

# Listening to First Nations women' expressions of heart health: mite achimowin digital storytelling study

Lorena Sekwan Fontaine<sup>a</sup>, Sarah Wood<sup>a</sup>, Lisa Forbes<sup>a</sup> and Annette S. H. Schultz<sup>b,c</sup>

<sup>a</sup>Department of Indigenous Studies, University of Winnipeg, Winnipeg, Canada; <sup>b</sup>College of Nursing, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada; <sup>c</sup>Health Services & Structural Determinants of Health Research group, St. Boniface Health Research, Winnipeg, Canada

## ABSTRACT

Historically, heart health was approached holistically by First Nations (FN) peoples, which was integrated into daily living. Caring for the physical, emotional and spiritual needs of individuals, community, family, and the living environment was integral. The Truth and Reconciliation Commission of Canada demonstrates the decimation of health practices through governmental policy to destroy the cultural foundations of FN peoples. Relational systems and ways of living were outlawed, and the health of FN people suffered.

A digital storytelling study collaborated with Manitoba FN women with lived experience of caring for a biomedical-diagnosed heart condition. The objective was to identify concepts, language, and experiences of heart health among FN women. Six women created five digital stories; four are available publically online. Themes addressed by the storytellers include: changes to diet and lifestyle, related health conditions, experiences with healthcare system, residential schools, and relationships with children and grandchildren.

The intersection of Western and FN knowledges heard in the women's stories suggests heart health knowledge and care is embedded within historical and social contexts. Insights into the non-dichotomous relationship between FN and biomedical knowledge of heart health, along with their conceptualisations of heart, suggests historical and social roots underlying heart health issues First Nations women face.

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## Introduction

Current conceptualisations of health informing publicly funded healthcare policies and programs are located within a biomedical worldview. The dominance of this worldview has also, historically and currently, silenced historical truths concerning First Nations peoples and traditional knowledge [1,2]. This relational dynamic of silencing is embodied in discourses of medical literature, clinical practice guidelines, and clinical decision-making tools; each of these resources privilege euro-western knowledge systems [3,4]. Interruption of this colonial relationship by listening to and hearing an alternate perspective could provide novel content to shift our collective health discourses. Respectful listening to expressions of First Nations health and wellness practices along with biomedical approaches could facilitate a shift [1,5–10] in our collective ways of knowing, approaching and funding publicly available healthcare. Such a shift would require

an end to the epistemic racism that exists within current day healthcare, where one worldview is privileged and others are silenced [1,2,8,11–14]. Below we offer insights into two narratives rooted in divergent knowledge system concerning heart health.

## *First nations knowledge and wellness practices concerning heart health*

Historically, heart health was approached holistically among First Nations peoples.<sup>1</sup> It was integrated into a way of life that included caring for the physical, emotional and spiritual needs of individuals, community and family. The development of relationships between people and the land was equally important. Maintaining a balanced connection with each was necessary for the health and well-being of First Nations peoples and essential for caring for the heart

**CONTACT** Annette S. H. Schultz  [annette.schultz@umanitoba.ca](mailto:annette.schultz@umanitoba.ca)  College of Nursing, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada

<sup>1</sup>The oral mite teaching was passed onto Lorena Sekwan Fontaine by relatives, Doris Young and Esther Sanderson from the Opaskwayak Cree Nation of Manitoba. The teaching was originally shared to prepare a grant proposal in winter of 2015, and the teaching was used to inform this article.

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(*mite*). As a result, each of these areas were integrated into healthcare practices.

Language is critical for exploring heart health because it provides a culturally specific lens. In the Swampy Cree dialect of Manitoba, *mite achimowin* loosely translates as heart talk. Conceptually, *mite achimowin* encompasses complex cultural teachings integral to caring for the mind, physical body, and spirit, as well as to living healthy lives. Foundationally, *mite* (heart) is gifted to every human being at birth by the Creator and is where one's emotions and intelligence are derived. To care for one's heart health, there must include an understanding of how to care for psychological, physical, emotional and spiritual well-being. In northern Manitoba, Cree *mite* teachings include maintaining a physical way of life that fosters a spiritual connection to the land, self and Creator. Although many of the practices that contribute to *mite* well-being have been fractured by colonialism, the teachings remain critical to Cree and Ojibway peoples as they deal with poor heart health.

