then [they’re] gone Thursday evening or Friday morning, so it’s only probably 3 days. It’s 3 days, or 4 days at the most. They’re gone. That’s it. —FRC worker, Charlottetown

Participants suggested one way to overcome this gap between the dentist and patient would be to have hygienists or dental health promoters located in Southern Labrador. They could establish trusting relationships within the community while providing needed oral health promotion within the community, as well as dental hygiene services. This would allow the visiting dentist to spend more time learning about the communities and dealing with emergencies and other serious oral health concerns.

I think they should have a [dental hygienist] in the community, ’cause they know the children, they know the parents. —FRC worker, Charlottetown

In light of the need for a greater relationship of trust between dentist and patient, our research team secured funding to allow youth from the NunatuKavut communities to produce a short video to share with health care professionals, introducing them to their community and themselves. This short video was screened at an oral health forum held in February 2015 and will be delivered to dental science and dental hygiene students within Dalhousie University as part of their curriculum.

Discussion

A great deal can be learned from Inuit about the relationships between land-based traditional foods and oral health promotion and prevention. At the same time, the set of skills and knowledge associated with professional dentistry holds an important place in Inuit communities, too; it provides the means to address complex dental issues that have arisen under the influence of colonization, particularly the introduction of sugary, processed, and preprepared foods that are replacing traditional foods as diet staples.

Despite the value of Inuit knowledge in relation to dentistry, Inuit oral health is the purview of dental professionals. The dentist-patient relationship within the context of Southern Inuit communities includes little emphasis on getting to know the patient—the focus is on what happens inside the mouth, with limited regard for the whole person (notwithstanding the person’s community or natural environment). That oral health should be isolated to the oral cavity has been critiqued from within the dental profession (Watt 2007; Kral et al. 2011; Watt et al. 2015), and efforts are needed to develop meaningful connections between dentistry and other health professions, including public health. From the perspective of Two-Eyed Seeing, there is correspondingly little opportunity for colearning to take place—where dental professionals might learn from Inuit (and vice versa) about the synergies between oral health and overall health. Without such consideration, dental professionals are positioned at odds with Indigenous (w)holistic conceptions of health contributing to the marginalization of Indigenous knowledge and voices regarding impactful oral public health service delivery. Furthermore, given that Inuit epistemology might sometimes depart from the origins of dental science, Inuit epistemology (and other Indigenous epistemologies) could very well offer considerable benefit to the discipline of dentistry.

Two-Eyed Seeing reminds us of the critical importance of valuing diverse perspectives on a topic in a balanced and equitable way (Martin 2011), and yet we see that the complex historical relationship of superiority (upheld by the colonial perspective from which health care was and is derived) has certain threads remaining in dental care service provision; those delivering the services are characterized as benevolent “heroes” and those receiving services as merely passive recipients (Perry 1997). This can be partly explained by a lack of understanding and relationship between those providing the services and those receiving them, but it is also attributable to epistemic differences. While it is important to acknowledge that the services provided today are far ahead of what was experienced in Southern Labrador even just 1 generation ago, there remains a distinct cultural and epistemic divide between dentist and patient. Research participants identified a power differential (exacerbated by geographic distance and the “helicopter” nature of dental visits) that makes it difficult to establish relationships of trust, which is truly the hallmark of acceptance within many Indigenous communities (LaVeaux and Christopher 2009; Simonds and Christopher 2013; Castleden et al. 2016).

Our interview guides did not specifically ask Inuit whether they were troubled by what might be considered a “clashing of epistemologies.” Rather, this divide emerged through the data, warranting our attention to how Inuit of all ages perceive dental care and whether their conceptualization of oral health might differ from conventional Western science. More research might uncover the degree to which differences might exist across diverse ages and demographics within the Inuit population. NunatuKavut children and youth seem very knowledgeable about how to prevent oral diseases—what foods they should be eating, and which foods they should be brushing and flossing, what foods to limit. They are also firmly aware of the differences that exist in terms of oral health services for their generation versus that which was available to their parents and grandparents historically. This might mean that youth have become enculturated to Western scientific understandings, or it may reflect that youth embody the very nature of what the concept of Two-Eyed Seeing aims to convey: the ability...
Linking Inuit Knowledge and Public Health in NunatuKavut

