



Kainai Photovoice

Young people are not just the leaders of tomorrow — they have a great untapped potential for responsible leadership today.”

- Brendtro, Brokenleg and van Brockern, 1990





Leading the Way! Alberta's voice for Healthy School Communities

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Speaking to the Past: An Exploration of a Healthy School Environment for Alberta First Nations Secondary Students Through Photovoice

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BACKGROUND

This project was developed to further enhance the positive effect of the capacity-building work currently taking place from the original Ever Active Schools (EAS) initiative, “Kainai Moving Forward,” funded by Alberta Sport Recreation Parks Wildlife Foundation (\$50,000.00 in 2009-10). Ever Active Schools is building upon the comprehensive school health work that is presently taking place in Kainai. In 2008, Ever Active Schools’ original project was to create a successful partnership with an Aboriginal Band for the purpose of implementing learnings from the Battle River School District project and introducing a district level comprehensive school health approach within the Band’s school communities. An EAS school coordinator took ownership of this project and committed to a health and wellness strategy to work with the selected Band, school communities (school staff, students, parents and community members) and other partners such as health professionals, the Future Leaders Program and the Alberta Government partners dedicated to a Healthy Alberta. EAS staff spent time on the reserve, and in the school communities to develop relationships, build partnerships, form a steering committee and implement the initial phases of this project. The Band is included as a full partner and has added a variety of “in-kind” contributions such as opportunities for teacher professional development, school release time, meeting space and support for the project committee.

Building from a positive working relationship with the Kainai Board of Education, this project aimed to enhance the current work and focus on further student engagement and identification of future interventions through a student leadership initiative called Photovoice.

RESEARCH BACKGROUND

Why should we be concerned about childhood obesity and physical inactivity among Aboriginal youth health? Physical inactivity and obesity are associated with an increased risk for approximately 25 chronic illnesses including Type 2 diabetes, cardiovascular disease and various cancers¹. Recent surveillance studies in Canada suggest that up to 87% of youth do not achieve the recommended amount of physical activity required for adequate growth and health². Subsequently, 26% are considered overweight or obese³. Rates of inactivity and obesity in children increase rapidly following puberty and reach a pinnacle in late adolescence^{4,5}. In fact, physical activity rates decline by as much as 85% during adolescence, a period of growth when obesity rates exceed 30%^{5,6}. Indigenous adolescents across the world are disproportionately affected by obesity and its chronic conditions especially in Canada. Recent national surveys have documented that rates of obesity are 50-300% higher among Aboriginal youth living within their home communities. Not surprisingly, the rates of several chronic diseases in adolescents, in particular Type 2 diabetes and hypertension, are highest during this period of development^{4,7-9}. Within Canada, rates of these chronic conditions are again disproportionately higher among Aboriginal adolescents. Novel culturally-tailored approaches are needed to increase physical activity, reduce body weight and prevent chronic conditions among Aboriginal adolescents.

Determinants of obesity and Type 2 diabetes in Aboriginal adolescents

The disproportionate prevalence of Type 2 diabetes in Aboriginal people living in rural communities can be attributed to several unique lifestyle and societal factors²⁴. The unique geopolitical and historical experiences of

Aboriginal people in Canada cannot be overlooked. Aboriginal people living in rural communities suffer from some of the highest rates of chronic disease in the country and a legacy of several forms of colonization. These include geographic displacement, residential school education and religious acculturation. The appropriation of traditional land by European settlers led to the displacement of several communities away from environments that were suitable to traditional ways of life (i.e. hunting, fishing, opportunities for community sport and recreation) onto lands that forced rapid transition to a more European lifestyle¹. Additionally, the legacy of residential schools and assimilation strategies on Aboriginal youth in previous generations play a key role in several diseases affecting Aboriginal children today, including Type 2 diabetes²⁵. One of these legacies is a significant number of young people raised in homes with parents and grandparents who attended residential schools and missed important Aboriginal teachings²⁶. As a result, the sharing of cultural knowledge was abruptly halted between generations, resulting in a generation with little knowledge of traditional activities or sport. These factors contributed to the rapid transition away from a traditional lifestyle of natural foods and high levels of physical activity to a more European calorie-dense diet and sedentary lifestyle^{5, 27}. Indeed, a geographic pattern of Type 2 diabetes has been documented whereby indigenous cultures who experience a rapid shift away from traditional ways of life tend to display the highest rates of Type 2 Diabetes Mellitus (T2DM)^{7, 27-29}. What remains unclear is how Aboriginal adolescents in this generation perceive a healthy environment and what barriers they perceive as key to adopting a healthy school community environment.