The Truth and Reconciliation Commission of Canada (TRC) documents the deterioration of healthcare practices after the government implemented a policy to destroy the cultural foundations of Indigenous peoples [15]. Relational systems and ways of living were outlawed. The ability to maintain and foster relationships amongst family, land and all aspects of nature was prevented. As a result of Canada's residential school system and assimilation policy, Indigenous peoples were unable to maintain a way of life that fostered heart health. Many survivors of residential schools have also characterised deteriorating heart health as a "broken heart" that comes from being torn away from their community, families and the land.

### **Knowing Indigenous people<sup>2</sup> heart health through a Euro-Western biomedical perspective**

Globally, health disparities and service inequities specific to heart health are reported among Indigenous populations [5,16–18]. In Canada, while general population rates are declining, the rates of coronary artery disease have increased among Indigenous populations [1,2,19,20]. A 2012 National Collaborating Centre on Aboriginal Health review stated that 11.5% of First Nations adults reported heart disease compared to 5.5% amongst adult general population in Canadians [2]. While Indigenous people are two times more likely to report heart diseases,

coronary heart disease among Indigenous women is responsible for up to 53% higher death rate in comparison to non-Indigenous women [7,21]. Research evidence clearly shows cardiovascular-related health disparities among Indigenous populations, across all settings, including urban, rural and remote communities.

Several risk factors are identified as influencing Indigenous peoples' health, primarily higher levels of poverty, tobacco use, obesity, hypertension, hyperlipidaemia and diabetes, all of which cluster to elevate their risk for coronary heart disease [2,19,20,22–26]. Higher rates of these risk factors reside within biomedical discourses concerning the individual and perceived "lifestyle choices" [1,27]. While these factors are widely known and accepted, there is evidence of other factors that influence heart health: such as, social exclusion (including racism), economic and political context, and other systemic structural mechanisms [28,29]. Moreover, timely access to healthcare and screening is influencing factors [1,6,16,19,25,30–32]; evidence suggests the lived reality of Indigenous peoples is one of racialised inequality that negatively impacts heart health. Even though these other risk factors move away from focusing on an individual's choices, our collective knowing remains located within a biomedicine discourse, along with ongoing silencing and delegitimising of knowledge located in alternate worldviews or perspectives.

In this article, we focus on ideas and experiences of First Nations women's expressions of heart, caring for their heart and experiences within healthcare settings. Four digital stories created by First Nations women, and transcripts of a learning circle held previous to creation of the digital stories, provided space to hear alternative, commonly silenced, ways of understandings heart health along with those rooted in a biomedical perspective. We invite readers to consider a decolonising move away from privileging biomedical discourses and move toward respectful consideration of diverse ways of knowing heart health. Adopting a stance of seeing and respectfully considering multiple perspectives is a concept known as two-eyed seeing, which came from Mi'kmaw Elders Albert and Murdena Marshall [7]. Alternative solutions may emerge through respectful listening and challenging our ways of knowing/caring for our hearts and health.

### **Methods**

A central aim of our overall study was to honour the traditions of oral history and storytelling as a means to elevate Indigenous knowledge and wellness practices

<sup>2</sup>In this article, our focus is First Nations people and knowledge. However, as with this literature review section and in the discussion section, when presenting from other's work we adopted the words Indigenous people to better represent who is addressed in work beyond our study.

among First Nations women and their heart health. One objective was to identify and locate concepts, language, and experiences concerning their heart and ways of caring for their heart health, which lead to the creation of digital stories. In this paper, we extend that objective through analysis of the digital stories and learning circle transcripts, which was guided by Kovach's conversational method [33]. Her method aims to capture stories situated within context. Ethical approval was obtained from the University Human Ethics Research Board at the University of Winnipeg and the Education and Nursing Ethics Review Board at the University of Manitoba.

### ***Digital storytelling: a decolonising research approach***

Digital storytelling methods, which is a decolonising approach to research, acknowledge the sharing of oral stories as rich and legitimate knowledge sources [34,35]. As an arts-based research method combining oral history and storytelling with digital technologies, each digital storyteller produces a recorded three- to five-minute story using the storyteller's own stories, words, photos, music, and video [36]. The storytellers are creators and owners of the stories told, what is produced and shared reflects their lived experiences in a way that has not been "written, pre-constructed, or altered" by the researchers [34,p.15]. Indigenised digital storytelling method adds ceremony, feasts, and learning circles in lieu of a discussion group [37,38]. Combining Indigenous storytelling and digital media creates safe spaces for the development and sharing of previously unshared stories [34,35].