Inuit knowledge might contribute to our understanding of dental science. Rather than isolating the mouth from the rest of the body, we need to consider that the mouth is, in fact, a gateway between the body and the rest of the world. It is a place where the natural world enters our body through foods and water and also a place where our stories leave our body to shape the world. Dentistry is uniquely positioned at this interface—providing an opportunity for the profession to incorporate the stories of patients into practice as a means to enhance service delivery and overall health for Inuit. It is also incumbent upon health professionals to work as political advocates concerning food and water security for NunatuKavut communities. Improvements to service delivery and education, while important, mean very little if people are unable to access consistent sources of healthy, culturally appropriate, and sustainable sources of food and fresh, clean drinking water.

Author Contributions

D. Martin, M. McNally, contributed to conception, design, data acquisition, analysis, and interpretation, drafted the manuscript; H. Castleden, contributed to conception, design, data analysis, and interpretation, critically revised the manuscript; I. Worden-Driscoll, contributed to data analysis and interpretation, critically revised the manuscript; M. Clarke, contributed to data acquisition and analysis, critically revised the manuscript; D. Wall, contributed to data acquisition and interpretation, critically revised the manuscript; M. Ley, contributed to data interpretation, critically revised the manuscript. All authors gave final approval and agree to be accountable for all aspects of the work.

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References


First Nations Information Governance Committee (FNIGC). 2007. The health of First Nations children: dental treatment needs and use of dental services. In: First Nations Regional Longitudinal Health Survey (RHS), 2002: Results for adults, youth and children living in First Nations communities. 2nd ed. Ottawa (ON): First Nations Information Governance Committee (FNIGC), a standing committee of the Chiefs to constantly shift between various perspectives—those of their culture and those of the “mainstream.” And yet, we see that this in-between place still has its challenges and incongruencies, since we know (anecdotally) that soft drinks and other sugary drinks are being consumed in large quantities in NunatuKavut communities, and traditional foods are not eaten as frequently among youth as among their older counterparts (Martin 2011). However, once again, reasons for this may have more to do with ongoing colonial attempts to control land and resources than conscious decisions on the part of youth to become “more mainstream.” Not eating traditional foods often has a lot to do with restrictions placed on hunting and fishing, as well as the need for people to work full-time and away from their communities, than it does with renouncing Inuit identity (Martin and Amos 2016). It is not clear whether NunatuKavut youth recognize the nutritional superiority of traditional foods over many store-bought alternatives, and this deserves further exploration. Finally, accessing consistent sources of fresh water is an ongoing concern within many NunatuKavut communities (Hanrahan et al. 2014), affecting the ability to enact positive oral hygiene practices and not a purposeful disdain for dental scientific knowledge.

A limitation of this study is that it represents a snapshot in time—we realize that the precarious nature of oral health can be influenced significantly by changes in service delivery models, personnel, resource allocation, and so on that are subject to change at any time.

In conclusion, our findings indicate that to witness improvements to oral health, health policymakers must include Inuit knowledge regarding oral health—a conceptualization that is very heavily shaped by historical and ongoing issues related to colonization. In doing so, we might begin to more closely scrutinize how oral health is currently understood and delivered within Inuit communities and to think more deeply about what Inuit knowledge might contribute to our understandings of dental science. Rather than isolating the mouth from the rest of the body, we need to consider that the mouth is, in fact, a gateway between the body and the rest of the world. It is a place where the natural world enters our body through foods and water and also a place where our stories leave our body to shape the world. Dentistry is uniquely positioned at this interface—providing an opportunity for the profession to incorporate the stories of patients into practice as a means to enhance service delivery and overall health for Inuit. It is also incumbent upon health professionals to work as political advocates concerning food and water security for NunatuKavut communities. Improvements to service delivery and education, while important, mean very little if people are unable to access consistent sources of healthy, culturally appropriate, and sustainable sources of food and fresh, clean drinking water.

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References


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