As physical activity and fitness levels were traditionally a strength of the Aboriginal people in Canada, their progressive loss is often viewed as a major contributing factor to the high rates of obesity and T2DM in children living in First Nations communities^{27, 33-35}. In fact increasing the capacity for physical activity was listed as the top priority for T2DM prevention and management in Aboriginal communities in the *2006 First Nations Diabetes Report*³⁶. One of the main goals of this study was to assess adolescents views towards the role of physical activity in achieving a healthy school environment in their community.

What is the role of physical activity for holistic health in aboriginal teachings?

The role of physical activity for the prevention and management of Type 2 diabetes in non-Aboriginal populations is well established³⁷⁻⁴¹. Traditional forms of physical activity played a major role in the lives of Aboriginal people prior to European acculturation practices of the early 20th century. Within traditional Aboriginal teachings, access to physical activity was viewed as an essential “medicine” for achieving balanced health (physical, spiritual, emotional and intellectual) (Lavallee & Levesque, In Medicine Wheel, Sport, Physical Activity and Health. In Giles. A & Forsyth. J. Red and White: Aboriginal People and Canadian Sport, In Press). Recent qualitative interviews we conducted with Oji-Cree adults living with Type 2 diabetes, support this concept. Adults view physical activity, in particular traditional activities of hunting and fishing, as a critical component for the prevention and management of Type 2 diabetes (McGavock et al. in Preparation). Aggressive assimilation practices within a number of First Nations communities led to a loss of sharing of traditional ways, games and cultural knowledge. This loss of knowledge also contributes to a loss of a culture of physical activity and well-being among community members. In particular, the value of physical activity in the health of Aboriginal people⁴². Accordingly, regaining the role of physical activity as a medicine may be considered as a small step towards reclaiming traditional ways of life. It remains unclear if Aboriginal adolescents share similar views and what they perceive as the role of physical activity within their own healthy school-community.

STUDY DESIGN AND METHODS

Study Design and Consent

In the spring of 2011, representatives from Ever Active Schools and the Manitoba Institute of Child Health evaluated the voice of students in a Aboriginal community. Eighteen students from a Grade 10-11 class from the Kainai High School were recruited to participate. We relied on three separate qualitative methods to assess the perceived barriers and facilitators to a healthy school environment in their community. Students were provided with cameras in April and asked to take pictures of things in their community that represent a healthy school community. They

were also asked to take pictures to reflect barriers and facilitators of wellness within their own school community. We used three separate ways to gather this knowledge:

1. Photovoice methods were used to take images of the perceived important aspects of a healthy school environment
2. Students organized their pictures into different themes, made a poster representing that theme and discussed them in a focus group setting
3. We conducted one-on-one interviews with the students to get their personal opinion about the images and the themes that they identified.

This triangulation approach is a proven method of increasing the reliability of the themes that emerge from qualitative studies⁷⁰⁻⁷². Photovoice is a method that is used to empower individuals to tell their story through pictures. We felt it was the most appropriate method to engage students and give them a sense of ownership over the project. A trained scientist with previous experience interviewed students with the method that has worked extensively with Aboriginal communities on the qualitative aspects of health and healthy behaviours.