Recruitment of First Nations women living in Manitoba followed a research protocol used in previous digital storytelling projects lead by several team members [38]. Over a six-month period, the research coordinator distributed a poster, and followed-up on word of mouth leads. Six women agreed to participate in a five-day digital storytelling workshop held in Winnipeg, Manitoba; each had a medically diagnosed heart condition or had been a caregiver for someone with a heart condition. All of the women were over the age of 65 and spoke English as a second language. All of the women originally came from northern Manitoba communities (during the study time period, 3 of the women lived in Winnipeg), which included: Tataskweyak (Split Lake Cree Nation), Wasagamack First Nation in the Island Lakes region, Berens River First Nation, Opaskwayak Cree Nation (the Pas). While five of the women gave permission to publically share their digital stories and details about themselves, the sixth woman did not give this permission. She came from a Northern First Nations

community, which if mentioned might result in identifying her due to size of community. An Indigenised storytelling method used in previous studies informed data collection [38], which began with Cree and Ojibway research protocols of relationship building through a berry and water ceremony. Strawberries or "heart berries" were used because they are recognised as medicine by Cree and Ojibway peoples. A water ceremony was conducted because water is recognised as a source of life. Women are also the carriers and protectors of the water. We hosted the accompanying feast as an additional component of research protocols. It provided space for the women to meet each other for the first time prior to the workshop and included all of the research team and technicians hired to support digital story production. The building of trust between researchers and the women in the weeks leading up to and during the workshop was critical and has resulted in ongoing relationships.

On the first morning, after breakfast, a learning circle created a safe space for the women to share ideas, and reflect upon each other's stories. The learning circle also allowed the women to look deeply into their understanding of the heart, heart health, causes of heart disease, and their personal healthcare experiences. Over the next 3.5 days working with a helper from the research team to listen and type, the women created their digital story. The women's own story idea was written as a first-person narrative script on the topic of heart health. Each woman narrated the script and directed technicians in editing her story. On the fifth day, a lunch feast was held to celebrate and share the digital stories with family members and study collaborators. The six women storytellers created five digital stories because two women decided to work together to create one digital story. Consent was obtained from each woman regarding public sharing of the digital stories, and permission was granted to publically share four of the digital stories. These digital stories are available on the National Collaborating Centre for Aboriginal Health website: [https://www.cnsa-nccah.ca/563/mite\\_achimowin\\_-\\_Heart\\_Talk.nccah](https://www.cnsa-nccah.ca/563/mite_achimowin_-_Heart_Talk.nccah). In addition, consent was obtained for researchers to review recorded materials (digital stories and learning circle transcripts) to conduct analysis and anonymous reporting.

### ***Analysis of the digital stories and learning circle dialogue***

To extend the dissemination of the women's digital stories and include content from the learning circle, we reviewed all of the recorded material. Conversational method aims to elevate knowledge through story and

embraces a dialogic process [33]. In this analysis, we were curious about concepts, language and experiences rooted in either a First Nations perspective or based on experiences within biomedical contexts [7]. As the women were back in their communities during the time of our analysis of these materials, the dialogic process involved the co-authors. Each of the co-authors reviewed this material keeping notes, and then we met to discuss what we heard to come up with common stories. From there co-author, Sarah Wood began the process of writing the results and inserting quotes to bring the digital storyteller's words into the article. Once we had an initial draft, we shared our insights with the storytellers to confirm the stories we elevated from their digital stories and the learning circle dialogue.

Kovach acknowledges the relationality between researchers and the storytellers [33], though introducing ourselves we provide further insights into what each brought to this analysis and to our relationships with the storytellers. Lorena Sekwan Fontaine is Cree Anishnaabe and a member of the Sagkeeng First Nation of Manitoba. Her maternal family is from Opaskwayak Cree Nation. She is a first degree Midewiwin, having received mide teachings over 15 years. In addition, Lorena is also a language rights lawyer and recently completed an Interdisciplinary PhD concerning Indigenous language rights in Canada. As lead Principal Investigator of the digital storytelling study, she developed a relationship with all of the digital storytellers. Sarah Wood is Anishinaabe and a member of Chippewas of Nawash First Nation. As a summer graduate research assistant, she was part of the study only for the purposes of completing the analysis for this article. Lisa Forbes is a Cree and Metis member of Peguis First Nation in Manitoba. She regularly develops community-based social service programming and policy with and for Indigenous people. As the Research Associate on this study, she was involved in all aspects of assisting the storytellers in logistics and details of gathering materials for their digital stories. In particular, relationships were formed between Lisa and the storytellers during recruitment, and have lasted beyond the study activities. Annette Schultz is a settler from Alberta with French and German ancestry. She has worked within healthcare for several decades; direct care provider, health policy analyst, and health researcher for the last couple of decades. As Co-Principal Investigator she was actively involved in all aspects of the study and developed relationships with all of the digital storytellers.

## Results

Review of recorded materials, learning circles, and digital stories revealed to us, insights into the women's perspectives of intersecting factors affecting the holistic

heart health of First Nations peoples. It is apparent from the stories discussed below, the storytellers possess knowledge of *mite* that integrates biomedical and First Nations ideas, concepts and experiences as expressed in their discussions of the heart, heart health and how to care for their hearts.

### Changes to diet

The storytellers believed that colonial-imposed interferences to diet contribute to the *mite* of Indigenous peoples:

*I think most of us come from hunters and gatherers, fishermen. And we lived off the land, and that was how we lived. We lived a healthy life. We had berries. We didn't have any sugar in our diets, at least when I was growing up in my family. Living off the land was really ... it was hard but it was physical as well.*

One woman discussed gardening foods like potatoes, carrots, and turnips with her grandfather and prepared by her grandmother while she played outside. Further, she would eat goose, duck, moose, fish, rabbit and beaver hunted by her extended family members. When her grandparents passed away her mother would buy store-bought food instead which was less healthy. Another woman reiterated the impact of grocery stores:

*The language, the family life was all very traditional and wonderful. And then the changes happened with introduction of foods – Hudson Bay stores and then the schools, and all the changes that happened.*

The Cree language term *Puntagaykiin*, translated as junk food, was discussed by many storytellers during the learning circle and was described as a concern for younger generations especially.

*Puntagaykiin. What kids eat and put in their bodies.*

Avoiding feeding children and grandchildren junk food, and instead feeding them foods like vegetables, was identified as a way of keeping young people healthy.

Concerns were also expressed about non-Indigenous communities where heart disease is also present, as well as countries in the Global South where the introduction of Western foods is taking a toll on health globally:

*So I think it's not just us [Indigenous peoples] that are having, being affected by ... in our heart, for women, I think it's starting to be a general problem.*

### Changes to lifestyle

Connected closely to changes in diet, movement away from traditionally active lifestyles to sedentary lifestyles



was identified as problematic for maintaining good heart health. For example, the transition from walking everywhere to driving in vehicles was mentioned as a necessary aspect of contemporary life, however – to the detriment of the health of Indigenous peoples. Travelling by canoe was mentioned as a traditional activity that kept both the body and the mind active, demonstrating the holistic ways health can be viewed. The gathering of water and food was also identified as traditional ways to keep active. Further, childminding younger children by older siblings were identified as a way to keep holistically healthy through activity and connection to others.

*We're not connected to people the way that we were. We're not connected to the land, certainly, the way we were. So it's a whole host of things that we have gone through over the years that has affected our heart. It's not only diet, it's that whole aspect of looking at health in a holistic way. We don't have that anymore. We have maybe parts of us, but certainly not the way that we used to have at one time.*

Another woman was particularly concerned that her grandchildren were more sedentary than her generation:

*[They] just stay inside and just sit around with their modern technology.*

Many storytellers shared this sentiment and discussed passing on healthy traditions to their children and grandchildren.

### **Related health conditions**

The intersections between heart health and diabetes, as well as heart health and smoking were brought up by the women.

With the diabetes health, of course, one of the complications is heart. So with all the diabetes that are going around in our communities, and the obesity and all of that stuff, heart health definitely is a factor that we have to address.

And part of this, like you say, we never had it years ago. But then, since this technology and everything coming in, there's a lot of cigarettes, number one.