Qualitative Data Analysis

All interviews were digitally recorded and transcribed enabling analysis for thematic content using the constant comparative method. We used NVIVO, a software program for supporting qualitative data analysis (www.qsrinternational.com/products_nvivo.aspx). The researcher allocated codes and the software permitted automated indexing, searching and the creation of subcodes in “tree” fashion. This method facilitates the organization and interpretation of large and complex datasets. Data analysis, synthesis, and interpretation were performed iteratively and continually throughout the project in order to facilitate the consideration, uptake, and incorporation of findings into the creation of an intervention. Data analysis was guided by the PEN-3 health promotion model, which challenges and seeks to broaden the traditional Westernized medical approach to disease prevention as previously described⁷⁰. This approach places culture at the core of the development and evaluation of successful health promotion programmes. All matters of confidentiality and ownership surrounding photographs were employed according to TriCouncil policies.

RESULTS

Perceived Healthy School Environment: Friends and Social Support

Not surprisingly, the majority of students felt that their friends and family members played an important role within a healthy school-community. Several students had pictures of young cousins, nieces or peers that gave them a sense of a healthy environment. Connecting with others was a very important part of their health. One



Image 1.1 - A photo of the Kainai school community

student commented, “Friends are the people that keep you motivated and make sure you’re doing alright in your studies in school and stuff like that, make sure you don’t screw up.”

One student wrote a caption beside her picture, “When I took these pictures I was happy and grateful that someone gave me such a caring family.” Friends have also helped some students with their identity. One student felt that her friends and family always comment that she is a good role model for the community, “They all tell me I’m like a role model because I’m in Grade 12 and I’ll graduate and I plan to go to school more.” That support was viewed by most students and an important aspect to their community. Being a role model was perceived as

a positive aspect of life in high school: “It makes you feel good about yourself; you know you’re doing something good.”

Programs after school that bring students together are important because they provide social support that deters others from participating in negative social behaviours. One student commented about an after school program that was meaningful: “Maybe, maybe some who have already gotten into that path or negative environment and they come into this, these programs and these good positive ones in school and stuff like that, they maybe change their point of view of life probably and probably be a, a push to go in the school, they want to go to school and have a better life for themselves.”



Image 1.2 - A photo depicting 'family'

Connecting to Aboriginal Culture

Nearly all students interviewed expressed that a positive school environment should include aspects of traditional activities and culture. All students had taken pictures of past great chiefs or the mural at the school when asked to take an image that was something positive. “I’ve been to different schools but I think this one since we’re out here and we’re a big collective group of aboriginals and we’re close to like different sites like Red Crow. We all seem connected and it’s a good vibe, a good positive vibe.”



Image 1.3 - Chief Red Crow

One student reflected on a picture of Chief Red Crow, taken by a classmate. “I like this one ... and I agree with her Respect and never forget our ancestral stories and legends and stuff like that and our morals and our traditions and our culture.” Another student reiterated that comment after taking a picture of a former chief looking out onto the land. “I’ll never forget where I was raised and I’ll never forget my culture, these are just reminders to me that our culture and land will never be changed.” One of the older students expanded on these comments by stating that the image of Chief Red Crow, “... makes me proud to be native.”

One aspect to connecting with culture may include a stronger tie to elders in the community. While it did not emerge within all interviews, one student commented about the positive effect elders had on gang activity within the school:

One of the elders said, ‘What are you trying to be a gangster for, you’re First Nation aboriginal.’ They brought that conference here ‘cause they really wanted to change the gang activity and stuff, so they brought elders and there was like a whole bunch talking and all of the people who, well I think the whole school was in here, were just talking about it. They kept doing that for a couple of times and like just the activities went down, decreased.

A connection with elders was a common statement when discussing the importance of culture in the lives of a student. “I don’t forget. The elders said don’t forget where you come from and that’s why it’s ringing through my mind... Whenever I finish school, that’s what (I will) probably reflect back on... this or maybe go to Waterton and check it out again.”