High sugar and salt content in prepared foods were pointed out as being contributors to heart disease and diabetes, while quitting smoking was seen as a way to improve heart health in communities.

### **Experiences with healthcare system**

All storytellers had experiences with various facets of the mainstream healthcare system. Many of these

experiences involved seeking care for their own heart health or family members' heart health, though many women spoke of the healthcare system more broadly as well. Experiences of both overt interpersonal racism and epistemological racism, wherein the women described how their medicines and worldviews, were regarded as invalid by the healthcare system.

One woman described an incident when she was working among a predominantly non-Indigenous staffed health care setting where she would hear racist comments about Indigenous patients:

*Our people were really looked down on, and were not treated very well by some of the nurses. Some of the nurses were good, but some of them weren't. And they acted or spoke – sometimes I think they thought I didn't understand or didn't hear me – I'd hear them talking about our people. Like we didn't have feelings?*

Another woman described a relative's experience of trying to access healthcare; he was turned away due to the healthcare worker's belief that nothing was wrong with him other than alcohol abuse, an attitude which stems from racist stereotypes:

*I lost (a family member). He did drink a lot. And anyway, he got sick and every time he went to the Nursing Station, the nurse in charge there told him, he said, 'Oh, you have a severe hangover,' without checking him. And he went about three, I know three times for sure, whether the fourth time, I can't remember. But anyway, they kept chasing him home, 'There's nothing wrong with you. You're just ... quit drinking, get, you're ... hung over, you know. Anyway, he died one night in ... his home.*

This woman argued that all healthcare professionals serving Indigenous populations should have to undergo mandatory training on Indigenous histories, culture and way of life to reduce the prevalence of stereotyping and racism Indigenous people encounter in the healthcare system.

In addition, many storytellers were concerned with the general lack of respect that exists between medical professionals and Indigenous patients, particularly in regard to traditions and traditional medicine.

*Like I say, respect us as people, respect our herbal medicines. There's a lot of doctors [that] say, 'Are you taking herbal medicine?' I say, 'Yes.' I do that too, he asks me. And I said, 'I'd rather take that, but I have just two medications that I take. I tell him, 'I don't want any,' cause I said, 'Someone'll give me something to use from Mother Earth.'*

Many storytellers said that they preferred to use traditional medicines. One woman believes healthcare workers simply need to understand and respect the way people want to be cared for, and that for many

Indigenous people, this includes traditional medicine and healing. Demonstrating the complex intersections of biomedical and other conceptions of health, one woman pointed out that doctors need to move past solely prescribing pills and take into account holistic health alongside biomedicine:

*That it's not only pills and drugs that will take care of us, it's those other things, the traditional medicine. I take traditional medicine.*

Indeed, another storyteller described feeling that she and her family members were being over-medicated and that this was to their detriment. She described her grandfather's experience with a heart condition and his refusal to take medication that was given to him for it:

*He says, 'The nurse wants me to come here with my medication,' he says. 'I don't know why but I think I'm not sick enough, so he wants to give me some more medicine. He wants to change my medication, give me stronger ones so some day I'll die,' he says. And that's how he took it. 'I'm okay,' he said, and he was. And he died of old age – we were all sitting there. But that's how he put it. That's why I say, I see a lot of times when elders are sick, they keep piling medicine on them.*

Finally, another storyteller expressed concern over the general lack of care and direction she received while trying to navigate the healthcare system after her heart issues. She discussed being told she needed to find a cardiologist and that they were hard to find, and then receiving no guidance. She described this difficulty finding regular care as the hardest part of her experience:

*Just, bah ... not knowing what to do. Where to go. And it's being scared it's gonna get worse.*

### **Residential schools**

Storytellers explicitly identified their and their family's experience with residential schools as a factor that has affected their *mite*.

*I think one of the things that I see that really changed our lives was the residential school. Our whole world turned upside down.*

Residential schools produced fractured relationships between children and their parents or children and their grandparents. This had an impact on both the children's and the adults' health and well-being, as in this example of residentially schooled children who lost the ability to speak and understand the only language their grandparents spoke:

*So there was that gap again, and it was hurtful in the heart, to our grandparents because they couldn't speak to their grandchildren. That caused stress for grandparents as well. Hard stress for them.*

Prior to her attendance at residential school, one woman said that she and her siblings would care for their extended family members. However, after learning at residential school that healthcare work should be left to healthcare workers such as nurses and doctors, working together to care for one another would occur less often.

One woman talked about how when she came back to her community after residential school as a teenager, she had to relearn how to survive in the north, as nothing traditional was taught to her at the school. Upon returning, she learned how to snowshoe, how to snare rabbits, how to set nets, and how to catch fish.

Experiences at residential school have had links to physical heart health as well as the emotional and spiritual.

*And so, that memory, I think, for me, that's locked in my heart, has dictated a lot of things, the way that my life has gone. And it's ... it's caused loneliness and stress as well.*

*The reason we walk around with broken hearts is because of our, of the trauma that we've been through, and the relationships, and the way we live has all broken down because of residential school. Like, we don't really understand the impact of what that residential school did to our lives. It just tore them apart, and a lot of people walk around with shredded hearts.*

### **Relationships with children and grandchildren**

Interrelated to the above discussion of residential schools and the identified connection the schools have had to intergenerational relationships, the women described reconnecting or strengthening relationships with children and grandchildren as a mode of healing the heart. The storytellers discussed these relationships as having an effect on both physically and holistically healing the heart. That is, their relationship with younger generations was the purpose for engaging in physical activity and physically caring for their hearts:

*I'm just tryin' to keep my heart healthy for my grandkids. They keep me going.*

Passing on knowledge of healthy habits to children and grandchildren was also discussed as a way of keeping their heart physically healthy. The storytellers emphasised the importance of getting their children and grandchildren out on to the land to be physically healthy. Others expressed concerns that their children

were spending too much of their time with electronics, making it harder to connect with them in ways that had kept children healthy traditionally, as they themselves had been as children.

Relationships with children and grandchildren had broader implications for the heart health of many of the women:

*The Creator gave them a seed for my heart to start; that's how I look at it. And this is, the heart is still beating. And I give my heart to my children and the heart's still going, and for their children. They're all beating. From the Creator to my parents. And this is what I call my heart, and it's still going. And I'm thankful for that.*

*... the traditional teachings to pass on to our children and grandchildren, is the drum. You know, the heartbeat of the nation, is the heartbeat of yourself, community, and all that we see as traditional people. I think that's the first thing I'd say, as opposed to the physical heart.*

For many women, children who are emotionally, spiritually and physically healthy would contribute to the survival and health of Indigenous communities and nations generally. Moreover, connection and relationship to children and grandchildren were discussed as a way for the heart to be “filled” or “full of love.” One woman discussed seeing her grandchild exhibit kindness to a stranger and described that as both a moment of pride for herself and an example of the child exercising his heart. Finally, one storyteller articulated the importance, for the heart, of maintaining connections to younger generations:

*For me it would be ... it would be building good relationships within your family, with each other, with children and grandchildren, because you belong somewhere. And that belonging is really important. If you don't belong, then your heart, I think, dies in a lot of ways, because there's not much joy, really, in life if you don't have good relationships.*

## Discussion

From our review of the digital stories and learning circle dialogue, we collectively heard the women address several influences impacting their heart health: transitions from traditional to westernised lifestyles and diets; trauma of residential schools; racism in healthcare; subjugation of culturally rooted medicines, and economic and geographic marginalisation. In particular, the storytellers talked about how trauma affected their families and broke relationships. The women attributed maintaining or restoring heart health to positive, meaningful, engaging relationships in all aspects of life – one's friends and family, with health professionals, medicine, food, lifestyle, one's ability to make a living, spirit,

culture, community, and land. In the following discussion, we reflect on their collective knowledge through a discussion of two-eyed seeing and challenge the presences of epistemic racism within healthcare.

### *Two-eyed seeing and epistemological racism*

Throughout the learning circles and digital storytelling process, the women shared their in-depth understandings of heart health. They expressed knowledge of biomedical factors that have affected their heart health. That is, the women identified factors such as diet, exercise and smoking as contributors to Indigenous-non Indigenous health disparities, but also emphasised relationships and healing from past colonial tools such as residential schools and current colonial practices such as the subjugation of Indigenous healing knowledge as an important part of heart health. Moreover, many were careful to clarify, when they did talk about their heart as an emotional or spiritual part of themselves that they were aware that their heart was also obviously an organ, serving a biomedical purpose.