Image 1.4 - Statue of a former chief

This may be achieved by including aspects of the traditional language into future programs. Another student



Image 1.5 - A mural at Kainai High School

commented, “A lot of the kids, a lot of different students, I see that they want to speak Blackfoot and then some people are actually trying and they’re starting to speak Blackfoot and then one time I heard my friend he said a whole sentence, a couple of sentences in Blackfoot and then another friend responded to him in Blackfoot and they just started having a conversation and they started laughing and then like another person would be like, ‘I wish I was that cool.’”

Connecting with Nature

When speaking about a trip to the mountains near Waterton Lake, one student said, “The positive vibe grows whenever we go there and we come back and we just know that we’re going to go there again or something. Every time we go there it’s just another experience.” Several other students took pictures of trees around the school or within the community. “I was thinking that trees give us oxygen and show the beauty of earth covered in green.” Natural settings with connections to the earth seemed to be powerful aspects of a healthy school environment for adolescents.

The connection with nature may be an important aspect of the Aboriginal culture for secondary students. One student connected his own culture to his connection with nature. “Even though we’re living in today’s world we get to look back at this, I think our ancestors and stuff lived for this every day and its cool that we have it just like in our back yard, we could just go look at it whenever.” Another student reiterated these comments. “Most of it, it was our, you know how green this was, we were born on the land because of our culture, yeah; some of our ancestors ... lived on the land green.”

This same student commented on the negative effects of a loss of nature in their community. When speaking of a tree that had been destroyed by students from past classes (see Image 1.7), he noted it was a negative aspect to a healthy environment: “We destroyed mother earth.” To reiterate a comment previously discussed, one student noted, “I’ll never forget where I was raised or I’ll never forget my culture, these are just reminders to me that our culture and land will never be changed.” The student felt that the tie between land and culture was something that rooted her to her community and despite changes in her life would always be something she could turn back to for comfort.

Negative Aspects of a Healthy School Environment



Image 1.7 - A tree destroyed by students



Image 1.6 - Greenery and nature

Participants were asked to tell a story about some parts of the school or community that make it hard for them be healthy. We were searching for barriers to making healthy behaviours for youth. The pictures they took, however, reflected the perceived unhealthy aspects of the school. The most common perceived unhealthy aspect of the school was garbage, the second was cigarettes. These images and the discussion surrounding them reinforced the student’s connections with nature. They felt that garbage on the streets and around the school gave them the sense that it was an unhealthy environment. Some students connected garbage to drinking water or to a hazard for children. “...in Standoff they drink most of the water ‘cause they clean out the filter and they bring the filter to

Standoff but then some particles that are in the water kill or hurt people that are drinking it.” The student continued, “cause we got kids, some of the kids like to go walk around, some of the babies eat anything off the ground.” This was a common concern among students and something they felt should be changed to make a healthier school environment.



The other common aspect of the unhealthy school environment was smoking and cigarette butts around the school. They pointed to the irony of receiving messages about not smoking but having several receptacles around the school for cigarette butts.

A student described this picture as “disregard for the environment.” *Image 1.8 - An unkept well*
Students indicated pride in their community and detailed when this pride was not seen with the whole community.



Image 1.9 - Described as 'disregard for the environment' by a student

KEY FINDINGS

Several important findings emerged from this qualitative study into the perceived aspects of a healthy environment for adolescents.

First, students feel a deep connection between nature and their own culture. Students see land and culture as key components to their health. In contrast to most current messages regarding health among Aboriginal people, students turned first and foremost to land and culture and not physical activity, obesity or diabetes.

Second, students felt that a healthy environment involved opportunities to connect to others. To provide opportunities for role modelling and for supporting others to achieve important goals (i.e. graduating high school).

Third, a link to their cultural past, including language and elders is an important feature of a healthy school environment for youth.

Fourth, the negative aspects of health for students had more to do with changes to their environment, like garbage and cigarettes than to physical changes to their health or the health of others.