The idea of two-eyed seeing in Indigenous health research, a concept developed by Mi'kmaw Elders, “stems from the belief that there are many ways of understanding the world, some of which are represented by European-derived (Western) sciences and others by various Indigenous knowledge systems and sciences” [7, p.31]. Two-eyed seeing, rather than position Indigenous and Western biomedical knowledge as dichotomous, recognises that multiple epistemologies exist, can be learned from, and valued for their differences. The author further explains that an essential component of two-eyed seeing is that it recognises the “idea that our perspectives of the world are never static but are constantly shifting and changing in response to the changing world around us” [7, p.31–32]. This aspect of two-eyed seeing was brought up throughout the learning circles where articulation of the ways they adapt to changes brought on by colonialism as well as appreciation of the necessity of aspects of contemporary life, such as, as one woman described, cars to get around. This technology is now necessary, but also can be detrimental to active lifestyles. The women shared insight that aligned with two-eyed seeing principles, recognising the need to find ways to take care of themselves as a First Nations person, despite not necessarily returning fully to the ways that kept First Nation peoples traditionally healthy.

Moreover, the storytellers indicated that there was a lack of respect for First Nation worldviews and traditional medicines from healthcare providers with whom they interacted. Two-eyed seeing involves an understanding that not only do First Nation knowledges deserve space in

health research and the world generally, but that this space is also “not greater or lesser than the place held by Western scientific understandings of health” [7,p.32]. Reluctance experienced from their healthcare providers in regards to the use of traditional medicine demonstrates current devaluation. This epistemological racism is problematised in two-eyed seeing, as well as the Indigenous Maori concept of Kaupapa Maori, which acknowledges that “Maori means of accessing, defining and protecting knowledge existed before European arrival” and that Maori people are politically, historically, intellectually, and culturally legitimate [39, p.2]. Both two-eyed seeing and Kaupapa Maori highlight the importance of recognising that Indigenous conceptions of heart health and the use of traditional medicines are legitimate in order to challenge hegemonic devaluation of Indigenous ways of knowing. It is increasingly important to “create space where multiple knowledges can co-exist” “especially since Eurocentric knowledge subsumes and appropriates other knowledges” while devaluing other worldviews [39,p.8].

## Limitations

Although in this article we elevate First Nation knowledge of heart health as expressed by the storytellers and retold by the authors, the study is not without limitations. The most obvious is the small sample size of six women from Northern Manitoba communities. While providing insights into alternate understanding and approaches to caring for one’s heart, these expressions are not representative of Canadian First Nations’ knowledge and wellness practices, in general. Therefore, it is the reader’s responsibility to determine how transferable the results section is with other Canada regions and Indigenous people. Additional research involving First Nations, Inuit and Metis peoples from other Canada regions, and also men could result in a stronger evidence-base, either through confirming or extending our understanding of the heart and caring for the heart, of alternate ways of knowing to inform healthcare decisions and policies. In our study one digital story was withheld from public sharing, however the storyteller granted permission for materials from the digital story to become part of this anonymous analysis. In the end, research focused on oral history and stories seldom intend to definitively answer questions but rather aims to present evidence that challenges previously held ideas [13,40]. This is particularly the case, when a decolonising stance is embraced [13].

## Conclusion

This research provides insights into First Nations women in Manitoba’s conceptions of heart health, which reveals an

intersection of Indigenous and biomedical knowledges. The stories provide further evidence of distal determinants of health, such as historical and social contexts, affect First Nations health [41], which includes colonialism, racism and social exclusion. Colonialism has and continues to impact the health of First Nations peoples. While residential schools (a critical Canadian colonial structure) were a critical source of proximal determinants through changes in diet and exercise, which impacts their heart health, as we heard from the storytellers in this study there are additional impacts on their heart health, through the deterioration of land, family and community relationships. This sentiment is reflected in these storyteller’s words,

*And that heart is what gives you that good feeling. That’s why they call it mite achimowin; you always talk about your heart in a good way. Relationships are what we talk about when we talk about mite achimowin, and mino-pimâtisiwin when you talk about having a good life. And without having a good heart, you can’t really have the rest of those things?(storyteller)*

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