The final key finding was that when asked specifically to take images of diabetes, students neglected to do so and instead focused on other more holistic features of their health.

Discussion and Policy Implications

There have been very few qualitative studies of perceived health outcomes among Aboriginal adolescents. Current scientific and public health messages around health among Aboriginal youth have focused on obesity, Type 2 diabetes and mental health (i.e. depression and suicide). However, when interviewed individually or within a group, none of these issues were seen as key threats to health among the youth. Impressively, youth connected their health to more holistic aspects of their community, including connections with others, connections to their land and connections to their own culture. While we did not ask specifically if they were aware of the higher rates of obesity and Type 2 diabetes within Aboriginal communities, it seems as though students would be more drawn to programs that focus on more holistic aspects of health.

This may explain in part the poor outcomes from previous community-based obesity and diabetes prevention studies within other First Nations communities. Large-scale interventions that included education of healthy foods, extra activities and promotion of healthy living had very little effects on body weight among Aboriginal youth. The same poor results were noted in a number of other school-based physical activity interventions in both the U.S. and non-Aboriginal schools in Canada. It is possible that students prefer programs that target aspects of their health that are important to them. Within Kainai First Nation, it appears as though students are more interested on programs that would connect them with each other, with nature and with their own culture.

With regards to threats to their own health, students did not comment on risk factors for obesity and diabetes. Nor did they comment on threats to their mental or psychological health (i.e. depression, loneliness, addiction) that are also common among adolescents. Rather this group of students felt that threats to their land through excessive garbage and cigarettes were perceived unhealthy aspects of their own community. This may be viewed as a lack of knowledge in the area of health behaviours. It may also be viewed as reinforcement of the importance of nature and the land to their sense of well-being and health.

There are several limitations to the current evaluation. First, the sample group of students was small — eighteen students — and may not reflect the views of the general population of students. Second, students were selected within a classroom as part of a school project. Therefore the responses may have been skewed somewhat in comparison to students that would have volunteered for this project. Finally, while we did not take family or medical history from the students it is unclear if they have had any experience with diabetes in their family or personally in the past. If students with strong family history or personal experience with diabetes were included in the sample, it is likely that the role of diabetes may have emerged as a more important determinant of health.

RECOMMENDATIONS

Based upon these findings, Ever Active Schools would make the following suggestions for developing programs for engaging youth in creating a more healthy school environment.

1. Review the theme presented here with a youth group, youth council or student leadership committee to validate the findings. Other students may have additional comments to add to the discussion and refute or reinforce the findings here.
2. Further engage elders into the design of the program from the very beginning. Elders have a strong connection with the culture of the community and their presence would reinforce the school's commitment to incorporating culture into the program.
3. Include outdoor activities that connect youth with nature and the land. Outings to traditional sites with historical teachings from elders would engage youth and reinforce the school's commitment to culture and their link to the land.
4. Incorporate the community's traditional language, Blackfoot, into the program. A number of students commented that they were impressed with others that spoke their traditional language and that it was an important link to their past.
5. Incorporate some degree of role modelling or peer mentoring into the program. This can be achieved by delivering after school activities for elementary school youth. Peer-led healthy living programs have emerged recently as an effective method for eliciting behaviour change in children and adolescents that lead to changes in diabetes risk factors. Students frequently cited the importance of role modelling in creating a healthy environment (i.e. staying in school, graduating, attending classes). Incorporating some aspect of role modelling into the program could achieve many benefits that are key to a healthy school environment, including attendance and grades.
6. Work alongside Kainai and provincial partners to continue a long-term strategy to support health initiatives within Aboriginal school communities.

Moving Forward

In the spring of 2012 the Kainai Board of Education and Ever Active Schools created a video to share the findings from the Photovoice project and inspire other First Nations and Inuit Communities to follow similar promising practices. The video captured the voice of the youth in the community and set the direction for continued progress in building a healthy school community.

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